COMMUNICATION STANDARDS FOR SUSTAINABLE DEVELOPMENT OF THAI LISTED COMPANIES

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A Dissertation Submitted in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy (Communication Arts and Innovation) The Graduate School of Communication Arts and Management Innovation National Institute of Development Administration 2020

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ABSTRACT

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The research is aimed to construct communication standards, indicators, and scoring or assessment criteria for communication standards towards sustainable development that are accepted by practitioners based on the systems concepts and theory as the main conceptual framework, to be applied for the listed companies in Thailand and organizations following a sustainable development approach. The constructed communication standards are expected to be an important tool that helps to plan, evaluate, and improve a communication process towards organizational sustainable development more effectively. Besides, they are expected to increase business competitiveness at the national and international level as a result of the integration of organizational communication and sustainable development knowledge.

The research "Communication Standards for Sustainable Development of Thai Listed Companies" was conducted by mixed methods of both qualitative and quantitative research. Firstly, the researcher determined standard statements, indicators, and scoring criteria from the data collection by in-depth interviews with 28 regulating and supporting agencies, including communication practitioners towards the sustainability of Thai listed companies with outstanding performance in 2019. Then, the developed communication standards were tested for acceptability from representatives of 75 Thai-listed companies with explicit communication practices towards sustainability. After that, the standard assessment scheme was tested for its suitability for use by in-depth interviews with 13 representatives of listed companies in 8 industry groups.

From the survey of the acceptance of communication standards for

sustainable development, the overall acceptance of every standard statement, indicator, and scoring criterion was 97.3%, 94.5%, and 93.8% respectively. From the findings, 27 communication standards, 95 indicators, and 102 scoring criteria were obtained, which were divided into 1) Input-factor standards comprising standards in management structure, vision, mission, value, and sustainable development policies and practices, materiality analysis and assessment, strategies and planning, stakeholders and expectation. 2) process-factor standards comprising standards in determining and designing a message, planning, choosing communication channels, and a communication process for sustainable development. 3) output-factor standards comprising standards in the efficiency of communication for sustainable development, perception and understanding of sustainable development, and disclosing and reporting of information. 4) Outcome-factor standards comprising standards in communication effectiveness, value creation with stakeholders, and the creation of balance in all dimensions of sustainability, under the condition that companies that would pass the standard assessment had to gain total scores of more than 50.

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CHAPTER 1

INTRODUCTION

1.1 Background and Significance of the Study

1.1.1 Significance of Sustainable Development in Thailand

Nowadays, the world has been facing plenty of problems, i.e., Global warming, air pollution, deterioration of natural resources, threats to wildlife, natural disasters, social inequality, etc. All of these problems are external risk factors affecting the implementation of an organization's plans. Moreover, both government and private sectors also confront internal risk factors, i.e., corruption, violation of human rights, unfair labor practice, violation of intellectual property and regulations, unrighteous compensation and welfare, unsafe working environment, etc. These internal and external risk factors all affect an organization's sustainability internationally and globally.

Accordingly, the concept of "sustainable development" (SD) has played a great role in the development currents of the global society, especially since UN member countries, including Thailand, countersigned in the World Master Plan for Sustainable Development or Agenda 21 in the Earth Summit Conference on Environment in Brazil in 1992. Thus, it becomes an obligation of each nation to search for proper ways to develop the nation towards sustainability. (Office of the National Economic and Social Development Council, 2003) in the social, economic, and environmental domains. Subsequently, Millennium Development Goals (MDGs), comprising eight goals, were established, which took 15 years (2000-2018).

Later, in 2002, the UN organized another World Summit Conference on Sustainable Development (WSSD) in Johannesburg, the Republic of South Africa, with 180 member countries, including Thailand. All countries countersigned to certify Johannesburg Declaration on Sustainable Development, to confirm all countries' political intent in collaboratively complying with the obligations signed in the Earth Summit 1992 Conference and the implementation plans for the WSSD, which determined measures for accelerating the compliance with the Agenda 21, including other agreements from the Earth Summit 1992 Conference to yield concrete outcome. (Yodprudtikan, 2012). All developments during such a period tended to reduce problems in each domain despite no actual accomplishment. (Office of the National Economic and Social Development Council, 2017)

Nevertheless, upon approaching the edge of Millennium Development Goals (MDGs) in 2015, the United Nations initiated a consultation process to determine a post-2015 development agenda based on the "Sustainable Development" paradigm. The key issue was to establish Sustainable Development Goals (SDGs) (United Nations Thailand, 2015), which was achieved on September 25, 2015, at the United Nations Headquarters in New York, the U.S.A. in which General Prayut Chan-o-cha, the Prime Minister of Thailand, also jointly certified the 2030 Agenda for Sustainable Development and Sustainable Development Goals (SDGs) so that all countries would have accomplished it by 2030 with the economic, social, and environmental sustainability, following the SDGs approach. Besides, Thailand also gives significance to cultural sustainability. (Kongsri, 2017)

From the world sustainable development currents, it induces Thailand to adapt itself and implement plans to bring about the concrete outcome as soon as possible. On the other hand, the government sector has adopted such a concept as guidelines for developing the country under the National Economic and Social Development Plan continually. The Twelfth National Economic and Social Development Plan (2017-2021) is based on the 20-year National Strategy (2017-2036), into which integrated SDGs of the United Nations, comprising 17 goals and 169 purposes. Accordingly, it can be considered a new landscape that creates changes for stakeholders. In other words, it can be a stimulus and accelerator supporting sustainable development. Consequently, an organization's economic, social, and environmental activities, including business entrepreneurship of both government and private sector, need to adapt towards sustainability. Thailand itself has to apply SDGs as guidelines for future national development. (Office of the National Economic and Social Development Council, 2016). Particularly, the national development strategy related to sustainable development can be witnessed apparently in Strategy 3: The Economic Strengthening and Sustainable Competitiveness, and Strategy 4: Environment-Friendly or Eco-Friendly Growth for Sustainable Development.

Furthermore, the concept of sustainable development also reflects the vision of Thailand through the 20-year National Strategy (2018-2037), which specifies that "Thailand is stable, prosperous, and sustainable as a developed country based on the Sufficient Economy Philosophy." The concept of sustainable development is contained in the National Strategy regarding the creation of growth based on the eco-friendly quality of life. Thus, it still focuses on the aim of development goals towards sustainable development in all dimensions: social, economic, environmental, governance, and the integrated collaborative partnership within the nation and among countries. (National Strategy Secretariat Office, 2018)

Accordingly, government, private, and civil sectors all support and collaborate with the government's policies in driving sustainable development towards the determined goals and using it as development guidelines to increase the competitiveness of the nation. From a summary report of the voluntary implementation following 2030 sustainable development agenda at the national level of Thailand in 2018, it wrote that the process initiated by the government sector, namely the appointment of Sustainable Development Committee, chaired by the Prime Minister, can be considered as the installation of national mechanism. It performs as an axis in mobilizing national sustainable development, in parallel to the adoption of the Sufficient Economy Philosophy of King Rama XI. (Subcommittee on Driven Sustainable Development Goals, 2018)

For private sectors, they also respond to SDGs, driven by main agencies and networks, such as the Securities and Exchange Commission, the Federation of Thai Industries, Chambers of Commerce, and the Thai Chamber of Commerce, etc., which operate under the "SDG Compass," initiated by three leading organizations in sustainable development at the international level, namely Global Reporting Initiative (GRI), UN Global Compact, and World Business Council for Sustainable Development (WBCSD) (Knowledge Network Institute of Thailand, 2018).

Applying SDGs as a working framework for designing and determining communication direction and reporting strategies, goals, and activities, enables the companies to gain several benefits, such as future business opportunities, the valueadded organizational sustainability, the strengthened relationship establishment with stakeholders, the updated policy development, the increased stability in the society and markets, the usage of common language and common goals, etc. (GRI, UN Global Compact, & WBCSD, 2016). Particularly, it is beneficial for the listed business organizations in the Stock Exchange of Thailand, which are very important sub-units in the economic systems, society, and for national sustainability, since they are influential fund-raising sources for the government and private sectors. Thus, well-balanced financial systems can be enhanced, while a mechanism for driving economic systems emerges. Consequently, it brings about employment, income distribution, a channel for saving and investment for people, and an index indicating national economic development (The Securities and Exchange Commission, 2017b).

Moreover, the mobilization along SDGs approach is not only a challenge for business sectors, but it can be counted as crucial business opportunities to help increase their competitive capacity since they can reduce their cost from reused or recycled resources, reduce their risks of resource shortage, and fluctuating prices of raw materials, including leading to innovative development and valuable brand building. (Wongsarawit & Phattharasen, 2016) SDGs thus are like standards of doing business in the new globe to which all private organizations, both large and small, need to pay high importance. (S. Vutikorn, 2018)

Correspondingly, Thai listed companies need to operate their business per the SDGs. The report of Sustainable Development Showcase 2018 (The Stock Exchange of Thailand, 2018a), states that several Thai listed companies complied with more than 5 goals of SDGs. For example, Goal 4 is "a support towards equal and inclusive education," Goal 8 "A continual employment and economic growth," and Goal 13 "Preparation for climate change," etc.

Still, Thai listed companies were found to misunderstand and misuse the SDGs; thus, it causes a gap between business operations complying with sustainability practices and the understanding of long-term investment return or yield upon investment from their compliance with the SDGs. Moreover, some obstacles were found, i.e., rules and regulations, no sufficient information, no systematic collaboration between the government and private sectors. (Tiyarattanachai & Chhang, 2019). Besides, some companies misunderstood that "sustainable

development" and "corporate social responsibility (CSR)" are identical. As a result, they assigned an office responsible for CSR to work on corporate image building at the same time with an operation on sustainable development. (Business and Sustainable Development Commission, 2017)

Notably, corporate social responsibility (CSR) involves stakeholders for the whole enterprise, but sustainability can occur from the concern of the impact of the operation on each group of stakeholders equally and righteously based on rules of law and universal practices. On the other hand, sustainable development (SD) will involve the society as a whole; thus, a company has to concern about public interest mainly in all dimensions: economic, social, and environmental, aimed to achieve the goal of sustainable development of the whole society, not for the sustainability or for an organization's survival solely. (Thaipat Institute, 2018)

Besides, from the perspective of the capital market, there has been development and support to induce sustainable development in more dimensions, especially from the operation in three domains (economic, social, and environmental). Still, it may not be sufficient to respond to the needs of investors of the listed companies nowadays because investors will not give importance to only financial data in terms of economics, which can reflect their past performance, but also non-financial data. Especially, they need social, environmental, and governance data (Or ESG) increasingly. (Yodprudtikan, 2013). ESG data thus becomes valuable because it can reflect sustainability in the business operation of the investors and other stakeholders distinctly.

Such a notion is supported by Mr. Omar Selim, Chief Executive Officer (CEO) of Arabesque Asset Management (as cited in ThaiPublica (2017)), who stated that ESG data is considered as a gauge or meter of the quality of corporate management and strategy. Financial data can reflect corporate past performance through income, profitability, debts, and cash flow, while ESG data is a foresight that can anticipate how a company can cope with any occurrence. However, ESG data does not replace financial data but is supplementary data for investors instead. Typically, each kind of data is as follows:

1) Environment (Environmental management) focuses on the effective use of resources and maintain the natural environment affected by the corporate business operation.

2) Social (Social management) is the fair and equal personnel or human resource management, the supervision of employees' safety and health, and good relations with surrounding communities.

3) Governance (good governance) is to have decent policies for managing the enterprise with transparency, anti-corruption, and protecting stakeholders' benefits.

Despite the seeming similarities between ESG and CSR, Thaipat Institute (2017) explains the relationship between CSR and ESG that CSR is an enterprise's role in the "part of operation" to display their social responsibilities by concerning about all stakeholders' expectation whereas ESG is an enterprise's role in the "part of data" that can reveal corporate social responsibility expected investors, especially institutional investors. Hence, good ESG is the information preparation from CSR practices to communicate to investors.

Accordingly, sustainable development becomes a mainstream concept of investment nowadays reflecting through the concept of "sustainable investment," which values and evaluates business success by three balanced domains: surveillance of environment, social responsibility, and business growth, including transparent governance or ESG in parallel to the consideration on business profits or turnover that yields good long-term financial returns investment. At the same time, it can create sustainable value for society and the environment simultaneously. (The Stock Exchange of Thailand, 2017)

From the anticipation of the Thailand Business Council for Sustainable Development (2017) (TBCSD), it pointed out that corporates with sustainable stocks tended to be more interesting and appealing for investment. From the evaluation of the face value of corporate with good ESG, it reflected the expected higher growth and lower capital. Therefore, the competition in taking ESG into the mainstream business can indicate its connection to the business operation, which can be considered as the opening of a new dimension in sustainable investment.

Consequently, ESG turns to be another significant indicator that investors use to make decisions to invest with any organization with good environmental management, high social responsibility, and good governance. Such an indicator is called "Sustainable Development Indicator" or "ESG Rating." In other words, it is used to reflect the impact on the business operational process, both positive and negative, relating to social, environmental, and economic issues. (The Securities and Exchange Commission, 2017c).

Moreover, at present, transparency of information, codes of ethics, anticorruption, and social and environmental data, all affect major stakeholders' perceptions, attitudes, and behaviors. Accordingly, any organization that can report its operational performance with good ESG data can create an opportunity for investors to decide to invest and attract business partners to join the business more easily. (Ekachaiphiboon, 2018). ESG thus is like a framework scoping business operation towards sustainability by having external or secondary stakeholders as a drive to mobilize business sectors to accomplish the planned target.

The situation of sustainable development of Thai listed companies at present is very distinguished, proved by the sustainability ranking by both domestic and international organizations from indicators of several projects. (Phatarasen, 2019). One of the key indicators of sustainable development is governance. From the report on the governance of the Thai listed companies in 2019 (Thai Institute of Directors Association, 2019b), good governance of 657 Thai listed companies in the Stock Exchange of Thailand is evaluated by 5 categories of disclosed and communicated information to the public: shareholders' rights, equal treatment to shareholders, directors' responsibility, transparent disclosed information, and the concern about stakeholders' roles. It was found that the overall average scores were at a very good level and reached the top statistics of 81%. It reflects that Thai listed companies give high importance to responsible performance for stakeholders of all groups to establish sustainable growth increasingly. The outstanding performance of Thai listed companies also accords with the tendency of good governance at the international level, namely the ASEAN CG Scorecard Project. The project was initiated by ASEAN Capital Markets Forum, which was supported by the Securities and Exchange Commission in the ASEAN region, to assess the governance of listed

companies in six ASEAN countries: Indonesia, Malaysia, the Philippines, Singapore, Thailand, and Vietnam. 100 top-rank of listed companies with the highest market value on March 31, year, were evaluated, and it was found that Thai listed companies still gained the highest average scores per ASEAN CG Scorecard. Specifically, Thailand got the average scores of 85.73, followed by Malaysia 82.41, and Singapore 78.45 respectively.

Thailand Sustainability Investment (THSI) is another indicator of Thai listed companies with sustainable business operation by concerning about environment, society, and governance or ESG. The listed companies that pass the selection from the THIS list must obtain at least 50% of the scores of each dimension: environmental, social, and economic, including governance from responding in an evaluation form. Otherwise, they must be the companies selected to be members of Dow Jones Sustainability Indices (DJSI) with required qualifications, i.e., the assessment on governance reports, business net profits, and shareholders' profits, no record of creating any ESG impacts, etc. In 2018, there were 79 listed companies in the THSI list (increased from 2017, in which there were only 65 companies), which could be divided into 73 companies listed in SET and 6 companies in MAI, with a total market capitalization of 10.59 trillion baht (59.80%), while that of SET and MAI equaled 17.71 trillion baht. Besides, if considering the rate of average return dividend of THIS at 3.91%, it was higher than that of SET at 3.62%. Notably, companies in the THSI with the highest value are 17 companies in the resource-groups, 14 in real estates and construction, and 13 in industrial commodity respectively (The Stock Exchange of Thailand, 2018b).

Furthermore, The Stock Exchange of Thailand (2019c) developed a sustainable index called "SETTHSI Index" as an alternative for investors who want to invest in the stocks of listed companies with distinguished ESG, including for promoting listed companies with the sustainable business operation. Companies in the THIS list of the most recent year with the market capitalization of no fewer than 5,000 million baht and having the proportion of minor shareholders (free float) of not less than 20% of the paid-up capital, including having the total number of trading shares of no less than 0.5% of the number of registered shares for no less than 9 of 12

months. It was found that in the second half of the year 2019, there were 53 Thai listed companies as SETTHSI members.

Dow Jones Sustainability Index (DJSI) is a universally well-known sustainable index accepted by investors around the world. DJSI aims to evaluate the potential and operation concerning sustainable development in three dimensions or ESG, and focuses on the value shareholders will gain in the long term in parallel to short-term and medium-term growth. (RobecoSAM, 2019a). The companies selected to be DJSI members in 2019 were revealed and Thai listed companies, particularly Public Company Limited, were evaluated to be industry leaders in 8 industry groups as follows: 1) Thai Beverage (Beverage), 2) BANPU (Coal & Consumable Fuels), 3) CPALL (Food & Staples Retailing), 4) PTTEP (Oil & Gas Upstream & Integrated), 5) PTTGC (Chemicals), 6) Thai Oil (Oil & Gas Refining & Marketing) 7) TRUE (Telecommunication Service), and 8) Thai Union Group (TU) (Food Product).

For the sustainability assessment by MSCI ESG Research, which compiles sustainability data of listed companies under the MSCI All Country World Index, it was found that in 2018, there were 32 Thai listed companies as members of MSCI AC ASEAN ESG UNIVERSAL, which accorded with another assessment under FTSE index, which found that there were 34 Thai listed companies as members of FTSE4 Good Emerging Indexes in 2018. (Phatarasen, 2019).

Although the overall image of sustainable development of Thai listed companies was quite predominant nationally and globally, from the sustainable development report in 2019, which aimed to evaluate the corporate operation of companies around the world, it was found that no country had operated to reach 17 aspects of sustainable development as stipulated. For Thailand, it could respond to the goal of sustainable development as the 40th rank (upgraded from the 59th rank of last year), from all 162 survey countries. The goals that Thai listed companies could not perform so well were: Goal 3: good health and well-being, Goal 10: decreased inequality, Goal 13: Ability to cope with climate change, and Goal 14: the utilization of oceans and marine resources. Thai companies could accomplish Goad 1: Successful eradication of poverty (Sachs J., Schmidt-Traub G., Kroll C., Lafortune G., & Fuller G., 2019).

Another significant challenge of the goal achievement towards national sustainable development was to create awareness, especially to children and the youth, who will be a major force in mobilizing national sustainable development in the future. Besides, business sectors must have a correct understanding of sustainable development and also apply the concept in business operation sustainably in the future. (Subcommittee on Driven Sustainable Development Goals, 2018). Therefore, communication to stakeholders to inform about an operation following the sustainable development approach, especially by a transparent report related to SDG, is vital as being a channel for providing suggestions within an organization and for communicating with investors and authorized agencies about the performance towards the determined goals. (PwC, 2018)

1.1.2 Sustainable Development Communication

Typically, sustainable development can be accomplished by the mobilization of civil society formed by the collaboration of a majority of people with awareness, determination, and common goals towards sustainability by adjusting their attitudes and behaviors, and concerning about the sustainability and long-term benefits for people of the next generation. These people will help to drive towards changes by initiating the establishment of networks, creating a learning process, and collaborative working at the local and national level, including using communication and public relations to create awareness for people in society widely. (Office of the National Economic and Social Development Council, 2003)

Communication with stakeholders is a key step in a process of awareness creation via information reports enabling an organization to communicate effectively with its stakeholders. SDG Compass (GRI et al., 2016) specify that reporting and communication are important steps and another indicator of a company's growth, as it can apply sustainable practices and integrate sustainability data in its report. Besides a formal report, a company can use several kinds of channels to communicate its strategy and performance for sustainability more widely. Generally, a corporate's websites, social media, activities, product labels, service, marketing, and advertising are effective channels for communicating with stakeholders related to its sustainable development. Besides, such media can create, maintain, and protect an organization's image and fame. (Cornelissen, 2013)

Accordingly, the disclosure of sustainability data has been widely paid attention to during these years as a result of a tendency of responsible investment that has been growing continually. Investors need to use environmental, social, and governance data for their investment decisions. Thus, the data provided has to be complete, correct, and transparent since it becomes a mechanism leading to valueattracts investors increasingly. added securities and (Tantimangkorn & Ekachaiphiboon, 2017b). Besides being influential communication channels for attracting investors and increase business credibility, reports can stimulate the concept of sustainable investment widespread. Accordingly, business sectors need to disclose sustainability data to stakeholders and ensure that they can access, study and understand, including investigating such data from the public reporting. (Paetrat & Petchchedchoo, 2018).

Hence, the main issue is to have a report of sustainability data communicated effectively to reflect corporate sustainable development in all dimensions, both positive and negative. However, in practice, most corporates prefer presenting only positive information. For instance, they display how their business creates a positive impact for a community, society, and the environment, and try to avoid mentioning the negative impact that cannot be resolved as planned, etc. (Yunprathom et al., 2014). Stakeholders are exposed to information as a passive audience; thus, they will perceive only the perspectives presented by a corporate and this affects the decision-making process of stakeholders as well.

Correspondingly, the provision of correct organizational information will be useful for the decision-making of stakeholders of all groups. Thus, to disclose sufficient data should not involve only financial data or quantitative figures only, but also other non-financial qualitative data (Natural Heritage Trust, 2000) because stakeholders need credible information that reflects complete, sufficient, and timely information of business operation to reduce imbalanced data transmitted by management and external people who are capital owners (Lee & Yeo, 2016). From acquiring full information, it helps to use such information for planning, decisionmaking, and regulation.

Communication will be more effective if an organization can communicate about sustainable development as a major stimulus in their internal and external communication. Besides, the content related to the sustainability of each company is particular, so communication can help a company to manage its organizational communication to make everything go in the same direction more easily. (Moingeon & Soenen, 2002). However, organizational strategies, identity, brands, and reputation can jointly determine "a starting point" for establishing an organizational communication system, while brands will be communicated from the narration about organizational sustainability and used as a communication framework. (Cees B.M.Van Riel, 2001). Therefore, sustainability substance will be a determinant of all organizational communication of its identity to stakeholders and can be considered as "organizational fame policy" as well. (Fombrun & Riel, 2004a). The notion accords with Dowling (1994), who states that organizational communication can help an organization to create an eminent and attractive image for stakeholders. Besides, it can strengthen an organization's brand and support the fame capital of the organization. Thus, an organization must keep communicating with external or secondary stakeholders to ensure that the organization can respond to their expectations concerning sustainability duly.

Besides, to move an organization ahead, it requires the determination of a vision, mission, and goal distinctly, including accordant strategic planning to control, regulate, and lead organizational personnel to proceed in the same direction. To make all personnel in an organization comply with the organization's vision, the most important thing is intra-organizational communication (Siriwan, 2016). Particularly, "employees" are major or primary stakeholders of an organization. To lead them to perceive an organization's direction can make them feel united with the organization, and have trust that can motivate them to stay in the organization. Therefore, intra-organizational communication should be inclusive and focused on a two-way communication process between top management and employees. (Unthong & Ekachaiphiboon, 2016). Accordingly, effective organizational communication will help increase an understanding of top management's policies and tighten relationships among personnel in the organization too.

Consequently, intra-organizational communication is essential in mobilizing activities and operations related to organizational sustainability. Simply, if communication is clear, the operation following policies will go the same way. Personnel in the organization feel satisfied and understand its policies clearly, which affects the effectiveness of the operation. (Myers & Tolela, 1983); (Frank & Brownell, 1989) To create employee participation towards sustainability successfully, it is important to consider some important internal organization factors, namely personnel's characteristics, such as tradition, value, attitude, behaviors, emotion, belief, culture, and social relations. (Bucur & Petra, 2011)

Top or chief executives, as leaders, are key persons leading an organization towards sustainability. They have to determine communication approaches and operations, including establishing engagement with all employees throughout the organization. Primarily, they have to induce direct and two-way communication, including selecting communication patterns for major decision-making. Especially, they must perform themselves as good exemplars of operating the business under the concept of sustainable development strictly. Typically, such a concept and business operation concerning sustainability must start with executives and be embedded in every step of organizational operation until it becomes corporate culture to assure that an organization performs its business with responsibility and sustainability genuinely. ("Brands can be sustainable, beginning from within the organization.," 2015)

From the survey of listed companies under SET 100, it was found that Thai listed companies seldom executed their organizational communication, especially through an IR Internal Report to its committee and top management, compared with other countries. Notably, effective internal communication can help the board committee or management to receive useful feedbacks for planning organizational planning, especially feedbacks or reflections from analysts or institutional investors, and fund managers. Therefore, several leading listed companies adopt those feedbacks for consideration on their strategic operation that will affect their business growth. (Watcharapa, 2009)

Although most business organizations' growth comes from their business performance, it is insufficient for their survival amidst severe business competition. Therefore, an organization still has to operate its business with responsibility for stakeholders in parallel to the creation of economic returns towards the organization's goal, namely sustainable development. Still, to move an organization towards sustainability is challenging and it requires communication to induce collaboration and integrated working of the organization's personnel at all levels to comply with rules, regulations, and practical guidelines strictly and harmoniously. The operation has to be systematic with good management and governance, human resource management, supervision, internal audit, evaluation, and transparent information report. All of these require effective communication. Most of all, the transmission of information about sustainability value through various media of internal organizational communication to all groups of stakeholders, to let them be informed and collaboratively comply with it to reach concrete outcome is an important challenge.

Pinta (2016) states that listed companies in the Stock Exchange of Thailand involve several parties of stakeholders. Thus, it is necessary to disclose financial information and other relevant information, i.e., a CSR report, an organizational sustainability report, etc., to reveal information about a company's policies, social and environmental practices, including human resources information, to communicate to stakeholders.

Communication is thus an important foundation for business success. (Genç, 2017) since business organizations, either large or small, often face communication problems at every level, i.e., no compliance with an organization's regulations, no understanding of organizational practice or value, no coordination in commands and governance among departments, cliques, conflicts between colleagues, employees' bias against the organization, etc. They all reflect ineffective internal organizational communication and barriers against organizational sustainability.

Accordingly, effective internal organizational communication will help to increase an understanding of organizational policies and enable to help to achieve the goal of organizational sustainability. Besides, it can connect the relationships among personnel in an organization. Therefore, internal organizational communication is very essential for all activities and operations towards organizational sustainability. If internal organizational communication is explicit, it will bring about compliance with the policies in the same direction, and employees' satisfaction and understanding of sustainability policies clearly, which leads to organizational efficiency. Hence, to ensure a successful operation of business sectors, communication among personnel in different departments must be fluid and enhance common understanding, including effective collaboration and coordination. Subsequently, it will turn to be a crucial driver to transmit information to external stakeholders efficiently in the same direction to create external stakeholders' confidence, positive attitudes, and trust from the transmitted information of organizational sustainability that has been strongly held.

1.1.3 Communication for Sustainable Development Standards

To communicate with stakeholders of all groups to make them understand the objectives and value of sustainability is a challenge every organization will face since each group of stakeholders possesses different attributes and need different kinds of communication patterns. Ineffective communication with stakeholders affects relationships, acceptance, support, and image, which will inevitably affect an organization's strength, competitive advantage, and sustainability.

For this reason, responsible agencies issue measures and best practices as standards towards sustainable development for business organizations, i.e., Principles of CG by OECD; UN Global Compact (UNGC), Sustainable Development Goals (SDGs), Global Governance Principles by ICGN; Global Reporting Initiative (GRI), International Integrated Reporting Council (IIRC), Carbon Disclosure Project (CDP), Dow Jones Sustainability Indices (DJSI), FTSE4Good Index, etc. Particularly, Thai listed companies in the Stock Exchange of Thailand under the supervision of the Securities and Exchange Commission and the Stock Exchange of Thailand, have to comply with rules, regulations, and practices in disclosing transparent, correct, complete, and sufficient information, which is the key of Thai listed companies' communication to stakeholders. Not only can it inform about yearly business performance, but it can also create confidence for investors, every group of stakeholders, and the overall capital market.

Besides, Thai listed companies confront communication challenges in disclosing their sustainability data under demanded practices at the national and

international level through several forms of reports, i.e., 56-1 Report, 56-2 or Annual Report (AR), CSR Report, Sustainable Development Report or SD Report based on GRI standards. Moreover, several sustainability indices have been developed, such as Dow Jones Sustainability Indices (DJSI), FTSE4 Good Index, MSCI ESG Index, ASEAN CG Scorecard, Corporate Governance Report (CGR), Human Impact and Profit (HIP), 100 Index, etc. All mentioned indices require data from a listed company's report communicated to the public for considering its performance on sustainability, which is important data for investors' decisions in choosing their investment.

Nevertheless, such information disclosure often incurs confusion and difficulties for Thai listed companies since they are required to communicate a huge amount of information that has to be correct, complete, and timely. Therefore, it yields an effect on investors and stakeholders in accessing sustainability data, which is convenient, rapid, and easy to understand as well. Accordingly, the guidelines for preparing a sustainability report suitable for all groups of stakeholders are paid attention to by regulating agencies. Principally, each listed company is required to submit one integrated report covering all three dimensions: economic (performance, profits, and financial report), social, and environment, which reflects corporate sustainability truly. (Bunyachotima, 2015). The sustainability report accepted at the international level at present is the Integrated Report (IR) of the International Integrated Report Council (IIRC), which publicized the framework and guidelines for a standardized integrated report to be accepted worldwide and keeps improving it continuously by its research and outcome. (EY, 2014)

International Integrated Reporting Council (2013) (IIRC) defines "an Integrated Report (IR)" as "precise communication on corporate strategy, governance, performance, and anticipation of an organization concerning external environmental context, leading to the value-added creation in a short term, medium-term, and long term." The main mission of IIRC is to create the framework for preparing an Integrated Report widely accepted, which discloses data on finance, environment, society, and governance integrally to make it complete and understandable. Such a

report then will help to respond to directions of global economics and increased sustainability. (KPMG, 2011)

Regarding content elements in an Integrated Report, the content consists of 8 interrelated elements: 1. Organizational overview and external environment, 2. governance, 3. business model, 4. risks and opportunities, 5. strategy and resource allocation, 6. performance, 7. outlook, and 8. basis of preparation and presentation. Furthermore, it comprises the following indicators: social, environmental, and governance. (Paetrat & Petchchedchoo, 2018)

In Thailand, a new form of a report has been initiated by integrating data of social and community responsibility for the environment and the possible impacts with an annual report of listed companies since January 1, 2014. SEC notified companies issuing all types of securities and listed companies to disclose their CSR information in a report form of the registration statement of the offering the securities (Form 69-1), the Annual Registration Statement (Form 56-1), and the annual report (Form 56-2). (Setthasakko, 2014). The reasons why an Integrated Report was developed were several causes. For instance, the content in a business performance report was so scattered; for example, financial data was displayed in the annual report, while performance data concerning impacts on society and the environment in the corporate social and environmental report. There was no information connection, which was difficult to measure and evaluate the overall performance. (Suttipun, 2013)

Accordingly, SEC improved and determined new required practices for disclosing sustainability data to be more suitable for Thai business sectors by containing good governance practices in Principle 7.4 for listed companies in 2017 (The Securities and Exchange Commission, 2017a). According to the Principle, the Commission should consider a Sustainability Report preparation properly by the following practices:

7.4.1 The board should consider and report data on the company's compliance and ethical performance (including anti-corruption performance), its treatment of employees and other stakeholders (including fair treatment and respect for human rights), and social and environmental responsibilities, using the framework of a report that is proportionate to the company's size and

complexity and meets domestic and international standards. The company can disclose this information in the annual report and separate reports, as appropriate.

7.4.2 The board should ensure that the company's sustainability reporting reflects material corporate practices that support sustainable value creation.

Besides, SEC determined practical codes for disclosing CSR information in Form 56-1, comprising: 1) Fair operation, 2) anti-corruption, 3) respect for human rights, 4) equitable labor practice, 5) responsibility for consumers, 6) environmental surveillance, 7) Collaborative development of society and community, and 8) innovativeness and innovation dissemination. The above information derives from an operation with responsibility for the society, environment, and stakeholders. It covers both financial and non-financial data but separates the issues of corporate governance and social and environmental responsibility in the annual report (Form 56-2). Listed companies are suggested to use explanation formats suitable and easy for stakeholders to understand, i.e., graphs, illustration, etc. However, no matter what kind of disclosed information is, it must not display any deceptive information nor concealing facts that make other people misunderstand such information. (The Securities and Exchange Commission, 2013)

On the other hand, the Stock Exchange of Thailand (SET) also determined communication practices in disclosing sustainability information in Part 3: Roles of Stakeholders NO. 2, as follows:

2.1 The company should disclose the activities that it has undertaken to implement the above policies. The company should disclose performanceenhancing mechanisms for employee participation in implementing the above policies

2.2 The board should encourage the company to make a separate sustainability report on corporate social responsibility (CSR) or make it by adding into the firm's annual report.

Besides, disclosure of key information related to both corporate financial and non-financial data has to be correct, complete, timely, and transparent through easyto-access channels that can be accessed by every group of stakeholders and credible. Such requirements are contained in Part 4: Information Disclosure and Transparency, in which guidelines for information disclosure and minimum data to be disclosed on the corporate websites, i.e., vision, a name list of top executives, financial budgets, policies, business codes of ethics, etc. are determined.

Still, although responsible agencies of both Thailand and foreign countries give high importance to the disclosure of sustainability information of listed companies in the form of a report by requiring clear practices at all levels: policy, implementation, etc., and detailed information that needs to be disclosed, the requirements emphasize organizational communication with external stakeholders. They do not specify models, methods, types of channels, and coverage of communication for sustainable development, nor a communication process with internal stakeholders distinctly. No concrete practices were presented as standards for the overall organizational communication to communicate with every group of stakeholders, both internal and external.

Correspondingly, the creation of the communication for sustainable development standards is very crucial for determining acceptable and standardized communication approaches and methods for listed companies to apply as a framework in their supervision, follow-up, auditing, and assessing the quality of their practices. Besides, they can apply the results for comparison and for improving the effectiveness of communication for sustainable development.

Hence, the researcher is interested in and aims for the creation of standards of communication for sustainable development that can be applied by using his knowledge, expertise, and accumulated experience in corporate governance, which is the foundation of sustainability. Besides, from his working experiences in organizational communication management in leading business sectors of the country, he perceives its importance and plans to adopt the concerned knowledge gained from his studies in communication for sustainable development to develop business sectors and agencies towards sustainability more effectively to comply with the National Economic and Social Development Plan and the National Strategy, including increase the competitive advantage for Thai business sectors on the global stage genuinely.

1.2 Research Questions

- 1.2.1 How are communication standards for sustainable development of Thai listed companies?
- 1.2.2 How will communication standards for sustainable development of Thai listed companies be accepted and applied?

1.3 Research Objectives

- 1.3.1 To determine communication standards for sustainable development for Thai listed companies.
- 1.3.2 To evaluate the acceptance and examine the appropriateness of communication standards for sustainable development of Thai listed companies that operate in compliance with sustainable development approaches.

1.4 Scope of the Study

The research entitled; "Communication Standards for Sustainable Development of Thai Listed Companies" scoped the study as follows:

- 1.4.1 Scope of Thai listed companies
- 1.4.2 Scope of persons and key informants
- 1.4.3 Scope of document and media concerning sustainability

1.4.1 Scope of Thai Listed Companies

The study aims to study listed companies in the Stock Exchange of Thailand (SET) that are accepted in their sustainable development at the national and international level. In Thailand, the criterion is the selection of Thai listed companies that received SET Award in the group of "Sustainability Excellence Award," and the group of "Thailand Sustainability Investment or SETTHSI Award in 2019, which

were organized by the Securities and Exchange Commission (SEC) in 2019, including Thai listed companies in the group of ESG 100 in 2019, organized by Thaipat Institute. Besides, it includes Thai listed companies that received a 5-star score (outstanding level) in corporate governance (CG) in 2019.

For indicators at the universal or international level, the listed companies that were selected are the members of Dow Jones Sustainability Indices (DJSI), which is an indicator of sustainability at the international level, in 2019, in parallel to the sustainability assessment from the MSCI ESG Research, which collected sustainability data of listed companies under MSCI All Country World Index, and assessed the corporate sustainability from the ESG performance of the companies in the FTSE Index (Phatarasen, 2019). Thus, this study did not classify the groups by Market Capitalization or Market Cap because the awards and assessment have divided the groups based on Market Cap already.

AAV	ADVANC	AGE	AKP	AMATA	AOT	BAFS	BANPU	BAY	BBL	BCP	BEM	BGRIM	BPP
BTS	BWG	CENTEL	CFRESH	сно	COLOR	CPALL	CPF	CPN	DELTA	DRT	DTAC	EA	EASTW
EGCO	FPI	GFPT	GGC	GPSC	GULF	HMPRO	НТС	ICHI	ILINK	INTUCH	IRC	IRPC	IVL
JWD	KBANK	ККР	КТВ	КТС	LPN	M-CHAI	MINT	MTC	NSI	NYT	PCSGH	PHOL	PM
PPP	PPS	PSH	PT	PTG	PTT	PTTEP	PTTGC	RATCH	S	S & J	SAT	SC	SCB
SCC	SCCC	SCG	SFP	SNC	SPALI	SPI	SSSC	STA	SYNTEC	TASCO	TBSP	TFG	TFMAMA
тнсом	THIP	TISCO	тмв	ТОР	TRUE	TSC	TSTH	TTCL	TTW	TU	TVO	TWPC	UAC

Figure 1.1 Thai listed companies selected into the list of THSI in 2019

As illustrated in Figure 1.1, there were 98 listed companies in the list of Sustainability Investment (THSI) in 2019, most of which (19 companies) come from Resource Industrial Group, followed by Real Estate and Construction Group, Industrial Commodity and Service Group (15 companies each). Besides, Agricultural and Food Group and Service Group were the groups of the listed companies that were selected increasingly into the list of THSI the most. The Market Capitalization of the total 98 listed companies on October 15, 2019, equaled 11,314,328 million baht, or

65.26% of the total Market Capitalization. Remarkably, the THSI list still uses SETTHSI as the indicator criteria to promote Sustainable Investment that concerns the environment, society, and corporate governance. (The Stock Exchange of Thailand, 2019a)

Moreover, there were four awards of SET Sustainability Awards in 2019 in the group of Sustainability Excellence: Sustainability Awards of Honor (8 listed companies were awarded: IRPC, PTTGC, SCC, TOP, BANPU, BCP, SAT, and CFRESH), Best Sustainability Awards (6 listed companies were awarded: CPN, MINT, PTT, PTTEP, DELTA, and TU), Highly Commended in Sustainability Awards (11 listed companies were awarded: CPALL, CPF, HMPRO, KBANK, AMATA, SC, S&J, SNC, SSSC, FPI, and PPS), and Rising Star Sustainability Awards (9 listed companies were awarded: GPSC, RATCH, EASTW, TASCO, HTC, ILINK, NSI, TBSP, and UAC). (The Stock Exchange of Thailand, 2019b)

Concerning Thaipat Institute, which is a cooperative organization operated by Global Initiative for Sustainability Ratings (GISR), uses the sustainability assessment standards of GISR as its rating methodology on a process and content following the standards accepted at the international level. Besides, ESG Rating Office was established, aimed to support the development of the level of ESG information disclosure of the listed companies and general business organizations, including arranging channels for disseminating ESG information of the listed companies with good performance to domestic and foreign investors. Thus, it can increase more investment opportunities from the investors who rely on ESG criteria to reach their satisfactory long-term investment returns in combination with the distribution of positive social impacts. (Thaipat Institute, 2018)

From the selection of the listed companies in Universe of ESG 100 in 2019 based on documents and reports, or the specification of information the companies communicated and disseminated to the public in Form 56-1, according to the announcement of the Capital Market Supervisory Board on Criteria, Conditions, and Procedures of the Disclosure of Financial Position and Results of the Companies Issuing Securities, including in the annual reports, sustainability reports, and performance information related to sustainable development disclosed by investment companies, funds, trusts of six information sources, 100 listed companies were selected in the Universe of ESG 100, and classified into eight industry groups namely:

1) Agro & Food Industry	11 companies
2) Consumer Products	4 companies
3) Financials	12 companies
4) Industrials	15 companies
5) Property & Construction	21 companies
6) Resources	10 companies
7) Services	21 companies
8) Technology	6 companies

From the list, the companies selected the most came from services group and property & construction group the most (21 companies or securities), followed by industrials (15 companies), and financials (12 companies). Besides, there were 9 companies with listed securities in MAI in the ESG 100 list as follows: TMILL, XO, MOONG, FPI, MBAX, PPS, TPCH, SPA, and WINNER (as illustrated in Figure 1.2). The Total Market Capitalization in ESG 100 securities was 10.4 trillion baht or 62.6%, compared with a Market Cap of SET of 16.6 trillion baht (Thaipat Institute, 2019).

ADV	ANC	AH	AOT	B-WORK	BAFS	BAY	BCH	BCPG	BDMS	BEM
BG	ЪС	BGRIM	BH	BJC	BTS	BWG	CENTEL	СК	COM7	CPALL
CF	۶F	CPN	CPNCG	DELTA	DRT	EGATIF	EGCO	ERW	FPI	FTREIT
GP	SC	GULF	GVREIT	HMPRO	HTC	INTUCH	IRC	IVL	JASIF	KBANK
KK	(P	KTB	KTC	LH	LHFG	LHK	LHSC	LPN	М	MBAX
ME	ЗK	MEGA	MINT	MOONG	NER	NSI	NTV	NYT	ORI	OSP
P	В	POPF	PPS	PSH	PTT	QH	S&J	SAT	SCB	SCC
SC	P	SEAFCO	SIS	SMIT	SNC	SPA	SPALI	SPI	STANLY	SUC
SYN	IEX	TCAP	THANI	TISCO	TKS	TMB	TMD	TMILL	TMT	TOG
TPO	СН	TSC	TTW	TVO	TWPC	VGI	VNT	WHART	WINNER	XO

Figure 1.2 100 top securities of sustainable business operation in 2019.

Regarding Thai Institute of Directors, it is an organization surveying according to the Corporate Governance Survey of the Listed Companies in 2019 (CGR 2019) to explore and follow up the development of corporate governance of listed companies in Thailand based on Good Corporate Governance of the Organization for Economic Cooperation and Development (OECD) and listed companies in 2013 of SET. The overall assessment results will be presented to let other listed companies use as guidelines for developing their corporate governance, including other relevant organizations in considering policies and regulations concerning corporate governance. In 2019, 193 companies were assessed at the outstanding level (5-star), which increased from 142 companies in the previous year. (Thai Institute of Directors Association, 2019a)

As for ROBECOSAM, the conductor of Dow Jones Sustainability Indices (DJSI) at the international level, it presented that in 2019, there were 12 Thai listed companies, assessed by DJSI World, were selected to be DJSI members in 2019 or DJSI 2019 as follows: 1) KBANK, 2) SCB, 3) PTTEP, 4) PTT, 5) CPALL, 6) THBEV, 7) PTTGC, 8) SCC, 9) CPN, 10) ADVANC, 11) IVL and 12) AOT. For DJSI Emerging Markets or new markets, 20 Thai companies were selected into members of this list as follows: 1) KBANK, 2) SCB, 3) MINT, 4) BANPU, 5) IRPC, 6) PTTEP, 7) PTT, 8) TOP, 9) CPALL, 10) CPF, 11) THBEV, 12) TU, 13) IVL, 14) PTTGC, 15) CPN, 16) HMPRO, 17) TRUE, 18) AOT, 19) BTS, AND 20) ADVANC.

For this study, from considering the list of Thai listed companies, 34 companies were awarded by SET Sustainability Awards and 98 selected in the list of Thailand Sustainability Investment in 2019 (a name list as illustrated in Figure 1.1). All these listed companies must be in the list of ESG 100 with an outstanding sustainable business operation (a name list as illustrated in Figure 1.2) and evaluated at the "outstanding" level in CGR 2019, in combination with the consideration of Dow Jones Sustainability Indices (DJSI), by which 20 Thai companies were selected, including a name list of 32 Thai listed companies under MSCI All Country World Index.

Thus, from considering Thai listed companies with outstanding sustainable business operation in 2019, evaluated by domestic and international indicators as mentioned above, there were 8 companies as follows:

1)	CPALL	Established in 1988	(31 years)
2)	CPF	Established in 1978	(41 years)
3)	CPN	Established in 1980	(39 years)
4)	HMPRO	Established in 1995	(24 years)
5)	KBANK	Established in 1945	(74 years)
6)	MINT	Established in 1967	(52 years)
7)	PTT	Established in 1978	(41 years)
8)	SCC	Established in 1913	(106 years)

From the aforementioned name list, the researcher studied a communication process to create organizational sustainability by an in-depth interview with persons involved in communication for sustainable development at the executive and employee level, in combination with documentary analysis of rules, regulations, practices, and media used in dissemination, both online and offline, including communication for sustainable development plans of each organization.

1.4.2 Scope of Key Informants

The research aims to determine communication standards for sustainable development of Thai listed companies by selecting personnel according to the structure of the organizations involved in a communication process for sustainable development of Thai listed companies mainly. The key informants are thus executives who play a role and have the responsibility in governing and regulating the operation according to the organization's sustainable development plans to yield concrete outcomes. The executives are working groups, sub-committee, division heads, department chiefs, chiefs, etc., while the employees are those involved in sustainable development, comprising personnel under the supervision of executives and conduct an operation by plans, strategies, projects, in their division or department, and practitioners responsible for communication for sustainable development as planned.

1.4.3 Scope of Document and Media for Disseminating Sustainability Information

This research studied from the document of the Thai listed companies in 2019 by analyzing sustainability information disclosed to the public following practices of both national and international requirements in various forms of reports, i.e. Form 56-1, Form 56-2 or Annual Report (AR), CSR Report, and Sustainable Development Report (SD Report), as determined by GRI framework, in combination with studying new media the Thai listed companies used as main channels in publicizing their official sustainability information to the public. Besides, information from the websites of the following companies was studied:

1)	CPALL	https://www.cpall.co.th
2)	CPF	https://www.cpfworldwide.com
3)	CPN	https://www.cpn.co.th
4)	HMPRO	https://www.homepro.co.th
5)	KBANK	https://www.kasikornbank.com
6)	MINT	http://www.minor.com
7)	PTT	http://www.pttplc.com
8)	SCC	https://www.scg.com

1.5 Operational Definitions

The research entitled, "Communication Standards for Sustainable Development of Thai Listed Companies," defines the terms used in the study operationally as follows:

1.5.1 Communication standards mean criteria or requirement of the desirable characteristics of organizational communication with accepted practical guidelines or operational methods covering the whole organization communication process towards sustainable development: Input factors, i.e., policies, vision, mission, value, etc.; process factors or procedures of both internal and external organizational communication through various channels; and output factors, i.e. content, statement, images, infographics, video, clips, etc., which bring about outcome factors from the accomplishment of sustainable development goals.

1.5.2 Communication for sustainable development means a process of organizational information transmission to let stakeholders be informed, understand, accept, and participate in the organizational operation, aimed towards long-term business growth in parallel to the development of the quality of life of people in

society and the country, by reflecting an organization's ability to maintain the standards of using natural resources within natural production potential to achieve the goal of development sustainability. The main purpose is to create a balance of economics, society, environment, and governance, including the integration of collaborative partnerships within and outside the organization.

1.5.3 Organizational Communication means obligations and processes of communication management between an organization and major stakeholders within and outside the organization, aimed to create perception, positive attitude, and stimulate supporting behaviors to help increase competitive advantages and lead the organization towards sustainable development goals continually.

1.5.4 Internal organizational communication means a process of exchanging information and knowledge among organization members to reach the effectiveness and efficiency of the organization. Internal organization communication has several levels: individuals, groups, and the whole organization, which are interrelated under different environments, climate, and members' roles and responsibilities, which can be adjusted by time, place, content, and communication objectives.

1.5.5 Sustainable development means the reflection of the main roles of listed companies in creating economic growth with good corporate governance and the ability to balance social nurture and environment protection and development in parallel. By doing so, companies can apply diverse approaches, concepts, and practices appropriate and congruent with business contexts to develop stakeholders' quality of life that is related to business operation while being able to keep the level of natural resources utilization with no exceeding the potential or carrying capacity of the ecosystem.

1.5.6 Thai listed companies mean the public companies approved by the Securities and Exchange Commission (SEC) to be able or issue and sell their securities to general people, and approved by the Stock Exchange of Thailand (SET) to be registered as listed companies in SET and MAI (Market for Alternative Investment) by sizes of registered and paid-up shares, and other qualifications required by SET. Besides, they must be public companies limited that were assessed

to operate their business under the concept of sustainable development outstandingly at the national and international level in 2019.

1.5.7 Input factors mean components at the initial stage of a communication process towards sustainable development of Thai listed companies, comprising several sub-components playing significant and essential roles in driving the system of communication for sustainable development of Thai listed companies.

1.5.8 Process factors mean steps or procedures of transmitting information of organizational sustainable development to stakeholders to create perception, understanding, and confidence in the operations of Thai listed companies, including a positive attitude and supporting behaviors towards sustainable development based on the determined framework of each company, which accord with and respond to the stakeholders' expectation properly.

1.5.9 Output factors mean the consequences occurring from the systems and operation of communication for sustainable development conducted by Thai listed companies and communicated to stakeholders, within and outside the companies, following corporate strategic plans. The output can be both verbal and nonverbal, products, services, or tangible and intangible communication activities.

1.5.10 Outcome factors mean the impacts of communication for sustainable development achieved by Thai listed companies based on indicators and objectives specified in the strategic plans and determined strategy of a short term, medium-term, and long term, including reaching the goals of sustainable development and a good balance of economic, social, and environmental dimension. Besides, the consequence of communication for sustainable development can respond to the expectation of both internal and external stakeholders properly. The outcome must also be audited and assessed for reviewing and correcting communication strategies for sustainable development towards more effectiveness.

1.5.11 The environment of a system means the major state and condition that is dynamic, which can affect the business operation and a communication process for sustainable development of Thai listed companies. Besides, a communication process will interact consistently with the environment, which helps to examine if communication activities towards sustainable development occur under a proper context of an organization.

1.6 Expected Benefits

1.6.1 To develop a more complete body of knowledge in organizational communication and sustainable development, including guidelines for improving an effective and efficient communication process for both internal and external organizational communication, with standardized methods and procedures that can be used by every organization towards sustainable development in the future.

1.6.2 To enable organizations, agencies, and institutes interested in sustainable development to adopt standardized guidelines for effective use and for creating value and value-added for their organizational communication sustainably.

1.6.3 To stimulate Thai business sectors to pay more attention and significance to business operations towards sustainable development, which can attract Thai and foreign investors to jointly invest in the companies following the concept of sustainable investment.

1.6.4 To upgrade the standards of sustainable development and increase competitive advantage at the ASEAN and global level due to their application of communication standards for sustainable development to increase their business sustainability strongly.

1.6.5 To promote and drive business sectors and other agencies, both government and civic sectors, to apply communication standards for sustainable development in helping to mobilize Thailand towards sustainable development goals in economic, social, and environmental dimensions successfully.

CHAPTER 2

THE REVIEW OF LITERATURE

The research entitled, "Communication Standards for Sustainable Development of Thai Listed Companies" studied a communication process for sustainable development of the listed companies in Thailand, aimed to establish communication standards for top or chief executives to help them to implement their operation plans concretely, and for practitioners for implementing them as planned successfully in all three dimensions: social, environmental, and economic under good corporate governance, supervised by top executives. Besides, the constructed standards were tested and assessed to be accepted as communication standards for sustainable development, which can be applied by other organizations with business operations following the concept of sustainable development in the future. The study used the following concepts, theories, and related studies, as a conceptual framework:

- 2.1 System theory
- 2.2 Theories and concepts of standards
- 2.3 The concept of Moonshot Thinking
- 2.4 Theories and concepts of organizational communication
- 2.5 The concept of Sustainability Development (SD)
- 2.6 The concept of communication for sustainable development

2.1 System Theory

2.1.1 Definition

According to the Dictionary of Sociology, Royal Institute Dictionary (Office of the Royal Society, 2009), "system theory" is a paradigm initiated from a cognitive comparison between human physiological systems and social systems and an effort in making an understanding of a pattern or structure of the interconnected parts formed to be a system. This theory analyzes mechanisms that enable the parts of social systems to exist and be maintained in the equilibrium state

Lunenberg and Ornstein (1996) define a system as a group of interrelated components functioning as each unit for each specific purpose. Such a definition accords with that of Hoy, Miskel, and Tarter (2013) who define a system as a set of interrelated components, which are combined into one whole part, or a systematic and organized overview.

System Theory can be considered as an interdisciplinary theory that perceives all beings or substances in a holistic view (Capra, 1996), based on the assumption that everything is a part of a bigger system. On the other hand, such a system can also be subdivided into a large number of small systems at several levels. Still, these subsystems have a logical relationship, which affects their co-existence. Mele, Pels, and Polese (2010) believe that a system can be found in the natural, scientific, social, and economic contexts, including information processing.

Kalayanathum (2007) defines "a system" as interrelated components or factors having a reciprocal impact in an operation to achieve an organization's goals. A systemic work requires major components to perform their functions to reach the goals as planned, i.e., input factors, process factors, output factors, and feedback.

2.1.2 Major characteristics of a system

The distinguishing characteristic of System Theory is its simultaneous development from several disciplines in the second half of 1940. The basic principles are from Biology, or known as "General System Theory" of Ludwig von Bertalanffy, Physiology of Walter B. Cannon, Walter Pitts, and Warren McCulloch, and Information theory & Cybernetics of Claude Shannon, Norbert Wiener, and William Ross Ashby. Among them, the concept Shannon & Wiener was paid high attention to because of its coverage of different systems and focus on solving common problems. (Stichweh, 2000). On the other hand, Cybernetics is a study of communication concepts and the manipulation over living creatures, machines, and organizations, including self-regulation. The main focus is at a system (digital, mechanic, or biological) to see how information is processed, responded, and changed to better the working of all parts. (including manipulation and communication) (Novikov, 2016)

Bittel (1978) as cited in Ploysuwan (1996) states that the basic system framework comprises five major factors: input, sub-systems or processes, output, feedback, and environment, as illustrated in Figure 2.1.

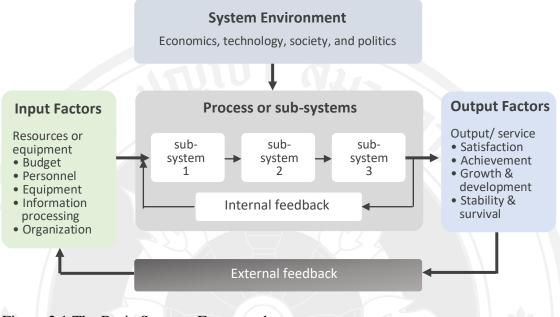


Figure 2.1 The Basic Systems Framework

System Theory is used to explain social mobilization since a society is like a large system. Durkheim (1984) states that a well-organized system of each working part can help to nurture a society. In a complex society, individuals perform different roles, which are adjusted all the time, leading to the creation of specific expertise. Therefore, the decomposition into parts can help to create interrelationships among social units.

Accordingly, System Theory is very meaningful for a process of social change management since in solving social problems, the consideration of only sub-systems or a large system cannot be accomplished. On the other hand, correcting the large system without affecting other sub-systems is unsuccessful either.

Wijitjammaree (2002) states that one of the important features of a system is when a sub-system is changed, it will affect changes in other sub-systems as well. Therefore, "a system" is a set of interrelated things forming to be a whole system. Generally, a system consists of the following features: 1) Wholeness. A system is formed by a driving force or interaction among interrelated units.

2) Hierarchy. A system is often embedded in another system as a part of a larger system (or supra system).

3) Self-regulation and Control. A system is purposive. All activities of a system will be controlled by goals. Thus, a system has self-regulation to achieve such goals whereas other subsystems must comply with it and adapt themselves to the environment based on the received feedback.

4) The interchange with the Environment. An open system will always interact with the environment and a system composes of both input and output factors. Namely, a system gets something in to yield an output out of it.

5) Balance. A system requires maintaining its equilibrium.

6) Change and Adaptability. A system necessarily survives amidst a dynamic environment; thus, it needs to be adaptable to the changing environment by leaving from its equilibrium temporarily. A progressive system can organize itself to respond to environmental pressure.

7) Equifinality. Goal achievement is the equifinality of a system. An adaptable system thus can achieve its goal under different types of environmental conditions. Besides, it can process input factors by different methods or approaches to yield output factors.

2.1.3 Systems in organizational operation

System Theory is also applied to explain organizational operations. Emery and Trist (1960) view that companies or organizations are counted as a system composing of social components (people) and technical components (technology and mechanics).

Pantawee (2001) states that "a system" can be divided into three parts:

- 1) Interdependence
- 2) Self-Regulation
- 3) Goal-Oriented

An organization is a system regulated by goals or purposes. Each organization will have self-regulation of its behaviors towards the determined goals. Parts of an organization will be interdepended and respond to the regulations the organization holds and to the changing environment, which rely on feedback, as a significant mechanism of self-regulation towards balanced organizational operations.

On the other hand, Yoisaeng (2012) views that a system is divided into two types:

1) Closed System is a system that is complete by itself; thus, it needs no connection with other systems and separates itself from the social environment. Thus, a closed system can be controlled and gives importance to only internal factors. No interchange of power energy, information, resources, or raw materials from outside is needed.

2) Open System is a system concerning both internal and external factors since it is believed that a system must interchange with other systems to exist through its interchange and interdependence, including the interchange interdependence with energy and other environments, i.e., individuals, organizations, agencies, in any aspect. Besides, the external environment is influential for organizational operations.

Katz and Kahn (1966) apply the concept of an open system with an organization because they view that an organization is a constructed system driven by the power of input and output factors. Furthermore, social organizations are an open system since they depend on raw materials or other environmental factors. Typically, the properties of an open system are as follows:

1) Importation of Energy: From external environment to put into a process.

2) The through–out: A transformation of energy into the form of activities and output. Thus, it is an internal process to cause internal activities within a system

3) Output: A transmission of output into the environment.

4) Cyclical activities: An organization has interdependent internal activities to yield outputs. However, such activities happen cyclically and continually based on time and spatial conditions.

5) Negative Entropy: The loss of energy in a working process. Normally, there is an effort of avoiding loss or disappearance to keep a system by drawing environmental energy and using it properly for survival, i.e. to keep the balance of an

organization towards changes and consistent adaptability to the environment and pressure from both internal and external organization properly.

6) Feedback Mechanisms: Responsive mechanisms to keep a system balanced consistently. A system will acquire information from the changing environment. A system consists of positive and negative feedback. Negative feedback indicates a system is being apart from the planned goal or direction; thus, it has to adapt itself to keep its balanced state, while positive or beneficial feedback will help organization members to have the motivation to work; thus, it indicates the success or consequences from an effective process.

7) Homeostasis: An ability to maintain an internal system stable and adaptable to the external changing environment.

8) Differentiation: The creation of differences by acquiring increased expertise for survival.

9) Equifinality is a state of the system attempting to achieve the planned goal by any different method or approach. It is based on the assumption that there are diverse ways for problem solutions. Thus, it highlights diverse operational practices and diverse utilization of resources.

Besides, the application of System Theory in an organizational context may lead to the following:

1) An organization consists of several interactive components. Each component is a part of the wholeness with specificity. These components are subunits or dimensions, i.e., people, process, structure, culture, etc.

2) Each organization has permeable boundaries, more or less depending on each organization, which enables an organization to interact with the external environment, which is the source of input factors.

3) An organization is a network of people, structure, and technical practices, functioning by transforming raw materials to be products or services needed by users in the environment.

4) An organization has a feedback mechanism, which leads to the adaptability of components to work harmoniously like the flow of information between an organization and the environment. Thus, it enhances adaptability and mutual effects.

5) The decay of a system can occurs if the energy cannot be input continually so no output is produced nor worth investment and development.

Thai listed companies will give importance to an open system since it facilitates a two-way communication. On the other hand, for a large system as an organization to grow and operate in balance, it needs information, including external environment as crucial raw materials for driving to be an important input factor, namely sustainable development, which is a universal guideline that organizations can hold. At the same time, organizations have to adapt themselves through this guideline to get along with the organizational process, which is a process factor, leading to activities or output that can reflect the outcome of sustainable development.

Still, organizations cannot perform their management by themselves solely without sub-units, which help to support the organizations' work continually. Such sub-units are shareholders, executives, employees, regulating agencies or regulators, people, including stakeholders, who have to perform their functions effectively and are important units to transmit feedback to the system to reach the planned goal. Thus, the researcher applied System Theory as a conceptual framework for the study to explore an organizational communication process and to analyze how these subsystems are interrelated to determine organizational communication standards for sustainable development properly.

2.2 Theories and Concepts of Standards

2.2.1 Meanings of standards

"Standards" are the terms used in various disciplines with different approaches. The researcher compiled the following concepts of standards for applying in this study:

Office of the Royal Society (2009) defines "a standard" as something held as a generally acceptable criterion like Greenwich time standard. It is something to which people adhere for comparison both quantitatively and qualitatively, such as industry standards, etc.

Collins (2020) defines "a standard" with many meanings as follows:

1) A level of quality or achievement, especially a level is thought to be acceptable.

2) Something that one uses to judge the quality of something else

Business Dictionary (2020) defines "a standard" as something accepted, or approved or the signification of something it should be at the universal or general level. The meanings of "a standard" can be classified as follows:

1) Material or substance with well-known properties at the sufficiently accurate level that can be used as a physical reference in comparison or for measuring with other material or substance with the same properties.

2) Determined concepts, norms, principles through common agreement. The use of power or tradition generally used as an exemplar or a model for comparison or measurement of the quality or effectiveness of a practice or procedure.

3) Written definitions for limitation or approved and audited rules to yield compliance with an authorized agency (or a professional organization, or an accepted agency). It is a low-standard criterion that is acceptable.

From the above definitions, a standard is a concept or principle composed of criteria or regulations generally accepted as a practical guideline of doing something, which can be used as a reference and an assessment of value, quality, and effectiveness of a practice.

2.2.2 Types of Standards

Standards are like statements that specify expected details, procedures, and approaches to make sure that products, services, and systems are save, congruent, and reliable, which covers several subjects: products and services for consumers, environment, construction, water, public utilities, energy, etc. Generally, standards can be divided into three types: universal or international standards, regional standards, and national standards. (Standards Australia, 2020)

Moreover, the European Committee for Standardization (CEN) and the European Committee for Electro - technical Standardization (CENELEC) (CEN & CENELEC, 2019) specify that standards can be divided into four main types as follows:

1) Fundamental standards: Involve terminology, agreement, signs, and symbols.

2) Test methods and analysis standards: Measure characteristics, i.e., temperature, chemical components, etc.

3) Specification standards: Determine attributes of products (product standards) or service (service standards), and effectiveness criteria, i.e., suitability for interface usage, the ability for co-working, sanitation and safety, environmental protection, etc.

4) Organizational standards: Explain functions and relationships in an organization, including other features, i.e., quality management and assurance, maintenance, value analysis, logistics, project or system management, production management, etc.

On the other hand, Thasanabanchong (2002) states that standards can be divided into six levels:

1) Personal Standards: Determined by oneself

2) Company Standards: Companies determine target customers and needed quality

3) Association Standards: Determined by a group of the same profession.

4) National Standards: Determined by government agencies, i.e., Thai Industrial Standards Institute, etc.

5) Regional Standards: ASEAN or ASEM standards

6) International Standards: ISO

Besides, Kemp and Richardson, (1995: 42) (as cited in Thasanabanchong (2002)) cite distinguished characteristics of standards as follows:

1) Measurable: Can indicate the result

2) Realistic: Can be reached

3) Appropriate: Can be applied properly

4) Desirable and acceptable: Can be assured of no violation of culture, professional codes of ethics, policies, or procedures

5) Unambiguous: Clear meaning.

Consequently, the methods of constructing standards are very important and require appropriate procedures. Thus, Thomson (1886, as cited in Webster and Eren

(2014)) propose the concept idea for constructing standards, as illustrated in Figure 2.2

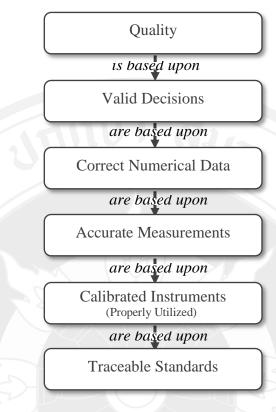


Figure 2.2 A Conceptual Basis of Measurements

Figure 2.2 illustrates interesting sequences to reach the quality. Namely, "doing the right thing" requires correct and accurate decision-making. However, valid decisions cannot be made without correct numerical data. Still, all of these must come from accurate measurement through calibrated instruments. Finally, instruments that are accurate enough can measure other things at other times and places accurately if they are standardized and traceable.

2.2.3 The Importance of Standards

Standards play a very significant role in organizational operations nowadays since standards help to develop products through supporting methods that increase an understanding and application at the international level. Hence, it stimulates coworking and makes product development more easily. Moreover, it accelerates the launching of products into a market. Standards also facilitate an understanding of the level of products by comparing with competitors' products based on established standards accepted worldwide and applied in several markets. Furthermore, standards are stimulus towards technological development and utilization, which cause changes in people's lifestyle, working style, and communication. (IEEE, 2011). Such notions accord with the European Commission (Hatto, 2010), which specifies important roles of standards as follows:

1) Assure the safety, quality, and credibility of products, procedures, and services.

- 2) Increase production effectiveness
- 3) Reduce capital cost competition
- 4) Support rules and regulations

Besides, Kritchaphongwara (2015) describes the benefits of the adoption of standards systems into an organization as follow:

- 1) Benefits for an organization
 - (1) Have a more systematic working process, leading to the acceptance of every step of the operational procedures.
 - (2) Have a correct and systematic operation to display quality products and services.
 - (3) Increase positive image.
 - (4) Reduce cost and capital, while increasing operational effectiveness and efficiency.
 - (5) More secure and safer organizational information processing systems.
 - (6) Increase competitiveness potential
- 2) Benefits for employees
 - Create working satisfaction with organizational operations that are systematic and explicit, including having handbooks enabling for interchanging roles. Besides, it enhances working audits at all steps.
 - (2) Increase employees' participation in the working quality as determined by standards of systems and procedures.
 - (3) Reduce risks of accidents causing injuries, sickness, and losses under a safe working process.

- (4) Induce supporting behaviors towards the creation of quality awareness in every step of working, while increasing teamwork.
- 3) Benefits for customers
 - Trust the quality of products and services with increased satisfaction and good relationships between an organization and customers.
 - (2) Save customers' time and expenses for testing products' standards.
- 4) Benefits for the society and the nation
 - Increase participation in sustainable development, including creating good sanitation and welfare for the society
 - (2) Reduce environmental problems by causing no negative impacts on the environment.

Moreover, Hekmat (2005) adds that standards also help to connect networks located in different geography (i.e., nations and continents). Thus, from the customers' perspective, "standards" mean actual cost-saving since standards enable them to access diverse networks and services.

2.2.4 Standards in business operations

To connect research with business sectors, it is necessary to have standards with equal values as tools for promoting innovation and commerce through several ways as follows:

- 1) The dissemination of new concepts and good practices
- 2) The validation or test by new instruments and measurement methods.
- 3) The application of new processes and procedures.

Furthermore, the following standards have been applied in business operations in various dimensions towards the creation of quality excellence, internal organizational operations effectiveness, and others: (Kritchaphongwara, 2015)

1) ISO 9000: Standards on quality management and quality assurance developed to help companies effectively document the quality system elements needed to maintain an efficient quality system 2) ISO 9001: Standards for a quality management system. Organizations use the standard to demonstrate the ability to consistently provide products and services that meet customer and regulatory requirements.

3) ISO 9002: Standards for quality assurance in installation, production, and service provision.

4) ISO 9003: Standards for quality assurance in final inspection and test covered only the final inspection of finished products

5) ISO 9004: Guidelines for quality management towards the maximized effectiveness or guidance to achieve sustained success, with sub-requirements for each type of business.

6) ISO 14000: Standards for environmental management systems, aimed towards continual environmental improvement.

7) ISO 14001: Standards for environmental management systems, aimed to reduce and regulate environmental problems with effective environmental management.

8) ISO 18000: Standards for quality management systems of sanitation and safety.

9) OHSAS 18001: Standards for sanitation and safety management systems. They are regulations aimed to reduce and control risks and dangers, causing injuries, sickness, and losses, including risks towards accidents during a working process, for employees and organizational practitioners.

10) ISO 50001: Standards for energy management systems, aimed towards effective energy utilization, and continual energy improvement and conservation capacity.

11) ISO 26001: Standards for Cooperation Social Responsibility (CSR), focused on possible impacts caused by an organization's decisions or activities (including products, services, and procedures) on the society and environment by an organization's transparent and ethical expression. It also includes participation in sustainable development, good sanitation, and welfare for the society by concerning stakeholders' expectations, and complying with laws and universal practices.

12) ISO 27001: Standards for management systems of information processing security from improper or wrongful access, usage, disclosure, obstruction, modification, loss, damage, or violation of information processing and properties.

Moreover, there are other standards relevant to business operations, such as Industrial Standards, Accounting Standards, Communication Standards, Reporting Standards, etc.

2.2.5 Business operation standards based on sustainability approaches

Thai listed companies are required to operate their business under several standard frameworks. However, the standards related to sustainable development mostly held by listed companies at present can be divided by levels and practical guidelines as follows:

1) National Standards

(1) Thailand's Private Sector Collective Action Coalition Against Corruption (CAC), operated by the Thai Institute of Directors, is a project helping listed companies to apply the concerned standards for controlling the corruption risks systematically. It also aims to create an ecosystem for transparent business operations by determining 71 criteria, such as anti-corruption in all forms, strong determination towards anti-corruption policies, preparation of required documents, risk assessment for developing anti-corruption measures, the consideration on the appropriateness of anti-corruption laws, political assistance, charity donation, financial support, gifts expenses, reception service costs and other miscellaneous expenses, organizational structure and responsibilities, determination projection of a corporate committee or executives, measures implementation by an organization or business-involved personnel, supporting parties, and human resource management, etc. (Collective Action Against Corruption, 2018)

(2) The integrity and transparency Assessment (ITA) on government organizations is the assessment covering government agencies throughout the country. Thai listed companies, which are state enterprises, have to apply it as guidance to improve and develop operational effectiveness. Besides, it is for communicating an organization's image to let the society and general public be informed of how an agency gives importance to the information disclosure, and how it prevents anticorruption in an organization. The assessment consists of 10 indicators: Performance, budgets, authority, governmental property utilization, corruption resolutions, operational quality, communication effectiveness, working procedure improvement, information disclosure, and corruption prevention. (The Integrity and Transparency Assessment of Government Organizations Center (ITA), National Anti-Corruption Commission (Office of the National Anti-Corruption Commission, 2020).

(3) A Survey and Monitoring Program on the Development of the Corporate Governance of Thai Listed Companies in Thailand, organized by the Thai Institute of Directors (Thai IOD), is aimed to present corporate performance based on the guidelines of corporate governance principles or standards, and to stimulate the development of the good corporate governance of Thai listed companies, by assessing five categories, namely shareholders' rights (having 32 sub-criteria), equal treatment for shareholders (19 sub-criteria), roles of stakeholders (29 sub-criteria), information disclosure and transparency (53 sub-criteria), and the committee's responsibilities (108 sub-criteria), totally 241 sub-criteria (Thai Institute of Directors Association, 2018a).

(4) Annual General Meeting of Shareholders (AGM) Quality Assessment Program of Thai listed Companies, organized by Thai Investors Association, aimed to encourage Thai listed companies to realize the importance of an annual general meeting of shareholders and keep the standards of the annual general meeting to be close to and acceptable at the universal level. Besides, it leads to the creation of a positive attitude towards Thai capital markets in terms of shareholders' participation and rights under good corporate governance. Moreover, it can stimulate shareholders to realize the benefits of attending the meeting and create collaboration and good relationships among concerned agencies in the capital market. Three principal categories and one special category are assessed as follows: Before the meeting of shareholders (4 criteria), during the meeting (7 criteria), after the meeting (5 criteria), and other practices following good corporate governance principles (5 criteria). (Thai Investors Association, 2017).

(5) Thailand Sustainability Investment provides the list of companies with sustainable business operations from the standards assessment of environmental, social, and corporate governance indicators. It is the list of the companies that respond in the sustainability assessment form of the Stock Exchange of Thailand (SET) voluntarily and earns sustainability assessment scores of more than half of the full scores in each dimension: economic, environmental, and social. The name list is also acquired from the selected members by Dow Jones Sustainability Indices (DJSI) in each year that the results of the sustainability assessment are announced. The assessment is classified into 19 indicators as follows: Economic indicators: corporate governance (8), Business and anti-corruption codes of ethics (3), risk and crisis management (5), identification of business essence (1), customer relations management (1), supply chain management (3), tax procedures (1); Environmental indicators: environmental information disclosure (1), environmental management (1), effective resources utilization (5), and biodiversity (1); and social indicators: social information disclosure (1), fair labor treatment and respect of human rights (2), employee empowerment (1), employee supervision (3), sanitation and safety in the working environment (1), participation in the community and society (2), and stakeholders' participation (2), totally 43 folds (The Stock Exchange of Thailand, 2018b).

(6) ESG Index is an index for comparing investment returns or benchmark index. It can be used as Investable Index for financial products giving importance to quality securities that pass the ESG criteria, assessed by Thaipat Institute. They are 100 securities or ESG 100, which are the securities with outstanding performance in environmental, social, and corporate governance dimensions. Three indices are used: (1) Price Return Index or Thaipat ESG Index PR is an index displaying the level of movement of securities price, (2) Total Return Index or is Thaipat ESG Index TR is an index displaying the level of movement of total yield or return, calculated in the form of dividends, and (3) Net Total Return Index or Thaipat ESG Index NTR is an index for displaying the level of net total returns, calculated in the dividend after the tax deduction. The main assessment criteria are based on the consideration on ESG that affects industrial growth potential, the methods companies use in specifying and managing opportunities and risks related to the ESG issues, and the impacts of ESG on the company's performance, by analyzing each industrial groups of the total eight groups. Besides, the information used for the assessment is that disclosed to the public, i.e., the Annual Report, Form

56-1, notification letters of meeting appointments, Annual General Meeting of shareholders, a company's websites, information publicized via the Stock Exchange of Thailand (SET), the Securities and Exchange Commission (SEC), and other disclosed information to the public (Thaipat Institute, 2019).

(7) For information disclosure and the Sustainability Report, SEC determines more practical standards for disclosing sustainability information for the Thai business sector and contains them under the good corporate governance principles for Thai companies listed in 2017. For instance, it is specified in Principle 7.4: "The board should ensure sustainability reporting, as appropriate," and also determines practices of disclosing CSR information in Form 56-1, comprising 1) fair business operations, 2) anti-corruption, 3) respect of human rights, 4) fair labor treatment, 5) responsibility for consumers, 6) environmental surveillance, 7) participation in the community and society, and 8) innovation and dissemination. The assessment is based on business operations with responsibility for society, environment, and stakeholders, presented in both financial and non-financial information. The corporate governance section and reports on social and environmental dimensions are reported separately in the Annual Report (Form 56-2). (The Securities and Exchange Commission, 2017a). On the other hand, the Stock Exchange of Thailand (SET) also identifies guidelines for sustainable information disclosure by specifying it under Part 3: roles of stakeholders, No. 2: The disclosure of policy compliance, and the preparation of CSR report. (The Stock Exchange of Thailand, 2012).

2) International Standards

(1) UN Global Compact (UNGC) is a UN strategic policy providing standardized guidelines for business operations based on 10 universal principles, UN development goals in various aspects, and the application of 10 universal principles for national practices. It composes of four main issues: human rights: 1) support and respect the protection of human rights declared at the international level within the authorized scope, 2) inspect to prevent the violation of human rights in corporate business; Labor: 3)support the labor's freedom in group formation and certify their rights in a negotiation process earnestly, 4) eradicate the use of forced or compulsory labor in all forms, 5) no use of child labor strictly, 6) no discrimination in the

employment and professions; Environment: 7) support the surveillance of an operation that might affect the environment, 8) organize activities to increase responsibilities for the environment voluntarily, 9) promote the development and dissemination of friendly technologies for the environment, and Anti-Corruption: 10) operate in anti-corruption, including threatening and bribery in all forms, and promoting strategic implementation for driving towards the society's goal at large, i.e., UN SDGs (United Nations Global Compact, 2020).

(2) Sustainable Development Goals (SDGs). UN established sustainable development goals from September 2015 to August 2030 as the development direction for the world community, consisting of 17 goals and 169 targets. (United Nations, 2019)

(3) Dow Jones Sustainability Indices (DJSI) are the securities indices of leading companies of the world, assessed by sustainability index on economic, social, and environmental dimensions, and accepted by institute investors around the world as investment information sources. The indices are assessed by RobecoSAM, which uses an evaluation form specifically for each of 60 industrial groups classified by RobecoSAM, based on Global Industry Classification Standard (GICS), for selecting best-in-class companies efficiently. Besides, the assessment can compare the performance scores of companies in the same industrial group. Typically, it contains the following indices: Economic Indices comprising corporate governance, the main essence of business, risk and crisis management, business codes of ethics, customers relations management, policies, brand management, tax strategies, information and cybersecurity, and privacy protection, Environmental Indices comprising an environmental report, environmental policies and management systems, ecoeconomic effectiveness, and climate strategies, Social Indices comprising a social report, indicators of labor operations, human rights, human capital management, compensation, welfare, and employee development, good organizational employees, sanitation and safety, etc. (RobecoSAM, 2019a).

(4) CG Watch is a Corporate Governance (CG) report based on standards of countries in the Asian region, organized by the Asian Corporate Governance Association (ACGA). ACGA, which is a non-profit independent organization, has collaborated with Crédit Lyonnais Securities Asia (CLSA) and Asia-Pacific Markets in organizing a CG Watch report from 2001 up to the present. The assessment criteria consist of 5 topics. Namely, 1) Government & public governance, (2) regulators, (3) CG rules, (4) listed companies, (5) investors, (6) auditors & audit regulators, and (7) civil society and media. (Asian Corporate Governance Association & CLSA Limited, 2018)

(5) ASEAN Corporate Governance Scorecard (ACGS) is the good corporate governance assessment of listed companies in the ASEAN region, which is a part of the ASEAN Capital Markets Forum (ACMF) or ACMF Corporate Governance Initiatives, by disclosing the level of governance quality of listed companies. The purposes are to enhance more effective corporate governance in the region and to create standards of good corporate governance, including standards of operational indices of capital markets in the ASEAN region to be tantamount to universal standards and accepted by investors of all nations. Besides, it is to carry the liberalization of trade in the ASEAN region. The countries in the ASEAN region participating in the assessment are Thailand, Malaysia, Singapore, the Philippines, Indonesia, and Vietnam. The assessment is based on five categories: shareholders' rights, equal treatment of shareholders, roles of stakeholders, information disclosure and transparency, and the board's responsibilities, comprising a total of 183 sub-criteria. (The Stock Exchange of Thailand, 2020).

(6) The accepted international standards related to information disclosure and sustainability reports are those of the Global Reporting Initiative (GRI) and the International Integrated Reporting Council (IIRC). GRI is considered the most popular model of sustainability reports since the reporting indicators are easy to understand, clear, and simple. Besides, it is suitable for all kinds of organizations of all sizes and all kinds of industry. At present, "GRI Standards" are used as the framework for sustainability reports, but containing the same content, principles, and format as before. It composes of two parts: basic information or universal standards, i.e., company profile, corporate governance, organizational strategies, risks, the main essence of the business, and stakeholder analysis, and specific information or topic-specific standards, covering economic, social, and environmental standards. However, what is different from the previous report is the more systematic structure of reporting and the reduced complexity of reporting information by changing some

major indicators. Besides, the structure of GRI Standards has been designed to carry such changes of indicators and rules for internal use in the future, without revising the whole structure. (Tantimangkorn & Ekachaiphiboon, 2017a)

(7) Integrated Report (IR) by International Integrated Report Council (IIRC) in collaboration with the United Nations Principles for Responsible Investment (UNPRI) was developed under the concept of Sustainability Report by combining several sustainability reports to be submitted into only one integrated report to create common universal standards of a Sustainability Report, add and develop good corporate governance, including long-term benefits for corporate economics and co-existence of business and communities, and society and the environment. (Suttipun, 2013). It is a report that connects a business model with business measurement to emphasize core organizational strategies. (Supphatada, 2016). The report comprises general information of an organization, external environment related to the business, corporate governance, business types, threats and opportunities, resources allocation and strategies, operational performance, business operation trends, and guidelines for report preparation and presentation. (International Integrated Reporting Council, 2013)

Business operation standards based on sustainable development guidelines are summarized in Table 2.1

 Table 2.1
 The comparison of indicators based on the national and international sustainable development standards used as practical guidelines for Thai listed companies

		SD	Natio	onal S	Stand	lard	1	S	D In	terna	tiona	ıl Sta	ndar	d
Criteria / Index	CAC ¹	ITA ²	CGR ³	AGM ⁴	SISHT	ESG Index ⁶	SEC	UNGC	SDGs ⁹	DJSI	CG Watch ¹¹	ACGS ¹²	GRI^{13}	IR^{14}
Organizational Dimension	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	√ √	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
- Purpose/objectives (short, medium, and long-term)			✓					✓			✓	✓	✓	✓
- Mission, vision/values			\checkmark								\checkmark	\checkmark	\checkmark	\checkmark
- Organizational strategies			\checkmark									\checkmark		\checkmark

		SD	Natio	onal S	Stand	ard		S	D In	terna	tiona	al Sta	ndar	d
Criteria / Index	\mathbf{CAC}^{1}	\mathbf{ITA}^2	CGR ³	${\bf AGM^4}$	³ ISHT ⁵	ESG Index ^{6}	\mathbf{SEC}^7	UNGC	SDGs [°]	\mathbf{DJSI}^{10}	CG Watch ¹¹	ACGS ¹²	GRI^{13}	\mathbf{IR}^{14}
- Organizational structure - Structure of business	~	~	✓ ✓									✓ ✓	✓ ✓	√ √
group														
Structure of share- holdingBusiness type								1				√ √	√ √	✓ ✓
- Market and competition			~							\sim		· ~	• •	• •
- Background/qualification of board & top executives		~	~	1								~	✓	✓
- Type of committee			~	~								✓	✓	~
- Duties/responsibilities	\checkmark	~	~									√	~	~
- Scope of authority		~	~									✓ √	v	~
- Board/top executive Nomination			v									v	v	
- Corporate/board consultant			~	~								~		
- Numbers and types of			~										\checkmark	~
employees - Corporate rules			1									\checkmark		
 Strategic/development plans 		~	ļ										~	
- Relevant laws		~												
- Operational quality		\checkmark			\checkmark			\checkmark					\checkmark	\checkmark
assessment														
 Working systems improvement 		×			V									
- Contact/location/branch		\checkmark	\checkmark									\checkmark	~	1
information														
- Capital/brand					\checkmark					~				\checkmark
management					/	/								/
 Innovation/production & service technologies 					v	v							v	v
Economic dimension	$\overline{\Lambda}$	\checkmark	\checkmark	~	1	~	1	~	1	1	1	✓	✓	✓
- Financial			~		~	~					~	\checkmark	\checkmark	\checkmark
status/performance														
- board/management			\checkmark	√								\checkmark	\checkmark	\checkmark
compensation - Employee compensation			✓							✓		✓	✓	✓
and welfare - Budget spending		\checkmark	\checkmark									\checkmark		
- Financial		-	✓									✓	\checkmark	
acquisition/assistance														
- Exchanged/connected directory			✓	✓								✓		
uncetory														

Criteria / Index U W			SD	Natio	onal S	Stand	ard		S	D In	terna	tiona	ıl Sta	ndar	d
Securities holding &changes Dividend payment Non-financial indicators, i.e. market shares Auditor/audit fee Supply chain management Tax strategies and operation Innovation Innovation Innovation Employee treatment Employee treatment Cocupation health, security, and sanitation Human right respect Costial partner treatment V <liv< li=""> <liv< li=""> V <li< td=""><td>Criteria / Index</td><td>CAC</td><td>$\mathbf{ITA}^{\mathrm{z}}$</td><td>CGR³</td><td>$\mathbf{AGM}^4$</td><td>²ISHT</td><td>$ESG Index^6$</td><td>SEC</td><td>UNGC</td><td>${\rm SDGs}^{\circ}$</td><td>\mathbf{DJSI}^{10}</td><td>CG Watch¹¹</td><td>$ACGS^{12}$</td><td>GRI^{13}</td><td>IR^{14}</td></li<></liv<></liv<>	Criteria / Index	CAC	$\mathbf{ITA}^{\mathrm{z}}$	CGR ³	\mathbf{AGM}^4	² ISHT	$ESG Index^6$	SEC	UNGC	${\rm SDGs}^{\circ}$	\mathbf{DJSI}^{10}	CG Watch ¹¹	$ACGS^{12}$	GRI^{13}	IR^{14}
&changes				~									√		
 Dividend payment Non-financial indicators, i.e. market shares Auditor/audit fee Supply chain Tax strategies and operation Tax strategies and operation Innovation possession/dissemination Social Dimension Competitor treatment Competitor treatment Competitor treatment Competitor treatment Social partnership Social investment Social investment<td>÷</td><td></td><td></td><td>✓</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>~</td><td></td><td></td>	÷			✓									~		
i.e. market shares Auditor/audit fee Supply chain management Tax strategies and operation possession/dissemination Social Dimension Employee evaluation Human right respect Competitor treatment Competitor treatment Community treatment Community treatment Composition/ducation Creation of a paceful society Human capital development Impacts on community & society Environmental Dimension Community & Stakeholders' Community & Stakeholders Community & Stakeholders Community & Stakeholders Community & Stakeholders Community & Community &				\checkmark	\checkmark								\checkmark	\checkmark	
 Auditor/audit fee Supply chain management Tax strategies and operation Innovation possession/dissemination Social Dimension Customer/consumer V <liv< li=""> V V <</liv<>				1									\checkmark	\checkmark	\checkmark
 Supply chain management Tax strategies and operation Innovation possession/dissemination Social Dimension Creation health, security, and sanitation Human right respect Coupation health, security, and sanitation Human right respect Coupation treatment Competitor treatment Social preterment Computing treatment Computing treatment V V<td></td><td></td><td></td><td>./</td><td>./</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>./</td><td></td><td></td>				./	./								./		
management Tax strategies and operation Innovation possession/dissemination Social Dimension Innovation Isoparation <liisoparation<< td=""><td></td><td></td><td></td><td>v</td><td>Ŷ</td><td>\checkmark</td><td>\checkmark</td><td></td><td>\checkmark</td><td></td><td></td><td></td><td>v</td><td></td><td></td></liisoparation<<>				v	Ŷ	\checkmark	\checkmark		\checkmark				v		
operation Innovation possession/dissemination Impose the sympthemetic of the symphretic of															
Innovation possession/dissemination v						~					~				
Social Dimension								\checkmark		1					
 Employee treatment Employee evaluation Employment Occupation health, security, and sanitation Human right respect Customer/consumer treatment Competitor treatment Competitor treatment Debtor treatment Computity reatment Debtor treatment Community treatment Stakeholders' Stakeholders' Social partnership Poverty elimination Hunger termination Knowledge provision/education Creation of a peaceful society Muman capital development Impacts on community & society Environmental Dimension Y Y					Y										
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 Employment Occupation health, security, and sanitation Human right respect Customer/consumer Customer/consumer Competitor treatment Competitor treatment Partner treatment Debtor treatment Community treatment Community treatment Stakeholders' V Stakeholders' V V<!--</td--><td>- Employee treatment</td><td></td><td></td><td>\checkmark</td><td></td><td>\checkmark</td><td></td><td></td><td></td><td></td><td>\checkmark</td><td></td><td>\checkmark</td><td>\checkmark</td><td></td>	- Employee treatment			\checkmark		\checkmark					\checkmark		\checkmark	\checkmark	
 Occupation health, security, and sanitation Human right respect Customer/consumer treatment Competitor treatment Partner treatment Debtor treatment Community treatment Community treatment Community treatment Stakeholders' Social investment Social partnership Poverty elimination Hunger termination Knowledge provision/education Creation of a peaceful society Human capital development Impacts on community & society Environmental Dimension V V	- Employee evaluation								\checkmark						
security, and sanitation Human right respect Customer/consumer Customer/consumer treatment Competitor treatment Partner treatment Debtor treatment Community treatment Community treatment Community treatment Labor treatment Social investment Social partnership Poverty elimination Knowledge provision/education Creation of a peaceful society Human capital development Impacts on community & society Environmental Dimension										~				✓	
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- Customer/consumer ✓				1		1		~	\checkmark		✓		\checkmark	~	
- Competitor treatment ✓ <td></td> <td></td> <td></td> <td>\checkmark</td> <td></td> <td>\checkmark</td> <td></td> <td>\checkmark</td> <td></td> <td></td> <td></td> <td></td> <td>\checkmark</td> <td></td> <td></td>				\checkmark		\checkmark		\checkmark					\checkmark		
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 Community treatment Labor treatment Stakeholders' Stakeholders' Stakeholders' Social investment Social partnership Poverty elimination Hunger termination Knowledge provision/education Creation of a peaceful society Human capital development Impacts on community & society 				1					V				1		
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engagement & support - Social investment - Social partnership - Poverty elimination - Hunger termination - Knowledge provision/education - Creation of a peaceful society - Human capital development - Impacts on community & society Environmental Dimension						\checkmark		\checkmark	\checkmark		~			~	
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provision/education ✓ ✓ - Creation of a peaceful society ✓ ✓ - Human capital development ✓ ✓ - Impacts on community & society ✓ ✓ Environmental Dimension ✓	- Hunger termination									~					
 Creation of a peaceful society Human capital development Impacts on community & Environmental Dimension 										\checkmark					
society ✓<										\checkmark				\checkmark	
- Human capital development ✓ <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>-</td><td></td></td<>														-	
- Impacts on community & society ✓ Environmental Dimension ✓	- Human capital										\checkmark				
society Environmental Dimension Image: Additional system of the system	-													1	
Environmental Dimension \checkmark \checkmark \checkmark \checkmark \checkmark \checkmark \checkmark \checkmark \checkmark	- · ·													•	
				\checkmark		✓	✓	\checkmark	✓	✓	✓	✓	✓	✓	\checkmark
- Information of resource	- Information of resource						\checkmark							\checkmark	

\mathbf{CAC}^{1}	$\mathbf{T}\mathbf{A}^2$	ŝ	4		x					11			
	Ι	CGI	AGM	⁵ ISHT	ESG Index ^{6}	SEC	UNGC	$SDGs^{\circ}$	\mathbf{DJSI}^{10}	CG Watch ¹¹	ACGS ¹²	GRI^{13}	\mathbf{IR}^{14}
		1									/	/	
		✓ ✓		~	~		~	~			✓ ✓	√ √	√
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					~			•				~	
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~	✓	\checkmark	\checkmark	~	~	-	~	✓	~	~	✓	✓	✓
		✓ ✓	✓		✓ ✓	1		V		√	√ √	√	✓ ✓
		\checkmark			\checkmark		\checkmark				\checkmark		\checkmark
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		× ×											

		SD	Natio	onal S	Stand	ard		S	D In	terna	tiona	ıl Sta	ndar	d
Criteria / Index	CAC	\mathbf{ITA}^{2}	CGR ³	${\bf AGM}^4$	THSI	ESG Index ⁶	SEC	UNGC	${\rm SDGs}^{\circ}$	\mathbf{DJSI}^{10}	CG Watch ¹¹	ACGS ¹²	GRI^{13}	\mathbf{IR}^{14}
- Threats/opportunities assessment & risk and			√		✓	✓		~		√		√	√	✓
crisis managementCode of ethics/ codes of conduct			1		1	~		~		~	✓	√	√	✓
- Compliance and internal audit		1	~					~			~	~	✓	✓
- Conflicts of interest		~	\checkmark	~								\checkmark	✓	
- Inspection of discretion use		~											~	
- External auditing	\checkmark		\checkmark	1		\checkmark		✓			~	\checkmark	\checkmark	
- Information security and safety, i.e. the use of			~		~	~				~		~		
inside information cyber securities														
- Privacy protection						\checkmark				\checkmark			\checkmark	
Anti-corruption dimension	\checkmark	~	~		~	~	~	~				~	\checkmark	
- Prohibition of corruption of all kinds	1	~			~	~	~	Ğ						
- Political assistance	1													
Charity donationFinancial support	V													
- Gifts, service & reception	1													
fee, and other expenses - Comply with guideline	4													
- Raise of doubts and	1													
recommendation requestInternal control	\checkmark		\checkmark									\checkmark		
- Anti-corruption risks assessment and	~	✓	✓					~				~	~	
management														
- Monitoring and reviewing	1	1	~									\checkmark	\checkmark	
- The use of government		1											\checkmark	
property		1	1											
- Anti-corruption in a wide range		V	V					•				V	V	
- Procurement		\checkmark						✓						
<u>Communication</u> <u>dimension</u>	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
 Crisis communication Marketing 					✓	✓							✓	
communication														

		SD	Natio	onal S	Stand	ard		S	SD In	terna	tiona	al Sta	ndar	d
Criteria / Index	$\mathbf{CAC}^{\scriptscriptstyle 1}$	\mathbf{ITA}^2	CGR ³	${\bf AGM}^4$	3ISHT	ESG Index ^{6}	SEC	UNGC	SDGs [°]	\mathbf{DJSI}^{10}	CG Watch ¹¹	ACGS ¹²	GRI ¹³	IR^{14}
- Communication		✓											✓	
 effectiveness English publication Information sufficiency Transparent information disclosure to the public, both quantitative and 		•	* * *	✓ ✓		~		~			•	✓ ✓ ✓		✓ ✓
 qualitative, i.e., statistics Easy to understand/no complicating content Connection/cause and effect 		~												✓ ✓
Focal point orientationForesightUse of technology and innovation														✓ ✓ ✓
Internal communication	✓	\checkmark	~	~	~	~	~	~	\checkmark	√	✓	~	\checkmark	~
 Policies, regulations, requirements Action plans Budget expenditure plans Operational handbook/standards Service handbook/standards 		* * * *						*		✓ ✓				
- Employee development/training	~		~		~	~		~		~			~	~
- Relationship activities														
External communication	~	~	√	~	~	~	~	~	~	~	~	~	~	~
 Notice for Annual General Meeting Annual general meeting of shareholders The announcement, i.e. 		-	 ✓ ✓	• •								V		
procurement, etc. - Summary report of procurement/ annual material procurement report		1												
- Minutes of annual general meeting of shareholders		/	•	•								•	/	
- Annual report/annual information form		•	•	V	V	V	V			V		V	V	V

		SD	Natio	onal S	Stand	ard		S	D In	terna	tiona	al Sta	ndar	ď
Criteria / Index	CAC^{1}	\mathbf{ITA}^{2}	CGR ³	$\mathbf{A}\mathbf{G}\mathbf{M}^4$	² ISHT	ESG Index ^{6}	SEC	UNGC	${\rm SDGs}^{\circ}$	DJSI	CG Watch ¹¹	ACGS ¹²	GRI ¹³	10 ¹⁴
Social and environmental			✓				✓			✓		✓		
responsibilities report An annual budget expenditure report Integrated report		~	~									✓		~
website			~	\checkmark								√		
investors relations			✓ ✓									\checkmark		
analyst meeting news or press conference			\checkmark									\checkmark		
Public relations news		\checkmark	~									~		
News notification to			~	\checkmark								~		
regulators video				\checkmark										
agencies' address		~												
telephone/fax		1												
location map Social Network														
E-Service		✓ ✓												
 Sector Colle ² Integrity an Transparence ³ Corporate O Thai Institute ⁴ AGM Chece ⁵ Thailand S Thailand ⁶ ESG 100 In ⁷ Corporate O Exchange O ⁸ United Nati ⁹ Sustainable 	d Tra cy Ass Govern te of I klist (1 ustain dex 20 Govern Commi on Glo Devel	nspar essmi hance Direct 2017) ability 019 by hance ission obal C lopme nabili	ency ent, (Repo ors by T y Inv y Tha Cod Comp ent G	Asse Officion of Thai I vestmaipat le for bact (oals dices	essme e of t f Tha nvest ent 2 Instit : liste (SDC s (DJS	ent (I he N i Lis cors A 2019 ute ed co C) 2 Gs) by 5 SI) 2	(TA) ation ted C Assoc (TH ompar 019 b y Uni 019 b	(201 al Ai Comp ciatio IS) 1 nies ny Ui ted N by Ro ce As	9) by nti-Canies n 2017 hited Jation becco socia	by the state of th	otion 9 (C cock the S on 4 & C	Com GR 2 Exch	nmiss 2019 nange	sion) b e c
 ⁹ Sustainable ¹⁰ Dow Jones ¹¹ CG Watch 2 ¹² ASEAN Co Markets For 	rporat	•			Score	ecard	l (AC	CGS)	201	8 by	AS	EAN	l Cap	oita
 ¹⁰ Dow Jones ¹¹ CG Watch 2 ¹² ASEAN Co 	orporat rum orting	e Go Initia	verna tive	ance (GRI) 201	7							-	

The above standards, it indicates that standards for sustainable development at the national and international level involve indicators in several important dimensions: economic, social, environmental, and governance. Besides, both Thai and universal sustainability standards have indicators and practical guidelines in the same direction. It also reflects that content related to sustainability of listed companies must be disseminated or communicated to major stakeholder groups, i.e., customers, partners, competitors, debtors, creditors, shareholders, investors, regulators, government sectors, mass media, the environment, society, and people, including employees within an organization, via appropriate channels. These indicators are further used to determine the standard framework and be indices of communication for sustainable development.

2.3 The concept of Moonshot Thinking

2.3.1 Definition

Alayón (2018) explains the origin of the concept that it was initiated in 1962. An example to illustrate this concept is when John F. Kennedy, the former President of the U.S.A, gave a speech at Rice University, "*We decided to go to the moon in this decade*." Finally, he could lay down the whole country to focus on going to the moon successfully. In other words, Kennedy might not know how he could reach such a goal by only giving a simple promise. His speech just implies that they could do some incredible thing to happen within their forecast time by stimulating inspiration to cause an action.

Fifty years later, Astro Teller brought up this discourse for public interest and changed it to be some kind of philosophy. At that time, Teller was a director of X (originally was Google X), in which new things had been invented by the Innovation Department. They had brain-storming, tests, and launched a project using modern technologies to create solutions that could develop the world, like a factory that was ready to go to the moon.

Moonshot Thinking is thus a guideline for choosing alternatives to solve a large problem, i.e., a need to change climate condition by proposing the use of new technologies to solve this gigantic problem. In other words, this can happen only when the old idea of choosing an improvement as an alternative is omitted, and the focus is on the solution that can change the climate completely.

The notion is accordant with Fisk (2017), who states that Moonshot is an incredible idea, which seems to be impossible, but on the other hand, it can change our world. For instance, Google X is the factory, aiming towards the moon. In the factory, there are plenty of creative and optimistic thinkers who search for a mighty opportunity and the most challenging problems. These thinkers just use their little imagination but enormous innovation that may change our world to be a better place, starting from inventing the Smart car up to the creation of the virtual world. Thus, Team X combines all technological possibilities with human needs to create a future bravely and inspiringly.

Buckley (2019), (as cited in Baengsunita (2019)) defines "Moonshot" as the designing of vision or a model with boldness, craziness, and unlimited projective thinking without being afraid of something unseen in the future. Mostly, the action is not done for oneself or one's business, but for a gigantic and challenging goal with decent conscience and integrity to see a better and pleasant future world sustainably.

Besides, it means a 10x goal setting for creating a powerful drive by using up the team's full capabilities and advantages. This kind of thinking composes of three main factors: 1) a gigantic problem, 2) extreme solution, and 3) super modern technology. If the common point of these three things is found, then some incredible innovation can be created stunningly. (The Matter, 2019).

2.3.2 A Moonshot-Thinking Process

A Moonshot-Thinking Process starts with a giant-leap goal setting through brainstorming among a diversity of concepts and people to look for a future, not for themselves, or people in the present world, but for the opportunity in the 10-20 years ahead in which business can contribute great benefits for the society and people of the next generations. Therefore, such business has to be sustainable and can create higher values.

Therefore, sometimes, business design has to originate from systematic thinking with the integration of several disciplines: science, technology, and society, through the use of innovation for the industrial revolution, especially in the agricultural and food sectors for sustainability. Business must be perceived with different perspectives, and vision must be adapted to connect the world as one entity. Namely, everybody has to collaboratively manage resources securely and safely by the use of technology for a better future through the following steps:

1) Foresight framing. It is essential to arouse brains and imagination towards what will happen in another 20 years in the future without concerning oneself, but people of the next generation. What needs to be designed is concerns and fears, a working format in the next era, activities and social life, routines, and people's dream.

2) Ideation Platform. During this step, the idea is divided into three substeps. Firstly, the design of business concept by having a model solve problems for the world in the next 20 years. Then, it will be exchanged with others in the group, and the final step is to acquire an overall concept connecting with the development of one's ideas or extending others' ideas towards better ideas.

3) Moonshot or vision design. It is a bold thinking pattern beyond limits, which aims to do what is impossible to be possible. In this step, it consists of seven sub-steps as follows: 1) understand the current situation and search for what must be changed, 2) question who can make a moonshot become true, 3) think of the name for a moonshot, 4) think of the relevance of the moonshot to the ways of making the society better. Such an idea must be related to 17 criteria of SDGs to be able to reinforce sustainable development concretely, 5) find out what is the difference (or a surprise) or different ideas from those of general business. However, it must be something that has never been introduced into a market, 6) estimate proper timing that can ensure the possibility of making the plan true, and 7) choose the right measurements in terms of quality and quantity that can lead to possibility and can reflect if a moonshot can achieve the goal as dreamed.

4) Moonshot Story or communication strategy. The procedures enabling a moonshot concept to access general people and acquiring alliances to support the dream consist of the six steps: 1) see the world as it is nowadays, 2) search for some relevant to human life that can mobilize a moonshot, i.e., new knowledge for increasing an opportunity to conquer something, i.e., by space exploration instead of going to a war, 3) find an answer why everybody must believe in the invented moonshot. It is possible to find an answer that going to the moon is not something easy, but it must be reached because it is possible to make it. Thus, going to the moon was something people in that period perceived as impossible to be accomplished, 4) step over resistance of some groups, 50 look for three power that is influential for driving a Moonshot, i.e., Moonshot of Kennedy is challenging and acceptable without any postponement. One who has a strong determination is a winner, and 6) determine timing the Moonshot should happen.

A Moonshot-thinking process and steps are illustrated in Figure 2.3 (Alayón, 2018)

1) Moonshot Thinking. Despite being the first step and the foundation of everything, everything must be "reset." A new operating system and thinking system must be set clearly.

2) Moonshot launch. It is a travel of "an unknown or unlearned" regarding the impact the technology used as a tool, to a relearned.

3) Moonshot landing or settling on the moon. At this step, there is no certain methods, except for tremendous reading and experiment, by analyzing what is good or what is hopeless.

- 4) Transform oneself through infinite learning
- 5) Transform the company.

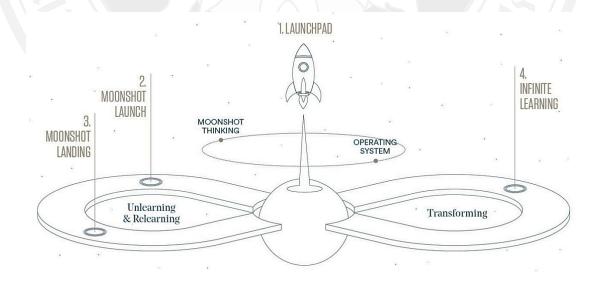


Figure 2.3 A Moonshot Thinking Process

The last two steps are related to changes in skills and personal thinking, which can lead to changes in organizational culture. The steps accord with those of Lain and Schroeter (2018), which specify guidelines for making business organizations accomplish the sustainability goals based on the concept of Moonshot Thinking as follows:

1) Step over the laid limits and pull-out genuine potential.

2) Every moon can be a good goal to be achieved; thus, expectation, which challenges most people's thinking, but not beyond social rules and regulations, must be determined.

3) Imagine realistically what the world should be and devote oneself to what is imagined.

4) With imagination, no problem cannot be solved. No innovation, entrepreneurs' capabilities, nor anything else can be impossible.

5) Cultivation, motivation, and empowerment for helping to expand the vision can connect perceivers with what is unobservable beyond rationality.

6) Creative innovation often comes from the connection with some individuation and ambiguity, which may be caused by different disciplines. Therefore, imagination, perception, curiosity, and borderless thinking are important.

7) Knowledge is a prerequisite. However, it cannot always solve a problem, as most problems in the world and the board committee's meeting are not caused by a lack of knowledge, but because of imagination failure.

8) Knowledge can also obstruct imagination and an innovative process because when people accumulate increased knowledge, they will think of all kinds of methods to do something, which in fact may not be able to solve new problems that require new solutions.

9) Moonshot thinking rejects the thinking-routine perspective to achieve a change.

10) It may be difficult to think outside the box, as there might be other easier ways to do it. Thus, a thinker must challenge his or her ideas all the time.

Eventually, the key to success is openness to all possibilities. Thus, the first step is always the utmost importance to draw the unlimited capabilities and potentials of human beings to create a world in which everybody plays a significant role to change the world.

Therefore, to make the global society accomplish Sustainable Development Goals is very challenging since to solve all 17 identified targets is a very gigantic problem for human beings to solve, especially without collaboration from every sector and proper use of innovative technologies, particularly in business operations that face plenty of problems, of both internal and external. Accordingly, the awareness of and importance paid to the sustainable development of Thai listed companies is comparable to a Moonshot thinking of business sectors, no matter what obstacles they will face. Still, they have been operating and trying to find solutions by the application of innovative technologies and communication, including opening an opportunity for stakeholders to participate as much as possible via sustainability information in various dimensions to let stakeholders perceive, understand, and imagine concurrently to help solve the problems. Communication is thus driven for an organization towards sustainability successfully. Therefore, the concept of Moonshot Thinking is suitable for being applied to explain patterns and methods of business operations of Thai listed companies and being a framework for developing communication standards for sustainability in the future.

2.4 Organizational Communication Theories

Organizational communication is an important process that enhances a common and correct understanding between an organization and stakeholders, both internal and external. However, organizations nowadays are facing some changes that have not been encountered before, i.e., the merger of companies, corporate acquisition, globalization, including the increasing virtual organizations created by modern communication technologies. The challenge for an organization and leadership nowadays is how to keep organizational communication connected with the specific needs of diverse stakeholders. (Moingeon & Soenen, 2002)

2.4.1 Meanings of Organizational Communication

Academicians and communication scholars define "organizational communication" differently as follows "Organizational communication is an integrated process for communicating all produced by or products of an organization, aimed for all concerned target groups. Communication of each issue needs to communicate and emphasize the organizational identity." (Blauw, 1986, as cited in Cees B. M. Van Riel and Fombrun (2007)).

Jackson (1987) states that "organizational communication is all communication activities created by a company to accomplish the goals as planned."

Cees B. M. Van Riel (1992) specifies that "organizational communication is a management tool by using internal and external communication for as efficient and effective as possible to establish a foundation for good relationships with all stakeholders."

On the other hand, Ormeño (2007) defines "organizational communication" as the transmission of messages, aimed to induce target groups' responses, feeling, and behaviors. Therefore, it composes of three main parts: 1) organizational communication is the transmission of statements, 2) with an effort in stimulating some responses, 3) relevant to the target receivers, and 4) to accomplish organizational goals.

Cees B. M. Van Riel and Fombrun (2007) explain that organizational communication is a set of activities related to all communication management and coordination, of both internal and external communication. Mostly, it composes of the information dissemination by experts in an organization, aimed to create a good starting with stakeholders related to the organization towards common goals in increasing the organization's competitiveness, while tempting to keep the organization's right on business operations

Moreover, Chaisamret (2015) describes that for an organization to create a common meaning between an organization and stakeholders, it requires both verbal and nonverbal communication, depending on the purpose and occasion, including the context of each organization, which is different. Thus, organizational communication management is very essential since executives and employees at all levels require communication skills at a good level that can ensure efficiency as planned.

Nevertheless, organizational communication is often used as a reference for external communication mainly. Sometimes, it is used to identify internal communication. However, organizational communication includes both internal and external. Besides, organizational communication in a new meaning implies the creation of an organization's identity, including concurrent image presentation

2.4.2 Aspects of Organizational Communication

Organizational communication is often combined with public relations, public activities, investor relations, advertising, environmental communication, and intraorganizational communication. Typically, major aspects of organizational communication are as follows: (Cees B. M. Van Riel & Fombrun, 2007)

1) Organizational communication aims towards an organization's stakeholders, i.e., shareholders, financial reporters, investment analysts, regulators, and lawmakers or legislators, etc.

2) Organizational communication focuses on a long-term perspective, not on sales increase directly.

3) Organizational communication utilizes a different model of marketing communication as its content will not be exaggerating or oversimplifying, but formal content.

4) General organizational communication is often initiated by external people because of external pressure driving an organization to disclose correct information.

Organizational communication is thus a major part of organizational management owing to its role in presenting an organization's image to major stakeholders, both internal and external. Accordingly, business communication and management communication are applied by emphasizing writing, presentation, and other communication skills. As organizational communication portrays the overall image of an organization and all management aspects, organizational communication practitioners must have management capabilities in analyzing an organization's status and identity, i.e., values, slogans, image, history, etc. that have to be anticipated, developed, and planned for proper communication activities and evaluation of

communication efficiency (Cornelissen, 2004). Generally, organization communication should contain the following content:

1) Management roles by determining communication practitioners who can perceive the overall image of the organization and connect it with organizational strategies and goals. It means that organizational communication must be strategic and designed to have sets of activities that accord with organizational strategies.

2) A communication management framework is used for establishing an organization's reputation and good relationships with stakeholders. However, it is not only the responsibilities of organizational communication practitioners but also their competence in coordinating all concerned communication practitioners.

3) Vocabularies or keywords conveying communication concepts and technical terms used to bring about an understanding and communication management between the organization and stakeholders by considering a diversity of stakeholders related to organizational operations, both internal and external.

Thus, organizational communication plays a role in management based on the framework and specific keywords used to connect all meanings of communication effectively and following the determined goals. Besides, organizational communication has to maintain corporate reputation and keep relevant stakeholders adhere to the organization. Typically, words or vocabularies used and involved with organizational communication are as follows:

1) Mission: The achievement of organizational goals, which are congruent with stakeholders' values and expectations.

2) Vision or strategic intent: A long-term goal and inspiration of an organization.

3) Corporate Objectives or Goals: Declared statements of goals and targets.

4) Strategies: Ways or methods for achieving an organization's goals and becoming valid or effective.

5) Corporate Identity: The communicated profile or value of an organization.

6) Corporate Image: A set of meaning synthesized from personal confrontation or responses to certain signs from an experience or involvement in an organization for a period.

7) Corporate Reputation: Representational image of an organization a person has accumulated, which may be caused by the organization's past image (perceived or acknowledged by communication) or from past experiences for a long time.

8) Stakeholders: Individuals or groups who can cause an impact or be affected by organizational operations following the organizational goals.

9) Public: General people who can gather together to resist an organization due to several causes, or some issues with which they are worried.

10) Market: The determined group, which can be products, or any desired things (i.e., what has constructed an organization, products in charge, or the presented services)

11) Issues: Not well-made subjects (but are ready for making decisions) or controversial issues between organizations or between an organization and the public.

12) Communications: Tactics for internal and external communication and media used with groups both within and outside the organization.

13) Integration: The coordination of all forms of communication to portray the organizational identity to groups within and outside the organization effectively and continually.

2.4.3 Components of Organizational Communication

Cees B. M. Van Riel and Fombrun (2007) state that communication activities involve management communication, which is communication occurring between persons with authority and internal and external stakeholders. Executives are employees authorized to obtain and maintain important resources of an organization, including managers at the unit level and departments within an organization.

Still, to enhance management communication effectiveness, it requires having marketing communication and organizational communication experts. Marketing communication focuses on the acquisition of the highest budget allocation used for product advertising, direct mails, direct sales, and other supporting activities. Remarkably, to gain budgets more or less depends on organizational communication. In general, budgets of organizational communication involve PR experts, public activities, investor relations, environmental communication, corporate advertisement, and employee communication. Kleechaya (2018) points out that the major goal of organizational communication is an organizational sustainable success, which needs integrated organizational communication composed of all three components.



Figure 2.4 Directing communications through "common starting points"

Besides, an organization must illustrate its responsibilities for all communication activities and policies, adopted from core organizational strategy, identity, and brand or SIB (Strategy–Identity–Brand), as illustrated in Figure 2.4. The above illustration displays a connection between the core strategy, identity, and brand of an organization or SIB. For the starting points, an organization should develop with all communication experts, by following communication objectives and policies, which are an operational framework in which the priority of communication policies and responsibilities of communicators are organized. Furthermore, the following should be concerned:

1) Strategy interpretation is a general starting point that is applied in communication at both organizational and unit levels through PPT Model. A PPT

Model consists of "Promise" or the identification of what an organization promises the most to both internal and external stakeholders, then "Prove" or the identification of how such a promise can be achieved, and finally "Tone" or the identification of the tone of voice needed to communicate the main message to receivers.

2) More specific communication plans should be organized through the application of KAB, namely "Knowledge" or the identification of what an organization needs its target receivers to know, "Attitude," and "Behavior," both related to an organization and business units.

All of these components can bring about three forms of communication, which lead to organizational communication efficiency. In other words, an organization must integrate and connect SIB components towards common starting points completely.

2.4.4 The Communication Value

Zerfass and Viertmann (2016) developed a conceptual framework to explain a process of creating value through communication academically and practically, entitled, "the Communication Value Circle." The framework explains the value creation in two levels: organizational management and organization communication by having "organizational strategy" as a core, which is the starting point for making decisions on the intended issues, as illustrated in Figure 2.5.

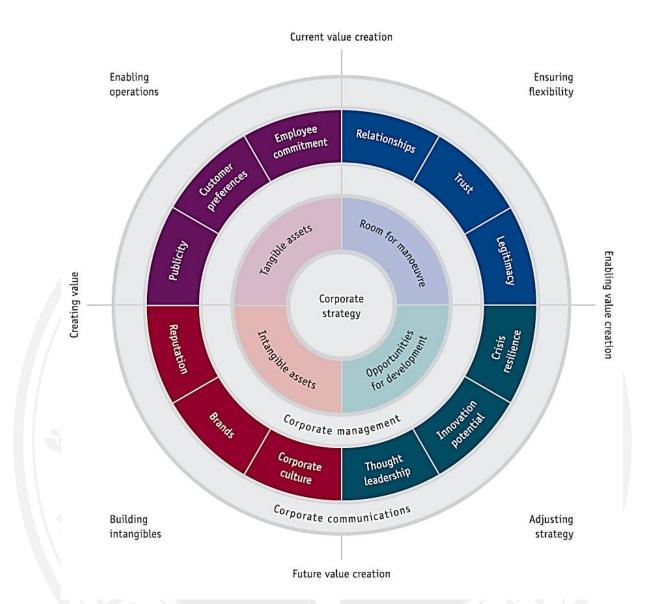


Figure 2.5 The Communication Value Circle

Figure 2.5 illustrates that corporate strategy is the key and core of organizational communication, comprising organizational goals in four domains. The Diagram portrays a vertical and horizontal line. The vertical line displays perspectives on 1) tangible assets and 2) intangible assets, leading to organizational value creation. While 3) corporate strategy, and 4) opportunities for development, enable current value creation, 2) intangible assets, and 4) opportunities for the development lead to future value creation. Therefore, every organizational performance must be supported

by the organizational values of these four domains. At the second level, it portrays a core communication objective, transmitted through these four domains as follows:

1) Enabling operations

Communication will lead to organizational goals and support both internal and external business operations through stimulating them via publicity, customer preferences, and employee commitment. However, an organization should publicize content and statement by increasing attention and perception in the strategic issue. Then, communication can help an organization to further its operation and create assets. Thus, communication with employees, partners, and customers is fundamental communication that enables value creation to major stakeholders of the organization.

2) Building intangibles

Communication helps to create intangible assets, i.e., reputation, brand, or corporate culture, which are parts of the overall corporate value. Reputation is acquired from good governance as an important representation of an organization, such as the communication of the CEO. Besides, a good reputation and strong bands are parts of the organizational environment and play a role to create a strong corporate identity as well. Besides, integrating the specific culture and history of an organization with internal and external communication is a fundamental role of organizational communication divisions.

3) Ensuring flexibility

It is a matter of creating good relationships based on trust, perceived righteousness, and transparency of organizational values and operations. Communication can also help to create stakeholders' networks during changes and crises, which is another important strategy. Therefore, whenever stakeholders question organizational legitimate operations, it should yield negative impacts on organizational value in various dimensions or domains. Although an organization must face uncertain situations, nothing is more important than relationship capital, trust, and public acceptance.

4) Adjusting strategy

Communication can help to make decisions for managing strategies by supporting to bring about thought leadership, innovative potentials, and crisis resilience. Communication divisions must perform a role of listening and following people's opinions from mass media, social media, markets, politics, and society systematically, which can help to adjust strategies to be accordant with economic, social, and political development. Then, organizational communication can lead to determining the competitive advantages.

2.4.5 Organizational Communication Strategies

Chaisamret (2015) states that the determination of communication strategies that accord with an organization and can respond to the goals of organizational communication is the most important since they are the guidance towards targets and directions of all communication activities. Effective organizational communication must identify purposes, forms, a focus, and direction of organizational communication by displaying the relationships among communication strategy components, as illustrated in Figure 2.6.

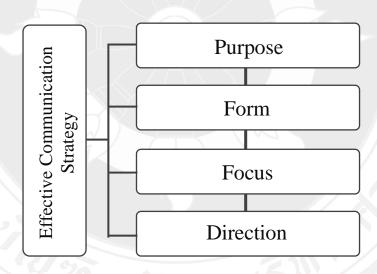


Figure 2.6 Relationships among communication strategy components

Besides, effective organizational communication must have the following features: (Moss, 2012)

1) The identification of explicit purposes and direction of organization communication

2) The determination of the clear positioning of organizational communication in the context of particular business organization markets.

3) The specification of plans or communication activity plans

4) The presentation of organizational management perspectives by reflecting the overall image of the business and organizational positioning.

5) The determination of guidelines for resource utilization of all organizational communication.

2.4.6 Tools for Organizational Communication

Organizational communication must execute integrated communication to yield efficient consequences for diverse targets, which can be done through the following practices: (Cees B. M. Van Riel & Fombrun, 2007)

The application of visual identity systems that enhance the perception of people on organizational communication through visions, starting from product and service design through the use of names, trade logos, trademarks, sound, and scent, used for constructing corporate identity. Such an identity will be an important determinant of brand communication through the use of logos, employee uniforms, architectural design, interior design, furniture, etc. that stakeholders can perceive through visions.

Integrated marketing communications will cover a variety of harmoniously integrated communication activities, aimed at target customers to create product or service loyalty.

Trust in coordinating teams. Successful organizational communication relies on the work of groups of people, teams, and communication working groups, who have to coordinate effectively with trust and apply a mechanism for determining policies and evaluation jointly.

A centralized planning system. A system of communication planning is key for preparing and communicating a message to the targets, both internal and external, as planned. The benefit of the adoption of a centralized planning system is to help to acquire more united communication planning based on standardized practices developed from research. Besides, it facilitates the management and helps to regulate resource utilization and communication guidelines at a certain level, especially issues related to common starting points, which help to limit budgets and time. Moreover, it is a tool for facilitating good coordination for intra-organizational communication and a crucial database for compiling knowledge to induce communication continuation and enhance communication effectiveness. A standardized report structure may be used in various situations, i.e., Sustainability Report, an annual report, etc.

2.4.7 Significance of Organizational Communication

Organizational communication is a prerequisite for organizational management since it is a tool for creating understanding between top management and employees or practitioners. The extent of management success is partly determined by the effectiveness of organizational communication since organizational communication will help to use the acquired information for making decisions, management, and implementation. (Siriwan, 2016). The significance of organizational communication is as follows:

1) Be a management tool since organizational communication can help to accomplish work since working requires several parties and several parts of work for complementing one another to enhance organizational potentials.

2) Be a tool for helping relationships between executives and personnel in the same organization towards common understanding and mutual trust, especially providing an opportunity for personnel at all levels to participate in the management administration.

3) To help organizational operations and coordination, including establishing harmonious working of all parties for the same organization so the management can use communication to create unity in the organization.

4) To help to develop and work effectively. From combining all the above roles of organizational communication, it can help to develop the organization, especially being a powerful mobilization driven by the management with good knowledge in organizational communication.

Therefore, communication is an executive tool bringing about good relationships within an organization. Especially, if top management opens an opportunity for personnel at every level to participate in the management. Without effective communication, it is impossible to work effectively and yield good quality of life for employees.

Still, organizational communication is inevitable and an essential factor facilitating organizational management success. On the other hand, low-quality communication can be avoidable. Most of all, executives and all leaders must perform their roles as good communicators. In reality, everything they do involves some kind of communication by someone to someone. The question is what kind of effect it yields, or if the consequence is as intended or not. Normally, in business practices, organizational communication plays four significant roles: controlling, motivation, emotional expression, and information provision.

Moreover, organization communication is a process of transmitting information and understanding to subordinates or other people towards their behavioral changes as wished. Typically, a communication process comprises the following components: a sender, receiver, communication channel, and symbols.

2.4.8 Organizational Communication Principles

Ngernprasertsri (2001) explains that in every organization, there are two kinds of communication: formal and informal communication. Principles for enhancing the effectiveness and efficiency of both kinds of communication as follows:

1) Formal communication

(1) Communication channels should be informed clearly and consistently.

(2) Functions of communication channels are witnessed formally.

(3) The communication line must be precise and get to the point.

(4) Able persons are in the center of communication, i.e., practitioners, division heads, etc.

(5) During an organizational operation, the communication line should not be interrupted.

(6) All communication systems must be reliable.

2) Informal communication

(1) Respond to an individual's needs and feeling in the issue of unification, self-respect, and independent decision-making.

(2) Bring about harmony within an organization.

To use organizational communication strategies to achieve organizational goals for the situation and accordant with what to be communicated and person to communicate with.

2.4.9 Organizational Communication Methods

Wittaya-Udom (2013) explains in "Organizational Behaviors," that organizational communication consists of various methods, depending on the appropriateness of each type of internal communication, which is classified into four types as follows:

1) Downward Communication is the communication from a superior to a subordinate as the information transmission to control, regulate, supervise, command the subordinate. Mostly, the content is about objectives, policies, methods, orders, and cooperation from other organizations. To practitioners, the content is mostly an order, regulations, requirement, announcement, notification, etc.

2) Upward Communication is a communication from the bottom level to the upper level in an organization aimed to examine results or feedback of an operation, which can be a report, an order response, suggestions, appeals, opinions, etc.

3) Lateral or Horizontal Communication is interpersonal communication between persons of the same level, same task group, or maybe of different levels but not in a hierarchical relationship. Often, it is communication as a collaborative team, consultation, information exchange, etc., including being a channel for creating organizational innovation.

4) Diagonal Communication is often a cross-departmental or crossfunctional communication, i.e., the HR or human resource manager communicates with the production department chief to inform about newly announced regulations. The purpose is to enhance quicker and more effective working procedures.

Communication is important for every organization and a crucial foundation to bring about collaboration, good relationships between employees and executives, and good understanding, including positive attitude, value, image, and reputation of the organization. Besides, it induces good coordination among units and helps to drive an organization in the correct direction as planned towards organizational success. All of these require correct, explicit, transparent, direct, and easy-to-understand communication, which can stimulate the utmost effectiveness and efficiency of organizational administration.

2.4.10 Corporate Reputation

The flow of information throughout an organization, including its relationship with media, social media, and organizational communication; relationship with the government and communities, etc. can create the perception of an organization and the overall corporate image, which is considered as corporate reputation, aimed to communicate one same message to all groups of stakeholders to be connected to achieve credibility and ethics. (Laws, 2014)

BarnettJohn, Jermier, and Lafferty (2005) specify three major issues involving corporate reputation, which are key issues of the concept of corporate responsibility: 1) Reputation is a state of awareness. Namely, observers or stakeholders perceive an organization by an overall view; thus, they can still be unable to evaluate or judge such an organization. Thus, this state is called by most researchers as "perceived reputation." 2) Reputation is an assessment. One of the reputation's functions is a judgment, an evaluation, or assessment of an organization. 3) Reputation is an asset. From this perspective, reputation is perceived to be valuable or meaningful. Besides, it performs as an intangible resource, but a great economic asset.

This concept accords with Lange, Lee, and Dai (2011), who define "corporate reputation" as 1) being known, considered from general perception or the appearance of a vision of an organization, 2) being known for something, which is perceived anticipation an organization's outcome and behaviors involving specific stakeholders' benefits, and 3) generalized favorability, which determines, from the perception or judgment on the organization as a whole, if an organization's reputation is well-known, good, interesting, or proper or not.

To lead corporate reputation towards a positive direction, the corporate image and identity must be in the same direction. Corporate reputation is the sum of both tangible and intangible assets, evaluated by an organization's competence in delivering valuable products and services. Corporate reputation also illustrates stakeholders' participation in the long term and helps to increase organizational capabilities in employee recruitment and maintenance in parallel to increased income and profits. (Christensen, Morsing, & Cheney, 2008)

There are many types of corporate reputation. C.E. Carroll, Greyser, and Schreiber (2011) classify corporate reputation into the following:

1) Actual reputation (what we are), comprising an organization's current characteristics, which are internal attributes and may not be so apparent and discovered.

2) Communicated reputation (What we say we are), through either controllable media, (i.e., advertising, marketing, public relations, or sponsorship), or uncontrollable media (word-of-mouth, news reporting, criticism, or social media)

3) Perceived reputation (what we see we are), or the way an organization perceiving itself through considering from several and diverse factors.

4) Interpreted reputation (what we think others see us) or stakeholders' perspective towards corporate reputation.

5) Promised or committed reputation (what a brand commits), or what a brand promises and stakeholders expect.

6) Ideal reputation (what we think we should be), comprising proper positioning of an organization in the market within the determined time frame, such as sustainable development goals.

Fombrun and Riel (2004b) proposes a business model for examining corporate reputation, as illustrated in Figure 2.7, which explains that corporate reputation is a social structure composing of stakeholders of several parties, as a result of strategic communication established by an organization, but possibly being distorted by media and analysts of such a reputation on images in several dimensions: social, financial, product, and personnel recruitment.

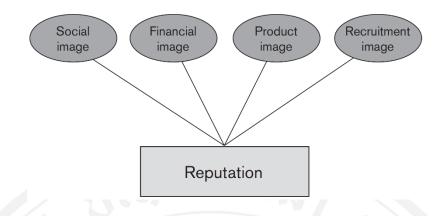


Figure 2.7 The relationship between image and reputation

Notably, corporate reputation is caused by a process of information transmission affected by the leads of an organization, i.e., from colleagues, media, personal experiences, etc. The evaluation of corporate reputation is based on the evaluation of an organizational performance after a period, including in the past or expectation about the future. Corporate reputation is specifically meaningful in the context of comparison. Reputation is not static but tends to fluctuate, depending on what an organization has performed or operated. (Craig E. Carroll, 2013)

However, although corporate reputation will be an important reflection of organizational performance, it is also influenced by organizational communication substantially. Cees B. M. Van Riel and Fombrun (2007) propose a strategic model on the relationship between organizational strategic goals, organizational communication, reputation, and performance, which explains two connected cycles. The first cycle called "business cycles," are the standard development of organizational strategies, that will circulate by business activities. Thus, if corporate strategies are operated successfully, it will affect a capacity in creating higher financial performance, whereas "the communication cycle" helps to develop proper communication systems for creating a positive corporate reputation. Therefore, to enable organizational communication to be successful, it is necessary to identify groups of stakeholders and stimulate behaviors to support them.

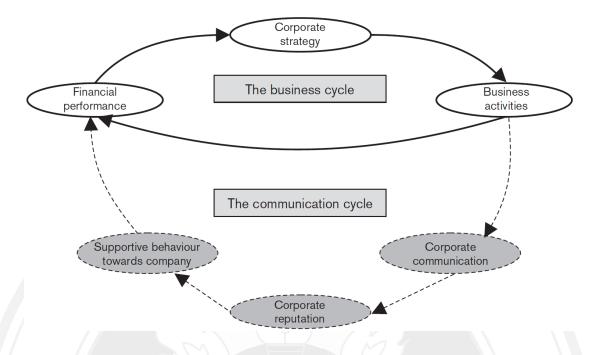


Figure 2.8 Linking communication and reputation to the business

From the above model, the important element is groups of stakeholders, who play important roles in business existence or survival.

2.4.11 Stakeholders

Stakeholders are groups related to an organization in some ways, either organization value or impacts. Stakeholders cover various individuals or groups of individuals with similar goals or interests. Stakeholders may be a formal gathering of members or people with continual relationships, i.e., employees, shareholders, or informally relevant groups, i.e., consumers, general people, etc. (Chaisamret, 2015). In short, stakeholders can be classified into the following groups:

- 1) Internal Stakeholders can be divided into the following sub-groups:
 - (1) Management group: Both top and middle management executives
 - (2) Operational-level employees, who cover both regular and casual

workers

(3) Union group or club members are a group of employees who gather together formally, including groups for specific activities.

(4) Shareholders are specific groups who are major shareholders in a public company limited, or the case of a company limited with few shareholders but holding a clear proportion of shares.

2) External Stakeholders comprising the following sub-groups:

(1) Investors and shareholders are a group of investment groups who play important roles in funds raising to support the growth of a company, especially in a large business organization, including potential investors who may be shareholders of a company in the future.

(2) Partner groups are groups related to the feeding of raw material or supporting resources needed in a production or service process, i.e., place, labor, knowledge, expertise, consumable supplies, including direct raw materials, importing into a transformation process.

(3) Government executives and officers are groups having a direct role in supporting an organization through the government's decision-making on policies, regulations, information, including activities for supporting business at the local or national level.

(4) Community groups at physical proximity are groups with close relationships with an organization as a giver and a receiver. They also include habitats or people living in and using a common area around the headquarter, a branch, or a factory.

(5) Community-benefit groups are a group of people informally gathering and a non-profit NGO with some specific goals. This group can be or are not the same group as community groups at physical proximity groups, but having common interests or focal goals, which may or may not accord with business lines. Besides, a gathering of groups can be formed widely in social media, which is very influential on other stakeholders' opinions and expression.

(6) Distributor Groups. Many kinds of businesses must rely on distributors who are sub-customers or a middle man between a company and consumers. Thus, they play the role of major partners who influence business survival and growth.

(7) Consumer/ customer groups are stakeholders who influence business success. Besides studying corporate reputation, an organization should cover

its consideration widely on consumers in the market, who also include potential customers in the future.

(8) Mass media groups. Although mass media may be a small group compared with other stakeholder groups, the impact of mass media is very significant for the perception of an organization and other stakeholders' attitudes towards an organization.

(9) Public groups mean general people who may no involve with an organization directly but are members or citizens of a society. Thus, an organization must pay attention to them seriously due to their huge size and diversity of demographic attributes, social and economic status, including different goals and needs. The public's understanding and acceptance may affect support for or opposition against organizational operations.

All of these stakeholders are major targets who can affect the corporate reputation and are a challenge for an organization to design communication patterns and strategies to create perception, acceptance, and supporting behaviors for Thai listed companies towards sustainable development successfully.

2.4.12 Concepts of Corporate Reputation Measurement

Dowling (1994) summarizes three research methods or approaches to study corporate reputation as follows:

1) Qualitative research

It is an appropriate research method for understanding the public as a target group to search for factors influencing their perception of corporate image and reputation. Qualitative methods that can be used are a documentary review of management information, an in-depth interview with stakeholders individually, a focus group interview with the determined samples, etc. However, no matter what kinds of research method is used, the samples should be representative of the target population.

2) Quantitative research

It is another research method that can explain a tendency and factors influencing corporate image and reputation. The predominant method is a survey. If research is properly designed and the number of samples is sufficient, it can help the study to be more credible. The results from the quantitative surveys can indicate the target's perception and issues to which the target groups give importance. Besides, an organization can apply the results of the study for planning efficient communication.

3) Statistical Analysis

Statistical analysis can reflect corporate image and reputation by analyzing its strengths and weaknesses.

2.4.13 Techniques of Corporate Reputation Measurement

Cees B. M. Van Riel and Fombrun (2007) explains two types of questions for measuring corporate reputation as follows:

Subjective questions are questions on each stakeholder's opinion.
 The examples of subjective questions are

- (1) Who should be questioned?
- (2) Is it possible for dividing receivers into segments?
- (3) Is there any method to access the target receivers?
- (4) What should be done if the research incurs a bad impression?
- (5) How much does it cost?
- (6) How long will the research be conducted?

2) Objective questions are questions for evaluating an issue related to any component of an organization, i.e., the country of origin, manufacturing company and branches, etc. The examples of objective questions are:

- (1) Which business unit should be studied especially?
- (2) Can business units be divided into sub-units?
- (3) Can sub-business units yield enough profits for the organization?
- (4) Can the research findings be applied?

On the other hand, techniques for measuring corporate reputation are divided into two methods:

1) Open methods: It is a method to ask respondents to give their opinions on an organization from their perspectives.

2) Closed methods: It is a method to ask respondents to consider and choose to evaluate based on the provided attributes of an organization.

Moreover, The Harris Poll (2019) organized a survey, called Axios Harris Poll 100, to rank the top 100 corporate reputation or the most well-known companies in the U.S.A., by collecting data from 18,228 American people, which were representatives of the country. The survey asked general people's opinions on the companies they mentioned. Axios Harris Poll 100 was organized in a two-step process. Firstly, general people's perception of the excellence or security of each company was surveyed annually. Then, the given names of the companies mentioned by the first group of respondents were ranked by another group or the second group of the respondents in various dimensions related to attributes of corporate reputation. The first rank equaled the best, and the 100th rank the worst. The companies in the list were of good and bad reputation, but the significant level of each could not be perceived. Generally, the measurement was in two periods:

Period 1: Visibility in Society is the period in which visible or appearing aspects of an organization or a company are measured by the use of open-ended questions about what respondents felt familiar with or used to hear about the organization by identifying the best corporate reputation and the worst. All responses were counted (brands of a small unit will be counted and combined with that of the mother country to get only one name list of each company. After that, a survey was conducted with 6,118 people in the U.S.A. aged over 18 years old in three phases, namely November 8-12, 13-15, and 27-29, 2018.

Period 2: Trust / Business Trajectory/ Organizational Character is the period in which a ranking was organized with a RQ-rating survey by collecting online information through online interview in English from people aged over 18 years. Respondents were randomly selected to give a score for two companies identified as "very good" or "quite good." The online interview took approximately 20 minutes.



Figure 2.9 Company Ratings Measured across Key Attributes

As illustrated in Figure 2.9, major indicators of corporate reputation measurement are as follows:

1) Affinity. It is a measurement of the trust respondents have in each organization or company.

2) Organization Character. Three main issues are considered: good corporate culture to see if a company is attractive to work with, ethics or the maintenance of organization standards at a high level, and citizenship is the sharing of corporate value with stakeholders and good support provision.

3) Business Trajectory. Three main issues are considered: Vision to see if it is explicit and reflects a goal towards the future, growth or good and continual performance, and products & services or the development of product and service innovation, including the presentation of high-quality products and services for consumers.

Another accepted measurement of corporate reputation is the concept of Reputation Quotient (RQ), developed by Charles Fombrun and Harris Interactive, a marketing research company, who supports an RQ survey every year. An RQ survey was designed as a measurement method for measuring the reputation of organizations from more than 26 countries from the points of view of stakeholders. 20 questions on organizational or a company's attributes, covering six dimensions, were asked. Six dimensions are: emotional appeal, products and services, vision and leadership, workplace environment, social responsibility, and financial performance, as illustrated in Figure 2.10 (Cees B. M. Van Riel & Fombrun, 2007)

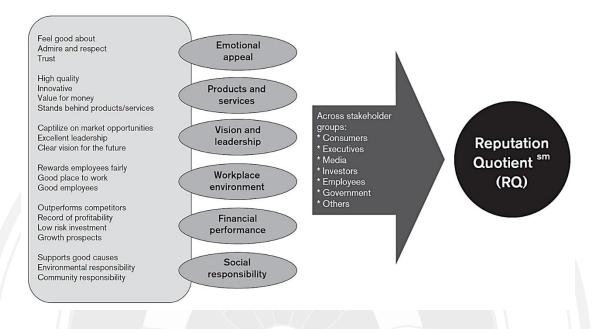


Figure 2.10 The six dimensions and 20 attributes of the Harris–Fombrun Reputation Quotient (RQ)

Besides, Cees B. M. Van Riel and Fombrun (2007) states that the RQ measurement of corporate reputation can be applied for planning organizational communication. The findings of the analysis can be useful information for executives to determine influential issues that help to improve corporate reputation to be accordant with different target consumers. RQ also reveals organizational attributes or dimensions used as indicators of financial or key performance, as illustrated in Figure 2.11

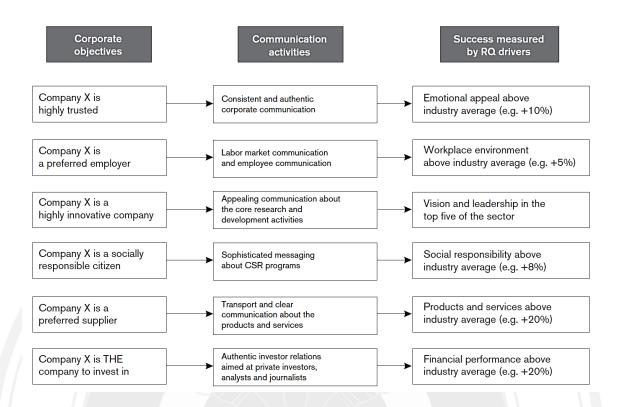


Figure 2.11 Using RQ dimensions as key performance indicators

Khlaiophas (2008) analyzed, collected, and summarized concepts of corporate reputation by universal methods, which were identified as "the U.S.A.'s most admired attributes," and found eight attributes as follows: leadership, ethics and corporate governance, customer orientation or focus, social responsibility, financial performance or performance, management quality, and employees' skills. On the other hand, 10 characteristics of Reputation Quotients (RQ) are leadership, customer orientation or focus, quality, emotional bond, social responsibility, financial performance or performance, management quality, employees' skills, value, and familiarity, while RepTrak® points out 13 attributes: leadership, ethics and corporate governance, customer orientation or focus, quality, emotional bond, social responsibility, financial performance or performance or performance or performance or focus, quality, employees' skills, value, and familiarity, while RepTrak® points out 13 attributes: leadership, ethics and corporate governance, customer orientation or focus, quality, emotional bond, social responsibility, financial performance or performance or performance or performance, management quality, emotional bond, social responsibility, financial performance or performance, sustomer orientation or focus, quality, emotional bond, social responsibility, financial performance or performance, management quality, emotional bond, social responsibility, financial performance or performance, management quality, employees' skills, reliability, value, familiarity, and differentiation, as summarized in Table 2.2

Reputation attributes	USA's most admired	Reputation Quotient (RQ)	RepTrak ®
Leadership	✓	✓	\checkmark
Ethics and governance			\checkmark
Customer focus	✓		\checkmark
Quality	\checkmark	× 0	\checkmark
Emotional bond		\checkmark	\checkmark
Social responsibility	✓	✓	\checkmark
Performance	1 × 1		✓
Management quality	~	(A V	✓
Employee skills	~	~~~	✓
Relevance			
Reliability			\checkmark
Value			\checkmark
Presence / familiarity		~	\checkmark
Differentiation	YUY		~

Table 2.2Illustrates reputation characteristics or attributes measurement from
corporate reputation measurement of different concepts.

Accordingly, it can be summarized that the concept of organizational communication reflects major organizational activities and processes an organization needs to convey its meanings to stakeholders to perceive the value of organization operations towards goals through integration via media or channels suitable for each target group It aims to establish a common understanding between a sender and receivers, leading to their acceptance and co-existence between an organization and a society continually and sustainably through the use of communication arts and science. Therefore, the disposition of ineffective communication strategies can affect an organization's image and reputation inevitably and lead to business failure. Consequently, the development of organizational communication standards and the application of indicators of corporate reputation play a significant role in providing desirable guidelines or approaches for the self-evaluation effectiveness of the organization. Moreover, it can be used to improve the appropriateness of communication approaches and strategies for each stakeholder group promptly in due time.

2.5 Concepts on Sustainability Development (SD)

Sustainable Development (SD) means the development of human life quality under the ecosystem potential of the world. Sustainable development consists of three major components: economic, social, and environmental. All these three components are interrelated. The main purpose of SD, according to Edward Barbier (year), is to achieve all these three components the best. However, since the society cannot achieve the utmost goal of all components, some purposes in some components are necessarily reduced to increase the achievement of other components, depending on the priority among components, i.e., if economic growth is ranked as the most important, then it is necessary to lessen the importance of social and environmental purposes. (Sukhothai Thammathirat Open University, 2014)

2.5.1 Meaning of Sustainable Development (SD)

The United Nations (2019) defines Sustainable Development (SD) as the development that responds to the needs of people at present without reducing the ability in responding to the needs of the next generation in the future.

Similarly, the Ministry of Industry (2016) specifies that SD is the development that responds to the needs of the current people without affecting the needs of people in the future. SD has three interrelated dimensions: economic, social, and environmental.

1) Economic SD. Normally, economic growth development that can yield proper income is based on three fundamental goals: increased product production and service, the response to basic needs of people or decreased poverty, and more fair and equitable income distribution.

2) Social SD must base on principles of justice and equality towards long-term development.

3) Environmental SD is the resource utilization sustainably to keep natural and environmental capital that enables the successful economy of the society, without affecting the ecological system of the world.

Chongwuthiwet (2006) specifies that sustainable development is the development that responds to the fundamental needs of people of both nowadays and in the next period, which can create a balance between social, economic, and environmental development.

Wiriyaphan (2018) also defines sustainable development as the development that aims to respond to the needs of people at present and in the future by supporting the creation of balanced growth of economics, society, and the environment simultaneously. However, the results of the development will not cause any negative impact on the ways of living of people at present and in the future. The process of development of all dimensions should orient to the participation of all sectors in society through integrated collaboration to enhance a more systematic and concrete development and problem-solving.

The Stock Exchange of Thailand (2014) states that sustainable development is the development responding to the needs of people of this generation, without diminishing an ability to respond to the needs of people of the next generation. The ultimate goal of SD is to develop world citizens' quality of life by keeping the level of human utilization of natural resources no exceeding natural production potential and maintaining a balance between economics, society, and the environment. Namely, resources must not be exploited wastefully nor impotently without any concern of people in the next generation of the following components of SD, as illustrated in Figure 2.12.

Concepts that are elements of Sustainable Development are:

1) The economic concept is the idea that a business can make maximal profits by using the lowest cost, or capital. Thus, it involves the concept of the utmost utilization towards effective economics from the use of limited resources.



Figure 2.12 A Model of Sustainable Development (SD)

2) The social concept is an expectation to search for and keep the stability of social and cultural systems, including the equality among people of different generations, poverty eradication, the maintenance of cultural diversity, and participation of people of every level in society, especially grassroots, in a decision-making process towards SD. Accordingly, SD is the development of people and society, connecting with the balanced development of economics, natural resources, and the environment to create a quality society.

3) The environmental concept emphasized the maintenance or the conservation, and protection of physical and biological systems towards the sustainability of the ecosystem of the world, including the environment created by human beings.

However, economic sustainability requires growth to induce proper income, while being able to keep stocks of the capital created by human beings, human capital, and natural capital. In short, the fundamental goals of economic systems are as follows:

- 1) An increase in products and services
- 2) Response of people's necessities or decreased poverty.
- 3) A more equitable income distribution.

Importantly, these fundamental goals must follow SD approaches as aforementioned.

For social elements of SD, they are based on two bases: Fairness and equality principles towards long-term development. The opportunity of people to access resources must be equal. Equal opportunities cover human rights and all benefits, i.e., food, public health, education, accommodation, and self-development. Social equity provides education and participation in empowering the productivity for the society, which can accomplish social goals in keeping cultural diversity, social righteousness, sex equality, and public participation.

Environmental elements mean the sustainable use of resources and maintenance of natural capital stocks, i.e., forestry, rivers, mountains, minerals, etc. All of these natural resources should be maintained to support economic and social elements successfully. On the other hand, the ecosystems of the world will be affected either.

Figure 2.12 illustrates three principal elements of SD: economic, social, and environmental systems or eco-systems, all of which are interrelated and interdependent. SD will occur in the overlapped or shaded area of the three elements in the Figure. In other words, economic development, social development, and environmental protection must be executed simultaneously.

However, it is difficult to adapt SD in all three dimensions to be appropriate for and congruent with both people of the present time and in the future. Thus, a concept of an integration of all three dimensions was developed, as illustrated in Figure 2.13. (Gupta & Vegelin, 2016).

1) Green economy/growth or the growth that integrates environmental and economic dimensions. Thus, green economy is an economic system leading to the bettered ways of living and increased social equity, while it can reduce environmental and resource shortage problems or risks.

2) Green society is an integration of environmental and social dimensions, aimed to surveillance of the environment and communities towards a green society.

3) Inclusive growth is an integration of social and economic dimensions. Thus, it means the growth that brings about benefits-sharing and equal opportunities of all groups of people in the society towards a better society.

For inclusive growth in Thailand, Chaiwat, Pailinthinkan, and Wongkaew (2016) found four major factors that help Thai inclusive growth towards increased equality: Financial Part involves accessibility to entrepreneurial loans and the poor's investment; Labor Part involves an assurance of laborers' good work; Development Part emphasizes a balance of rural and urban development; Political Part focuses on political policies that are not subsidy-oriented.

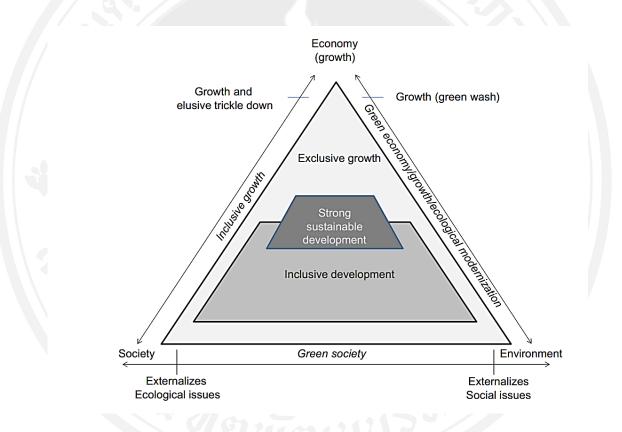


Figure 2.13 The relationship between participatory development and sustainable development.

2.5.2 Aspects of Sustainable Development

The concept of SD comprises the following aspects: (Yodprudtikan, 2012)

1) It is the development that responds to the needs of a society under the environmental limits but causes no effect in reducing an ability to respond to the needs of people of the next generation.

2) It concerns the connection between economic, social, and environmental dimensions, i.e. to dissolve poverty problems, environmental conservation and social equity should be concerned in parallel.

3) A determination towards the achievement of global community sustainability, not sustainability nor survival of any particular organization. It also includes sustainable consumption and sustainable resources.

Nevertheless, professional or institutional investors who want secure and sustainable returns or profits have developed plenty of tools for indicating enterprises with attractive corporate assets for investment. It thus reflects investors' needs to choose an investment with an enterprise that provides good environmental, social, and governance yields or is based on ESG principles.

Sustainability Development Index thus becomes a tool for aligning with corporate social responsibilities, which can reflect both positive and negative impacts in the social, environmental, and economic dimensions. Examples of SD Index, Dow Jones Sustainability Indices (DJSI), FTSE4Good Index Series MSCI, ESG Indexes, and HIP (Human Impact + Profit) 100 Index etc.

Under the concept of SD, two additional important concepts are applied as guidelines towards sustainability.

2.5.3 Sustainable Development Goals (SDGs)

Business organizations around the world all pay attention to Sustainable Development Goals (SDGs) increasingly every year due to the Millennium Development Goals (MDGs), which ended in 2015. The United Nations initiated a consultation process for determining the post-2015 development agenda based on the SD paradigm. The main issue of the post-2015 development agenda was to prepare Sustainable Development Goals (SDGs) (United Nations, 2019).

Sustainable Development Goals (SDGs) are used as the development direction of the world community in 15 years from September 2015 to August 2030, to transform the world, which consists of 17 goals, and 169 targets, as follows:

- GOAL 1: End poverty in all its forms everywhere
- GOAL 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture
- GOAL 3: Ensure healthy lives and promote well-being for all at all ages
- GOAL 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
- GOAL 5: Achieve gender equality and empower all women and girls
- GOAL 6: Ensure availability and sustainable management of water and sanitation for all
- GOAL 7: Ensure access to affordable, reliable, sustainable and modern energy for all
- GOAL 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
- GOAL 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
- GOAL 10: Reduce inequality within and among countries
- GOAL 11: Make cities and human settlements inclusive, safe, resilient and sustainable
- GOAL 12: Ensure sustainable consumption and production patterns
- GOAL 13: Take urgent action to combat climate change and its impacts
- GOAL 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development
- GOAL 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
- GOAL 16: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
- GOAL 17: Strengthen the means of implementation and revitalize the global partnership for sustainable development

From the global tendency, Thailand needs to adapt itself and aims towards SD. Knowledge Network Institute of Thailand (2018) states that the issues of sustainability following SDGs of the United Nations are tied with the 20-year National Strategy, and Section 65 in the Constitution regarding the 12th National Economic and Society Plan, which specifies that the National Strategy must contain SDGs. Namely, SDGs comply directly with Section 5 and 7, and remarks or notes of the 2017 National Strategy Act.

Nevertheless, the genuine success of mobilization towards SDGs cannot occur if the government sector operates it solely. Instead, it requires collaboration from all concerned sectors: private, academic, and civic, etc., at the national and international levels via goal integration.

2.5.4 Concepts of Environmental, Social, and Governance Sustainable Operations. (ESG)

Colombo Stock Exchange (2019) explains the concept of ESG that it means a set of standards for the corporate operation to help investors who give importance to social and environmental sustainability for their consideration on investment selection. Typically, the ESG concept will determine relevant factors, comprising environmental, social, and governance factors, for investment selection in combination with financial factors. Generally, the issues used for consideration can be divided into the following:

1) Environmental issues comprising the following important factors: climate change, natural resources, pollution and waste, environmental opportunities, etc.

2) Social issues comprising the following important factors: human capital, responsibility for products, adversarial stakeholders, social opportunities, etc.

3) Good governance issues comprising the following important factors: organizational governance, organizational behaviors, etc.

All mentioned factors accord with the concept of Clark, Feiner, and Viehs (2015), which specify that ESG is very important as being supporting information for investors' decision making on their investment, which is based on the following issues, as illustrated in Figure 2.14.

ENVIRONMENTAL ("E")	SOCIAL ("S")	GOVERNANCE ("G")
Biodiversity/land use	Community relations	Accountability
Carbon emissions	Controversial business	Anti-takeover measures
Climate change risks	Customer relations/product	Board structure/size
Energy usage	Diversity issues	Bribery and corruption
Raw material sourcing	Employee relations	CEO duality
Regulatory/legal risks	Health and safety	Executive compensation schemes
Supply chain management	Human capital management	Ownership structure
Waste and recycling	Human rights	Shareholder rights
Water management	Responsible marketing and R&D	Transparency
Weather events	Union relationships	Voting procedures

Figure 2.14 ESG issues used for considering the investment.

The division of the said factors is also congruent with MSCI (2020), which prioritizes the importance of factors based on ESG principles as follows:

Environmental issues: Climate Change (i.e., Carbon emission, product carbon footprint, financing environmental impact, climate change vulnerability); Natural Resources (i.e., Water stress, biodiversity and land use, raw material sourcing); Pollution and Waste (i.e., Toxic emissions and waste, packaging material and waste, electronic waster); and Environmental Opportunities (i.e., Opportunities in clean technologies, opportunities in green building, and opportunities in renewable energy).

Social issues: Human Capital (i.e., labor management, human capital development, health and safety, supply chain and labor standards); Product Liability (i.e., product safety and quality, chemical safety, financial product safety, privacy and data security, responsible investment, health, and demographic risks); Stakeholder Opposition (i.e., Controversial sourcing); and Social Opportunities (i.e., Access to communication, access to finance, access to health care, opportunities in health and nutrition).

Good corporate governance: Corporate Governance (i.e., Board diversity, executive pay, ownership and control, accounting) and *Corporate Behaviors* (i.e., Business ethics, anti- unrighteous competitive practice, tax transparency, corruption and Instability, financial instability).

All these ESG factors will lead to investment strategies, which can create or damage the value of shareholders. Besides, they can be used as criteria for decisionmaking on the investment and evaluating the effectiveness of corporate sustainability management of major organizations from such factors.

In Thailand, sustainable investment is in the trend and is paid attention by investors, especially institutional investors who use ESG criteria for their consideration for investment. In short, there are several patterns for screening companies for investment as follows: (The Stock Exchange of Thailand, 2017).

1) Negative/Exclusionary Screening is the selection of not investing in a company whose ESG operations are not accepted, i.e., unethical companies, arms manufacturers, etc.

2) Positive/Best-in-Class Screening is the selection of a company or a project with ESG excellence, compared with other companies and projects in the same group.

3) Norms-Based Screening is the selection of investment by referring to universal ESG principles, i.e., United Nations Global Compact (UNGC) that concerns human rights, labor and environmental and labor supervision, and anti-corruption, etc.

4) Integration of ESG Factors is the application of the combined ESG factors in an analysis process for investment making decisions with traditional financial analysis.

5) Sustainability Themed Investing is the selection of investment concerning sustainability, such as clean energy, green technology, sustainable agriculture, etc.

6) Impact/Community Investing is the investment with specific purposes for solving social and environmental problems or for providing financial support for businesses with clear purposes towards social and environmental sustainability.

7) Corporate Engagement and Shareholder Action is shareholders' operations in driving companies with ESG practices, i.e., communication with top executives or board, reporting to shareholder meetings to vote for companies with ESG practices, etc.

Sustainable development is very important for creating business continuity as a result of corporate image and reputation that reflects the concern of shareholders' benefits. Business organizations with good ESG principles can increase their competitiveness and stakeholders' confidence in corporate operations.

2.6 Concepts on Corporate Sustainability

2.6.1 Definition of corporate sustainability

Chareonwongsak (2007) defines corporate sustainability as an important paradigm in modern business management. The paradigm proposes that corporate growth and profitability are essential; however, to ensure corporate sustainability, social goals related to sustainable development are also oriented, i.e. environmental protection, the creation of social equality and righteousness, economic development that promotes income distribution, etc.

Moreover, business economic activities must be able to respond to the needs of people of the present time, while causing no harmful impact on the lives of people in the next generation. The distribution of benefits must be based on equality and fairness. The well-being of people in society is promoted and their quality of life is improved.

Groups of people in society for which the business sectors should partly be responsible directly are stakeholders of the business that can create good relationships with them with trust, mutual respect, and participation. Besides, such business organizations will be even more accepted from the society and can continue their business sustainably since stakeholders are those who can create direct impact and, at the same time, be affected directly by business operations, i.e., shareholders, employees, customers, partners, communities around the business location

Trangjirasathian (2018) states that the government and private sectors can apply the concept of sustainable development successfully if SDGs are contained into a part of plans or policies that can be implemented actually. For business sectors, PwC proposes in its report the following as key principles for transforming the existing policies to be SD strategies:

1) Every unit of an organization must participate in driving the goals without perceiving them as not involving with them. On the contrary, they must be perceived as a mission that everyone must have a conscience and implement into actions.

2) Organizational leaders must pay attention to driving policies genuinely.

3) Organizations must determine an operational evaluation or KPIs that can measure and evaluate the effectiveness genuinely so that stakeholders can realize and understand the significance of SDGs.

4) An organization must give importance to the preparation of the SD report with good quality, equivalent to a financial report.

However, Thailand Sustainable Development Foundation (2017) states that to move forward to sustainability must start with the creation of a development balance or "Thriving in Balance," based on "Sufficiency Economy Philosophy (SEP)," to adjust people's thinking and paradigms about the development in the right way to transform Thailand into Thailand 4.0 via value-based ecosystem. Such a value-based ecosystem comprises circular economic systems, distributive economy systems, and innovation-driven economy systems, to create a balance between "man and nature," "man and man," and "man and technology." All of these three economic systems are in harmony with the 17 goals of SDGs perfectly.

Still, in the private context, sustainable development can be difficult to occur because of CSR activities only, but it can be permanently sustainable if the private sector adjusts its business operational paradigms from "Greed for Growth, Growth for Greed" to "Doing Good, Doing Well," as follows:

 "Doing Good" to respond to the goals of stakeholders, while "Doing Well" for the goals of corporate shareholders.

2) "Doing Good" can reflect "being human" of an organization, while"Doing Well" corporate identity.

Both "Doing Good" and "Doing Well" are like "Yin" and "Yang" that create a balance. Once a balance is achieved, then comes the growth, but is sustainable growth. Therefore, a sustainable business model is still "Market-Based Economy," but also "Merit-Oriented Market-Based Economy" that each organization must hold with the paradigm of "Doing Good, Doing Well" predominantly.



Figure 2.15 Business drive towards SDGs.

2.6.2 Steps of Corporate Sustainability Creation

SDG Compass (GRI et al., 2016) is guidance for companies to know about how to adjust their strategies to accord with SDGs and management measures for supporting the achievement of SDGs. Five main steps of corporate working towards sustainability are illustrated in Figure 2.16.



Figure 2.16 SDGs Compass

From the above diagram, the following steps of creating corporate sustainability are:

Step 1 : Understanding the SDGs. It is the first step that a company takes to create familiarity with and understanding of SDGs by considering which goal is congruent with corporate operations and value.

Step 2: Defining priorities. It is the step of looking for and determining major business opportunities to reduce risks by assessing the possible impacts, both positive and negative, that might occur in the business value chain in the future.

Step 3: Setting goals. It is the step of setting a goal that is vital for business success and for promoting sharing of rights and better performance all through the organization. An organization's leader can express his or her determination to run the business following the approach of sustainable development by adjusting its goals to conform with SDGs.

Step 4: Integrating. It is the step of integrating sustainability with the main business and corporate governance, including implanting SDGs in every party of an organization. It is a key step of accomplishing planned goals jointly, while challenges can be managed systematically. All companies thus should increase their participation as a partnership in the value chain of their business, or government and civic sectors.

Step 5: Reporting and communicating. It is the step that helps organizations or companies to prepare their SD reports effectively by using shared index and priorities. SDG Compass can support organizations and companies by using them to do a report for and communicate with their stakeholders.

All the above steps point that every part must work in harmony and the same direction as corporate strategy and goals, which require thorough operational planning and the creation of a balance of all three dimensions. Wiriyaphan (2018) states that business organizations must make planning to determine policies and strategies that are harmonious with the creation of sustainability. Business organizations seeing the importance of sustainable management will operate their business by concerning the contribution of benefits for society and the environment. Therefore, such organizations will focus on business operations under proper benefits for society and the environment, without aiming towards maximal profit-making.

2.6.3 Attributes of organizations with sustainable development

United Nations Global Compact (2014) mentions in the organizational sustainability handbook about five major principles (prerequisites) with which organizations with sustainable development must conform:

1) Principled Business

Businesses determined to have business operations following the SD approach must start with honesty, respect, and responsibility in basic human rights, labor, environment, and anti-corruption.

2) Strengthening Society

Sustainable businesses tend to have a foresight and operate their business to support the society as a whole, i.e., resolve problems of poverty, conflicts, uneducated labor, resource shortage, etc. All of these problems can be used to determine strategic issues leading to the success and survival of businesses. Business growth cannot be reached if the surrounding society is vulnerable or degrading. Therefore, businesses often organize activities that support their main business, i.e., merit-making, campaigns on various issues, etc. Besides, they allow stakeholders to participate in their operations to reduce possible risks.

3) Leadership Commitment

In the SD process, organizational leadership is very crucial. Typically, businesses through top executives, who are supported by the board committee, will commit to the public. However, a leader must transmit clear signals to all through the organization of the sustainability direction where a company would go or display its responsibility. Commitments can be reflected through a meeting agenda, revised policies, and practices, training or inspiring programs for employees, etc. to mobilize sustainability to occur in the supply chain. Besides, leaders must have a long-term vision and continuous determination.

4) Reporting Progress

Businesses should disclose their financial and non-financial reports by communicating to stakeholders to be informed of the annual progress for expressing their responsibility and support for society. At present, some groups of stakeholders, i.e., investors and consumers, are pushing business organizations towards increased transparency. Accordingly, a company should find methods for measuring the positive impact of sustainability so that it can help to determine corporate strategies effectively. Furthermore, a company should know how to communicate with their communities and stakeholders, and help investors to make decisions on their investment.

5) Local Action

Businesses at the national and community level have different business expectations. Moreover, the problem issues businesses at different levels confront and needed to support the community or the nation are different too. Hence, a proper creation of stakeholder networks will lead them towards sustainability successfully.

Besides, United Nations Global Compact determines 10 principles for businesses to apply for their strategies, policies, and business operational procedures. The 10 principles are as follows:

1) Human Rights

(1) Businesses should support and respect the protection of internationally proclaimed human rights.

(2) Businesses must make sure that they are not complicit in human rights abuses

2) Labor

(3) Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining.

(4) Businesses should eliminate all forms of forced and compulsory labor.

(5) Businesses should eliminate the effective abolition of child labor.

(6) Businesses should eliminate discrimination in respect of employment and occupation

3) Environment

(7) Businesses should support a precautionary approach to environmental challenges.

(8) Businesses should undertake initiatives to promote greater environmental responsibility

(9) Businesses should encourage the development and diffusion of environmentally friendly technologies.

4) Anti-Corruption

(10) Businesses should work against corruption in all its forms, including extortion and bribery.

2.6.4 Qualifications of Sustainable Development Leaders

Corporate Social Responsibility Institute (2013) states that the important aspect of the SD organizations is not to perform their external activities for social and environmental development only, but also internal management. Typically, businesses ranked as the SD leaders with global standards possess 5 major qualifications:

1) Commitment towards SD value creation. It means the expression of determination to create organizational value, based on SD approaches, to stakeholders. Such commitment may appear in organizational vision, mission, policies, or value, and be embedded in organizational structure and management procedures genuinely.

2) Transparency and communication. It means an ability to perform as committed to stakeholders to let them be informed of to what extent the promised operations have been achieved, and what kind of changes are required. Besides, it must portray transparency in those procedures and means to let stakeholders see the promised economic, social, and environmental development.

3) Sustainable products and services. They mean products and services with social and environmental value, which reflects that an organization has an internal development that accords with the CSR concept so it can produce products that can create sustainability for the organization and society.

4) An integration of CSR practices with the core of business operations. It means a concern of sustainability all through a development process, starting from the production step to the disposal step, i.e., using safe raw material for consumers and friendly to the environment, reduce energy for production, decrease the released waste and pollution, etc.

5) Innovation, research, and development. It means an effort in improving or developing a management process and practices to add value for society and the environment or to reduce negative impacts so strongly that it leads to a new practical idea or innovation that can add value for an organization and its stakeholders.

SD is thus very important and essential for business operations nowadays for long-term success by displaying an organization's responsibilities and delivering value to society and the environment, including other stakeholders, completely.

2.7 Concepts of Sustainable Development Communication.

Newig et al. (2013) state that Sustainable Development (SD) is a social process in exploring, learning, and determining the future. It thus necessarily involves communication since sustainability all through the world is so complicating and uncertain. Therefore, an effective communication process between an organization and stakeholders is very crucial for establishing common understanding leading to the

acceptance of organizational operations. Generally, communication, related to sustainability, is divided into three types as follows:

1) Communication about Sustainability (CaS)

It means a process of information transmission, interpretation, and opinion expression about sustainability issues. Such issues can be applied for adjusting methods and framing horizontal communication at several levels, from faceto-face interpersonal communication to mediated communication by mass media. Also, it helps to provide a framework for managing problems, including constructing facts, arguments, and calls to create an understanding with a clear goal, which requires continual follow-up and responsible people in the operation.

2) Communication of Sustainability (CoS)

Communication is a tool or management aimed at the flow of information between a sender and receiver in the same direction. A sender intends to communicate sustainability-related information to receivers: scientists, NGOs, scholars, companies, and journalists, etc. to make them interested and disseminate sustainability issues to the general public widely. A distinct example is the SD report of a company. Thus, the main role of CoS is to provide information and knowledge to people until they participate in the SD process and take action.

3) Communication for Sustainability (CfS)

While CaS and CoS mean the direction and source of information, Communication for Sustainability (CfS) emphasizes SD standards. However, CfS is not only SD-related information provision, but it also creates an awareness of sustainability issues. The main goal is to support social changes towards SDGs. In terms of communication direction and roles of a sender, CfS possesses similar elements to CoS and CaS, which involves the creation of knowledge, social learning, and development of SD problem-solving methods. Therefore, the efficiency of CfS is measurable SD performances.

Moreover, Godemann and Michelsen (2011) specify that sustainable communication is the consideration of relevant issues and their rationale. Thus, the main content and issues in SD communication consist of several topics, i.e., biodiversity, consumption, migration, climate, energy, social responsibility, and organizational conservation, etc. Although SD communication is similar to other communications in several ways, it involves a greatly effective connection with a large number of stakeholders, including some challenges towards its success. For example, SD communication is applied because of media features and text designing by today technology, applications, and processing methods are used in SD communication, etc. (Genç, 2017)

2.7.1 SD communication strategies

Bucur and Petra (2011) state that communication is crucial in creating participation and responsibility, which are important elements of SD. Especially, communication is a process of information exchanges and helps to specify agreements in problematic issues, including supporting the achievement of projects' goals. Communication can also help to determine and specify the purposes of an organization more clearly, and create public participation in the activities or projects organized by an organization. There are five SD communication strategies:

1) Communication with development and the environment orientation

Communication can turn stakeholders to sustainability practices by integrating motivational appeals in economics, laws, regulations, or practices. Communication is a major tool for developing the environment by identifying problems explicitly, determining the significance of the problems and objectives, specifying management policies and major agenda through the consideration of the variety of stakeholders. Accordingly, proper message content and media selection are very crucial to ensure effective strategies. Still, the most effective communication requires planning, channel selection, and effective message design. Furthermore, it requires other steps to help develop information processing systems, auditing, and governance.

Consequently, SD communication strategies need systematic establishment and planning towards better understanding to change target receivers' attitudes and behaviors towards social and environmental protection besides business purposes. A process of SD communication strategies establishment can be conducted by two processes: a process of developing strategies (or what needs to do) and a process of strategy management (how to do). After complete strategic plans are acquired, communication will be penetrated in all practices. A message will be transmitted by different channels, based on the consideration of social and environmental responsibility or without affecting the environment.

2) Social Marketing

Social marketing is generally used for an organization's social campaigns through the conduction of marketing. The main purpose is to change social behaviors towards the well-being of people in society, or towards social benefits. Social behaviors can take place through a perceptual process of attention, evaluation, and acceptance or rejection. Mass media plays a significant role in the step of creating perception. On the other hand, social marketing will be included in practical guidelines for commercial marketing to enhance more social behaviors.

3) Ecosystem knowledge provision and non-formal education

Non-formal knowledge provision means the learning of society, economics, and the environment. Knowledge provision is vital for supporting SD and stakeholders' ability in perceiving development problems. Besides, it helps to perceive value, attitude, and skills related to the environment, including ethics, which accord with SD behaviors and decisions, awareness of a diversity of relevant experiences related to a basic understanding of environmental problems and stakeholders involved in those problems.

Knowledge provision must help to stimulate value and anxiety towards the environment since motivation is strongly needed for environmental protection. Therefore, effective communication principles can reflect a communication process between the government and private sectors, while stakeholders will determine their relationship with the environment and use it as a foundation for their decisions on social equality and justice or fairness.

Environmental knowledge provision is a major mission focusing on presenting information to add value and determining relevant measures that can be responded to truly. The purpose of non-formal knowledge provision or education is to help "stakeholders" to learn and have an ability to compile and analyze information for their correct decisions, including an ability to participate fully as stakeholders. Several programs have been developed and applied to provide knowledge and develop skills. Thus, perceived information will be transformed into practice significantly. Then, people can understand SD principles and concepts as they see these principles and concepts in their daily life.

4) Mobilization of civil society

Collaborations for SD often take place from the good intentions of an organization and are initiated by an authorized person in a community. The mobilization of SD is often in the form of management of groups of people based on their participation in activities. Primarily, the mobilization of civil society should emphasize listening to people's voices rather than ordering them to do what an organization needs. Thus, communication can start with learning from listening to people's experiences with attention, knowledge, and goodwill.

Listening requires skills and respect. In other words, it means more attention is paid to details of civil society, i.e., history, background, symbols, opinion leaders, etc. Communication must also be relevant to its communication patterns. No efficiency can be possible without social collaboration, intergroup, and mutual support. Still, mobilization of civil society is interpreted as the execution of power for negotiation via communication and the use of social and political skills. Besides, the integration of communication approaches with communities for SD is very significant. On the other hand, those involved, i.e., planners, need to find proper tools without using unethical persuasive strategies and management power.

In short, communication with local people and stakeholders can help to determine new ways for increasing the number of meeting participants. On the other hand, complicated problems of SD can be solved by adjusting forms and activities to be more credible.

5) Conflict management and negotiation

Conflict management is designed to be a tool of the policy for creating consensus opinions or absolute agreement and turning conflicting situations towards decision-making establishment. Effective communication will help to enhance negotiation that can determine insightful impacts, participatory analysis before decision-making, or planning required for creating possible changes. When communication faces obstacles or involved people do not communicate creatively, some certain situations can occur, as follows: (1) Difficult communication caused by bias or opposing political attitude or relationship problems between stakeholders and an organization.

(2) Improper and unaccepted senders of an organization.

(3) A communication process that cannot reflect a sender's needs distinctly or leads to complicating circumstances.

(4) Imbalanced power exertion, which obstructs open communication and acceptance of consensus.

(5) No participation of all involved in a communication process.

From the above cases, it indicates that a mediator, both individuals or groups of individuals, and steps of negotiation are needed to acquire a SD process. It is essential to specify specific needs of each individual in the conflicting situation and have a good mediator coordinate and propose communication guidelines to access and be accepted by stakeholders of each party related to the occurring problems. Problems or conflicting issues are focused genuinely. Often, organizations can bring about conflicts, but the understanding of cultural and political context of stakeholders can help to manage conflicts effectively. Accordingly, conflict management composes of negotiation, reconciliation, arbitration, and communication of corporate history or stories that is proper and harmonizes with target groups.

Such notions accord with Oepen (1999) who states that effective SD communication strategies can be divided into 10 steps as follows:

Step 1: Assessment comprising

1) An analysis of the situation and the scope of the problem by the use of Participatory Rapid Appraisal (PRA). Groups of stakeholders are allowed to share, present, jointly analyze the issues related to the impacts caused by corporate operations, which will be useful for communication strategy planning and organizing activities appropriately.

2) A receiver analysis by analyzing knowledge, attitude, and practice (or KAP Analysis) to understand motivation and factors influencing receivers' behaviors, including social factors (i.e., value, social norms, gender issues, etc.), cultural factors (belief, religion, tradition, etc.), economic factors (i.e., income, debts, etc.), and ecological factors (i.e. biodiversity, climate change, agricultural outputs, etc.).

3) An assessment of communication objectives. Typically, communication objectives should be specifically determined and aimed to increase receivers' knowledge, and adjust their attitude and behaviors towards specific behaviors or actions.

Step 2: Planning comprising

1) Communication strategy development, which is a planning process for determining problem issues, communication objectives or goals, and methods to achieve the determined goals, including the assessment of the progress towards the targeted goal. The adjustment of strategy for communication activities must be explicitly identified, i.e., what will be communicated? By whom? To whom? How to communicate? Through which media or resources? When? And Which standards are used for measuring communication efficiency?

2) Participation of strategists. It is a process of creating motivation and mobilize human and material resources for determining proper operational patterns and expectations.

3) Media selection and integration. It can be done by research and usage of integration expertise, i.e., the integration of mass media, group communication, and interpersonal communication, valuably with the most effective results.

Step 3: Production comprising

1) Message design, which is a form or pattern of presenting information for creating an understanding and interpretation of the transmitted message effectively. Typically, proper message content must be easy to access, correct, complete, timely, verifiable, and relevant to receivers.

2) Media test before dissemination and media production by testing it in the target area with target receivers in advance. Examples of what to be tested are the relevance to receivers, an understanding of content and actions, motivation and occurred behaviors, trust, and acceptance, etc. Regarding media production, it should be produced with proper and usable materials timely and accurately.

Step 4: Action & Reflection comprising

1) Media performance and application in the actual area. The operations and activities within the time frame are vital. Any delay can affect other parts of operations. Therefore, the estimation of time, place, opportunity, expenses, situation, and personnel in a communication process must be done thoroughly to ensure actual practices.

2) Preparation of a summary document. A summarized report on the regulation and evaluation of a communication process is prepared based on the continual evaluation. Normally, the evaluation can be conducted in 4 phases: 1) Exante or a pre-evaluation of the expected impact or consequence, 2) On-going to examine if an operation follows the determined plans, 3) Ex-post after the completion of an operation to confirm the impact, and 4) Terminal or the evaluation or assessment after the whole project is complete to rank SD impacts.

The above sequences enable an organization to communicate towards SD strategically with explicit patterns. Thus, they help to organize the important priority and respond to the expectation of each stakeholder group properly. Moreover, they can support an organization's decisions in the right direction under the determined concept of SD.

2.7.2 Communication of corporate sustainable stories

Cees B. M. Van Riel and Fombrun (2007) state that the creation of sustainable stories or content plays a vital role for an organization. The creation needs the integration of both internal and external organizational information sources to compose an interesting story or content to serve both academic and entertainment purposes. In general, there are some steps for developing or creating sustainability stories or content, as follows:

Step 1: Positioning the company. Good stories about the company can help it to compete and create competitiveness over its competitors in the market, including solving the anxiety of some stakeholders. The creation of a company's story thus must start with positioning the company, compared with its competitors and relevant to its stakeholders through the following ways:

1) Competition is the first step of creating a company's story, selected from a formal document and substantial studies on a company's positioning and that of its competitors. The obtained information is useful for quality ranking on market attractiveness and competitive capabilities. 2) Stakeholders are the next step for determining a company's positioning to create a company's stories, which mostly are developed from investigating its stakeholders' environment concerning the company. Stakeholders are very influential for a company. Therefore, interviews with stakeholder representatives of each group to know their worries about a company are important

Step 2: Linking the corporate story to the company's identity. The corporate identity composes of internal beliefs on what employees perceive as predominant and continual "facts," received from an internal survey with employees and managers through (1) an open participatory discussion about a company, (2) keywords employees used to describe their company, and (3) voting the words most meeting participants perceive about the company. Besides, a radar-chart analysis of relevant components will be valuable for developing stories of sustainable organizations.

Step 3: Linking the story to the company's reputation. "Good" companies are often defined mainly by the perception of external stakeholders. From analyzing corporate reputation, it can provide valuable information for creating a company's story. Figure 2.17 illustrates major drivers influencing corporate reputation. All these factors or drivers are good starting points for creating a company's story. For example, if a company needs to create its story on the workplace environment, it must present from the perspectives of employees with good skills, compensation, and welfare.

Step 4 : Plotting the story. After drafting a company's story from the above three steps, the next step is to create a positioning statement, which a company wants to declare to outsiders of its strength. However, positioning statements should be created by a small group of no more than 4-6 company representatives. Besides, the statements should be examined to see if they can yield any impact, both internal and external, to adjust them to be the most appropriate and accordant with the reality. Moreover, the examination can increase consensus by people participating in the creation process. The second step is related to "proof points" for proving a company's story, i.e., proved by "the distribution of products in more than 42 countries" or "a company gives more than xx hours for employees to do voluntary activities in a local community." The third step involves the use of tone of voice, i.e., aggressive, modest, humorous, polite, etc. The tone of voice is an important component in creating a company's story and creating impacts for drawing emotions of external stakeholders in parallel to employee support. Still, in plotting a story, it must explain the core abilities of a successful company, and summarize the main corporate activities in which a company participates, including the overall accomplishment of a company.

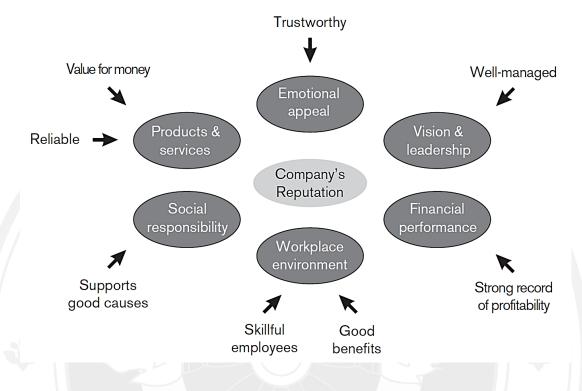


Figure 2.17 The creation of a company's story from corporate reputation.

Step 5: Implementing the corporate story to test external support. A company should conduct an opinion survey on the company's drafted story with a diversity of stakeholders. Nevertheless, a good story must illustrate a company's unique significance and eminence. After the findings, they should be communicated to stakeholders via various media.

Step 6 : Monitoring the story's effectiveness. A company's story is often dynamic and ongoing. Therefore, a written story without any updated changes can cause disadvantages since in reality, an organization has to adjust itself to the changing environment all the time. Therefore, a company's story must be changed as well. Furthermore, a company's story should stimulate the opinions of both supporters and dissidents. Online media should also be used to access a huge number of receivers while being an important channel for analyzing receivers' feedback on the company's story. For Thai listed companies that operate their communication strategies towards sustainability, they focus on the creation of stakeholders' participation, which is used for analyzing stakeholders' needs and expectations for making communication plans, designing content, and selecting communication channels and communication methods suitable for stakeholders of each group. Moreover, the disclosure of information must be accessible, transparent, and combine with government regulations for use. (Kuntasuwun & Benjarongkij, 2019)

Accordingly, changes and dynamism of an organization's response to communication for sustainable development challenge society greatly due to stakeholders' different needs for information. Besides, owing to academic and practical stimulus, especially the SD report, is a challenge of communication for SD, since there are a variety of approaches for reporting. Therefore, external agencies play a significant role in determining the expectation and requirements of the reports. (Godemann & Michelsen, 2011)

Colombo Stock Exchange (2019) suggests that for communicating a company's sustainability story, a company may use various communication channels, or submit only one integrated report or SD report. Communication channels can cover websites and other printed media to disclose ESG information that can be comparable and timely. Thus, the selection of correct communication channels can help investors to acquire information necessary for decision-making, which is very useful for an organization.

2.7.3 Concepts on the SD report

At present, universal agencies have determined a lot of practices for business operations and sustainability information disclosure for business organizations, i.e., Principles of CG by OECD, UN Global Compact (UNGC), Sustainable Development Goals (SDGs), Global Governance Principles of ICGN, Global Reporting Initiative (GRI), International Integrated Reporting Council (IIRC), Carbon Disclosure Project (CDP), Dow Jones Sustainability Indices (DJSI), FTSE4Good Index, etc. Especially Thai companies listed in the Stock Exchange of Thailand (SET) have to operate under the supervision of the Securities and Exchange Commission (SEC) and comply with rules, regulations, and practices to disclose transparent, correct, timely, complete, and sufficient information.

Moreover, Thai listed companies have to confront challenges in disclosing sustainability information by following both national and international practice guidelines in various forms of reports, i.e., the Annual Registration Statement (Form 56-1) for displaying information (56-1), Form 56-2 or Annual Report (AR), CSR Report, and Sustainable Development Report (SD Report) based on GRI framework. Furthermore, there are other sustainable indexes, such as Dow Jones Sustainability Indices (DJSI), FTSE4 Good Index, MSCI ESG Index, ASEAN CG Scorecard, Corporate Governance Report (CGR), etc. All of these indexes rely on information from reports disseminated to the public for evaluating the sustainability performance of Thai listed companies. However, such information disclosure confuses Thai listed companies quite a lot, as well as they, are required to report a huge amount of information with correctness, completeness, and timeliness. On the other hand, it also causes impacts on investors and stakeholders to access sustainability information conveniently, rapidly, and easily.

Therefore, the preparation of a sustainability report suitable for every group of stakeholders is interesting for a regulating agency, which wants all companies to submit only one report, namely Integrated Report, that covers all three dimensions: economic (financial performance, profits or losses, financial report), social, and environmental, that can represent a corporate Sustainability Report genuinely. (Bunyachotima, 2015). However, the sustainability report that is accepted universally at present is the Integrated Report (IR) of the International Integrated Report Council (IIRC).

International Integrated Reporting Council (2013) defines "an Integrated Report (IR)" as "precise communication on corporate strategy, governance, performance, and anticipation of an organization concerning external environmental context, leading to the value-added creation in a short term, medium-term, and long term." The main mission of IIRC is to create the framework for preparing an Integrated Report widely accepted, which discloses data on finance, environment, society, and governance integrally in the explicit, precise, consistent, and comparable.

The main purpose of Integrated Report (IR) is to create common universal standards of a Sustainability Report, add and develop good corporate governance, including long-term benefits for corporate economics and co-existence of business and communities, and society and the environment. (Suttipun, 2013). It is a report that connects a business model with business measurement to emphasize core organizational strategies. (Supphatada, 2016). Thus, it presents information related to resources and relationships in using resources that affect the creation of organizational expressed value as a consequence of the increased or decreased business value of corporate operations of activities, and the concern about stakeholders with understanding, attention, and response to their needs. Typically, IR composes of capital information, content, and indexes. (Paetrat & Petchchedchoo, 2018)

The content in IR must connect with business performance in economics, society, and the environment by reflecting how the organizational vision, mission, value, strategies, and all business operations affect value creation of today and the future by the existing or available capital. Thus, it leads to developing effective value creation from existing business capital allocation in various forms. (Yunprathom et al., 2014), as follows:

1) Financial capital, i.e., capital, ownership, debts, etc.

2) Manufactured capital, i.e., building, machines, manufacturing infrastructure, etc.

3) Intellectual capital, i.e., intellectual property, patent, copyright, etc.

4) Human capital, i.e., capabilities and potentials of human resources, personnel's morality, etc.

5) Social and relationship capital, i.e., brand, corporate reputation, relationships with stakeholders, etc.

6) Natural capital, i.e., soil, water, air, biodiversity, ecological system, etc.

Preparation of an IR is a significant organizational mechanism used for communicating business performance that concerns the responsibility for all three dimensions: economic, social, and environmental. However, an IR is not limited to only large-sized or mega-companies, it is also useful for SMEs to communicate their corporate social responsibility to their stakeholders in a business chain to gain acceptance, which consequently helps to increase their competitiveness and positive corporate image.

Still, SD reports have some different characteristics from other reports, as illustrated in Table 2.3

Table 2.3Comparison of characteristics of a conventional Annual Report (AR),
Sustainable Report (SD), and an Integrated Report (IR)

Characteristics	Conventional AR ¹	SD Report ²	Integrated Report ^{1,}
Credibility	Disclosure in a limited circle	Disclosure at the universal level	Disclosure at the universal level with increased transparency
Scope	Financial report	Oriented to economics, society, and the environment	Covering all dimensions
Target	Investors	Stakeholders	Investors and stakeholders
Concept	Segmented	Segmented	Integrated
Highlighted issue	Past stories and	Past stories, statistical	Stories of the past
	financial figures	and non-statistical information, and economic, social, and environmental practices	and the future accordant with organizational strategies.
Resource allocation	Emphasis on financial capital	Emphasis on financial capital	All kinds of capital
Time frame	Short term	Short term	Short, medium, and long term
Adaptation	Adhered to regulations	Compliance with GRI	Situational
Conciseness	No conciseness, but complicating	Concise	Concise with brief essence.
Technological use	Publication	Publication and through some technologies	Through technology

Source 1 Thai Institutes of Directors (2013).

2 Arunee Tantimangkorn and Supakorn Ekachaiphiboon (2017).

3 Somchai Supphatada (2016).

From the above Table, an Integrated Report (IR) is different from other Sustainability Report distinctively, especially in the part of the communication of Thai listed companies that connect business operations with other sustainability indexes in a short, medium, and long term, and covers more dimensions than other reports. Besides, it is a new paradigm of reporting that connects strategies, performances, the resource uses in various periods altogether. Especially, it emphasizes the disclosure of the present corporate value mobilization and supports more meaningful reporting. (Adams & Simnett, 2011) It is thus a way of upgrading communication with corporate stakeholders to be more effective.

Furthermore, GRI et al. (2016) specifies in the handbook, "SDG Compass" that SDGs are a mediator in reporting that requires cooperative operation for sustainable development, which will be very useful for a design and the prioritization, including types of content to be disclosed. SDGs can also reflect organizational effectiveness through communication via various channels about their SD practices and operations.

Organizational communication, which accords with SDGs, is to explain effective operations expected by SDGs, including information disclosure with SDG language to ensure that communication among stakeholders will go in the same direction. Typically, a company or an organization should communicate and report the following issues:

1) The relevance to SDGs, i.e., the explanation of priority steps of SDG and stakeholders' participation.

2) Important impacts related to SDG, both positive and negative.

3) Related goals of SD and progress of goal achievement.

4) Strategies and practices for managing SDG-related impacts and for business integration, i.e., policy approaches, systems and procedures, audits for analyzing corporate status, etc.

5) Indicators that can classify economic and social criteria, i.e., gender, age, ethnicity, disability, and other related aspects.

6) Integrated information of SDGs with types of reports or existing communication that can use illustrators, i.e., images for each related SDG to highlight some important data or information.

7) Integration of economic, social, and environmental issues, including collaborative work for sustainable development in all dimensions, i.e., gender equality, sustainable health, production, and consumption related to other related goals of SDGs.

Remarkably, a Sustainability Report (SR) is a result of the responsible investment tendency that has been growing continually, especially when investors need information that is complete, correct, and transparent, for supporting their investment decisions. Besides, SR is also a crucial mechanism to help increase the securities value and attract more investors. Significantly, it comes from the stimulation of all concerned stakeholders who try to push business sectors to pay more importance to the society and environment in parallel to their increased financial performance. Consequently, it can lead to the economic, social, and environmental development towards SDGs successfully.

2.8 Related Studies

The research entitled, "Communication Standards for Sustainable Development of Thai Listed Companies," applied literature review and related studies as a conceptual framework to construct indicators of communication for sustainable development in various dimensions. The related studies were classified by the research issues into the following:

2.8.1 Research on Sustainability Standards and Indicators

Pholwan (2003) studied "Standard Development of Public Relations in Thailand," by qualitative research. An in-depth interview was conducted with 19 experts in the organizations related to public relations, while four of them were asked to verify standard statements. Besides, quantitative research was also applied to explore the acceptance of standard value from 11 organizations of the government, state enterprise, and private sectors, in Bangkok and Chiangmai, based on system theory as a research conceptual framework. 11 standard statements were obtained from the study.

Thasanabanchong (2002) studied, "Thai Film Standard Development," which aimed to construct standards, indicators, and criteria for assessing Thai film standards, by qualitative research. An in-depth interview was conducted with 74 professionals in the Thai film circle to create standard statements, and a quantitative survey was also conducted with 62 professionals, scholars, critics, and movie censors to find their acceptance of standard statements. Z-test was used at a 95% confidence level. Structural Functionalism Theory was used as a research conceptual framework. From the findings, 16 standards and 119 indexes were found, while movies passing standard criteria must have scores of over 50%.

Vichayadhon (2011) studied, "The Construction of Social Responsibility Indicators of Energy Business in Thailand," by using qualitative research, conducted by an in-depth interview with 2 scholars and 2 professionals of three organizations with CSR activities. For the quantitative research, 400 employees of three organizations were surveyed. It was found that social responsibility indicators of energy businesses consist of six major factors: 1) Relationships with target groups and society, 2) satisfaction of community residents around the corporate area, 3) satisfaction of stakeholders, 4) economic factors, 5) societal and national development factors, and 6) environmental factors. Besides, 49 sub-indicators were also found to affect the social responsibility of the energy business in Thailand.

Pantawee (2001) studied, "Thai Radio Broadcasting Station Standardization," which aimed to create standards and a tool for assessing standards of Thai radio broadcasting stations. Quality research was conducted by an in-depth interview with 68 samples in 4 groups: professionals, listeners, regulators, and program sponsors. Moreover, quantitative research was conducted with 243 subjects in four groups to assess the acceptance of the developed standards. From the research, 4 types of tools for assessing the radio-broadcasting standards of each type of stations: music, news and knowledge, public, and mixed, based on the concept of standards, quality assurance, system theory, organizational management, marketing principles, mass media codes of ethics, systems, and structure of mass media, and communication competence and professionalism, as a research conceptual framework.

Wijitjammaree (2002) studied, "Forming of Performance Standards for Newspapers, " which aimed to construct standards, indicators, and criteria for assessing standards of daily newspapers. Qualitative research was conducted with 74 professionals to search for principal information that could be used to determine standards, indicators, and assessment criteria in newspaper organizations, both central and regional. Besides, quantitative research was conducted with 107 professionals to test the acceptance of the professionals. From the study, 27 standards for newspaper practices and 123 indicators were found under the condition that the practices passing standard criteria must gain scores no fewer than 500 scores.

Singlumpong (2007) studied, "the Development of Standard Criteria for the Production of Thai Television Drama," focusing on the development of standards, indicators, and criteria for assessing the corporate performance of organizations producing Thai television dramas, based on System Theory as a research conceptual framework. 57 TV-drama practitioners were also in-depth interviewed, and 5 experts were asked for verification of the results, aimed to use for determining standards. 9 standard statements and 53 indexes were found from the study. Besides, another quantitative research was conducted to test all standard values with a condition that a TV drama that would pass standard criteria must pass standard criteria with scores of over 60%.

Phongphiphatwatthana (2017) studied "Sustainable Index for Thai Social Enterprise: Food Cluster Case Studies" and constructed sustainability indicators for social enterprise in the food cluster from qualitative research by documentary analysis and in-depth interviews with experts. The research found sustainability indicators composing of four parts: 1) Input factors (corporate governance, legal registration, organizational structure, organizational goals, finance, human resources, fair employment policies, and procurement policies; 2) process or activity factors (social innovative invention process, new product development, production standards, made-to-order production, marketing and brands, distribution channels, and impact management); 3) output factors (products and services), and 4) Impact factor (environmental compensation, social compensation, and financial compensation or returns).

2.8.2 Research on Communication for Sustainable Development

Nueangjamnong and Sthapitanonda (2016) studied, "Corporate Social Responsibility Communication: From Concept to Action and Future Research Challenges," by gathering information on the significance and concepts of "corporate social responsibility" and proposed some practical guidelines for business corporate social responsibility communication from various dimensions, i.e., based on communication intent, communication patterns, communication activities/channels, etc.

Jaipukdee (2017) studied, "Brand Communication, Environmental Concern, and Consumer Behavior of Generation Y towards Green Brands," to explore brand communication for the environment of two skill-care products through qualitative and quantitative research. 400 male and female consumers aged 18-38 year old who knew both brands were surveyed. The findings showed that consumers with different levels of environmental concern had different perceptions, attitudes, and purchase decisionmaking. Besides, the perception was found to have a positive relationship with attitude towards brands. Moreover, six communication channels were analyzed: corporate identity, relationship marketing campaign plans, corporate advertising, corporate public relations, communication through organizational representatives, and activities supporters or sponsors, and found that both brands focused on communication about animals and nature.

Silpasastr (2004) studied, "the Communication for Discourse of Corporate Governance of the Siam Cement Public Co, Ltd.," and found that a communication process was initiated by the board committee, while the organizational communication division planned and implemented communication plans. However, communication strategies and media were arranged by a consultant company and advertising agency through various communication channels, i.e., movie ads, radio spots, print ads, TV non-fiction or documentaries, and radio non-fictions.

Kuntasuwun (2018) studied, "Strategic Sustainability Communication Model of Listed Companies in the Stock Exchange of Thailand," aimed to examine the determination of policies, vision, strategies, strategic operations, and sustainability tactics of the listed companies in the Stock Exchange of Thailand by qualitative research. An in-depth interview was conducted with 11 executives and experts of 10 companies and 8 stakeholders. From the study, it was found that the listed companies prepared their master plans and sustainability strategies in three dimensions: economic, social, and environmental. Besides, some companies added the transparency and good corporate governance dimension, by focusing on stakeholders, with well-selected content communicated through proper communication channels and methods. Maharmit (2011) studied, "The Internal Organizational Communication on Social Responsibility of the Real Estate Development Group: C.P. Land Public Co. Ltd.," by exploring the management, including problems and obstacles in intraorganizational communication on social responsibility of the real estate development group of C.P. Land Public Co. Ltd. By qualitative research. An in-depth interview was conducted with 10 executives, chiefs of CSR working groups, and employees, in combination with documentary research. The findings showed that the management of intra-organizational communication started with planning, determining organizational goals and main objectives, which emphasized knowledge provision at the individual level via activities, then expanded to outside the organization. Besides, organizational management was communicated by lines of authority and hierarchical working positions and coordinated by CSR working groups.

Rodkasikum (2015) studied, "Sustainable Creation of Content Marketing for Having a Competitive Advantage on Social Media," by exploring factors affecting the creation of sustainability through the use of Content Marketing. The study was conducted by quantitative research with 200 employees of the organizations with content marketing experiences, both online and on paper. A Regression Equation was used to find the relationship between independent and dependent variables by statistical package for the social science. The concepts of sustainable competitive advantages were applied as a research conceptual framework.

Cox (2008) studied "Sustainable Communication: A Study of Green Advertising and Audience Reception within the Growing Arena of Corporate Social Responsibility: A Case Study of British Petroleum." The study explored the relationship between green advertising and people's perception and examined the differences between green and non-green advertising through content analysis and experiment research with 12 A-Level students to test their perception of two advertisements. The findings showed that the image layout for adjusting the corporate image to look friendly to the environment had a positive effect on the samples' perception. Thus, it was recommended that businesses develop their communication and consumption towards sustainability in the future.

Newig et al. (2013) studied, "Communication Regarding Sustainability: Conceptual Perspectives and Exploration of Societal Subsystem Sustainability" and found that communication of sustainability emphasized six sub-issues: civil society sector, education, mass media, science, politics, and economics. Besides, it found that Communication of Sustainability (CoS) was adapted to be Communication about Sustainability (CaS) increasingly by giving importance to three dimensions, namely the opening of sub-systems of communication leading to opinion exchanges, social scrutiny, and corporate governance, which are main challenging issues of sustainability.

Shahzalal and Hassan (2019) studied "Communicating Sustainability: Using Community Media to Influence Rural People's Intention to Adopt Sustainable Behavior," aimed to construct an effective theoretical and statistical model of Communication of Sustainability for the rural areas. The study was conducted by qualitative research through a focus group interview to find patterns used to determine assumptions, whose correctness was verified by 300 Bangladeshi who were community-radio listeners. The results showed that the acceptance affected attitude, belief, and behavior or compliance with the concept of sustainability positively. The effect of attitude and belief on self-efficacy and social norms was used as a research conceptual framework.

All aforementioned studies can be summarized for finding unstudied issues or a gap of knowledge, as illustrated in Table 2.4, which indicates that the studies on standards are substantial and diverse. Accordingly, it enables the researcher to know theoretical frameworks that can be applied for this study. Seemingly, system theory and concepts on standards are the main concepts used in a research conceptual framework. Besides, research procedures and sequences are also witnessed through the use of qualitative research by an in-depth interview with concerned people to find indicators and significant standard criteria. Then, quantitative research is used to explore the acceptance and test of standard usage. All of these findings help the researcher to apply them for this study more properly. Furthermore, concerning the studies on the communication of and about sustainability, they were studied diversely, depending on each researcher's interest. However, because of this diversity, it helps the researcher to see possible variables used to be studied as preliminary indicators for the study. Nevertheless, the construction of communication standards for sustainable development of Thai listed companies has not been studied yet. Therefore, the researcher chose to study this topic, and applied theories, concepts, and related studies, in Thailand and foreign countries, from the literature review as a research conceptual framework and proper research methodology.



Researcher	Title	Objectives	Concept/theory	Method/tool	Information source	Findings
<u>Standards</u>						
Kamolnut	A standard	1. To create PR standards	- System theory	Qualitative		
Pholwan	development of	2. To apply developed PR	- PR	In-depth interview	19 PR experts	Standards of 11 major PR
(2003)	PR in Thailand	standards to be assessed	- PR evaluation			works: 1. information
		for acceptance from PR	- standards	Quantitative		dissemination, 2. Organizational
		practitioners		- Survey for determining	11 governmental,	PR, 3. Organizational image
		3. To test developed PR		standard scores	state enterprise, and	strengthening, 4. Community
		standards by being			private	relations, 5. Media relations, 6.
		applied in PR			organizations in	Knowledge provision, 7.
		organizations			Bangkok and	Marketing PR, 8 crisis
					Chiangmai	management, 9. Public issues
				- Survey of standard	-31 organizations	management, 10. Charity
				value acceptance		funding, and 11. sponsorship
				- Survey of experimental	-19 organizations	
				use of standards		
Cheeraboo	Thai film	1. To develop Thai film	- Standard	Qualitative	74 Film experts and	16 Thai film standards, 119
nya	standard	standards	- Film evaluation	In-depth interview	professionals	indicators, and standard
Thasanaba	development	2. To test the acceptance	- Film working	Quantitative		assessment criteria. Passed films
nchong		of standards, indicators,	procedure	- testing of preliminary	- 12 samples	must have scores of over 50%
(2002)		and standard	- Performance	standards draft		and standard value.
		assessment criteria	- System theory	- Survey on standards	- 62 samples	Every statement was accepted

Table 2.4 Related studies used as a research conceptual framework for the study

Researcher	Title	Objectives	Concept/theory	Method/tool	Information source	Findings
		3. To test the adoption of	- Project	acceptance		with a higher proportion of
		Thai film standards in	management	- Survey on standards	- 1 movie	supporters by more than 0.80.
		relevant agencies		adoption		
Thapanee	Development of	1. To find factors	- Corporate social	Qualitative		6 Corporate CSR indicators of
Witchayath	Social	reflecting an indicator	responsibility	In-depth interview	- 2 professionals	the energy business: 1.
uo	Responsibility	of social responsibility	- Value of		- 2 scholars	Relationships with targets and
(2011)	Indicators of	of energy business in	operating	Quantitative		society, 2. Nearby residents'
	Energy	Thailand	activities	- Survey of factors &	400 employees of 3	satisfaction, 3. Stakeholders'
	Business in	2. To prioritize social	displaying social	indicators for assessing	companies	satisfaction, 4. Economic
	Thailand	responsibility indicators	responsibility of	CSR activity operations		factors, 5. societal and national
		by their importance.	business	of the energy business in		development, and 6.
		3. To classify components	organizations	Thailand		Environmental factors, with 49
		of social responsibility	- Stakeholders			sub-indicators.
		indicators of the energy				
		business in Thailand				
Teerarat	Thai Radio	1. To acquire standards of	- Standards and	Qualitative		A tool for assessing standards
Pantawee	Broadcasting	Thai radio broadcasting	quality assurance	In-depth interview	68 Radio	for radio broadcasting stations
(2001)	Stations	stations.	systems		broadcasting	of four types of stations: music,
	Standardization	2. To obtain tools for	- System theory		practitioners	news and knowledge, public,
		assessing the said	- Organizational	Quantitative		and mixed.
		standards⊲	management	- Survey of the standard	243 samples	Standards in 11 aspects and 29
		3. To test a tool for	- Marketing	acceptance		indicators.

Researcher	Title	Objectives	Concept/theory	Method/tool	Information source	Findings
		assessing standards	principles	- Survey of standard	8 stations	
		4. To gain the acceptance	- Systems and	adoption experiment.		
		of a tool used to	structures of radio			
		evaluate standards.	broadcasting			
			organizations			
			- Radio			
			broadcasting laws			
			- Professional			
			codes of ethics.			
Sasiya	Forming of	1. To establish standards	- Quality and	Qualitative	74 practitioners in	There were 27 standards for
Wijitjamm	Performance	for newspaper practice.	standards	In-depth interview	various fields with	requirement standards in
aree	Standards for	2. To determine standard	- System theory		more than 5-year	newspaper work and 123
(2002)	Newspapers.	indicators			experience	indicators, a work that passes
		3. To determine standard		Quantitative		standard criteria must receive no
		assessment criteria.		- Survey of standards	107 samples	fewer than 500 scores.
		4. To test the acceptance		acceptance		
		of standards, indicators,		- Survey of adoption of		
		and standard		standards		
		assessment criteria.				
		5. To test the adoption of				
		standards				
Ong-art	The	1. To establish standards	- standards	Qualitative	52 samples of	Standards were determined and

Researcher	Title	Objectives	Concept/theory	Method/tool	Information source	Findings
Singlumpo	Development of	for Thai TV dramas	- System theory	In-depth interview	professionals,	classified into 9 statements with
ng (2007)	Standard	2. To determine indicators	- Quality assurance		scholars, and	53 indicators, and TV drama
	Criteria for the	and standard criteria.	- Stakeholders		practitioners in TV	passing standard criteria must
	Production of	3. To test the acceptance			drama production,	have a score of no fewer than
	Thai Television	of standards, indicators,			sponsors, viewers,	60%
	Drama	and standard criteria for			and regulators	
		adoption of standards		<u>Quantitative</u>		
				- Survey of the standard	5 samples	
				acceptance		
				- Survey of standard	2 companies	
				adoption		
Kamonthip	Sustainable	To determine	- Logical	Qualitative		19 Sustainability indicators of 4
Phongphip	Index for Thai	sustainability indicators	framework	- Content Analysis		parts: 1. Input factors, 2.
hatwatthan	Social	that are suitable for social	- System theory	- In-depth interview	2 companies	Process or activity factors, 3.
a (2017)	Enterprise:	enterprise in Thailand in	- Sustainable			output factors, and 4. Impact
	Food Cluster	food clusters and can be	development			factors
	Case Studies	used as platforms for				
		measuring the				
		sustainability of every				
		type of social enterprises				

Research on Sustainable Communication

Researcher	Title	Objectives	Concept/theory	Method/tool	Information source	Findings
Parichart	Corporate	1. To present the	- CSR of business	Qualitative	Theories and	CSR communication was
Sthapitano	Social	importance and	organizations	Content analysis	concepts on CSR	divided into 4 groups:
nda &	Responsibility	concepts of CSR of	- Business		communication of	information provision, response,
Pitchanut	Communication	business organizations.	citizenship		Thailand and	relevance, and creation.
Nueangjam	: From Concept	2. To gather and propose	- CSR		foreign countries	Business organizations around
nong	to Action and	practical guidelines of	communication			the world had different CSR
(2016)	Future Research	CSR communication	- Structural			communication, depending on
	Challenges	for business	approach			cultural contexts. For Thailand,
		organizations	- Functionalism			CSR was implemented based on
		3. To analyze challenging	- Coordinated			the level of business citizenship,
		issues on CSR, being	management of			but charity activities were still
		discussed for a long	meaning			focused and progressive
		time in the academic				organizations emphasized the
		and professional				creation of co-values accepted
		contexts in Thai society				at a universal level.
Poonchaya	Brand	1. To study brand	- Marketing for the	Qualitative		Consumers with different levels
Jaipukdee	Communication	communication for the	environment	Content analysis	Document and	of environmental concern had
(2017)	, Environmental	environment of skin-	- Brand and brand		media publicized by	different levels of perception,
	Concern, and	care products.	communication		two companies in	attitude, and purchase decision-
	Consumer	2. To analyze differences	- Consumer		one year.	making. Besides, the perception
	Behavior of	in perception, attitude,	behaviors			had a positive relationship with
	Generation Y	and purchase decision-		Quantitative	400 male and	attitude towards brands by

Researcher	Title	Objectives	Concept/theory	Method/tool	Information source	Findings
	towards Green	making of Generation-		One-shot survey	female consumers	analyzing six communication
	Brands	Y consumers.		questionnaire.	aged 18-38 years	channels: corporate identity,
		3. To analyze the			old in Bangkok	relationship-marketing
		relationships of				campaign plans, corporate ads,
		consumers' perception,				corporate PR, communication
		attitude, and purchase				through organizational
		decision-making.				representatives, and activity
						sponsors.
Pacharakar	The	To study communication	- Discourse	Qualitative	The document,	A communication process was
n Silpasastr	Communication	for creating corporate-	creation	Content analysis	Advertising media,	initiated by the board committee
(2004)	for Discourse of	governance discourses of	- Good governance		TV and radio	and planned and implemented
	Corporate	the Siam Cement Public	and corporate		documentaries or	by consultant companies and
	Governance of	Co., Ltd.	governance		non-fiction, print	advertising agencies, through
	the Siam				ads	diverse communication
	Cement Public			In-depth interview	6 employees	channels, i.e. advertising movie,
	Co., Ltd.				responsible for	radio spots, print ads, TV and
					media planning,	radio features.
					production, and	
					dissemination	
Rittipol	Strategic	1. To study and compare	- Sustainability	Qualitative		
Kuntasuwa	Sustainability	the determination of	- Strategic	In-depth interview	11 executives and	The listed companies arranged
n	Communication	sustainability policies,	communication		experts in 10 listed	the master plan and operated

Researcher	Tide	Objectives	Concept/theory	Method/tool	Information source	Findings
(2018)	Model of Listed	visions, strategies, and	- Communication		companies and 8	sustainability strategies in three
	Companies in	tactics of listed	of Sustainability		stakeholders	dimensions: economic, social,
	the Stock	companies in the Stock				and environmental. Several
	Exchange of	Exchange of Thailand				organizations added the
	Thailand	2. To study and compare				dimensions of "transparency"
		strategic sustainability				and "good corporate
		communication of the				governance" by focusing on
		listed companies.				stakeholders through the
		3. To study trends of				selection of proper
		strategic sustainability				communication content,
		communication of the				channel, and methods.
		listed companies				
Winura	Management of	Management of 1. To study management	- Social	Qualitative		The management of intra-
Mahamit	Intra	of intra-organizational	responsibility of	In-depth interview	Executives, chief of	organizational communication
(2011)	organizational	communication on	business		CSR working	started with planning and
	Communication	Social Responsibility of	organizations		groups, and	determining corporate goals.
	on Social	Real Estate	- Management		employees, total 10	The main objective was
	Responsibility	Development Groups,	- Principles of		samples.	knowledge provision at an
	of Real Estate	of C.P. Land Public	general			individual level via activities
	Development	Co., Ltd.	management			and expanded to outside the
	Groups of C.P.	2. To examine problems	- Classical			organization. Organizational
	Land Public	and obstacles of intra-	management			management was conducted

Researcher	Title	Objectives	Concept/theory	Method/tool	Information source	Findings
	Co., Ltd.	organizational	theory			through lines of authority and
		communication.	- Communication			hierarchy of working positions,
			and intra-			and coordinated by CSR
			organizational			working groups.
			communication			
			- Internal public			
			relations			
Seksan	Sustainable	1. To study factors	- Sustainable	Quantitative	U	To create a business competitive
Rodkasiku	Creation of	affecting business	business	Online survey	200 experienced	advantage relied on several
m	Content	competitive advantage	competitive	questionnaires and by	employees	factors, starting with personnel's
(2015)	Marketing for	through content	advantage	paper questionnaire.		skills and innovation with
	Having a	marketing.				sufficient potential. For content,
	Competitive	2. To investigate factors				it must be diverse and suitable
	Advantage on	affecting sustainability				for target groups. Besides,
	Social Media	from using content				information must be updated
		marketing via social				consistently.
		media.				
Cox (2008)	Sustainable	To explore the		Qualitative		The layout of the illustration for
	Communication	relationship between		- In-depth interview	12 A-Level students	adjusting the corporate image to
	: A Study of	green advertising and		- Content analysis	2 pieces of	look friendly to the environment
	Green	people's perception,			advertisement	was found to have a positive
	Advertising and	aimed to find differences		Quantitative		effect on the ways target groups

	Title	Objectives	Concept/theory	Method/tool	Information source	Findings
	Audience	between green and non-		Experimental research	12 A-Level students	perceived. It was recommended
	Reception	green advertising of BP				that businesses must develop
	within the					sustainable communication and
	growing arena					consumption in the future.
	of Corporate					
	Social					
	Responsibility.					
	Case Study:					
	British					
	Petroleum					
Newig,	Communication	To analyze and synthesize		Qualitative		Sustainable communication
Schulz,	Regarding	studies and concepts of		Analysis and synthesis of	Studies and	emphasized ways of
Fischer,	Sustainability:	sustainable		previous studies	concepts of	communication in six sub-
Hetze,	Conceptual	communication.			sustainable	issues: civil society sector,
Laws,	Perspectives				communication	education, mass media, science,
Lüdecke,	and Exploration					politics, and economics. It was
&	of Societal					also found that CoS was adapted
Rieckmann	Subsystem.					to be CaS increasingly and
(2013)	Sustainability					importance was given to 3
						issues: the opening of sub-
						systems of communication
						(CaS, CoS, and CfS), leading to

Researcher	Title	Objectives	Concept/theory	Method/tool	Information source	Findings
						opinion exchanges, social
						scrutiny, and good governance,
						which were major challenging
						issues of sustainability.
Shahzalal,	Communicating	To construct a theoretical	- Attitude theory	- Qualitative		Characteristics of specific media
M., &	Sustainability:	and statistical model of	- Self-Efficacy	- Analysis and synthesis		of community radio were found
Hassan, A.	Using	effective sustainable	theory	of previous studies		to increase the acceptance of
(2019)	Community	communication in rural	- Social norms	- Focus group interview		sustainable communication.
	Media to	areas.				Hence, it affected factors
	Influence Rural			Quantitative		determining behaviors and
	People's			Survey questionnaires	300 Bangladeshi	changed their determination to
	Intention to				listeners to	adopt sustainable behaviors
	Adopt				community radio	
	Sustainable					
	Behaviour					
			6			

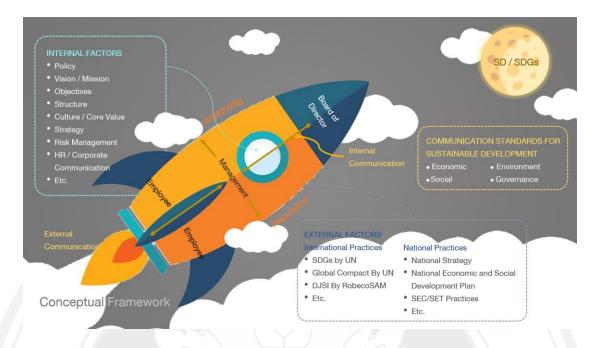


Figure 2.18 The research conceptual framework

The researcher applied concepts, theories, and related studies as a research conceptual framework by comparing organizations or listed companies based on sustainable development concepts to a space shuttle. SDG is like a moon, according to the concept of Moonshot, which is the goal to be reached in the future. Therefore, for an organization to make a run for SDGs, it requires a strong and effective organizational communication process to carry all concerned capitals, i.e., financial, production, intellectual, human, social, relationships, and natural, in combination with innovations used by the organization to reach the most effective benefits. Besides, external stakeholders must be communicated to let them be informed of the organization's determination, sincerity, and effort in solving global problems through technology and innovation. Moreover, an opportunity is provided for them to participate in driving the organization towards the intended goals to gain acceptance and a positive image.

Accordingly, organizational communication is like fuel that keeps the shuttle running up to outer space for interacting with the external atmosphere. However, it must be complete combustion that causes no harm to the engines and the shuttle, comparable to negative image and reputation, which will affect corporate operations and survival. Besides, external factors are like climate that supports the organization towards the goals smoothly, continually, and securely. On the other hand, they can also be barriers obstructing the journey as planned, especially if communication blowing out or emitting from the organization reflects no compliance with standards and regulations at the national and international level.

Notably, external factors influencing organizational sustainable development comprise all concerned regulations and practices nationally and internationally. At the national level, external factors are national strategies, national economic and social development plan, sustainable development practices of the Securities and Exchange Commission, the Stock Exchange of Thailand, and other involved agencies, such as Thai Investors Association, Thai Listed Companies Association, Thaipat Institute, Thai Institute of Directors, and listed companies in the Stock Exchange of Thailand, etc. At the international level, the external factors are SDGs and Global Compact of the United Nations, Dow Jones Sustainable Index (DJSI) of Robeco, SAM and ASEAN CG Scorecard of ACMF, etc.

Besides external factors that influence organizational sustainability, internal factors also play important roles in strengthening and growing an organization continually. However, internal factors are specific or individualized, depending on business models. Still, they often cover policies, visions, missions, targets, organizational structure, culture, values, strategies, risk management, organizational communication, human resources related to sustainable development. Thus, every organization requires a major mechanism to make all components in the organization (namely, each party or department) towards coordinated operations as a unity and to comply with the set goals. Such a mechanism is standardized and effective intraorganizational communication.

Intra-organizational communication is comparable to fuel in the space shuttle that needs standardized, specific, and proper mixture, without any adulterant or impurity to bring about complete combustion. Similarly, message or content must also be selected and only correct information is transmitted through appropriate communication channels in the same direction to yield an impact on receivers. Typically, a message will run through hierarchical levels in an organization by having the shuttle's head, namely top executive or an organization's leader, determines the direction towards SDGs. On the way, visions and missions of sustainability are communicated throughout the organization, based on four types of communication patterns according to the theoretical concepts. Generally, the key message of sustainable development drawn from the theories or concepts used for the study are economic, social, environmental, and governance concepts or dimensions. These four concepts or dimensions must be applied and integrated into balance for enabling Thai listed companies to run towards sustainable development goals successfully.



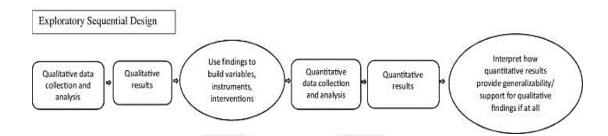
CHAPTER 3

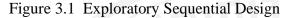
RESEARCH METHODOLOGY

The research entitled, "Communication Standards for Sustainable Development of Thai Listed Companies," focusing on developing communication standards for sustainable development, which are accepted to be applied in listed companies in Thailand and any organization that operates by the sustainable development approach. The results of the study are expected to bring about development and integration of knowledge in organizational communication and sustainable development for business sectors as guidelines for their planning, assessment, and improvement of effective communication with both internal and external stakeholders, including enhancing their business competitiveness at the national and international level.

3.1 Research Procedure

The study is a mixed-method research Exploratory Sequential Design, following the approach of Creswell (2015), as illustrated in Figure 3.1. The study started with qualitative research to search for standard statements and major indicators from communication for sustainable development practitioners in Thai listed companies. Then, the obtained standards were tested for the acceptance level by quantitative research. The findings of the acceptance level of the standard appropriateness were tested again by qualitative research, and the final results were summarized. In short, the research procedure can be divided into 4 steps with details as illustrated in Figure 3.2





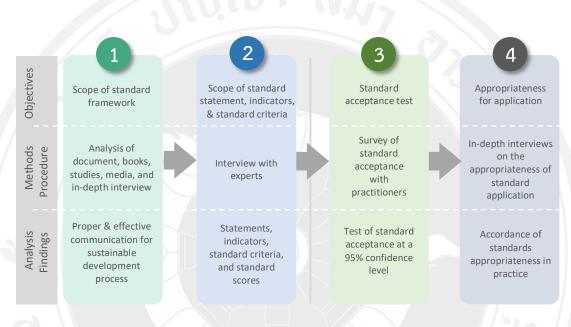


Figure 3.2 Research procedure or steps

Step 1 The researcher conducted qualitative research by content analysis of reports and media through which Thai listed companies communicated to the public formally, including by searching and analyzing information from the related paper on sustainable development in Thailand and in foreign countries. All studied document was read, recorded, and analyzed based on related concepts and theories to search for standard statements or issues, indicators, and major standard assessment criteria.

Step 2 The researcher applied an in-depth interview with an interview guide of open-ended questions, as the main research instrument, to collect data from key informants, who were selected by purposive sampling. The key informants were executives and employees in Thai listed companies and related agencies who were the population of the study. The interviews were recorded, in combination with participant observation, to gain information that can explain and analyze characteristics of organizational communication for sustainable development and its process. Besides, content from the companies' related documents, such as policies, strategic plans, action plans, handbooks or manuals, sustainability media, etc. gained from the first step was also used to supplement the findings of this step.

Step 3 Quantitative research was conducted, to test the acceptance of standard statements, indicators, standard assessment criteria, and standard statement scores, with communication for sustainable development practitioners in distinguished Thai listed companies who were representatives of the population of a total of 75 companies in this study. The samples expressed their opinions in the questionnaire, which had been verified for content validity at a 95% confidence level and for IOC approval and opinions from experts, including a pilot-test as a pre-test with 20 practitioners and experts who were not actual samples to test the questionnaire's reliability based on Cronbach's alpha coefficient, before data collection.

Step 4 The researcher verified the appropriateness of standard adoption in Thai listed companies, consisting of standard statements, indicators, and standard assessment criteria that had been tested for the samples' acceptance at Step 3, by conducting an in-depth interview with representatives of 8 industry groups of Thai listed companies. The final findings were then summarized as illustrated in Figure 3.2.

3.2 Information Sources for the Study

The research, "Communication Standards for Sustainable Development of Thai Listed Companies," collected information from sources related in communication standards for sustainable development, i.e., documentary, personal, and media sources, as follows:

3.2.1 Documentary Sources

Documentary sources are an introductory, but major information source to help understand the patterns or models and processes of organizational communication for sustainable development of 8 Thai listed companies including agencies involved in driving the concept of sustainable development in Thailand. The studied document of the sources was the company's document that was arranged and disseminated to the public, such as the Annual Registration Statement (Form 56-1), Annual Report (AR or Form 56-2), CSR Report, and Sustainable Development Report or SD report based on GRI, Integrated Report (IR), policies, strategic plans, action plans, and manuals that the listed companies arranged in 2019, including document prepared by the Securities and Exchange Commission (SEC) and the Stock Exchange of Thailand (SET), Thai Listed Companies Association TLCA), Thai Investors Association (TIA), Thaipat Institute, Thai Institute of Directors (IOD), and other listed companies in SET.

3.2.2 Personal Sources

Personal sources of the study are divided into two main groups: personal sources in the in-depth interviews for determining standard statements and indicators and another personal source in the step of verifying the standard acceptance. Personal sources comprise executives and employees responsible for sustainable development communication. The key informants were selected by each listed company.

Besides, to make the research more complete and well-rounded, the researcher also interviewed executives and other personnel involved in promoting and driving sustainability concepts (i.e., SET, SEC, TLCA, TIA, IOD, Thaipat Institute, and other listed companies in SET additionally to understand standard statements and indicators of Thai listed companies more clearly. The additional key informants included investors who invested in Thai listed companies to gain more financial returns, such as Government Pension Fund (GPF), etc. The list of key informants, divided by the goals of an interview, is as follows:

1) 28 key informants in providing information about standard statements and Indicators were divided into 3 sub-groups:

(1) 12 key informants from "Thai listed companies" who were the population of the study, composed of

CP All Public Company Limited (CPALL): The key informant was Mr. Thani Limprasert, General Manager, Communication and Corporate Image Administration Department (telephone interview, Tuesday, May 12, 2020, at 3.00-4.00 pm.) Charoen Pokphand Foods Public Company Limited (CPF): The key informant was Ms. Papitchaya Sunthep, General Manager, Sustainability Department (telephone interview, Monday, May 11, 2020, at 12.00 -1.00 pm.).

Central Pattana Public Company Limited (CPN): The key informant was Ms. Saowanee Jarusruangchai, Assistant Vice President, Sustainable Development Department (interview through Microsoft Teams Program, Wednesday, May 27, 2020, at 11.00-12.00 am.)

Home Products Center Public Company Limited (HMPRO): The researcher submitted a letter to the Corporate Strategy and Sustainable Development Department, which is the responsible department, and got a response from Ms. Nareerat. The researcher then kept contacting her continually for over 6 months (February – July), but due to some inconvenience and readiness of the company and because the top executives did not allow her to give an interview on July 6, 2020, so the researcher could not collect information from interviewing the corporate representative. Thus, the researcher gathered information from the Annual Report, the Annual Registration Statement (Form 56-1), Sustainability Report, and corporate website instead

The Kasikorn Bank Public Company Limited (KBANK): The key informant was Mr. Rawee Angthong, Department Head, Kbank Corporate Communication and Relations (face-to-face interview, Thursday, March 12, 2020, at 2.00-3.00 pm. At Kbank Meeting Room, Headquarter 1 Soi Rat Burana, 27/1 Rat Burana Road, Rat Burana Sub-District, Rat Burana District, Bangkok.)

Minor International Public Company Limited (MINT): The key informants were Ms. Budsayada Youngfuengmontra, Group Director, Sustainability Development, and Ms. Sirin Suwanjesda, Sustainability Manager (interview through Microsoft Teams Program, Tuesday, April 28, 2020, at 2.00-3.30 pm.)

PTT Public Company Limited (PTT): The key informants were Ms. Bongkod Mahanukul, manager, Corporate Management System Department, Ms. Salitta Pabut, Quality Management Officer and Ms. Marnwika Promban, System Management Officer, Corporate Management System Department (face-to-face interview, Monday, March 23, 2020, at 10.00-11.30 pm. at Café Amazon for Chance, in front of the library, Floor 1, Building 1-2, PTT, Headquarter, Vibhavadi Road, Bangkok.) The interview was under strict social distancing measures of PTT.

The Siam Cement Public Company Limited (SCC): The key informants were Mr. Korakod Anantasomboon, Associate Director, Enterprise Brand Management, Ms. Natthakan Na Thalang, CSR brand manager- enterprise brand engagement, and Mr. Weerapyos Onsamran, CSR Brand Manager, Enterprise Brand Engagement of Enterprise Brand Management Office (EBMO) (telephone interview, Wednesday, March 18, 2020, at 11.00-12.30 pm.)

(2) 7 key informants from "regulating agencies" comprise

The Securities and Exchange Commission (SEC): The key informants were Ms. Janjao Chuaydamrong, Senior Assistant Director, Corporate Governance Department, Ms. Sansanee Lovisuth, Senior Officer, Corporate Governance Department, Ms. Chantanipa Phakaimasakul, Assistant Director, Securities Registration Department 3, Ms. Nelisa Jencharasakul, Senior Executive Officer, Securities Registration Department 3, and Ms. Sucharee Jithatchai, Executive Officer, Communications and Investor Services Department. (telephone interview, Tuesday, April 28, 2020, at 10.00-11.00 am.)

The Stock Exchange of Thailand (SET): The key informants were Mr. Supakorn Ekachaiphiboon, Assistant Vice President, Sustainable Development 1, and Mr. Sukij Kittiboonyanont, Assistant Vice President, Sustainable Development 2 (interview through Microsoft Teams Program, Thursday, June 4, 2020, at 11.00-12.30 am.)

(3) 9 key informants from "promoting and supporting agencies" compose of

Global Compact Network Thailand: The key informant was Ms. Thanyaporn Krichtitayawuth, Executive Director (face-to-face interview observed by the association's team, Thursday, March 12, 2020, at 10.00-11.30 am. At the Global Compact Network Thailand Association, 89, Floor 31, AIS Capital Center Building, Ratchadaphisek Road, Din Daeng Sub-district, Din Daeng District, Bangkok). The interview was under strict social distancing measures of the Association.

Thaipat Institute: The key informant was Ms. Vorranut Piantum, Director, (telephone interview, Monday, April 20, 2020, 1.30-2.45 pm.) Thai Listed Companies Association: The key informant was Ms. Pensri Suteerasarn, President, (telephone interview, Wednesday, April 29, 2020, at 10.20-11.00 pm.)

Thai Institute of Directors Association (IOD): The key informant was Ms. Wirawan Munnapinun, Assistant Vice President, Research and Policy, who requested to respond to questions on the interview guide for convenience via email on Monday, June 15, 2020, at 2.59 pm.

Sustainable Business Development Institute (SBDI): The key informants were Dr. Anantachai Yoonprathom, President, Ms. Morakot Pornpibul, Deputy Director, Academic Section, Ms. Pano-Chandra Charurungsipong, Deputy Director, Sustainability Development Program, and Mr. Tantichai Jaiharn, Manager, Sustainability Initiative Development (interview through Zoom, Saturday, May 2, 2020, at 10.00-12.00 pm.)

Government Pension Fund (GPF): The key informant was Mr. Supawit Chotiwit, Director, Investment Analysis and Acting as Director of Investment Promotion and Responsibility (face-to-face interview, Tuesday, February 18, 2020, at 4.00-5.00 pm. at Floor 6, Abdulrahim Building, Rama IV Road, Bangkok). The interview was under strict social distancing measures of the organization.

2) 13 Key informants in verifying the appropriateness of standards adoption, were representatives of 8 companies in 8 industry groups that operate by sustainability approach, as follows:

(1) GFPT Public Company Limited (GFPT) was the representative from Agro-Food and Food/Beverage Industry Group. The key informant was Mr. Weera Thitayangkruvong, Investor Relations Manager. (telephone interview, Saturday, January 16, 2021, at 10.00-12.00 pm.)

(2) Union Pioneer Public Company Limited (UPF), a representative of Consumer Products Industry Group: The key informant was Mr. Wiwat Jongkonrat, Manager, Finance and Accounting Division, who requested to respond to questions on the interview guide for convenience via email on Wednesday, January 6, 2021, at 9.30 pm. (3) Bank of Ayudhya Public Company Limited (BAY), a representative of Financials Industry Group: The key informant was Ms. Virachorn Sirsupya, First Assistant Vice President, Investor Relations Section (face-to-face interview, Wednesday, December 23, 2020, at 11.00-12.43 am., at Meeting Room, Floor 17, Bank of Ayudhya Public Company Limited, Headquarter, 1222 Rama III Road, Bang Phong Phang Sub-District, Yannawa District, Bangkok.) The interview was under strict social distancing measures of the company.

(4) Indorama Ventures Public Company Limited (IVL), a representative of Industrials Industry Group: The key informant was Ms. Sasinotai Rochanutama, Manager, Sustainability Division, who requested to respond to questions on the interview guide for convenience via email on Thursday, December 24, 2020, at 5.24 pm.

(5) L.P.N. Development Public Company Limited (LPN), a representative of Property and Construction Industry Group: The key informant was Ms. Monnaphat Suphakitchanusan, Brand Manager, who requested to respond to questions on the interview guide for convenience via email on Wednesday, December 9, 2020.

(6) Bangkok Aviation Fuel Services Public Company Limited (BAFS), a representative of Resources Industry Group: The key informants were Mr. Prayoot Attasillapakit, Assistant Director, Sustainable Development and Corporate Communication Office, Mr. Tanai Sucharitakul, Manager, Corporate Communication, Mr. Apichart Thongma, Manager, Corporate Social Responsibility, Mr. Wirayut Tuthano, Public Relations Officer, Ms. Waraporn Meeprawat, Sustainability Officer, and Ms. Rungsigool Boonrungsee, Corporate Social Responsibility, (face-to-face interview, Tuesday, December 22, 2020, at 9.00-11.30 am., at Meeting Room 6, Floor 2, Building 9 BAFS, Headquarter, 171/2 Kamphangphet 6 Road, Don Muang Sub-District, Don Muang District, Bangkok.) The interview was under strict social distancing measures of the company.

(7) BTS Group Holdings Public Company Limited (BTS), a representative of Services Industry Group: The key informant was Ms. Duangkamol Thonguam, Corporate Communications Officer, Corporate

Communications Department, who requested to respond to questions on the interview guide for convenience via email on Monday, January 4, 2021, at 9.00 am.

(8) Interlink Communication Public Company Limited (ILINK), a representative of Technology Industry Group: The key informant was Ms. Warisa Anuntarumporn, General Manager, (telephone interview, Thursday, December 17, 2020, at 2.00-3.00 pm.)

3.2.3 Information Sources from New Media

The researcher considered from new media and social media the Thai listed companies used for dissemination of their formal information, i.e., Facebook, Line, YouTube, etc. Besides, some supplementary information was also searched from websites of the listed companies as follows:

- 1) CP All Public Co., Ltd. (CPALL) https://www.cpall.co.th
- Charoen Pokphand Foods Public Co., Ltd. (CPF) https://www.cpfworldwide.com
- Central Pattana Public Co., Ltd. (CPN) https://www.cpn.co.th
- 4) Home Products Center Public Co., Ltd. (HMPRO) https://www.homepro.co.th
- The Kasikorn Public Co., Ltd. (KBANK) https://www.kasikornbank.com
- Minor International Public Co., Ltd. (MINT) http://www.minor.com
- 7) PTT Public Co., Ltd. (PTT) http://www.pttplc.com
- The Siam Cement Public Co., Ltd. (SCC) https://www.scg.com

The information from the corporate websites was used to analyze patterns of models of organizational communication for sustainable development based on the conceptual framework and practices at the national and international level.

3.3 Data collection

The study is mixed-method research using Exploratory Sequential Design. The research procedure was divided into 2 phases with four steps. The first two steps used qualitative research. The third step used quantitative research for verifying the acceptance of standards, and the last step uses qualitative research to verify the appropriateness of standard adoption. In more details, data collection complied with the research procedure, as follows:

3.3.1 Literature review

The researcher collected information from previous studies in the country and foreign countries by reading, recording, and analyzing concepts and theories related to communication for sustainable development in various dimensions, i.e., a communication process for sustainable development, the construction of standard frames, organizational communication and good practices of communication for sustainability, including reports of Thai listed companies, who were the samples of the study, such as Sustainability Report, Annual Report, Annual Registration Statement (Form 56-1), etc. to find issues for using as questions to construct standard statements, including congruent and proper indicators.

3.3.2 In-depth Interviews

The researcher collected data from in-depth interviews with key informants, selected by purposive and snowball sampling, by considering the congruence of their representativeness and with the sustainability goals. The key informants were board committee, executives, and employees responsible for sustainable development communication in 8 Thai listed companies: CPALL, CPF, CPN, HMPRO, KBANK, MINT, PTT, and SCC, together with executives and personnel of regulating agencies involved in promoting and driving SDGs of Thai listed companies. The key informants used in in-depth interviews are as follows:

1) How do you perceive communication standards for sustainable development?

2) In your opinion, what is communication for sustainable development? What are its characteristics? What kind of communication standards an organization should have?

3) What is a communication process for sustainable development in your company? (by considering input, process, and output factors)

4) What kind of approaches do you use to accomplish the goals?

5) What kind of factors or components in the communication for sustainable development can reflect the effectiveness and efficiency?

6) What are the major elements enabling a communication process for sustainable development to be successful?

7) How do you follow and regulate the process to ensure effective communication for sustainable development and its compliance with the determined standards?

8) What is a challenge in establishing communication standards for sustainable development?

9) What are the suggestions or guidelines for constructing a standard framework and indicators of effective communication for sustainable development?

10) What is the trend of communication standards for sustainable development?

The researcher collected data from in-depth interviews and recorded it, together with participant observation to ensure more complete and well-rounded data collection. Responses to major questions were recorded to summarize important issues. Then, the obtained information was tested for its reliability and completeness, based on research hypothesis developed from personal sources, to summarize standard frames or scope and communication for sustainable development indicators by considering communication input, process, and output factors. A cognitive process following system theory and other concepts in the research conceptual framework was used. Finally, the findings were tested again for the acceptance of standard statements, indicators, and value of standard statements or scores as the last step.

3.3.3 Verification of standard acceptance

It is the third step in the research procedure in which the researcher developed standard assessment criteria and indicators from the in-depth interviews. The findings were collected and grouped to be congruent with theories and related studies that were used as a conceptual framework. The findings from the first phase were combined to classify as components of the measurement used to explore the acceptance of listed companies focusing on communication for sustainable development, by selecting the Thai companies in the list of Thailand Sustainability Investment (THIS), organized by the Stock Exchange of Thailand (SET). In 2019, 93 companies were selected into the said list.

Subsequently, the researcher determined the sample size by using the approach of Krejcie and Morgan $(1 \ 9 \ 7 \ 0)$, as cited in Ekakul (2000)) at a 95% confidence level with error no greater than 5% or 0.05 of 93 companies, so the sample size is 75 companies, as shown in the following calculation of the sample size:

Formula n =
$$x^2 Np (1-p)$$

e² (N - 1) + $x^2 p (1-p)$

Where	n	= 5	Sample size
	N	= 7	Population size
	e	=	Acceptable sampling error
	x^2	=	The table value of chi square (1 α -) 100% and Degree
			of Freedom (df) = 1 at the 95% confidence interval
			$(x^2 = 3.841)$
	p	≦/}	Proportion of population (if unknown, $p = 0.5$)

Substituting values into the formula $n = 3.841 \times 93 \times 0.5 \times 0.5$

 $(0.05)^2 \times (93-1) + 3.841 \times 0.5 \times 0.5$

= 75.03

After calculating the sample size, the researcher conducted a Simple Random Sampling to allow all units or all samples to have an equal chance to be selected by drawing lots to select listed companies until the determined number of samples was reached. Then, the researcher selected questionnaire respondents by purposive sampling, namely by asking companies that were samples of the study to select persons as their corporate representatives. However, these representatives had to involve directly with communication for sustainable development. Thus, 75 samples were each Thai listed company's representative, as illustrated in Table 3.1

 Table 3.1 Thai listed companies that were the samples in the step of verifying the standard acceptance.

No.	Symbol	Thai Listed Company (Public Co., Ltd)	No.	Symbol	Thai Listed Company (Public Co., Ltd.)
1	AAV	Asia Aviation	39	KTB	Krungthai Bank
2	AGE	Asia Green Energy	40	КТС	Krungthai Card
3	AKP	Akkhie Prakarn	41	LPN	LPN Development
4	AMATA	Amata corporation	42	MCHAI	Mahachai Hospital
5	AOT	Airports of Thailand	43	NSI	Nam Seng Insurance
6	BAFS	Bangkok Aviation Fuel Services	44	NYT	Nam Yong Terminal
7	BANPU	Banpu	45	PHOL	Phol Dhanya
8	BAY	Bank of Ayudhya	46	PM	Premier Marketing
9	BBL	Bangkok Bank	47	PPP	Premier Products
10	ВСР	Bangchak Corp.	48	PSH	Pruksa Holding
11	BEM	Bangkok Expressway and Metro	49	РТ	Premier Technology
12	BGRIM	B. Grim Power	50	PTG	PTG Energy
13	BPP	Banpu Power	51	PTT	PTT.
14	BTS	BTS Group Holdings	52	PTTEP	PTT Exploration and Production
15	BWG	Better World Green	53	PTTGC	PTT Global Chemical
16	CENTEL	Central Plaza Hotel	54	RATCH	Ratch Group
17	CFRESH	CFRESH Industry	55	S	Singha Estate

No.	Symbol	Thai Listed Company	No.	Symbol	Thai Listed Company
INO.	Symbol	(Public Co., Ltd)	INO.	Symbol	(Public Co., Ltd.)
18	СНО	Cho Thavee	56	S & J	S & J International
					Enterprise
19	COLOR	Salee Colour	57	SC	SC Assets Corp.
20	CPALL	CP All	58	SCC	The Siam Cement
21	CPF	Charoen Pokphand Foods	59	SNC	S.N.C Former
22	CPN	Central Pattana	60	SPALI	Supalai
23	DELTA	Delta Electronics (Thailand)	61	SSSC	Siam Steel Service Center
24	DRT	Diamond Building Products	62	STA	Sri Trang Agro Industry
25	EA	Energy Absolute	63	SYNTEC	Syntec Construction
26	EASTW	Eastern Water Resources	64	TASCO	Tipco Asphalt
		Management and			
		Development			
27	EGCO	Electricity Generating	65	TBSP	T.B.S.P.
28	GFPT	G.F.P.T	66	TFG	Thai Foods Group
29	GGC	Global Green Chemical	67	ТОР	Thai Oil
30	GPSC	Global Power Synergy	68	TRUE	True Corp.
31	HMPRO	Home Products Center	69	TSC	Thai Steel Cable
32	ICHI	Ichitan Group	70	TSTH	Tata Steel (Thailand)
33	ILINK	Interlink Communications	71	TTCL	T.T.C.L.
34	INTUCH	Intouch Holdings	72	TTW	T.T.W.
35	IRC	Inoue Rubber (Thailand)	73	TVO	Thai Vegetable Oil
36	IVL	Indorama Ventures	74	TWPC	Thai Wah
37	JWD	J.W.D. Info-Logistics	75	UAC	U.A.C. Global
38	KBANK	Kasikorn Bank			

Then, the samples were asked to express their ideas on all standard statements and indicators in the form of the Likert Scale, which is a popular measurement used for measuring the samples' opinions and attitudes (Patchanee Cheyjunya, 2015). The questionnaire, an instrument used in this step, composes of two parts: the first part covers standard frames, definitions, and aspects of communication for sustainable development. The second part questions about opinions towards standard statements, indicators, and standard criteria. The levels of opinions are divided into "agree," "disagree," "not sure," and "neutral" or "no opinion." Besides, questionnaire respondents were asked to provide their suggestions for improving standard statements and indicators into the column "for improvement" (Appendix A) that accords with and respond to the samples' needs the most.

3.3.4 Standards Application or Adoption

It was the last step of the research procedure, which was the step of adopting the standards that passed the process of acceptance in the Thai listed companies that followed sustainable development approaches. Firstly, some samples of Thai listed companies were selected as representatives of each type of Industry Group classified by SET (2019). Then, each company representing each Industry Group was selected by purposive sampling and chose its personnel as a key informant to be in-depth interviewed (the name list appears in 3.2.2.2: key informants in verifying the appropriateness for standard adoption), about the opinions on the standard statements and indicators for being applied as communication standards for sustainable development in the Thai listed companies in the future.

The names of the listed companies selected as representatives of each Industry Group of all eight Industry Groups, as follows:

1) GFPT Plc. (GFPT), the representative of Agro & Food Industry

2) Union Pioneer Plc. (UPF), the representative of the Consumer Products Industry

3) Bank of Ayudhya Plc. (BAY), the representative of the Financials Industry

4) Indorama Ventures Plc. (IVL), the representative of the Industrials Industry

5) L.P.N. Development Plc. (LPN), the representative of the Property & Construction Industry.

6) Bangkok Aviation Fuel Services Plc. (BAFS), the representative of the Resources Industry

7) BTS Group Holdings Plc. (BTS), the representative of the Services Industry

8) Interlink Communications Plc. (ILINK), the representative of the Technology Industry

3.4 Verification of Data and the Instrument's Quality

Before using any data to construct an indicator or to represent all data credibly, it requires the verification of the validity of the information related to communication for sustainable development by a group of relevant experts to consider to what extent it is proper or correct. Thus, the researcher applied information of communication for sustainable development to be tested by Triangulation (Lincoln & Guba, 1985) to ensure the most validity. For this study, three experts related to the studied issue considered and verified the correctness of the findings gained from qualitative research by in-depth interviews and from analyzing information from main media the companies used to disseminate to the public. The experts of this study comprised a scholar, an officer from a regulating agency, and an executive of a listed company that was awarded in sustainability. The names are as follows:

1) Sasanee Lovisuth, Ph.D., Senior Officer, Corporate Governance Department, the Securities and Exchange Commission (SEC)

2) Padachamai Siengkong, Deputy Director of Social Affairs, Airports of Thailand Public Company Limited (AOT)

3) Amornphan Sunaphan, independent researcher and guest lecturer, the Faculty of Communication Arts, Thai Chamber of Commerce University.

Moreover, to ensure the reliability of the tool used in the study, which was a questionnaire for assessing the acceptance of standards from the point of view of practitioners related to communication for sustainable development based on the related concepts and theories, including the findings from the in-depth interviews with relevant executives and practitioners. The questionnaire composes of two parts: personal information of respondents, and the opinion-survey questions on the acceptance of the standards. To test the quality and reliability of the research instrument or the questionnaire, the instrument was tested by the following methods:

3.4.1 Content Validity

The researcher tested the validity of the content in the questionnaire to ensure its congruence with research objectives and relevance to the reviewed concepts and theories through the calculation by Indexes of Item-Objective Congruence or IOC, developed by Rovinelli & Hambleton in 1977 and used widely in communication research. (Cheyjunya, 2015). The calculation of IOC is as follows:

1) Scholars and experts consider the congruence between the questions and the goals needed to be measured in parallel to the consideration of the research proposal. Three levels of opinions are determined: +1, 0, and -1 with the following meanings:

- +1 means It is sure that the statement is congruent with communication standards for sustainable development and can be applied for assessment.
 - 0 means it is unsure that the statement is congruent with communication standards for sustainable development and can be applied for assessment.
- -1 means it is sure that the statement is incongruent with communication standards for sustainable development and cannot be applied for assessment.

2) Then, the researcher gathered scholars' and experts' opinions and analyzed them by the three levels of their opinions +1, 0, and -1.

3) The level of opinions or scores were calculated by IOC formula as below:

$$IOC = \sum_{N} \frac{R}{N}$$

Where IOC is the Indexes of Item-Objective Congruence Value $\sum R$ is the sum of scores given by scholars and experts. N is the number of scholars and experts

4) Statements in the questionnaires or questions with IOC of lower than .50, evaluated by scholars and experts, were revised as recommended to make them more explicit, complete, proper, and congruent with the research objectives.

After the first content validation of standard statements calculated by IOC, the revised standard statements were tested for content validity by IOC again to evaluate their congruence with the research objectives and with the theoretical concepts. Five scholars and experts, both academic and professional, were asked to provide their opinions as follows:

1) Associate Professor Phnom Kleechaya, Head of the Department of Public Relations, the Faculty of Communication Arts, Chulalongkorn University (an expert in communication standards).

2) Mr. Anantachai Yoonprathom, Ph.D., President, of Sustainable Business Development Institute (SBDI) (Experts in sustainable development from promoting and supporting agency)

3) Ms. Sasanee Lovisuth, Ph.D. Senior Officer, Corporate Governance Department, the Securities and Exchange Commission (SEC) (an expert in sustainable development from a regulating agency)

4) Ms. Nalinrat Masomboon, Ph.D., Senior Consultant in sustainable development, Office of Sustainability Management, Corporate Governance, and Organizational communication, Charoen Pokphand Foods Public Company Limited (an expert in communication for sustainable development and a representative of the Thai listed companies in the Business Sector Group)

5) Ms. Padachamai Siengkong, Deputy Director of Social Affairs, Airports of Thailand Public Company Limited (AOT) (an expert in communication for sustainable development of Thai listed companies, a representative of State-Enterprise Sector Group).

From the content validity test, the IOC value was .82, which passed the determined quality criteria scores of over.50. After considering standard statements, indicators, and standard criteria of each item, it was found that most statements, indicators, and standard criteria passed the quality criteria of having an IOC of over .50. Only some indicators and standard criteria did not pass the assessment criteria, such as the indicator 18.1 "better performance," standard criterion 18.2 "better performance than last year," indicator 27.1 "increased securities holding and share value," and criterion 27.1 "higher number of investors holding securities and average higher share values from last year." The researcher thus cut those indicators and

criteria as recommended by the experts. The details of the content validation are presented in topic 6.1.1. the content validity test, while the value of IOC is presented in Appendix D.

3.4.2 Reliability Test

The researcher used the revised questionnaire after the content validity test by calculating the IOC value from the assessment and recommendations of 5 scholars and experts in the area of communication standards for sustainable development to conduct a pre-test with 20 practitioners and experts in communication for sustainable development, who were not actual samples to find the internal congruence of the standard statements, indicators, and standard criteria. These 20 questionnaires were processed by the SPSS computer program for reliability analysis, using Cronbach's Coefficient Alpha (Cronbach, 1990). The acceptable criterion, or α , must have a value of higher than or equal to 0.8 to be considered as having high reliability (Vichayadhon, 2011). The equation used is as below:

$$\alpha = \frac{k}{k-1} \left[1 - \frac{\sum s_i^2}{s_t^2} \right]$$

Where α is Reliability value

k is the number of questions

- s_i^2 is the variance of scores of each item or question
- s_t^2 is the variance of total scores or every question

The interpretation of Coefficient Alpha Reliability is based on the following: (Kanjanawasi, Pitayanon, & Sisukho, 2001)

Coefficient alpha (a)	Interpretation of reliability level
More than .9	Very good
More than .8	Good
More than .7	Fair
More than .6	Rather fair
More than .5	Poor

From the reliability test with 20 pilot samples, it was found that the coefficient alpha value was .978, which is higher than the acceptable criterion of 0.8, which is classified as a very good level (details displayed in the topic 6.1.2 reliability test). It means that the developed questionnaire is reliable and can be used for collecting data from the samples.

3.5 Data Analysis

After gathering information from all information sources, the data was analyzed to summarize the findings. In short, the steps of data analysis were divided as follows:

The researcher used the findings of the interviews with key informants to describe in detail to find the congruence of the data and processed towards a summary on communication standards for sustainable development. The main focus was the assessment of statements indicating a standardized communication process for sustainable development and indicators accepted by most key informants. The data was prioritized based on System Theory and other concerned theories to further determine major characteristics of standards, indicators, and standard assessment criteria.

The results of the test of standards acceptance were statistically analyzed and processed by the SPSS for Window Program, used for social science research, to confirm the developed standards, indicators, and standard assessment criteria at a 95% confidence level for each issue. Then, the last stage was to identify that each item of the standards, indicators, and standard assessment criteria was accepted by all concerned or involved in communication for sustainable development and be able to apply in the actual practices or operations.

The statistics used in data analysis was descriptive statistics in the form of frequencies and percentage and presented in the form of Table with supplementary descriptive interpretation to explain the data of the respondents' acceptance towards communication standards for sustainable development of Thai listed companies. The

information explained was demographic data, i.e., sex, age, working experience, position, the company name, and information about standard acceptance, namely standard statements, indicators, and standard assessment criteria.

3.6 Data Presentation

Since some parts of the information, especially that from an in-depth interview, were sensitive issues and might violate rules of the disclosure of inside information, the research necessarily cut some cues of the key informants, or disconnected such cues from the interviewed information, by replacing them with or coding them as "key informant 1, 2, 3, etc. The sequence of numbers was random with no certain conditions.

For the overall content of the study, it was organized and put for the presentation of the research called, "Communication Standards for Sustainable Development of Thai Listed Companies." The research objectives are in order as follows:

- 3.6.1 To determine communication standards for sustainable development of Thai listed companies.
- 3.6.2 To evaluate the acceptance and to test the appropriateness of the developed communication standards for sustainable development to be used in the Thai listed companies and organizations whose operations follow the sustainable development approach.

CHAPTER 4

COMMUNICATION FOR SUSTAINABLE DEVELOPMENT OF THAI LISTED COMPANIES

To determine communication standards for sustainable development of Thai listed companies, it requires an overall understanding of a communication process for sustainable development of Thai listed companies, which are the samples of this study, including a vision to see its communication system and factors related to and involved in the communication process first. Then, it can reflect the most wellrounded indicators and standard statements that are proper and accordant with sustainable development operations of Thai listed companies.

From the interviews with top executives, management, and employees related to a communication process for sustainable development of Thai listed companies, in combination with the analysis of main media used by the listed companies to communicate with their stakeholders, i.e., the Annual Registration Statement (Form 56-1), Annual Report (Form 56-2), CSR Report, and Sustainable Development or SD report following the GRI framework, including policies, strategic plans, strategies, action plans, manuals, and formal websites of listed companies, etc., some interesting findings can be summarized to display a communication process for sustainable development of Thai listed companies, based on the Basic Systems Framework of Bittel (1978 as cited in (Ploysuwan, 1996), as follows:

4.1 Input Factors

From the study, it was found that many initial factors or components were leading to the operation of a communication process for sustainable development of Thai listed companies. All of them were important and a major driver that enables the mobilization of communication systems for sustainable development. These important factors are:

4.1.1 The Structure of Sustainable Development Management

To establish organizational sustainability, it is essential to determine a proper and clear management structure to indicate roles, functions, and responsibilities, including regulations to achieve the goals as specified in the organization's missions. The structure of sustainable development management should cover all levels: policy, management, and operation or implementation; thus, such a supporting structure at all levels enables an organization to see the importance of each level and can operate the business following the sustainable development approach, including enhancing inclusive practices throughout the organization. Therefore, the structure of sustainable development management is an important input factor that drives an organization towards communication for sustainable development efficiently.

At present, SET and also global trend focus on the issue of sustainability. Thus, we see that we should have a direct agency responsible for this issue directly and explicitly since it also involves CSR matters. It is not the direct responsibility of the corporate secretarial to supervise by itself. Therefore, we proposed to the top management that we should have a clear function or agency for handling this. Truly, I think it is very important. Especially, for any organization that has not to have it yet, it should have. Otherwise, it will become a supplementary work or someone else's work. To have a clear structure or function, I think it can help to drive an organization well. (Key informant No. 25)

We must have it. If we do not have the budget for this, we must buy-in, starting from Level Board sequentially. Otherwise, it cannot happen. We must be clear, i.e., how to set up, how to disclose information, etc. If CEO is too lazy to talk about this but concerns about financial performance only, then it ends. There will be no presentation about this in the IR. If all levels in the organization do not see all the same things, everything can get stuck. (Key informant No. 1).

The first thing to do is to have the top executive buy-in. After that, then comes the second thing: how to organize its structure to operate effective sustainable development. The challenge is how to operate such a thing consistently and continuously. Thus, trigger issues must be determined, i.e., the organizational structure for establishing sustainability in transmitting organizational strategy, etc. (Key informant No. 3)

The Board is very important. First, they must know which issue is influential for the organization nowadays. For instance, they may need to communicate to the listed companies that despite Covid, they cannot stop because sustainability is like an immunity for their organization. (Key informant No. 18).

Sustainability is like a question of why we live. It is the first question really and is the question that top executives must answer, not employees. Then, it can reflect, from what they answer, a future vision of the organization will be. It will also reflect organizational policies. Therefore, it concerns the understanding of top executives that what they reply is an important goal that enables the organization to establish sustainability. Therefore, the major tool is communication. If we cannot make top management understand or have an intent to do it, it will become an option that they would choose to do whenever they need or to do when they have enough budgets. Thus, sustainable development tasks are cross-functional. The question is who will be the host. When none accepts to do it, then the SD division must be the host. (Key informant No. 19)

Moreover, some key informants point that the clear and specific structure of the SD committee should be established, but under the responsibility of all committees to be concerned and regulate the organization towards the sustainability direction since a business operation towards sustainability is not any particular person's or any particular group's responsibility. Thus, appointing sub-committees may not be necessary. Especially, some businesses may not be complex nor business size is too big. The corporate committee can regulate by itself by specifying SD as additional responsibilities. Accordingly, the determination of structure must concern about the appropriateness and accordance with business sizes and types of businesses mainly. Sustainability is a process of managing an entire organization. Is it necessary to have this function separately now? In my opinion, if the board can handle it, besides business issues, they can govern the social and environmental issues as well. Thus, it's no need to establish a specific function, except for a huge organization that may find some difficulties to manage it, then the board can deploy to sub-committees. Thus, the necessity of small-size companies depends on the complexity of their business operations. If it's too complicating, or the board cannot supervise it inclusively, then they should have a specific structure or agency. Therefore, it depends on business operations and types of businesses. (Key informant No. 26)

I think the SD Board may be unnecessary. Some companies still have some misunderstandings. For example, they understand that the Audit Communication Board must be responsible for finance, so they can get higher hireling. Everyone on the board has the same duties with equal responsibilities. The president has equal responsibilities as other committees. (Key informant No. 18)

Although a clear structure plays a significant role in driving sustainability approaches in an organization, such as structure must be equipped with personnel who have assigned roles and responsibilities. Thus, persons responsible for a communication process for sustainable development should be recruited and selected in congruence with organizational missions and values, including having knowledge, capabilities, and skills that can facilitate organizational sustainability operations distinctively as well.

If communication is like having an organization to order and employees to do, it causes a separation into two parties: commanders and doers. On the contrary, if communication is like a tact team, an organization does and all employees do in the same direction simultaneously as the same team, it can reduce resistance. Still, it may be done so quickly, but takes time. Another issue is before we can reach this point, it must start with employee recruitment. If we find someone sacrificing, honest, and creative, which is accordant with organizational values, we can recruit that person into an organization firstly. This person will understand corporate culture and can get along with us easily. (Key informant No. 27)

Besides, some key informants viewed that having a solid structure for carrying SD tasks may not be as important as an explicit delegation of work and responsibility to suitable personnel. Some companies may not be essential to establish a new structure, but they can have other agencies or divisions to operate sustainability tasks during the initial stage and can develop and expand to have proper structure aftermath.

The structure is very important for determining any policy in SD. However, from the overview of the organization structure, we can see a connection of each level with supporting authorities. Therefore, a structure may not be fixed and a specific SD division may not be necessary. PR and other concerned divisions responsible for building a corporate image can work together and understand the organization together. Thus, an organization can do together. (Key informant No. 2)

Organizational structure has not so much effect as the distinctive delegation of authority and responsibility to let concerned personnel be informed. However, if an organization is not ready to establish any structure, the question is if the SD office or agency is needed. For me, I think that the SD agency may not be essential as the explicit responsibilities of each task or issue delegated to someone in the organization. Supposedly, SD issues might be given to CG or organizational communication division. If they are assigned, they can consolidate relevant information from other related offices. The point is it must be clear. That's why I think the structure is less important than the clear delegation of responsibilities. (Key informant No. 4)

From the documentary analysis of Thai listed companies that were the population of the study, every company had a specific structure for supporting SD operations by establishing a core agency with direct responsibility and clear regulating mechanisms. However, the SD structures of each company were found to be different as follows:

CP All Public Company Limited (CPALL) combines the SD operations with organizational management structure by having the SD line be responsible for implementing SD plans under the supervision of and reporting to the Board of Director and Chairman of Executive Committee. Besides, there is another regulating committee. At the committee level, the company also appoints SD regulations and a good corporate governance board, composing four committees, responsible for regulation, SD policies preparation, goal setting, innovation promotion practices, social responsibility, and corporate sustainable development planning. Thus, the board is divided into two sub-committees. The first sub-committee is a good corporate governance committee and the other is a sustainable development committee. Both keep mobilizing an organization to operate under the sustainable development policies as assigned by the board and by universal standards. (CPALL, 2019b). The structure is illustrated in Figure 4.1.

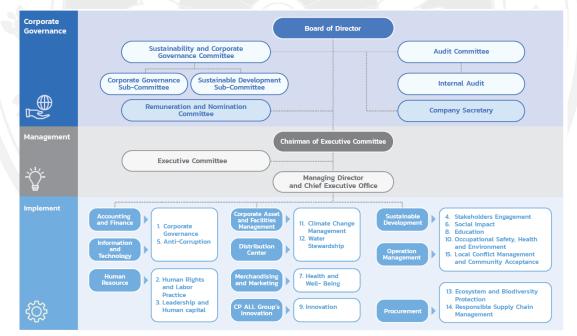


Figure 4.1 The structure of sustainable development of CP All Plc.

Charoen Pokphand Foods Public Company Limited (CPF) integrates SDGs with corporate operations of all parts under the strategy of social responsibility towards sustainability and business operations following the United Nations Agreement. Corporate Social Responsibility and Sustainable Development Office is established, including other offices related to SD operations, such as Executive Committee; CPF Foods Research and Development Center; Investor Relations and Capital Market Office; Human Resources Office; Agro-Industrial Technology and Innovation Office; Safety, Health, Environment, and Energy Management Office; Corporate Communication and Public Relations Office; and Corporate Social Responsibility and Sustainable Development Office. All of these units are under the supervision of the Chairman of the Executive Committee and another regulation committee. Besides, the company established sub-committees, comprising 4 committee members, responsible for determining policies and organizational directions, supporting operations, approving the report preparation, and regulating operations related to social responsibility and sustainable development. The structure of the company is illustrated in Figure 4.2.

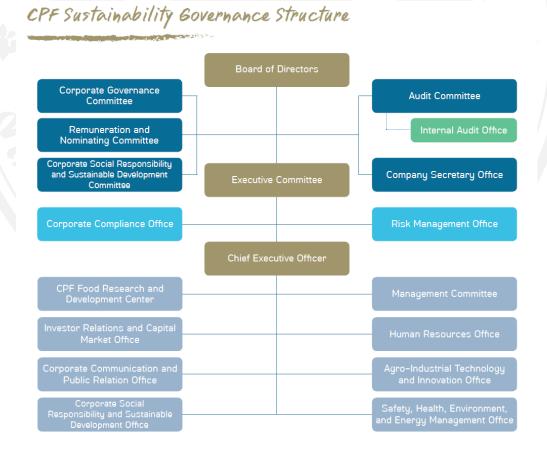


Figure 4.2 Sustainability Governance Structure of CPF Plc.

Furthermore, to mobilize the implementation of policies of the social responsibility and sustainable development committee, CPF established working groups to perform in different functions related to sustainable development, which are classified into 1) Economic working groups, comprising risk management, business codes of ethics review, digital changes, traceability system of digital products, animal safety, new product development, project-driving, and personal data protection project. 2) Social working groups, comprising: Supply chain sustainable management, Research and Business Establishment for Society. 3) Environmental working groups, comprising safety, health, environment, and energy management, sustainable environment, sustainability-driven package, mangrove-forest strategies, and eco-conservation. (CPF, 2019b)

Central Pattana Public Company Limited (CPN) aims to the goal of "growth to sustainable future" through the concept of "Aim to be the Center of Life and Communities," by establishing corporate governance and sustainable development committee chaired by the company's CEO, and others as committees, i.e., Deputy CEO, and CEO assistant of all units, and reporting to the Audit and Corporate Governance Committee. The main duties are to determine business sustainable goals, review policies, strategies, operation plans, requirements, standard systems, operational approach, and follow the operational performance in the same direction. Moreover, there are three more management committees: 1) Climate and environment (responsible for transmitting and driving climate and environmental policies; operating and natural resources, energy, and public utilities; environment; biodiversity; waste management; greenhouse gas emission; and the use of alternative resources towards maximal benefits and effectiveness systematically and sustainably.) 2) Safety, health, and working environment (responsible for driving and upgrading organizational safety and sanitation to be harmonious and in the same direction). 3) CSR (responsible for operating activities related to social responsibilities in economic, social, and environmental dimensions based on sustainable development approaches and shared- value creation with communities and stakeholders, including approving employees' voluntary activities and projects, (CPN, 2019b), as illustrated in Figure 4.3

From the below structure, CPN adopts the sustainable development approach into functions and responsibilities of its personnel in all sections, starting from the policy level (committee level), namely the management implemented policies into practices and reports operational performance back to the committee responsible for regulating each section, up to the operational level, which composes of coordination teams of a risk management office of each branch, surveillance and evaluation of energy and carbon footprint, chiefs and teams responsible for coordinating ISO systems of branches, 5-Principle, welfare, and human resources, CSR/CSV of branches, and safety, health, and working environment. The Department of Business Sustainable Development is responsible for operations in corporate communication for sustainable development as a whole, including gathering information and preparing reports for communicating with both internal and external stakeholders to assure effective mobilization towards sustainability.

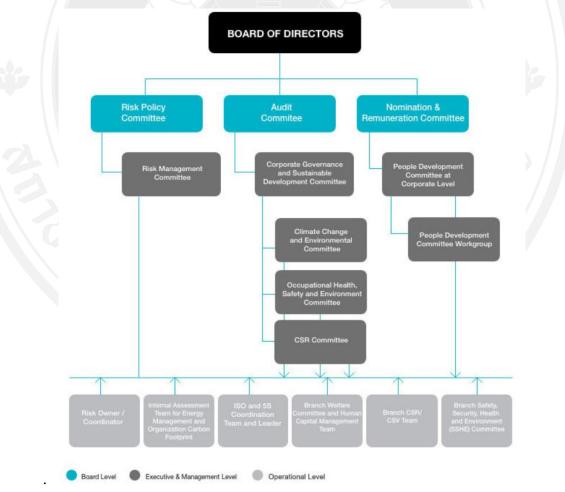


Figure 4.3 Sustainable development structure of Central Pattana Plc.

Home Products Center Plc. (HMPRO) has a distinctive sustainable development structure by having a Corporate Strategy and Sustainable Development Committee at the operational level, consisting of top executives of each department, and under the governance of the Managing Director and report directly to Executive Committee, at the committee level. Besides, Risk Committee is responsible for jointly reviewing and evaluating major issues of sustainable development. The Corporate Strategy and Sustainable Development Committee are responsible for determining and reviewing policies, regulating, advising, promoting, and following the operating performance as per organizational strategy, operational plans, and SDGs, including reporting the performance to communicate with stakeholders. Most of all, it is responsible for creating a balance between business operations based on good corporate governance, environmental surveillance, and well-being for society and communities, (HMPRO, 2019b), as illustrated in Figure 4.4

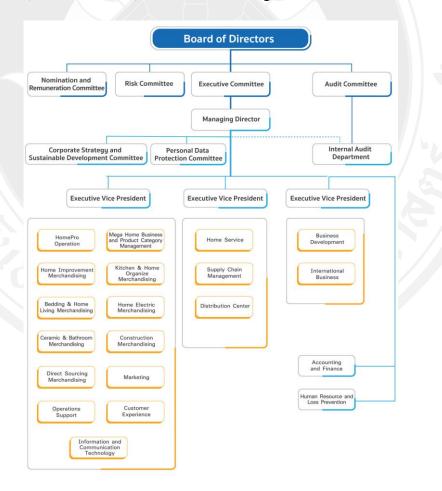


Figure 4.4 Sustainable development structure of Home Products Center Plc.

The Kasikorn Bank Plc. (KBANK) aims for business operations as a sustainable bank, by having Chairman and CEO as the leaders in driving the organization towards sustainable development and assigning the Corporate Governance Committee to be responsible for determining approaches and practices, reviewing and following the operational performance, and enhancing employees' participation. Besides, the Corporate Governance is responsible for reporting directly to the Bank Committee via the Board of Director, consisting of the CEO, Managing Director, employees, and other people related to the management of business operations as determined by the Bank Committee. Besides, the company has two specific sections: sustainable development under the corporate secretary, and social enterprise management under corporate communication and relations. Both sections are under the corporate secretariat, whose functions are to promote, support, and coordinate with sustainable development working groups, which comprise several functions. All of these operate SD practices as determined by the Bank Committee to accomplish the planned goals and respond to the needs of stakeholders of all parties, (Kasikornbank, 2019b), as illustrated in Figure 4.5.

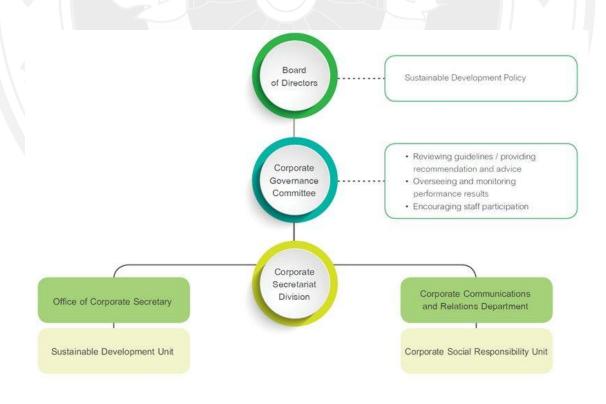


Figure 4.5 Sustainable development structure of The Kasikorn Bank Plc.

Minor International Public Company Limited (MINT) aims to elevate the level of sustainable development by determining the 5-Year Sustainability Strategy as a part of annual strategic planning. The Board of Directors (BOD) approves the said plans and contains them in BOD's quarterly meeting agenda. Chief Sustainability Officer is responsible for developing sustainability strategies, supported by Chairman, CEO, and top executives. Besides, the Sustainability Committee, chaired by the Chief Sustainability Officer, and attended by senior management of relevant functions, is responsible for a consultation on the sustainability plans and review of the sustainable development projects progress. A meeting is organized every quarter of the year. Moreover, Corporate Sustainability Department is authorized to support and implant sustainable development approaches in all working processes, including a follow-up and evaluation of all relevant project progress, which includes the advancement of SD operations throughout the organization. (Minor, 2019b). The structure of the company is illustrated in Figure 4.6

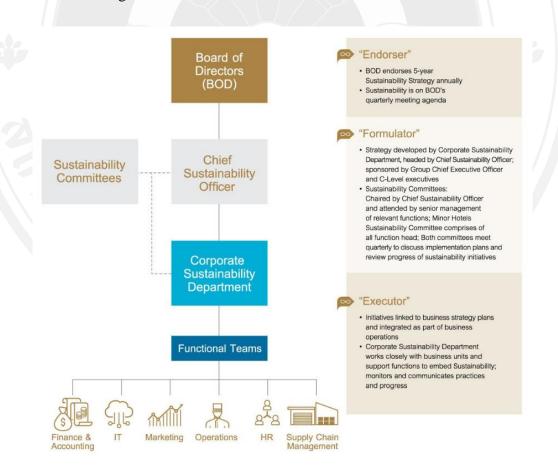


Figure 4.6 Sustainable development structure of Minor International Plc.

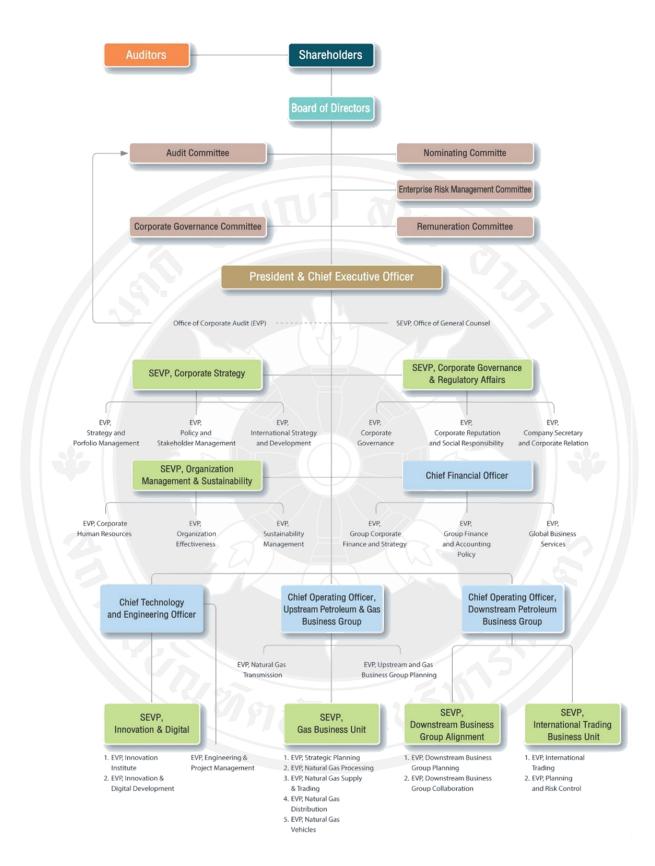


Figure 4.7 Sustainable development structure of PTT Plc.

PTT Plc. (PTT) places the priority to 3-P balanced sustainability management: business operations in parallel to the well-being of communities and society (People), natural resources and environmental conservation (Planet), and security base for economic and social sectors towards strong and sustainable growth (Prosperity). Besides, the company established the structure for supporting sustainability operations by having the Corporate Governance Committee responsible for delegation of policies and guidelines, including a follow-up of corporate sustainability governance, which covers surveillance of society, communities, and the environment. President and CEO also manage the company through 25 management committees, functioning to drive policies to concrete implementation via the collaboration with Deputy Managing Director of Organizational Management and Sustainability and Deputy Managing Director of Corporate Governance and Regulatory Affairs, to operate SD plans concretely. (PTT, 2019a). The sustainable development structure of PTT is illustrated in Figure 4.7

Siam Cement Plc. (SCC or SCG) reformed its sustainable development structure under the Sustainable Development Committee to achieve more effectiveness and efficiency by connecting all SD important issues or corporate materiality as a part of business operations. The governance is conducted in three dimensions: social, environmental, and economic. Besides, it added another function of corporate governance and has the specific committee and working groups to manage all concerned issues. The meeting is organized at least every quarter. The distinctive structure of sustainability operations is the integration of SD with the operations of all functions through two sub-committees: the CSR Committee for Sustainable Development and the Governance and Nomination Committee. These two subcommittees are responsible for delegating the overall operational policies and guidelines, and budget for CSR operations via the Managing Director. SCG Sustainable Development Committee plays an important role in determining and reviewing SD policies, operational practices, and goals; listening to stakeholders' opinions, and preparing SD issues or materiality towards proper care for stakeholders. Furthermore, there are two executive committees: 1) The committees for operating SD in three dimensions: Economic Excellence Committee, Environment Excellence Committee, and Social Excellence Committee. 2) The committees for implementing SD strategies and issues: Climate Change Committee, SCG Energy Committee, Occupation Health, and Safety Committee, and Circular Economy Committee. Besides, SCG founded the SD Committee covering all kinds of its business. (SCG, 2019c). The structure of sustainable development of SCG is illustrated in Figure 4.8.

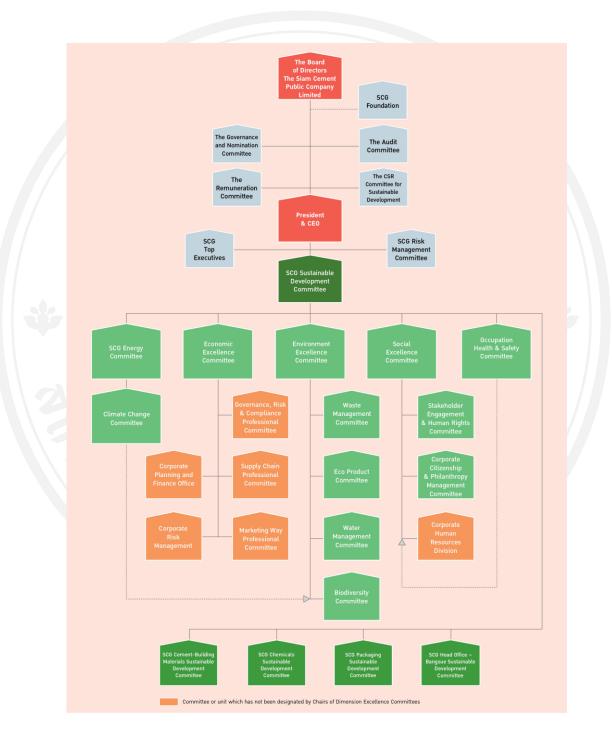


Figure 4.8 The structure of sustainable development of SCG Plc.

From the structure of sustainable development operations of all eight companies, all companies have a clear but different structure, names, and lines of authority at different levels: policies, management, and practice, depending on business size, types of business, and each company's vision and mission. Still, they have something in common, which is a drive towards corporate sustainable development. The main factors for achieving it are the establishment of supporting SD structure by determining explicit roles and responsibilities, systematic governance and regulations, hierarchical reporting of operational performance to higher management officers at the policy and management level. Especially, all companies have an agency or office responsible for creating perception and communicating their policies through various channels to induce practices all through the organization until they are perceived by stakeholders as having an image of distinguished SD organizations.

The major features of structural factors in SD management of Thai listed companies are summarized in the Table 4.1

Name	Policy Level	Management Level	Operation Level
CPALL	Sustainability and Corporate Governance Committee 1)Corporate Governance Sub-Committee 2)Sustainable Development Sub-Committee	Executive Committee	Every line of work by having sustainable development line responsible for sustainability operations
CPF	Corporate Social Responsibility and Sustainable Development Committee	Executive Committee	Office of Social Responsibility and Sustainable Development is responsible for SD operations and the establishment of economic, social, and environmental working groups.
CPN	Audit and Governance Committee	Corporate Governance and Sustainable Development Committee 1) Climate Change and Environmental Committee 2) Occupational Health,	Excellence Management and Sustainable Development Division

 Table 4.1
 The structure of sustainable development management of Thai listed companies

Name	Policy Level	Management Level	Operation Level
		Safety, and Environment Committee 3) CSR Committee	
HMPRO	 Executive Committee Risk Committee 	Corporate Strategy and Sustainable Development Committee	Corporate Strategy and Sustainable Development Division
KBANK	Bank Committee Corporate Governance Committee	Management Group	Corporate Secretariat, composing of 2 parts: 1)Sustainable Development, Corporate Secretariat Office 2)CSR Management and Organizational Relations
MINT	Board of Directors	 Chief Sustainability Officer Sustainability committee 	Sustainable Developmen Division
PTT	Corporate Governance Committee	25 committees at the management level	 Corporate Governance and Relations Organizational Management and Sustainability, by having organizational management systems responsible for SD promotion support, communication, and operations.
SCC	3)CSR Committee for Sustainable Development 4)Governance and Nomination Committee	 SCG Sustainable Development Committee 1. Sub-Committees for SD operations in 3 dimensions: Economic Excellence Committee Social Excellence Committee Social Excellence Committee Social Excellence Committee Social Excellence Committee Social Excellence Committee Social Excellence Social Excellence Committee Social Excellence Committee Sub-Committees for operating SD strategies and issues Climate Change SCG Energy Occupation Health and Safety 	Every function and every type of corporate business

From Table 4.1, all eight companies have structures for supporting sustainable development operations at three levels: policy, management, and operation or practice. They are different in naming the responsible groups and numbers of

divisions or functions related to sustainability. Concerning the management structure, the findings can be summarized as follows:

1) Policy Level Four patterns were found: 1) Designation of specific committees for governing sustainability issues, i.e., CPF and SCC, 2) the collaboration of sustainability and governance committees, or assignment of another role for the corporate governance committee, i.e., CPALL, CPN, KBANK, and PTT, 3) Nomination as roles and responsibilities of other committees, i.e. HMPRO, which authorizes Executive Committee to govern sustainability, and 4) Determining SD as major role functions and responsibilities of corporate committees, i.e. MINT.

For what I perceived, to have a board, it means business cost. Therefore, it's not surprising if a small company will combine it with the CG sub-committee as it's more dexterous for decision-making and it's easy to consolidate everything. Thus, a board of a small family is not like that of large companies, in which external consultants are invited to be their subcommittees. (Key informant No. 26).

2) Management Level. It was found that the eight companies have three different committees or working groups: 1) The companies delegate power, authority, and responsibilities to the executive committee, which composes of CEO, and top executives of every section of the organization, and is a significant force in driving corporate sustainability. This pattern was found the most in most companies, i.e., CPALL, CPF, KBANK, and PTT. 2) A sustainability working group was established, especially under the name of the "Sustainable Development Committee." In some companies, the "Chief Sustainable Development Officer" is appointed to govern and manage corporate sustainability operations, i.e., CPN, HMPRO, MINT, and SCC. 3) A diversity of sustainability committees or working groups are established, i.e., Climate Change Committee, Energy Committee, Occupational Health, and Safety Committee, etc., so that the companies can manage sustainability missions widely and congruently with diverse businesses, both products, and service, and business size, especially large-sized organizations, i.e., CPN, PTT, and SCC.

3) Operational Level The structure of management is like the management level. At the operational level, two patterns were found. 1) All listed companies will assign a working group or an office to have main responsibilities to operate sustainability concretely as per determined policies, especially to perform as corporate sustainability information source and to communicate for sustainable development, including preparing reports to internal and external stakeholders or as determined by the regulatory agencies. 2) Every personnel, every line of work, and every office must comply with sustainability approaches. From the analysis, it was found that most of them complied and their compliance was a major factor that makes communication for sustainable development successful, i.e. CPALL, PTT, and SCC. The patterns of the structure management for supporting sustainable development of Thai listed companies are summarized in Figure 4.9.

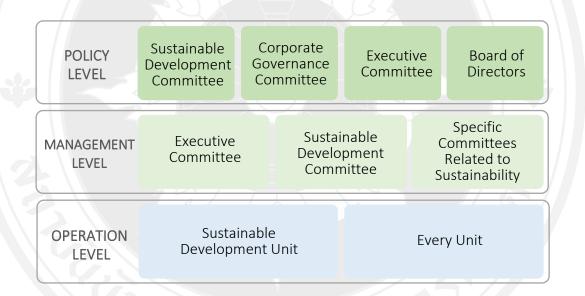


Figure 4.9 The patterns of structure management for supporting sustainable development of Thai listed companies

However, organizations must apply strategic sustainability practices and establish sustainability management structures integrally. It is important to determine clear objectives and create sustainability in an organization (Serafeim, 2020) by establishing a supporting structure at a policy, management, and operational level properly. Such structure is important for determining the direction of business operations and effectiveness of organizational communication for sustainable development as most organizational communication emphasizes top-down communication. Generally, the management will use top-down communication for communicating its clear goals, strategies, and practices to employees via important activities, stories, and development to create impacts for its employees. On the other hand, bottom-up communication opens an opportunity for employees to express their opinions or feedback to the management. Such information will help executives to know internal and external stakeholders' needs, perceptions, understanding, and opinions. (Beger, 2018)

4.1.2 Explicit Vision, Mission, and Values

Most companies determine their vision as a guideline or long-term goal for business operations and determine mission or practical guidelines as a frame for management towards planned goals concretely and successfully. Besides, another important thing is the creation of value for cultivating corporate culture towards unity and perceived goals in the same direction with strong determination towards corporate success. Therefore, vision, mission, and value are major input factors for planning communication for sustainable development and sustainable business operations.

Vision, mission, and value are important inputs used to determine strategies and operational direction and determine how to direct towards our vision and mission. It helps to guide us. Supposing we operate by this approach, how we will achieve our vision and mission. (Key informant No. 4)

Previously, we have not contained it seriously. However, by now, we are going to review once again what will happen. Corporate values or something like that, actually they used to be embedded but now it's disappearing. We did not identify them clearly, but we will revise them. It's our purpose to do so. Then, it will connect to another question for what purpose our goals are: for what or for whom? We have to wait for a while. We have not launched all of these yet. I think it's good if we can have them, but to state in our mission or vision, it may not be workable. I think the key should rather be the issue of commitment and policies because policies are connectors leading you to plans or any initiative that will happen. (Key informant No. 25) I think it's necessary because vision and mission create a corporate culture. Therefore, corporate culture is perceived as the way we do. If we can integrate ESG with corporate culture, which is reflected via vision, mission, and value, then it can yield commitment that gives importance to ESG. (Key informant No. 12).

It will be very helpful. When a company determines a 10-year vision, it's a long-term foresight. Here, we also determine our vision. It gives a clear path and makes us no distraction. The goal is clear enough to let us know what the company wants and what to get. For instance, sustainability goals give us a direction. Without them since the beginning, all in the company might not see the importance of the same thing. Besides, to have the same goal helps to communicate in the same direction and go towards the same goal. (Key informant No. 9)

It is an important issue because, for employees at the operational level, they may not feel involved with such a vision. Thus, it's a challenge for the board and management to consider how to make all people in an organization understand the determined foresight together and have engagement and commitment. I believe that organizational communication is very crucial. If people in an organization speak in the same language, they can also speak to people outside in the same direction. (Key informant No. 11)

Moreover, some key informants perceived that besides vision, mission, and value, an organization's purpose is another vital factor to which the companies give high importance and use as guidelines towards corporate sustainability. Purposes cover the determination of vision, mission, and value, including corporate norms and culture, which are harder to change. Therefore, to make corporate sustainability happen and be successful, a company should determine its purposes or goals to be congruent with the sustainable development approach.

I think another word being used widely is a purpose. A purpose covers a range of meanings. All missions in business operations serve some kinds of objectives. Then, what are an organization's purposes? Surely, they are not profits only. If this vision is projected, then employees can view it accurately, right? If you maximize profits only, but the operations damage others, what will happen? Thus, our purpose tells us that we will do this kind of business, but we must also concern about our society and environment. Therefore, purposes are norms. They are a corporate culture that everyone must go in the same way together. Some visions may be changed because of a CEO shift. Thus, adaptability is important. Even for a CEO or executive, if you are a true leader, you must know that under the current situation, you cannot think by the old paradigm. That's why I said that what you accomplished 4-5 years ago would take you to the future. (Key informant No. 16).

Thus, if any organization or office has determined its vision, mission, and value, it can still consider to apply or plan its communication to go along with sustainable development approaches that are proper and congruent with what is being held, unnecessarily without words reflecting sustainability in its organizational vision, mission, and value. The most important thing is organizational personnel adhere to and comply with the corporate sustainable development approach and values.

Values have been determined, but for sustainability, it covers almost everything in our values. In the implementation or communication to let our people be informed, we must do a mapping to consider the congruence between our values and our practices. For us, we have a sustainability operational framework as our guideline, and it must match with what we have. In other words, it should not be an irrelevant issue or something new that causes doubts or difficulties for operations. (Key informant No. 5).

I agree that no matter how much we contain in our written vision, mission, or value is not as important as what we are. For example, a supermarket employee displayed a delivery of quality products to customers. I read it from a German article. The supermarket sold bananas and employees had to pick them up every 12 hours from 6.00 am to 6.00 pm. When bananas started to get rotten but seemed to be eatable from some customers' perspective, employees would not keep them but threw them away because bananas were not quality products anymore. There were cases that some customers waited until 6.00 pm to buy these rotten bananas at cheaper prices, but the employees refused to sell them. They preferred throwing them away and buying new ones with full prices to selling to customers to get some money. This is called "culture" that is embedded in such employees. They learned to always deliver quality products to customers. Was this culture written? Probably not, but it became the DNA of those employees. Thus, supposing it was written somewhere "to deliver quality products to customers," but customers found employees selling low-quality products because of increased money, it's useless. Therefore, those employees must have actual practices, and an organization must be able to do something beyond written statements. (Key informant No. 27).

Typically, organizations operating business by the sustainable development approach will determine vision, mission, objectives, and value differently from general organizations, and such differences are considered as essential input factors. Sustainable development approaches must be integrated as a part of business operations distinctly as a core pin for an organization to adhere to and operate its business under such approaches. Thomson and MacDonald (2001) state that the increased perception of corporate culture, good relationships with external stakeholders, and the ability of good governance can increase the effectiveness of communication with stakeholders. From the analysis, Thai listed companies determined their vision, mission, objectives, and value, as follows:

CPALL applies good corporate governance principles as continuous corporate management policies, which reflects corporate social responsibility for a co-existence in the society sustainably. The sustainability vision of the company is "An organization that provides convenience to community and well-being and happiness to society." Besides, it has sustainability missions in three aspects: 1) Achieving operational excellence, creating sustainability in providing convenience to communities, creating well-being and happiness for society, and achieving global and national recognition. 2) Improving the supply chain and chain to meet ever-changing world conditions. 3) Cultivating good conscience and public mind in the DNA of employees. Besides, the company is aware of changes caused by external forces; thus, a brainstorming of more than 4,000 executives and employee representatives was conducted to search for approaches for creating corporate sustainable growth for more than 30 years. From the brainstorming, corporate principal values called, "Our way" (5 development domains), were constructed. "Our Way" composes of "trust," "coaching," "innovation," "smart," and "community awareness." All of these five domains or behaviors are applied for communication to create understanding and organize activities to cultivate employees towards actual practices, i.e., voting of a role model at the management level, the shared narration of stories or behaviors relating to the five behaviors. In the meeting on Monday morning, every executive must present his or her "Our Way Moment", by having one executive present it each week. (CPALL, 2019a)

CPF determines its distinguished and explicit vision as "Kitchen of the World," by delivering clean or safe food. Besides, the company can be audited backward and the company is committed to taking good care of the environment in every detail, step, and production process, until getting to consumers' hand. The company emphasizes and is devoted to research and development towards effective operations in food production that respond to consumers' ever-changing satisfaction and behaviors while adhering to its policies and business operations that are friendly to the environment and supports society sustainably. The main missions of the company are "to operate complete agro-industrial and food business by delivering quality products and services with high value, good taste, and safety. The company determines to create a business based on regional strategies while highlighting a modern production process by universal standards, with proper resource utilization and being friendly to the environment to raise the level of competitiveness at the forefront of the industry. On the other hand, it must yield good care and proper returns to stakeholders of all sectors, which lead to sustainable growth. Six values called "CPF Way" has been cultivated for all corporate personnel at all levels, and in every part of human resource management, starting from the recruitment, training, and performance appraisal. "CPF WAY" consists of "Three Benefits to Sustainability for the Country, the People, and the Company," "Speed & Quality," "Simplification,"

"Adapt to Change," "Innovativeness," and "Integrity, Honesty, and Reciprocity." (CPF, 2019a)

CPN adjusted its previous vision from "To be a mall developer at the regional level that gains the highest admiration from everyone with continuous happiness experience creation globally," to "Sustainable Future Growth" via the concept of "being a center of life and communities." Four main missions are determined. 1) Be a developer of shopping centers admired by everyone by creating distinguished and beyond-expectation values. 2) Be a mall developer that keeps developing continuously new styles of malls with diversity and modern new styles of shops responding to target consumers' lifestyles that change rapidly. 3) To be a potential mall developer in being a regional leader and is watched in the market. 4) Be a shopping center customer choose to have superior experiences of shopping happiness in all its markets. Moreover, the "I-CARE" value is also created as a guideline for conveying and cultivating all employees at all levels to hold and do towards the same goals and for creating decent corporate culture. i-CARE comprises I-Innovation: Creation of new products, welcome every opportunity and challenge to improve quality and produce more effective performance; C-Customer: Focus on customers, determined to provide excellent service with care and attention for internal and external customers; A-Alliance: Work as a team for the progress of the business group; R-Relationship: Common spirits with colleagues, business partners, and society, for sustainable growth; E-Ethics: Respect of ethics in business operations and adhere to the Company's Code of Ethics. (CPN, 2020a)

HMPRO has the vision of "To be the leader in Home Solution and Living Experience in Thailand and Southeast Asia." The five main missions of HMPRO are as follows: 1) Offer exceptional products and services that exceed customer's expectations and improve their standard of living through value and sufficiency. 2) Partner up with business alliances to develop product and service innovations to enhance management efficiency for mutual success. 3) Focus on the importance of empowering our associates and encouraging them to surpass their potential to enhance productivity, to spread the code of conduct accepted in the corporate culture, to increase their quality of life, and to encourage employee engagement. 4) Operate based on good governance while being social-responsible and maintain good

relationships with the community and the environment. 5) Continuously seek new business opportunities to enhance value-added to all of our stakeholders. Besides, five values or corporate culture are determined, composed of "Customer First," "Teamwork," "Think & Act as HomePro," "Passion," and "Integrity." Thus, both vision and missions are integrated clearly with sustainable development and corporate governance principles, which are key factors of sustainability. (HMPRO, 2019a)

KBANK has the vision "Be the most innovative, proactive, and customercentric financial institution, delivering world-class financial services and sustainable value for all stakeholders by harmoniously combining technology and talent." Besides, 4 core values are determined: customers at heart, agility, collaboration, and innovativeness. (Kasikornbank, 2019a)

MINT determines the general vision as "a leader in delivering exceptional experiences that anticipate and satisfy customers' aspirations and positively impact stakeholders." Regarding the vision related to sustainability, it is " To Strengthen Long-term Capabilities and Performance through Sustainability," and five core values are created: "Customer Focus," "Result Oriented," "People Development," "Innovative," and Partnership." (Minor, 2019a)

PTT sets up the vision "To be a Thai Premier Multinational Energy Company" by integrating the sustainable development approach with the company's missions explicitly, together with classified primary stakeholders of the company. For PTT's missions, it is to operate complete energy and Petro-chemical business as the national energy company, while balancing such vision with the missions for stakeholders. (PTT, 2019a)

1) To the country

Ensuring long-term energy security by providing adequate highquality energy supply at fair prices to support economic growth.

2) To community and society

Maintaining a good standing corporate status in Thai society by exercising environment stewardship of internationally accepted standards and helping to improve the quality of life for the community and society

3) To shareholders

Operating a profitable business that leads to sustainable growth while generating optimum returns.

4) To customers

Ensuring customer satisfaction and loyalty by delivering world-class quality products and services at fair prices.

5) To business partners

Conducting fair business practice with all partners while promoting trust, relationship, and cooperation to expand business capability and increase efficiency in a long-term business partnership.

6) To employees

Promoting capability building professionally and ensuring that employees' well-being is on the level with other leading companies.

Besides, PTT creates "SPIRIT" as core values and crucial foundation that unite and draw employees to have working behaviors in the same direction, which can reflect the PTT personnel's identity clearly as "a capable employee with responsibilities for the organization, society, communities, and the country. Furthermore, the company extends to cover digital concepts and behaviors in its personnel's openness for learning and ability to apply digital technologies to enhance effective tasks. Moreover, the mobilization of technologies and innovation or digitalization is also extended. Thus, the revised value of PTT is "SPIRIT+D." "S" stands for "Synergy," "P" for "Performance Excellence," "I" for "Innovation," "R" for "Responsibility for Society," "I" for "Integrity & Ethics," "T" for "Trust & Respect," and "D" for "Digitalization." (PTT, 2019b)

SCC is another company that integrates the concept of sustainable development with the corporate vision, mission, and value distinctly. The vision of SCG is "to become a regional business leader with a relentless commitment to driving innovative products, services, and solutions that meet the diverse needs of consumers whilst creating business success following the Circular Economy concept to contribute to the sustainable growth of every society and community where we operate with our passion to deliver better things under our promise "Passion for Better." The missions of SCC are "Adherence to Fairness," "Dedication to

Excellence," "Belief in the Value of the Individual," and "Concern for Social Responsibility." (SCG, 2019a)

From the vision, missions, and values of all the abovementioned companies, they have different goals and business operations. However, what they have in common is that every company contains sustainable development principles into its vision, missions, and values, as a framework for its business operations congruently and distinctly. Despite no mentioning of sustainability of some companies in their vision, the sustainability principles appear in their missions and values instead. It reflects that for organizations to operate their business by the sustainable development approach and to apply communication for sustainable development, it is essential that they establish their vision that reflects long-term goals that are universal, which are fundamental factors leading to effective operational procedure and organizational communication. On the other hand, corporate missions can reflect or convey a company's determination to operate its business with responsibilities for society, environment, and stakeholders of all groups, whereas the creation of sustainable culture must be created or integrated as a part of the corporate culture to which employees can adhere and collaborate in driving towards sustainable development successfully.

4.1.3 Policies and Practices of Sustainable Development

Besides, the management structure for supporting sustainable development approaches with clearly determined roles and responsibilities of all concerned personnel at the policy, management, and operational level, another important factor found to be used by the studied companies as the framework and guidelines for their business operations and communication for sustainable development is the explicit determination and enforcement of policies and practices related to sustainable development for the entire organization.

Frankly speaking, there should be policies and practices to guide the direction for what we will talk with our suppliers, vendors, or even tenants. In our company, we have to communicate about a balance between our employees' rights and our policies in customer care. If our customers violate

our employees' rights, we have to know what we have to do. It must be determined explicitly to which direction our company will go. (Key informant No. 25)

Truly, policies are more important than CEO. Namely, to have policies means communication to people who are our stakeholders, and also our employees to know what are our practical approaches, i.e.m before agreeing to join to do business together, etc. If you look at our websites, we have plenty of policies. Each policy will be endorsed with the clear goals of what we need from each policy, and what is our target. Important policies to be communicated to our target is to make them understand what we are doing. Importantly, every stakeholder must know our target and goals. Therefore, we have our attached goals for almost every policy. (Key informant No. 3)

To have apparent policies, it will help operations at all levels, starting from the board to the operational level. It also consists of a process for a follow-up and evaluation, including feedback. Sustainability is thus something an organization has been practicing in our organization; however, it is not spoken out clearly of how it relates to or involves business impacts. Policies are everywhere, dispersedly, but no clear business sustainability goals are determined. Thus, it is essential to set them up explicitly. I think policies are important. For instance, at the operational level, without policies, employees will work without a clear direction. (Key informant No. 26)

Typically, it must be policies from the organization's vision first as it is the part to determine future direction. However, only policies may not be sufficient, all plans must be thought of simultaneously. Are policies important? Of course, they are because at least policies help to reflect what is adjusted from vision, and missions to be visible and concrete. From directions and policies, then it leads to plans. Thus, things all go together. (Key informant No. 3)

On the other hand, some key informants perceived those policies may not be as important as the implementation of policies since policies are only a general operational framework, while practices require situations and environmental context to be operated properly and harmoniously with the planned policies. Therefore, policies and guidelines must be communicated clearly.

I perceive policies as a frame of guidelines to see what the management projects, where they want to go, and by which approach they want the company to operate. However, to transform a policy frame to be an operation is even more important. How can we transform it to be practices those employees can understand? Supposing you don't have any written policies, but your executives keep telling you every day that we have to do this or that, and we must do it together. I think it would be more effective than the declared policies, but without any communication of policies or practical guidelines to let employees understand. (Key informant No. 4)

I think policies are important, but they cannot guarantee success, or a company will be successful if it has policies. Another important thing is "doing." For communication, besides it requires good narration, it must present clear issues and focus on them, not beating around the bush. It should not be a presentation of a too broad view repeatedly. Therefore, policies are important, but they need to communicate what a company has to do next. (Key informant No. 7)

From the study, it was found that most policies complied with good practices as determined by both domestic and foreign regulatory agencies. Thai listed companies determine their policies and guidelines as follows:

CPALL launched several policies for supporting sustainable development, which covers all dimensions: economic, social, environmental, and corporate governance. The determined policies are Sustainable Development Policy and Goals, Diversity and Inclusion Policy, Tax Policy, Sustainable Sourcing Policy, Health and Nutrition Policy, Business Partner Guidelines, Data Privacy Policy, Human Rights and Labor Practices Policy, Corporate Social Responsibility Policy, Environmental Policy, GMO Policy, Packaging Policy, Occupational Safety, Health and Working Environment Policy, Risk Management Policy, Anti-corruption Policy, Policy on Corporate Governance, and Codes of Business Ethics and Bounden Duties in Working. (CPALL, 2020) All of these policies and guidelines are publicized to inform the public clearly on the company's website.

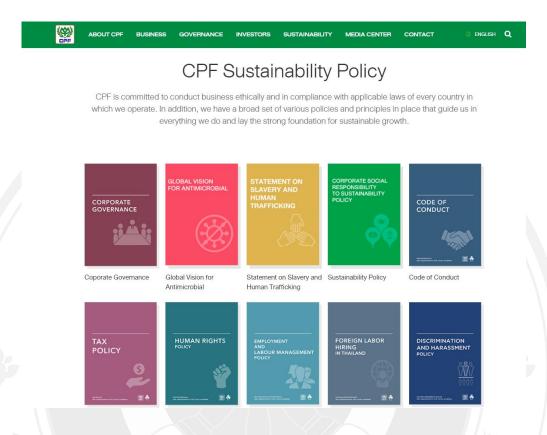


Figure 4.10 Sustainability policies and guidelines of Charoen Pokphand Foods Plc.

CPF also determines policies and good practices based on the sustainable development framework, laws, and other related regulations of all countries in which the company operates, as operational guidelines and well-established foundation for corporate sustainable growth. The policies of the company are as follows: Corporate Governance Policy, Anti-Corruption Policy, Global Vision for Antimicrobial, Statement on Slavery and Human Trafficking, Corporate Social Responsibility to Sustainability Policy, Code of Conduct, Tax Policy, Human Rights Policy, Employment, and Labour Management Policy, Foreign Labour Hiring in Thailand, Discrimination and Harassment Policy, Diversity and Inclusion Policy, Health and Nutrition Policy, CPF Healthier Choice Principles, CPF Quality Policy, CPF Food Traceability Policy, Animal Welfare Policy Genetically Modified Organisms Policy, Sustainable Sourcing Policy and Supplier Guiding Principle, Occupational Safety, Health, Environment, and Energy Vision, Mission and Policy, Sustainable Packaging Policy and Principle, Based on Circular Economy Concept, and CPF Fishmeal Sourcing Restrictions. (CPF, 2020b) All sustainability policies and guidelines are disseminated to stakeholders via the company's website apparently, as illustrated in Figure 4.10.

CPN aims to have business operations following the sustainable development approach by determining policies and guidelines concerning sustainability as follows: Corporate Governance Policy, Anti-Corruption Policy, Tax Policy, Intellectual Properties Policy, Respect of law and principles of human rights policy, Hiring & purchasing and treatment of business partners policy, Society, communities, and the environment policy, Safety and occupational health policy, Public relations and marketing policy, Biodiversity Management Policy, Supply Chain Management Policy, and Climate and Environment Policy. (CPN, 2020b)

HMPRO determines its Sustainable Development Policy by having all employees adhere to the Policy and support business partners to adopt the approach as well. The company's policies compose of the following: Corporate Governance of CG Policy, Anti-Corruption Policy, Tax Policy, Supplier Sustainable Code of Conduct, Cyber Security Policy, Human Rights Policy, Customer Privacy policy and Protection, Employment Policy, Policies and Ethics for Business Operations, Safety Policy, Environmental Policies and Management, and Intellectual Property. (HMPRO, 2020)

KBANK determines Sustainable Development Policy as guidelines for its business operations towards sustainable growth in three dimensions: economic, social, and environmental. Sustainable Development Policy is applied concretely as a core principle for all bank units at every step of their operations. Besides, the Policy will always be reviewed consistently by the Bank Committee to add Adaptability Policy and The Climate Change Policy, including revising policies of financial supports for business that is friendly to the environment and the Bank's policies on environmentally friendly business operations and decreasing environmental impacts that accord with the main substance of the Bank and global sustainability trends. The policies are divided to be 1) Economic Policies: Business operations defined by good corporate governance practices, Adherence to a "Customer Centricity" philosophy and effective customer responsiveness, product and service enhancements via value-added innovations, Sharing of financial knowledge with the general public, Efficient risk management, and customer data security and privacy. 2) Social Policies: Fairness of labor relations management and employee caring, Employee development, Promotion of occupational health and safety for employees, and Youth education development, and community and social development. 3) Environmental Policies: Environmentally friendly business operations, Conservation and reduction of the use of natural resources and waste reduction, and financial support for environmentally friendly business operations. (Kasikornbank, 2020)

MINT focuses on long-term organizational development and empowerment in parallel to those of stakeholders continuously by issuing several sustainable development policies as follows: CG Policy, Anti-Fraud, and Corruption Policy, Human Rights Policy, Environmental Policy, Risk Management Policy, Risk Management Policy on Customer's Money Laundering and Customer Acceptance Policy, Whistle-Blower Policy, Information Disclosure Policy, Tax Governance Framework and Policy, Sustainable Seafood Policy, Privacy Policy, and the Declaration of Children's Rights and Business Principles. (Minor, 2020)

PTT divides its sustainable development policies into three dimensions: economic, social, and the environmental, similar to KBANK as follows: Corporate Governance Policy, Complaint & Whistle-blowing Policy, PTT and PTT Group Anti-Corruption Policy, PTT Compliance Policy, Ethical Standards and Code of Business Ethics Handbook, Risk Management Policy, Climate change policy, Environmental Policy/Management System) Security, Safety, Occupational Health, and Environment Policy. (PTT, 2020)

SCC (or generally known as SCG) issues sustainable development policies and guidelines as guidelines for all company's businesses for adherence. The policies compose of the following: SCG Compliance Policy, Disclosure Policy, Anti-trust Policy, Insider Trading Policy, Corporate Governance Policy, Anti-Corruption Policy, Guideline for Green Procurement, SCG Eco Value, SCG Eco Value Guidelines, SCG Sustainable Development Guidelines) Sustainable Products for Green Building, Stakeholder Engagement Policy, Environment, and Energy Policy, Policy on Quarry Rehabilitation and Biodiversity, Impact Valuation, Tax Policy, Tax Payment and Principle, SCG Supplier Code of Conduct, SCG Code of Conduct, Human Rights Policy, Human Rights Expectation, Human Rights Disclosure, Diversity Disclosure, Freedom of Association, and Whistleblower. (SCG, 2020)

It is apparent that all eight companies issue policies and guidelines as guidelines for the organizations to comply with the sustainable development approach through not so different name callings for each policy. The core or principal policy will be called "Sustainable Development Policy," while "Corporate Governance Policy" is separated to be another principal policy category. Notably, each company has its policies declared in written distinctly, enforced, and endorsed by concerned committees.

All of these policies and guidelines are crucial input factors into a communication process for organizational sustainable development and a framework for creating sustainability narration and content. They are considered as the initial step of corporate positioning. (Cees B. M. Van Riel & Fombrun, 2007). From the mentioned sustainability policies and guidelines, they can be classified into four groups based on the concept of sustainable development based on the assessment criteria of DJSI (RobecoSAM, 2019b) as follows:

1) Corporate Governance Policies and Guidelines. This group of policies and guidelines is determined as the core or principal policies and guidelines, while some companies separated it from other groups distinctively for easy audit and assessment by regulating offices. This group contains the following policies and guidelines:

- (1) Compliance
- (2) Anti-corruption
- (3) No Gifts and Entertainment
- (4) Whistleblowing and Grievance
- (5) Stakeholders Engagement and Treatment
- (6) Anti-Trust
- (7) Sourcing and Treatment of Business Partners
- (8) Dividend Payment
- (9) Information Disclosure and Transparency
- (10) Intellectual Properties

- (11) The Use of Inside Information
- (12) Insider Trading
- (13) Risk Management
- (14) Conflicts of Interest
- (15) Internal Audit and Control
- (16) Ethics in Investors Relations
- (17) Board Responsibilities
- (18) Business Code of Ethics
- (19) Business Ethics

2) Economic Policies and Guidelines. This group of policies and guidelines are mostly contained in the sub-category of sustainable development policies, and only some companies classify this group under the sustainable development principles. Typically, economic policies and guidelines aim towards the mobilization of the supply chain all through the business operations towards sustainability management to create value-added to long-term business. Nevertheless, this group may not be so predominant as most of the policies and guidelines of this group are integrated into business operations policies related to finance, which are regular policies of every organization. The number of policies depends on the types of business companies. This group of policies and guidelines is as follows:

- (1) Tax
- (2) Innovation
- (3) Circular Economy
- (4) Green Procurement
- (5) Product & Service Development and Stewardship

3) Social Policies and guidelines. This group of policies and guidelines are oriented to be responsible for stakeholders of every group as determined by each company. The main targets are both internal groups in the organization, or employees, and external groups outside the organization or people sector living around where the company is located and the overall society. Most of this group of policies and guidelines is determined by regulating offices designated by the organization explicitly. Social policies and guidelines are as follows:

(1) Social Responsibility

- (3) Supply Chain Management
- (4) Response of the Needs of Customers
- (5) Health and Nutrition
- (6) Sustainable Packaging
- (7) Data Privacy
- (8) Cyber Security
- (9) Human Rights
- (10) Employment and Labor Management
- (11) Discrimination and Harassment
- (12) Fairness of Labor and Employee Treatment
- (13) Human Resource Development
- (14) Occupational Environment, Health, and Safety
- (15) Development of Youth Potential, Community, Society, and Public Interest.

4) Environmental Policies and Guidelines. This group of policies and guidelines are often combined with the social group, following the traditional environmental operations in the past, namely corporate social responsibility (CSR). Thus, this group is not distinguished and lacks clear guidelines. Nevertheless, when listed companies started to adopt the sustainable development concept, it brought about environmental policies and guidelines, which cover increased dimensions related to the environment and natural resources as a result of operations by SDGs determined by the United Nations. This group composes of the following policies and guidelines:

- (1) Environmental Management
- (2) Climate Change
- (3) Ecosystem and Biodiversity Management
- (4) Genetically Modified Organisms (GMO)
- (5) Animal Welfare
- (6) Air Pollution
- (7) Conservation and Reduction of Resources Utilization
- (8) Promotion of Water and Maritime Resources Sustainability

- (9) Energy Use
- (10) Waste Management

4.1.4 Corporate Materiality Analysis and Assessment

Sustainability corporate materiality analysis and assessment is the fundamental guideline that every company operating by the sustainable development approach must assess its potential and significant economic, social, and environmental issues following the guidelines of the Global Reporting Initiative (GRI) to respond to and plan its communication patterns with stakeholders of all groups. The assessment has four steps: the identification of sustainability and its significance, prioritization, review of materiality, and continuous follow-up, reporting, and development.

For important Input, we will look at global trends to see how the power of economics, society, and the environment will be. (Key informant, No. 4)

For an issue to be communicated, we cannot just communicate what we want to communicate. We must question first the materiality of it. We do not focus on making an all-out effort of communication for every issue the organization does. It must be something significant to the organization. It means that due to some impacts, it leads an organization to have this perspective. (Key informant No. 10).

I think we have to analyze it. As our company is customer-centric, basically we will have tenants and customers, and we must emphasize customer-caring highly, including customer engagement. Both the organization and customers must know each other. We must communicate with each other and gradually know them. Surely, at first, we cannot know what they need. Thus, according to sustainability principles, stakeholder engagement is important. Without it, it is not workable. (Key informant No. 5)

When you know your stakeholders, you can plan or do something to respond to the stakeholders' expectations, which is important. However, you may analyze more or less depending on how important they are. If they are primary stakeholders, you may have to analyze them more thoroughly. Despite being secondary stakeholders, we still have to think about them and never ignore them because some days they may become your primary stakeholders. Thus, you must have information for analyzing the expectation of each stakeholder and how we can respond to it. (Key informant No. 11).

An analysis of each group of stakeholders is different due to their different expectations. Besides, it is not a one-time analysis because, in each period, a context can be changed. Thus, an analysis of stakeholders' expectations must be reviewed consistently. Now, they may not be our priority to do something, but one day, the context may change. Therefore, we have to analyze if their expectation is changed and if our priority should be changed. That's why an analysis process must be something we do it continuously. (Key informant No. 12).

Nevertheless, some key informants gave some advice for analyzing materiality assessment that a company may receive incorrect information if a process of sourcing information is not proper, thorough, and accurate enough. On the other hand, stakeholders may not collaborate in providing correct information genuinely; thus, it affects the materiality assessment.

For primary stakeholders, how much information can we collect about them? We are also trying to mobilize about this. Another problem that we face is that some groups of stakeholders do not want to give their information to us. Anyway, we are still trying to make them trust and dare to disclose their information to us. (Key informant No. 25)

Some companies may invest with stakeholders engagement and relations to acquire their doubts or questions. However, sometimes they may not find them as some stakeholders may not tell them frankly. Sometimes, they may say it directly, but after 10 days, situations may change. Thus, the expectations we get from them that day and today may be different. This is the first complexity. The second complexity is that there are hundreds of stakeholders so sometimes errors can take place. We may not cover all possible stakeholders. Don't forget that some companies may have stakeholders almost throughout the country and they cannot interview all of them. It's impossible. Thus, we must use statistical probability criteria so the numbers or figures stand for their representatives. This is tough. Since there is no fixed formula to get all expectations, what we can do the best is get the closest direction. It's impossible to get 100% accuracy. Stakeholders are human and as human beings, they are varied. (Key informant No. 10).

Accordingly, corporate materiality analysis must be assessed in detail thoroughly as communication guidelines for sustainable development to respond to the needs and expectations of stakeholders of every group effectively. From the study, the listed companies have the following corporate materiality analysis and assessment:

CPALL (2019b) identified the scope of sustainability by corporate sustainability components of three dimensions: HEART (Living Right), HEALTH (Living Well), and HOME (Living Together). HEART is corporate governance, human rights, and labor treatment, leadership and human resource management (or human capital development), stakeholder engagement, and anti-corruption. HEALTH is social impact, health and well-being, education, innovation management, and safety, occupational health, and working environment. HOME is climate change management, conservation of water resource or water stewardship, ecosystem and biodiversity protection, responsible supply chain management, local conflict management, and community acceptance. For the specific issues assessed by the company that might have impacts on the organization at a high level (Level 5) in 2019, six issues were found: corporate governance, health and well-being, climate change management, responsible supply chain management, ecosystem and biodiversity protection, and innovation management, as illustrated in Figure 4.11.

Remarkably, the assessment of sustainability materiality of CPALL, yielding significant impacts on the organization and influencing corporate decisions at the top level covers all sustainability dimensions: economic, social, environmental, and corporate governance explicitly.

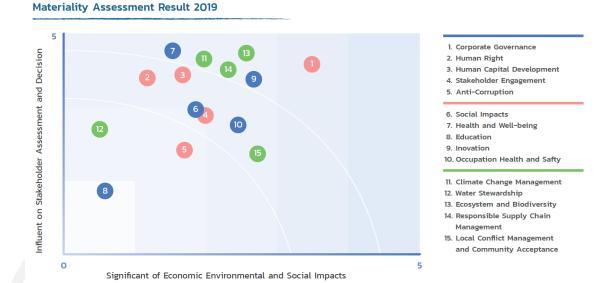


Figure 4.11 Materiality assessment results of CPALL in 2019

CPF (2019b) collected all concerned factors, both internal and external, including stakeholders' opinions and expectations for assessing corporate materiality and determining directions for social responsibility towards corporate sustainability under the stakeholders' interest. In 2019, corporate materiality was divided into 2 issues: 1) Issues of a highly significant level to stakeholders (high corporate materiality assessment results), consisting of six issues: Food quality and safety; governance, risk management, and compliance; responsible sourcing; human resources management; innovation management; and packaging management. 2) Issues of a moderately significant level to stakeholders (medium or moderate corporate materiality assessment results), consisting of 12 issues: health and nutrition, responsible marketing and product labeling, waste management, animal welfare, occupational health and safety, human rights, and labor practices, climate change management, water management, community development and support, food loss and food waste management, energy management, and biodiversity and ecosystems. Remarkably, no issues were classified as a very significant issue, or the issue to which primary stakeholders paid utmost attention, and which might cause very high risks to the organization as a whole without good management. The corporate materiality analysis and assessment of CPF are illustrated in Figure 4.12.



Figure 4.12 Materiality assessment results of CPF in 2019

CPN (2019a) applied corporate materiality, i.e., customers' behavior shift, severe competition, technology disruption, and social and environmental impacts, to be main issues for reviewing corporate sustainability issues while maintaining new risk issues in 2018, such as cyber risks, online impacts, etc., and added some issues on Personal Data Protection Act (PDPA). Besides, CPN also included suggestions from the questionnaires and stakeholders' participation, including the assessment of business performance and recommendations of external independent and international sustainability index analysis agencies. Ten sustainability significant issues (materiality) are illustrated in Figure 4.13.

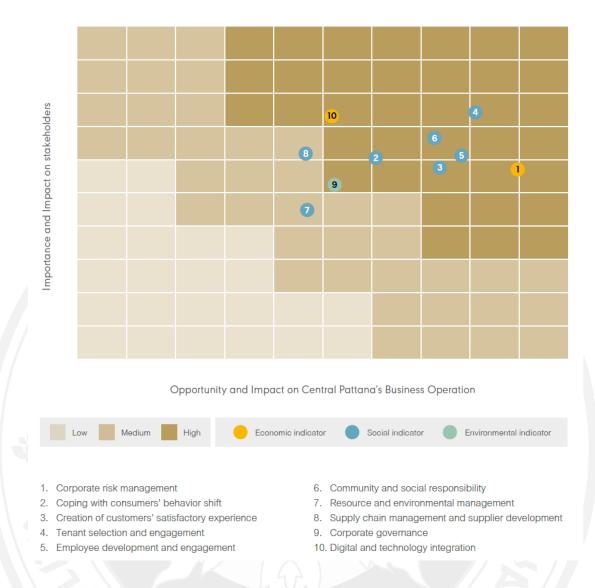


Figure 4.13 Materiality assessment results of CPN in 2019.

From the above Figure, there is eight highly significant materialities of CPN: Corporate risk management, creation of customers' satisfactory experience, tenant selection and engagement, employee development and engagement, digital and technology integration, coping with consumers' behavior shift, corporate governance, and resource and environmental management. Corporate materiality covers sustainability indices of all dimensions: economic, social, and environmental. The materiality at a medium level is a community and social responsibility, and supply chain management, and supplier development. HMPRO (2019c). The corporate materiality is determined every year from the findings of a survey on stakeholders' interest and expectation, used for making decisions for proper sustainability planning and strategies. In 2019, there were seven corporate materiality at a high significance level: Offering quality products and services, risk management, business partnership (young entrepreneur), personal data security, social and community development, associate care, and associate training and development, two at a medium level: corporate governance and environmental management, as illustrated in Figure 4.14.



Figure 4.14 Materiality assessment results of HMPRO in 2019

KBANK (Kasikornbank, 2019b) managed sustainability issues by collecting and prioritizing them based on the level of significance to business operations, in combination with present risk assessment and what was anticipated to have an opportunity to happen and might have impacts on the bank's business operations, including issues influencing stakeholders' decisions via a participatory process of all groups: shareholders, the bank committees, employees, business partners, customers, competitors, creditors, regulatory agencies, communities, and society, collected from opinion survey questionnaires and in-depth interviews. The findings reflecting stakeholders' perspectives and opinions were analyzed, prioritized, and used as guidelines for corporate operations to respond to stakeholders' needs properly. The sustainability materiality at a high significance level was business ethics and transparency, cybersecurity and customer data privacy protection, risk management, corporate governance, ESG credit and investment based on environmental, social, and corporate governance assessment criteria, digitization and innovation, customer centricity, and human capital development. The materiality at a medium level was employee well-being. The materiality that did not yield so many impacts was financial inclusion and financial literacy; labor practice, diversity, inclusion, and equal opportunity; green project finance, transition risk and opportunity from climate change, human rights due diligence, sustainable supply chain management, reducing KBank's environmental footprints, community investment and reducing social impacts, as illustrated in Figure 4.15.



Figure 4.15 Materiality assessment results of KBANK in 2019

MINT (Minor, 2019b) determined the corporate materiality based on universal reporting standards like other companies. From the assessment findings, eight issues were found at a high level: Economic performance, food and service safety, sustainable supply chain management, customer relationship management, training and education, environment (energy, water, greenhouse gas emission, waste, and biodiversity management, employment, good corporate governance, and anti-corruptions. The issues at a medium level were human rights and diversity in employment, safety and occupational health, public policy, communities and society, compliance, and environment (wastewater), as illustrated in Figure 4.16.

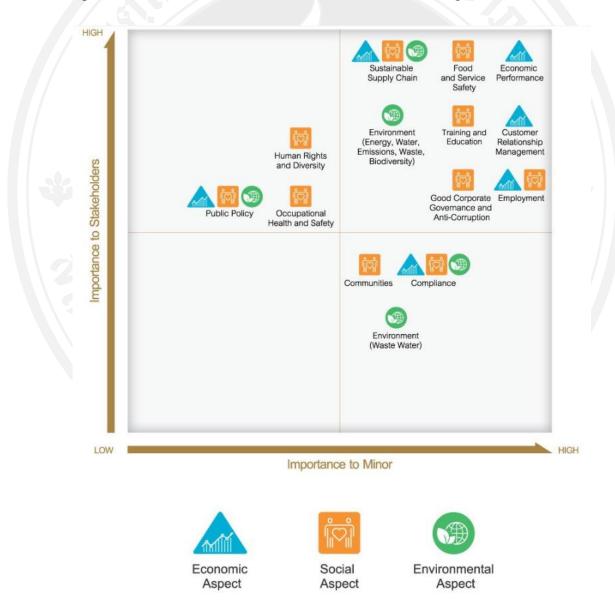


Figure 4.16 Materiality assessment results of MINT in 2019

PTT (2019b) There were seven issues with the highest importance: Climate change; sustainability governance human capital development; product stewardship; research, development and innovation; security and crisis management; and human rights, followed by the less important issues: safety and occupational health; talent attraction and retention; fair operating practices; capital project management; effluents and waste; biodiversity and integrated water management, stakeholder dialogue, corporate citizenship, and supply chain management, as illustrated in Figure 4.17.

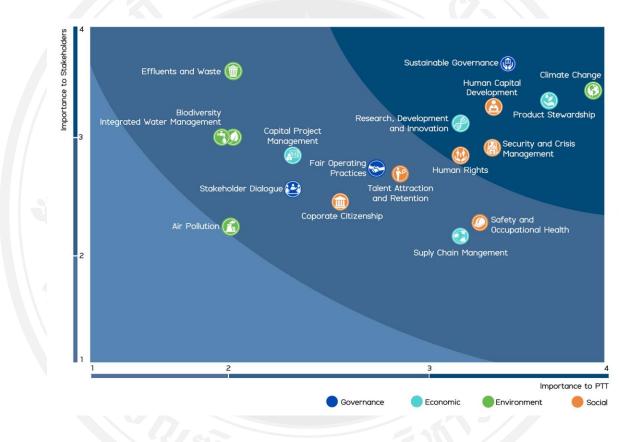


Figure 4.17 Materiality assessment results of PTT in 2019.

SCC or SCG (2019b) determined sustainable development issues by collecting and prioritizing them based on the business performance and findings from the present risk assessment and what might happen in the future. Besides, SCG conducted a participatory process for stakeholders for analyzing their perceptions, perspectives, opinions before all findings were ranked based on the significance level so that they could manage these issues to respond to stakeholders' needs properly.

From the findings, eight sustainability issues were found to have the highest significance: Greenhouse gas (GHG) emission management, water management, customer experience, energy management, safety, product stewardship, innovation and technology, and human rights, as illustrated in Figure 4.18.

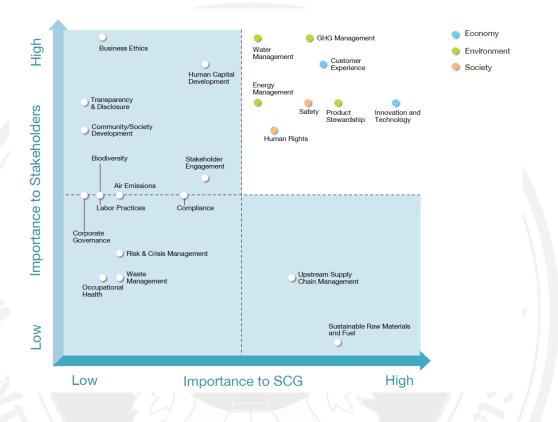


Figure 4.18 Materiality assessment results of SCG or SCC in 2019

From the corporate materiality assessment results, it was found that in 2019, six of eight Thai listed companies gave high importance to the overall issues of corporate governance and transparency (75%), followed by risk and crisis management. For the economic dimension, most companies, or 62.5% highlight innovation and technology management.

For the social dimension, most companies (87.5%) identified the issue of quality products and services that are satisfactory, safe, and sustainable, followed by supply chain and business partner management, customer centricity, customer relationship management, employee development and training, and employee engagement and human resource or capital management.

Regarding the environmental dimension, the identified materiality was the natural resource and environmental management (i.e. soil, water, plants, forestry, animals, air, waste, and energy); biodiversity and/ or ecosystem conservation; climate change; and greenhouse gas emission management. The high materiality assessment results were summarized in Table 4.2.

Table 4.2 A summary of the high materiality assessment results related to the sustainable development of Thai listed companies in 2019

High Materiality Assessment Result	CPALL	CPF	CPN	HMPRO	KBANK	MINT	РТТ	sco
Conomic Dimension								
Innovation and technology	~	~	~		\checkmark			~
management								
Digital/ innovative research and							~	
development								
Coping with customers'			~					
behavior shift								
Business/financial performance						✓		
ocial Dimension		/ [\sum					
Offering quality products and		✓	\checkmark	~	✓	✓	~	~
services (satisfactory, safe, and								
sustainable)								
Social impacts/ community and				1				
social development								
Human rights							~	~
Employee development and							1	
training								
Supply chain and business	~		✓ ?	~		1		
partner management								
Customer centricity/customer					~	\checkmark		√
relationship management								
Employee engagement/ human		\checkmark	\checkmark	\checkmark				
resource/capital management								
Employee				\checkmark	\checkmark	\checkmark		
development/empowerment								
Cyber personal data safety and				\checkmark	\checkmark			

High Materiality Assessment Result	CPALL	CPF	CPN	HMPRO	KBANK	MINT	PTT	SCC
protection								
- Health and nutrition	\checkmark							
Environmental Dimension								
- Natural resource and			\checkmark			\checkmark		\checkmark
environmental management								
(soil, water, plant, forestry,								
animal, air, waste, and energy))								
- Biodiversity/ ecosystems	~					\checkmark		\checkmark
conservation								
- Climate change/GHG	\checkmark						\checkmark	✓
management								
- Sustainable sourcing		~						
- Packaging management		~						
- Waste management						~		
Corporate Governance Dimension			1/					
- Corporate governance and	~	~	~		~	✓	~	
sustainability/transparency								
- Business ethics					~			
- Anti-corruptions						✓		
- Risk and crisis management/		~	~	1	~		~	
compliance								
- Cyber risks					~			

From the above Table, the identification of high materiality of most Thai listed Companies are similar to the overall corporate sustainability factors, i.e., innovation and technology management, offering quality products and services, supply chain management, corporate governance and sustainability/transparency, risk and crisis management, and compliance. The differences are due to the nature of their business. For instance, CPF deals with business in agro-industrial groups and full-service food; thus, it puts more importance on the issues of animal welfare and responsible sourcing of raw materials, which may be different from other types of businesses. Likewise, KBank is a financial institute, so it values cyber personal data security and protection. CPN develops malls or shopping centers and real estate; therefore, tenant engagement is its important issue. Accordingly, the corporate materiality analysis and assessment provide guidelines for companies to respond to the stakeholders' needs and for communicating with their stakeholders of all groups more effectively and congruently with their business operational environment and context.

4.1.5 Strategy and Planning

Strategies and planning of the listed companies are other crucial input factors and important tools for specifying operational guidelines and a communication process for sustainable development, including creating the public's participation to achieve the goals as specified in the organizational missions and vision. To conduct sustainable communication strategies, each organization classifies the stakeholders based on obtained information of the stakeholders' needs and expectation from their participatory process. A communication master plan then is developed with selected content and communication channels suitable for each group of stakeholders. (Kuntasuwun, 2018)

Communication for sustainable development should be unique and distinctive with the main goals of developing and changing an organization, communities, and society for better well-being. Thus, it is essential to have proper planning responding to the needs of each organization, which is different from general communication. (Key informant No. 24)

Plans should be explicit. Firstly, it must go forward to the future, It's difficult, though, to anticipate something five years ahead. 5-year or 10-year planning may be too far and difficult to measure since we can't predict accurately while things can be changed. However, at least it should help to tell where we should reach and what we should do during these five years. (Key informant No. 1)

We will consider the global trend to see to which direction the world will go. Thus, it is another kind of inputs. This input penetrates a process of identifying the corporate materiality, then to a process of strategic planning to design operational strategies. After that, it will be transmitted to be business or action plans, including specifying indicators that accord with strategic plans and then deploy to practice. Another input factor is previous operational performance after we have a management review, which can be added into a process of strategic planning. What was successful or unsuccessful will be brought into a strategic planning process as well. (Key informant No. 4)

When an operation is deployed from the policy level, it helps to see what for the purpose the operation is in relations to sustainability issues. After that operational staff, who of course know well the current situation and can provide available information must exert a strategic thinking process for determining the corporate materiality, and prioritizing it by considering which issue is relatively more important and can respond to the target goals determined by the board. It will tell what has to be done for a short term, medium term, or long term, or if it will be better to do it for a long-term basis. (Key informant No. 26).

I think the large or overall frame should be determined first. It's like a house construction. It needs foundation piles first. For furniture, it can be selected or changed later or a re-painting can be done any time. However, it's very rare to change roofs and foundations, especially foundation piles we hardly change them. Therefore, ESG is important because G is foundation piles while E and S can be changeable. (Key informant No. 18)

The top management or executive committee must set up a goal that is not only financial. Rather, the organization's goals are to deliver sustainable value, which includes both financial and non-financial. Then, some issues will be launched from that big goal. For instance, if the main goal is commitment, the question is what is the financial goal and what is the well-being goal, or what social goals are and how to reduce environmental impacts. Thus, the committee will be the ones that take the goals for implementation, assign responsible offices and practitioners to take them into action. Integration then occurs despite different means of communication. (Key informant No. 19).

Nevertheless, communication for sustainable development is difficult due to its abstract nature. Therefore, effective communication requires an ability to make people understand the plans easily and to have good planning. (GTZ Rioplus, 2006) Normally, communication will be different according to the nature or type of businesses and each organization's operational goals. Strategies analyzed thoroughly from the corporate materiality assessment, in combination with a follow-up of trends that might affect businesses. Strategies are also related to types of business operations and the availability of corporate resources. Primarily, communication strategies for sustainable development involved with a changing process in the long term rely on personnel, institutes, and systems. Effective strategies can be yielded require stakeholders' participation and interaction to discuss possible challenges and to share perspectives to collaboratively identify problems and needs, including objectives and new roles. All of these must be reviewed and revised all the time. (Dalal-Clayton & Bass, 2002). Besides, strategies help to determine indicators and major targets an organization can use for conducting communication for sustainable development to reach the planned goals.

From the study, it was found that Thai listed companies have the following strategies and sustainability operational plans:

CPALL (2019b) has declared its policies, development framework, and SDGs since 2017 under the three-pillar operational framework. 1) Determined to do business with righteousness, transparency, and auditable or Heart Pillar, comprising corporate governance, human rights, and labor practices, leadership and human capital development, stakeholder engagement, and anti-corruption. 2) Determined to create a sustainable society with good health (Health Pillar): Health and well-being, education innovation management, safety, occupational health, and working environment. 3) Determined for the sustainable environment (Home Pillar): Climate change management, water stewardship, ecosystem, and biodiversity protection, responsible supply chain management, local conflict management, and community acceptance, as illustrated in Figure 4.19. The company thus determined the 2019-2023 strategy (Figure 4.20) to achieve the SDGs as follows:

1) Strengthen 7 Go Green: Green Store, Green Logistic, Green Packaging, and Green Living. Besides, it aims to use renewable energy and management under the concept of circular economy, i.e., by using plastic waste to be transformed to be environmentally promoted products.

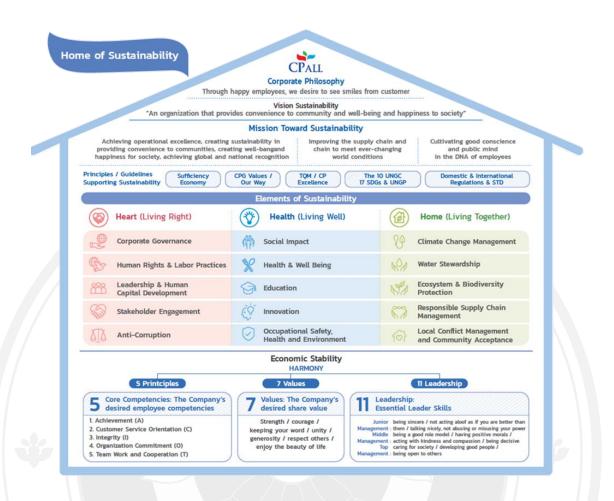


Figure 4.19 Sustainability strategies and operational planning of CPALL

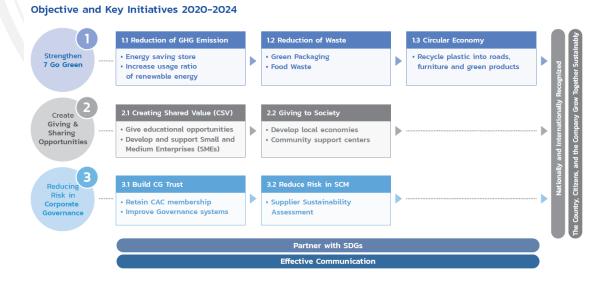


Figure 4.20 SDGs Strategy of CPALL

2) Create giving and sharing opportunities, by creating educational and occupational opportunities, supporting distribution channels or community support centers, and increasing income of agriculturists and SME entrepreneurs, including the vulnerable population, promoting well-being and quality of life under a variety of projects, i.e., A project for enhancing knowledge skills for agriculturists, a project of promoting occupations for the youth with hearing disparities and children with special needs, a project for increasing incomes for a community, etc.

3) Reduce risk in corporate governance by reviewing and revising policies and operational guidelines of corporate governance to cover the issue of climate change increasingly. Besides, the structure of the corporate governance committee was also modified to increase effective functions. An evaluation of sustainability risks for business partners based on business types in each industry group was conducted with responsible supply chain management. It also aims towards innovation development, i.e., product development, creative service, etc. in parallel to the enhancement of innovation culture in the organization.

The operational framework of three principal pillars: Heart, Health, and Home, helps to mobilize the organization to grow and cover SD operations in all dimensions. Besides, it reflects the benefits for the society and the country based on good corporate governance, social responsibility, and congruence with SDGs.

CPF (2019b) also implements their social responsibilities towards sustainability under the "Three-Benefit Principle," similar to CPALL, namely "Food Security, Self-Sufficient Society, and Balance of Nature," based on sustainability governance and the respect for human rights and labor practices, including "Sufficient Economy Philosophy" and "Ten Principles of the UN Global Impact & UNSDGs." The ultimate goal is to bring about proper returns for shareholders, consumers' good health, and security and well-being of employees, business partners, and communities, including natural resource and environmental protection, as illustrated in Figure 4.21. Goals and plans are divided into two categories. 1) to raise the quality and safety all through the process, with clear guidelines for achieving organizational goals, i.e., no product claims, sanitary new products, chicken farms in all countries with animal welfare officers, and 2) to enhance food accessibility, to be achieved by 2020 and aimed to have more than 300,000 children and youth access learning and gain skills for nutritious and secure food processing and/ or consumption.

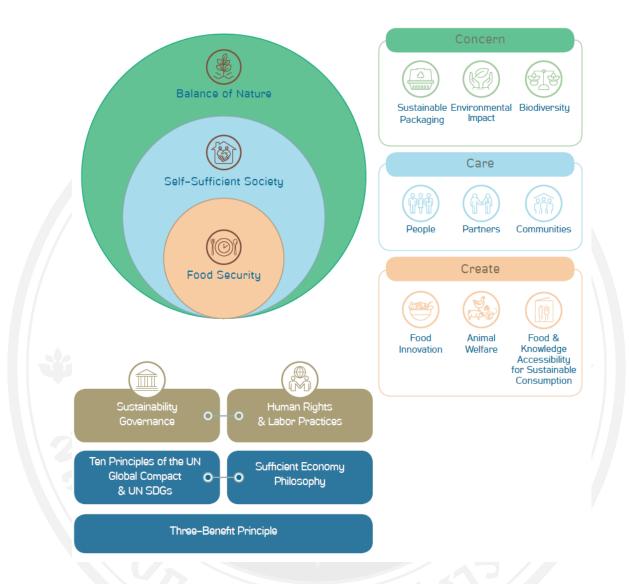


Figure 4.21 SDGs Strategy of CPF

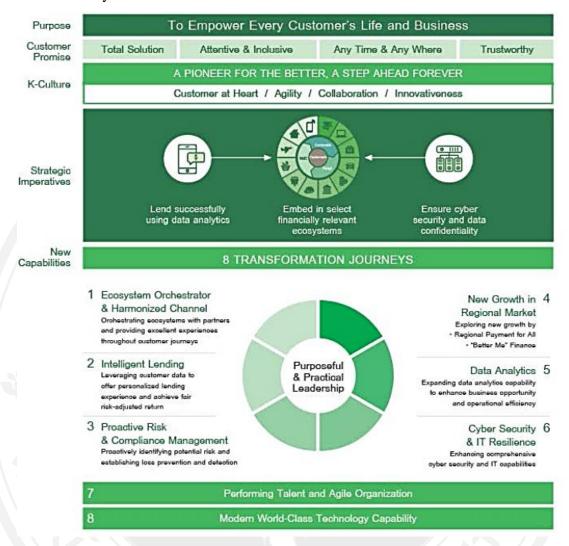
"Self-Sufficient Society Principle" comprises two goals: 1) Develop business partners to grow together by 2020. Major business partners must be assessed in their sustainability practices, and main agricultural raw materials must pass responsible sourcing and can be traceable, and 2) promote communities' quality of life by 2020. Occupations and the quality of life of agriculturists and small entrepreneurs will be promoted. "Balance of Nature Principle" comprises two goals: 1) alleviate environmental impacts by reducing energy use per production unit, greenhouse gas emission, the amount of water used, the amount of burned and incinerated waste; recycling plastic packages; and no using plastic packages that cause environmental impacts. 2) protect biodiversity by 2020. The company would protect the biodiversity of 9,000 rai of mangrove forests, watershed forests in the national strategic area, and corporate area.

CPN (2019a) connects SD approaches with strategic practices, and sustainability strategies with operational plans in the annual business strategy plans by determining business operational strategic plans in 5 ways: 1) Diversification of investment and creation of new business ecosystems by spreading business bases geographically and by investment types, i.e., opportunities for expanding investment to foreign countries, or in a new form of business or any business facilitating shopping mall business, such as condominiums, hotels, offices, and even new business ecosystems creation or supporting businesses. 2) Development towards "a Center of Life" by developing shopping malls as a life destination rather than a place for buying things only. A shopping center will be a place for doing a variety kind of activities together by creating and applying innovation of design development and building construction. It is a development of a new destination for consumers' extraordinary and unique experiences, and for sharing a common lifestyle in the same sphere. 3) Property management and caring of stakeholders by customer-centricity. Listening to stakeholders' voices and facilitating their participation is the key to business operations. Besides, it is the chance for the company to use its potential and expertise in creating shared values all through the value chain with stakeholders. On the other hand, digital technology is integrated into the operations to respond to stakeholders' needs towards maximal benefits. 4) Excellence in resource and environmental management by operating with universal standards, reducing resource utilization, turning to use renewable resources, increasing technologies friendly to the environment, concerning about the overall social and environmental impacts, supporting primary stakeholders towards conscience in using resources valuably and creatively, and creating a genuine circular economy. 5) Thorough capital sourcing and financial management through effective financial disciplines and cost control and by being ready to support investment plans for business expansion, such as to increase

opportunities for investment in new business or to take over some enterprises with consideration about stakeholders' returns by keeping financial fluidity sufficiently to assure their dividend.

HMPRO (2019c) plans its sustainability strategies to accord with the corporate strategy, covering 5 areas. 1) Quality products and services. The main strategies are to develop products and services meeting the needs of consumers, to increase channels for consumers to access new products and services, to create product and service standards or being friendly to the environment, and elevate product and service safety standards. 2) Associate care by inclusion and fairness to create employee engagement with the company and attract potential and capable people to work for the company, to empower employees and enhance leadership, reinforce safety behaviors, reduce risks and control disciplined practices. 3) Increased operational effectiveness through major strategies, i.e. using alternative energy or reduce natural resource utilization, and cultivating employees' conscience on energy conservation. 4) Good corporate governance, comprising the following main strategies, i.e., selecting and assessing business partners with potentials in sustainable business operations, to assess corruption risks and providing them the knowledge on anti-corruption, to develop and increase their potential towards collaborative sustainability in all dimensions: economic, social, and environmental. 5) Social and community development through the strategies of developing the potential of young-entrepreneur teams, supporting facilities for communities and society to enhance their well-being, and promoting the participation of employees and concerned people of all sectors towards sustainable value creation for the society.

KBANK conducts its business based on the concept of being "a Bank of Sustainability" under the principles of good corporate governance, risk management, and proper capital management to enhance the balance in three dimensions: economic, social, and environmental. The strategies aim to increase competitiveness towards continuous growth for creating long-term returns and sustainable business leadership under the core strategies of "Customer Centricity" and "Impressive Service for All People." The strategic operations compose of "lend successfully using data analysis," "embed in select financially relevant ecosystems" or entering where



customers spend their life and run their business, and "ensure cybersecurity and data confidentiality."

Figure 4.22 SDGs Strategy of KBANK

Besides, the company also gives significance to 8 strategies following strategic capabilities as follows: 1) Ecosystem Orchestrator and Harmonized Channel or to collaborate with business partners in creating ecosystems in parallel to the development of sales and service distribution channels. 2) Intelligent Lending or to analyze data for lending to respond to each customer's needs, 3) Proactive Risks to identify all possible risks and determine proactive prevention guidelines. 4) New Growth in Regional Market or to expand the business to foreign markets. 5) Data Analytics or to develop data analysis capabilities. 6) Cyber Security and Data Resilience or to develop IT potential and keep cybersecurity. 7) Performing Talent and Agile Organization or to develop employees' potential towards being an agile organization. 8) Modern World-Class Technology Capability or to use of modern technology leading the bank to be a leader of financial service provider of the region (Kasikornbank, 2019b), as illustrated in Figure 4.22.

MINT uses five organizational values (Customer Focus, Result Oriented, People Development, Innovative, and Partnership) as the core for corporate strategies based on four main factors as guidelines for mobilizing organizational sustainability. (Minor, 2019a). (Figure 4.23)

1) Driving People Development by developing employees' capabilities and creating good leaders for the company and society. The development process passes several steps, starting from establishing a good foundation for the youth and communities, offering working opportunities, to the step of developing skills and creating good leaders with SD conscience.

2) Engaging in End-to-End Customer Experience by concerning about customers' needs, supporting participation, providing understanding and knowledge for present and future customers, and creating the best products and service with concerns on social and environmental impacts, either direct impacts on customers or via the procurement or marketing channels.

3) Committing Long-Term and Sustainable Partnership by creating relationships with business partners and stakeholders to bring about shared benefits of every party in the long term and sustainably, including ensuring business partners grow together sustainably.

4) Managing Environmental Impact by managing and creating positive environmental impacts everywhere in which the company has its business operations, supporting wildlife, natural heritage, and biodiversity conservation.

Moreover, all these strategies are supported by the other two supporting factors:

1) Good Corporate Governance by having a well-established foundation for organizational sustainable growth through good corporate governance in every kind of its businesses.

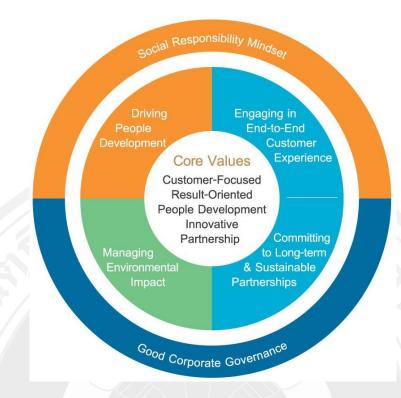


Figure 4.23 SDGs strategies of MINT

2) Social Responsibility Mindset by supporting and encouraging employees and business partners to have conscience of social responsibility, developing personnel and future leaders to be a capable person to manage business operations to achieve planned goals, while having an awareness of creating positive environmental and social impacts.

Besides, MINT develops 5-year strategic planning accordant with the overall corporate strategic plans and related SDGs of the United Nations, approved by the corporate committee from the Annual Strategic Planning Meeting. In the meeting, annual strategies will be reviewed and SD directions, of both present and future, will be analyzed. Besides, possible risks and opportunities will be identified for planning risk management guidelines. Moreover, the strengthening of long-term capabilities and performance through sustainability will also be included. Primarily, three core strategies are specified as major drivers. 1) Developing sustainable and capable human capital. 2) Managing sustainable value chain. 3) Managing environmental impact and advocating conservation. Besides, there are two supplementary strategies: 1) Governance: Strengthen good corporate governance and responsible business

culture, and 2) Shared Value: Integrate and advocate sustainability best practices in the corporate's operations., as illustrated in Figure 4.24.



Figure 4.24 SDGs strategies and operational planning of MINT

PTT (2019b) operates under the strategy of "Pride and Treasure of Thailand" or "PTT," by giving importance to sustainability management in three aspects (3P) in balance: 1) People: To manage human resource or capital, developing the quality of life, and enhancing business growth through social and community participation. It focuses on the preparation in organizational management and human resource management in parallel to the caring of communities and society through a participatory development to create well-being and good economics for people in the society. 2) Planet: or the conservation of natural resources and environment in parallel to the concern for the society and communities under the climate change strategy, i.e., Clean and Green Strategy of the PTT Group, which aims to reduce GHG emission and applies circular economy systems development to encourage the use of technologies that are friendly to the environment. 3) Prosperity or the creation of sustainable growth for the Thai economy and society, aimed to promote the awareness of the importance of culture and attitude in driving the corporate governance following PTT group management approaches. It also includes the integration of Governance, Risk management, and Compliance (GRC) to transmit practical guidelines all through the organization in parallel to the creation of business growth based on PTT 3D continuously. The 3Ds are "Do now" to increase competitiveness potential by improving the effectiveness of the present business operations. "Decide Now" to expand business all through the value chain of both local and foreign, and "Design Now" or to search for and develop new forms of business.

Moreover, the participatory surveillance of communities, society, and the environment is focused, including the creation of balance in responding to stakeholders of all groups through good corporate governance via the "CHANGE for Future of Thailand 4.0" Policy, enabling employees to adjust their working to be congruent with present and future situations and challenges. "CHANGE" is an abbreviation of "Continuity" or to continue sustainability principles. "H" is "Honesty or Righteousness," "A" is "Alignment" or Extended collaboration for security and sustainability, "N" is the creation of good and new things, "G" is "Good Governance" or effective governance, and "E" comes from "Excellence Teamwork" or the creation of personnel of all generations to work together and to prepare the cope with changes effectively.

SCC determines strategies and operational guidelines for sustainable development in three areas: 1) Circular Economy aimed to develop materials with better properties. It also covers waste-collecting and management for reuses, and the creation of new business based on the concept of "making products as services." 2) Safety, focusing on the safety for working, traveling, and transportation. 3) Climate Resilience, aimed to promote the use of alternative energy, to improve the effectiveness of energy use, and to use universal standards and collaborate with international organizations. Besides, it determines the target of being a leader of innovation creation based on SD approaches by being open to changes, collaboration, and self-challenges to raise the quality-of-life level for stakeholders of all groups: customers, employees, business partners, communities, and society. On the other hand, natural resources and environmental fertility have to be restored, as the important base for a sustainable society. For being a business leader of innovation

changes, the important strategies are 1) To develop digital technology for business operations in the working process, product development, transportation, and customer services. 2). To invent and research on the innovation creation with other organizations: research centers, universities, experts, etc. of local and foreign countries. 3) To invest in research and development of high-value products and expand the investment to start-ups and high-technology companies with high potential in the global market. 4) To create organizational innovation culture through training on innovation and Design Thinking, and the support of employees to create new products or new businesses. The important strategies of the Increased Quality of Life are 1) to access a variety of consumers' needs by analyzing their perspectives and needs for delivering products, services, and solution systems with increased value all through the customer journey. 2) to create sustainable innovation through product research and development, being friendly to the environment, and responding to consumers' different lifestyles. 3) to raise safety standards by controlling employees' and business partners' working risks strictly through the cultivation of safety behaviors and culture, including assessing the efficiency of safety measures consistently. 4) to treat everybody based on inclusive human rights, covering all groups of people prone to face risks in SCG and concerned business. Collaboration in Strengthening Society comprises the following strategies: 1) To create participation of all sectors. 2) To support and develop business partners' potential by selecting business partners with high potential in ethical business operations, and preparing plans for developing business partners' capabilities to grow with SCG. 3) To support and empower communities' potential by transmitting knowledge, management skills, and the concept of SD for their self-reliance. 4) To be the SD model by organizing a model project through the collaboration of several sectors to help solve major problems of the country. Prosperous World consists of the following strategies: 1) To set a goal of reducing GHG emission. 2) To mobilize circular economy as the main strategy of business operations in using limited global resources with the highest value, but the least negative environmental impact. 3) To promote innovation for the environment, research and development by recycling leftover resources and energy usefully, including controlling air and water pollutions. 4) to rehabilitate or restore

biodiversity through activities and participation with communities around the target area to conserve biodiversity towards sustainability. (SCG, 2019b)

From the analysis of sustainability strategies of Thai listed companies, it was found that most of them conduct the strategies under organizational sustainability in three dimensions: economic, social, and the environment under corporate governance principles. Nevertheless, from analyzing strategic issues, the findings showed that most companies gave importance to social strategies. Probably, the social dimension involves stakeholders of all groups; thus, there are plenty of strategies and goals for covering every group. Employees were the group of stakeholders almost every company specifies in its strategic plans distinctively. Typically, these companies have an annual review of the plans, considering indicators and goal values. Then, budgets are organized and proposed for the top management's approval.

Though from the study, many companies may not determine strategies in all dimensions in 2020, they had them in the previous years. On the other hand, many SD strategies were added to reflect their importance, while some strategies have been conducted regularly since previous years. Besides, strategies in the economic domain may not be presented clearly because several companies did not combine them into the dimension of SD, but display them under regular plans and general business goals.

Remarkably, communication strategies for SD are integrated into organizational operational plans with the materiality responding to sustainability to create perception, understanding, and awareness of organizational operations to ensure stakeholders of all groups and accept its SD approaches. Besides, most companies provide an opportunity for stakeholders to participate and collaborate with the companies towards sustainability through diverse and integrated communication channels: both formal and informal; online and offline, including business and SD activities, to respond to stakeholders' needs. (more details in the process factor).

4.1.6 Analysis of Stakeholders'

An organization is counted as a system interacting with other systems to maintain the existence of the system through an exchange of energy and the environment continuously. Mostly, the external environment is also found to affect organizational operations. (Yoisaeng, 2012). The external environment considered as

an important influence on a communication process for sustainable development is stakeholders, which are an important group or target receivers of organizational communication since they are those who get affected by business operations, both positively and negatively. Besides, stakeholders play a great role in an organization's survival, including being a group that keeps stimulating a business organization to operate under the expectation of each group.

Communication standards for sustainable development must highlight the participation of stakeholders. Communication content, channels, and methods must be appropriate for each group of stakeholders. (Key informant No. 24)

After that, it depends on who are the stakeholders whom you look for. Thus, communication patterns will vary. Someone may say that stakeholders are customers. Then you may use paid media for advertising, or feature articles for publishing the news. For us, it's rather complicating, so we have to increase our sales under our brand. (Key informant No. 16).

We look at our stakeholders' needs and expectations to see what they are. Thai society is moving into an aging society, so what does each of them expect? Typically, products for the elderly have to focus on green products and products that are friendly to the environment. Thus, their expectation is one of our input factors. (Key informant No. 4).

We will comply with what we report. We collect opinions from both inside and outside our company. For outside stakeholders, they are investors, business partners, customers, etc. What are the expectations they perceive our company should do well? Or what we cannot do well? What do they expect from us? That's a theme. A theme that can attract people or can be done genuinely must be congruent with the kind of business, which can contribute to society and the environment truly without pretending to be. In other words, it means that it must be something that the company has or be the nature of the company of business operation. In short, 1) it must accord with the company, and 2) it must accord with what the stakeholders want to see from us. It is something that makes people interested to see if the company can do it. (Key informant No. 3).

GRI (2015) specifies that an organization should explain how it determines and prioritizes corporate materiality and strategies, stakeholders' expectation and benefits, and reasons the organization chooses certain guidelines or practices for those stakeholders. An organization should survey analyzing stakeholders' needs and expectations thoroughly, including specifying groups of its stakeholders, thoroughly, and completely. Such operations must be conducted continuously for planning and creating a communication process to convey sustainability messages through various channels to the target receivers towards the utmost efficiency.

In the case of SME, there might be some restrictions, i.e., limited human resources, no engagement from stakeholders, etc. Thus, every time they make a list of stakeholders, they may say that the information is not collected from stakeholders themselves, but from their interpretation from talking with their customers. Thus, when questioned what customers want the company to adjust, they will use the implied information, but not the actual information. By doing so to determine stakeholders' expectations, it may obtain distorted information, as it depends on the mood that day. It has no evidence to support. (Key informant No. 27)

Accordingly, stakeholders can be considered as another significant input factor an organization must determine, analyze, and prioritize for operational planning and choosing proper communication for SD strategies, which must also be congruent with diverse stakeholders' expectations and needs inclusively. From the study, Thai listed companies have different ways to determine their stakeholders' participation and different approaches for responding to them, as follows:

CPALL (2019b) divides its stakeholders into 11 groups and has a communication process with every group. Besides, it has different communication channels for each group of stakeholders, depending on the nature of the relationship and different responses to its stakeholders' expectation and anxiety, as follows:

1) Employees: Financial returns and long-term welfare; the development of their capabilities, growth, and self-assurance; health promotion and management of stress, caused by working; and good working environment.

2) Store partners: Fair treatment and ethical business; increased competitiveness and business management; public relations and communication of corporate information and policies; business security, business expansion, and continuous joint operations.

3) Customers: Detailed and accurate sales promotion project; quality and safety; health care, product labels with complete information about products and services; length of services, impacts on community economics; and customers' data or privacy protection.

4) Business partners and suppliers: Participation with stakeholders; conflict management and community acceptance; good corporate governance, business code of ethics, anti-corruption, innovation management, responsible supply chain management, and climate change management.

5) Shareholders and investors: Good performance and business growth; worthwhile investment returns, good corporate governance, operational transparency, and information disclosure; organizational image and social acceptance.

6) Community, society, and the environment: Impacts on community economics; community development; the creation of shared values between communities and business; agriculturist supports, SMEs; product quality development; promotion of market accessibility and community sales channels; promotion and conservation of local culture; good environmental management; educational opportunities, and promotion of sustainable occupational or professional skills.

7) Government Sector: Strict compliance with laws and regulations; a model of the business sector in social and environmental responsibility; and fair business operations with business partners.

8) NGO and opinion leaders: good community relationships; the creation and development of what is available in society for uses; common benefits all through the supply chain; communication and induction of SD as a part of young generation's daily life; insightful access to the young generation.

9) Mass media and bloggers: The establishment of understanding and reduction of conflicts in virtual communities via social media; proper media disclosure, product quality, innovation for facilitating product payment.; creation and development of organizational positive image; organizational operations improvement; and packaging for the environment.

10) Creditors: Strict compliance with the agreement and concerned conditions; duly debt payment, accurate; transparent, and auditable financial status reporting.

11) Rental property owner: Joint ventures' ongoing operations; good governance; public relations and clarification of corporate information and policies.

CPF (2019b) analyzes and reviews its stakeholders for indicating groups of stakeholders in details by giving importance to the participation of stakeholders of all groups to get their needs, perspectives, opinions, doubts, and suggestions, the results of which are applied to develop accordant practical guidelines towards proper and fair sustainability operations. The company classifies the stakeholders into 8 groups with different expectations as follows:

1) Shareholders and investors: Good corporate governance; transparent, correct, and duly information disclosure; innovation and technology development.

2) Employees and their families: Occupational Health and safety; professional growth; remuneration; security interests or privileges and welfare; employee engagement.

3) Customers and consumers: Food quality and safety; traceability of sources; and product label information.

4) Business partners: Human rights and environmental impacts in the supply chain; promotion of agriculturists' and business partners' potential; and fair business operations.

5) Community and society: Environmental protection and conservation; participation in improving the communities' quality of life; and continuous promotion of hiring in a community.

6) Government agencies: Compliance with concerned laws and regulations; sharing and instructing sustainability innovation; a model of business operations with social and environmental responsibility.

7) Civil society and academic sector: Human rights in the supply chain; the assessment of social and environmental impacts; and social enterprises.

8) Mass media: Business operations with good corporate governance; growth in mobilizing the organization with social responsibility towards sustainability; and food quality and safety.

CPN classifies the stakeholders into 9 groups and assigns an agency responsible for creating participation, communication, hearing, caring, and responses to the stakeholders' opinions and expectations of each group properly, completely, and timely. The received opinions are adapted to match with business operations consistently and continuously, as follows: (CPN, 2019a)

1) Customers: Service quality; service convenience and safety; an ability to respond to customers' needs; and speed of message transmission and response.

2) Stores: Service quality and effective shopping-center management; the creation of value-added for tenants and entrepreneurs; service convenience and safety for tenants; channels for financial transactions, repair notification, and convenient and rapid contact.

3) Employees: Potential of smart and decent employees with public mind according to I-CARE value and good corporate governance; employees' wellbeing; experience and working that matches with each employee's lifestyles; and pride to be corporate employees.

4) Business partners: Sustainable joint ventures; and in-depth recommendations for developing innovation of joint business operations.

5) Community: The development towards shared benefits with the communities.

6) Government and education sectors, independent organizations, and other organizations in the society: Collaboration for managing useful knowledge for mutual benefits; collaboration in resources and environmental management; an exchange of information, and collaborative development of personnel.

7) Shareholders: business growth; and sustainable business operations.

8) Business competitors: Free and equal business operations.

9) Creditors: Analysis of corporate credibility; business performance and future projects; and potential to pay debts.

HMPRO (2019c) analyzes and identifies primary stakeholders, including combining the stakeholders' interests and questions into sustainability plans and materiality explicitly. The company divides the stakeholders into 7 groups and each group has the following expectations:

1) Customers: products that adhere to social and environmental responsibility; fair prices; product quality and safety; and after-sales service.

2) Employees: Fair compensation; employment with ethical compliance; life and properties security; knowledge development, occupational growth opportunities, and the balance between living and working.

3) Business partners: Fair commerce; increased order quantity, and business concrescence, and co-development of innovative products.

4) Creditors: On-time payment; and compliance with permission policy.

5) Shareholders: Business operation improvement; good corporate governance; transparent information; and rights and equity.

6) Community: Responsible business operations; community development towards sustainable self-reliance; and community economic improvement.

7) Government sectors and other organizations: Compliance with laws; and project participation.

KBANK assesses stakeholders' expectations for applying it as practical guidelines for proper practices and preventing possible risks and negative impacts. The stakeholders are divided into 8 groups: (Kasikornbank, 2019b)

1) Shareholders: High investment returns and secure growth; good business performance and consistent growth; transparent and righteous operations; thorough risk management, ethical operations with environmental, social, and corporate governance concern; society and good governance; and knowledge provision about new regulations of regulatory agencies.

2) The Bank Committee: Transparent operations with corporate governance; fair treatment of all groups; and good business performance and consistent growth.

3) Regulatory agencies: Business operations under corporate governance principles; sustainable development as determined by-laws and under proper risk management.

4) Employees: Fair compensation and welfare suitable for the economic condition; career path and occupational growth planning; continuous life knowledge and skills development; occupational health and working safety care; proper provision of working facilities; and permission for employees' time allocation to create a balance between their working and private life.

5) Customers: Responsible and fair customer service; quality and diverse products responding to customers' needs; convenience in accessing products and financial service; financial advice and knowledge; customers' data protection; readiness and rapidity in responding to customers' needs; readiness and stability of bank application systems on a smartphone that can give continuous, rapid, and smooth service.

6) Trade partners: Ethics, professional codes of ethics, and transparent business operations; and fair trade. For business partners: collaboration in doing business following corporate governance principles.

7) Competitors: Transparent and fair business operations and competition, complying with decent and honest competition scope.

8) Creditors: On-time interest and debt payment; and continuous communication and information disclosure.

9) Community, environment, and society: Financial knowledge provision; providing products, service, and channels for financial access responding to needs and lifestyles of people in the community; development and promotion of economic growth in the society and community; promotion of social and community enterprises; and assistance when the community faces natural disasters.

MINT divides the stakeholders into 9 groups. (Minor, 2019b) Each group has different expectations as follows:

1) Customers: Product quality (design, utility, convenience, safety, production condition, cleanliness, health usefulness, food and products produced by local materials); service quality (response, credibility, consistency, attention, and assurance); products and service worth paying and time spent; standardized and

expected delivery of products or service complying with concerned laws; and transparent pricing.

2) Employees: Career stability and growth; attraction of capable employees into the organization for long-term employment; good remuneration and benefits; a balance between personal life and work; a respect of rights and fair treatment; opportunities towards higher education during the employment; and occupational health, safety, and well-being.

3) Shareholders, investors, and creditors: Good financial returns and worthwhile investment; good corporate governance; risk and crisis management, transparency of business information; legitimate information disclosure within a proper time frame; compliance with terms, conditions, and agreement; commitment and payment by stipulated time; effective communication with shareholders, investors, and creditors; opportunities for shareholders and investors to participate in expressing their opinions for corporate operations; a response towards climate change (i.e., waste management, GHG emission, water utility complying with concerned laws); sustainable raw-material procurement and service; human rights; and safety and occupational health.

4) Business alliances: Regular joint meetings; a general manager's communication of information for franchise entrepreneurs every two months; a meeting of regional franchise entrepreneurs every quarter; local and international annual meetings of franchise entrepreneurs; corporate activities and social enterprises; SD projects and the annual opinion survey; a meeting with brand owners; communication between CEO and top management and hotel owners, investors, and business alliances; communication and meetings among business development agencies and hotel owners; and Minor Annual Award Presentation.

5) Business partners: Fair and equitable treatment for trade partners; fair, transparent, and easy-to-understand procurement process; commitment to product manufacturers and business partners regarding clear and consistent orders to ensure timely sourcing and service; advanced purchase order submission or estimated weekly or monthly orders; flexibility in adjusting prices of products and services properly; determination in creating innovation jointly; and established long-term relationships.

6) Community: Hiring, Joint economic, social, and environmental development of the communities, reduced negative impacts on society and community environment; respect of community ways of living; and listening to communities' opinion and regular communication with the communities.

7) Mass media: Business information and news (i.e., business expansion plans and strategies); a face-to-face interview with top executives, especially after some critical incident announcement; and transparent information disclosure.

8) Government offices: Collaboration and support for government projects; compliance with new policies; and sharing of excellence in environmental practices and conservation.

9) NGO: Responses to climate change (i.e., biodiversity conservation, waste management, reduction of GHG emission, water management, by complying with concerned laws); human rights; sustainable procurement; animal welfare; responses to social needs; and collaboration and support for donation and social enterprises).

PTT (2019b) divides its stakeholders from the assessment of the stakeholders' needs, expectation, and concerns into 6 groups from a variety of channels, i.e., call center, research, participatory processes, activities, and a joint meeting with stakeholders, for preparing management guidelines for concerned agencies to implement them. The six groups of stakeholders and their expectations are:

1) The Country: Roles of the state enterprises in taking care of people sector; national policy support; and a survey for a finding of fossil fuels or fuel energy with reasonable costs and can be reserved for sufficient use.

2) Customers: Quality, standardized, and diverse product and service continuous development; roles of state enterprises in public sector supervision.

3) Society and community: Transparent operations; roles of state enterprises in people supervision; safety and environmental impacts; community quality of life development; and mobilization of people's awareness of natural resource and environmental conservation.

4) Business partners: A convenient, rapid, accurate, transparent, and fair procurement process.

5) Employees: Career stability and advancement; adaptability to PTT changes in business operations; and a balance between working and personal life.

6) Shareholders: Stock prices and good financial performance; survey of fuel energy with reasonable price and that can be reserved for sufficient use; participation in developing national and social economics; and a transparent and sustainable business operation leader.

SCC analyzes, assessed, and determines guidelines for supervising corporate stakeholders. In 2020, the company divided the stakeholders into 8 groups. (SCG, 2019b) with different expectations as follows:

1) Shareholders, joint ventures, creditors: Disclosure of significant data necessary for the corporate operations clearly and timely

2) Employees: Happy work, supervision of the environment, health, and working safety; consistent skills and potential empowerment; communication and information disclosure of operations; and the creation of a culture of collaborations with other groups of stakeholders.

3) Business partners: Supervision of the environment and working safety; the creation of operational values; support and elevation of business partners' operations; knowledge development; development of collaborative projects for extending business growth.

4) Customers: Responses to diverse needs; product development with customer groups; channels for advising about products, services, consultation, problem-solving, and complaints or appeals; and promotion of collaboration in developing sustainable products and services.

5) Community: Human rights; surveillance of the environment surrounding the communities; quality of life development and enhancement of wellbeing for local and ASEAN communities and society in which the company has their business operated; listening to communities' opinion; and the development of collaborative projects for empowering communities to create benefits for the society.

6) Government offices: A good model of transparent and excellent management for other organizations; collaborations with government offices to propose the best ways for SD; and the participation in collaborative projects for achieving SDGs.

7) Mass media: Rapid, correct, complete, and updated information transmission; the creation of participation and establishment of good relationships.

8) Civil society sectors, scholars, and opinion leaders: Complete and transparent information disclosure; opportunities for creating collaborations in driving sustainability issues; provision of knowledge in SD, and the adoption of experts' knowledge for supporting collaborative projects.

From analyzing the determination and expectation issues of stakeholders of each company, it was found that stakeholders were determined about the goals of business operations, and they are relevant groups to the organization's survival, depending on the level of their significance and mutual impacts. The number of stakeholder groups varies, including the details of stakeholders specified by each company. The average number of stakeholder groups is approximately 8 groups. Nevertheless, the findings of the study show that, as a whole, most companies give importance to groups of stakeholders not so differently, especially primary stakeholders, i.e., shareholders / investors, customers / consumers, business partners / suppliers, communities / society, and employees, as illustrated in Table 4.3. These important stakeholder groups are paid high attention from the listed companies, and the companies expect to induce their participation, including searching for their genuine expectations. Therefore, the listed companies or organizations with SD business operations need to determine, analyze, and assess their primary stakeholders thoroughly and completely.

Stakeholder	CPALL	CPF	CPN	HMPRO	KBANK	MINT	PTT	SCC
The Nation		U S					√ **	
Committee					1			
Shareholders/investors	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	√ *	\checkmark	√*
Government sector/offices	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark		\checkmark
Customers/consumers	\checkmark							
Business partners/suppliers	\checkmark							
Business alliances	\checkmark		\checkmark			\checkmark		
Competitors			\checkmark		\checkmark			

Table 4.3 A comparison of stakeholder groups determined by Thai listed companies.

Stakeholder	CPALL	CPF	CPN	HMPRO	KBANK	MINT	PTT	SCC
Creditors	\checkmark		\checkmark	\checkmark	\checkmark	√ *		√*
Communities/ society	\checkmark							
NGO, civil society, scholars	\checkmark	\checkmark				\checkmark		\checkmark
Mass media	\checkmark	\checkmark				\checkmark		\checkmark
Employees	~	✓	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Rental property owner	1							
Total numbers of stakeholder groups	11	8	9	7	8	9*	6	8*

Note: * MINT and SCC assesses stakeholder groups by combining creditors into the group of shareholders and investors, both of which have different expectations

** PTT specifies corporate primary stakeholders by considering group characteristics, which are found to be the same group of government sector/ government offices.

Regarding the expectation issues of each stakeholder group, most companies analyze and evaluate them not so differently, based on the needs and expectations of each group, which seem to be similar. What is found to be different is the nature of the business that affects products and/or services. The expectation issues of Thai listed companies are summarized in Table 4.4. Remarkably, such issues are used for planning an operation for responding to the stakeholders' needs and for communicating to them through the selection of appropriate media channels. (details of channels are presented in the media planning topic). The aim is to transmit sustainability information and other responding issues from the organization to the target receivers most effectively.

 Table 4.4 A summary of expectation issues of each stakeholder group of Thai listed companies

Expectation Issues of Stakeholders					
 <u>The nation</u> The roles of state enterprises in taking care of people or civil sectors 	- Support of national policy				
Government sector/ offices					
- Strict compliance with concerned	- Sharing and transmitting	- Fair business operations			
laws and regulations	sustainability innovation	with business partners.			
- A model of social and	- Mutual information	 Project participation 			

Expectation Issues of Stakeholders					
environmental responsibility for business sectors	business sectors - Collaborative personnel management - Collaboration				
 <u>Shareholders/ investors</u> Good operational performance and sustainable business growth Worthwhile investment returns Good corporate governance Innovation and technology development Knowledge provision about new regulations of regulatory agencies Effective communication 	 Operational transparency and correct, clear, and on- time information disclosure. Organizational image and social acceptance Rights and equality, including participation in expression ideas about organizational operations Compliance with conditions and agreements, and on-time payment. Responses to climate change and environment 	 Business operational improvement Thorough risk and crisis management Ethical and sustainable operations Supervision of human rights Safety and occupational health Investment expansion and new markets. 			
The committee - Transparent operations based on corporate governance principles Regulatory Agencies - Good corporate governance	 Fair treatment for all groups of stakeholders Sustainable development as 	 Good performance and consistent growth Proper risk management 			
 Employees and families Good and fair remuneration Proper welfare and benefits Knowledge and capability development Occupational stability and advancement opportunity Health promotion and stress management Compliance with labor codes of ethics. Creation of a culture of promoting collaboration with other stakeholders 	 stipulated. Good working environment/occupational health and safety Employees' well-being Employee engagement and pride Public mind as per values and principles of corporate governance The attraction of employees for working in the organization. 	 A balance between personal and working life. Provision of facility equipment for proper operations. Respect for rights and fair treatment Congruent adaptation with business changes Happy working Communication and information disclosure 			
 Detailed and correct sales promotion projects Product and service quality and safety Health care Product and service labeling with complete information Length of service Impacts on community economics Personal data confidentiality 	 Traceability An ability to responding to customers' needs Message transmission speed Social responsibility products Fair and transparent prices After-sales service A variety of products and service Advice and consultation Establishment of participation, joint business, and collaboration projects 	 Convenience in accessing products and service Readiness and stability of application systems Worthiness Standard product and service delivery Product co-development with business customer groups Provision of suggestions and complaints channels 			

Business partners and suppliers Establishment of participation,	- Innovation management	- Potential promotion		
 joint business, and collaboration projects Continuous business Conflict management and community acceptance Good corporate governance and 	 Innovation development for joint ventures Responsible supply chain management Climate change management Environmental impacts in 	 Knowledge development Human rights Regular communication of information and meetings Clear purchase order and advance PO placement, or 		
 best practices by business codes of ethics. Anti-corruption Fair business operation and trade partner treatment Environmental and working safety surveillance 	 supply chain Righteous, rapid, correct, and transparent procurement Value creation for business operations 	estimation of weekly or monthly PO - Flexibility in price adjustment		
<u>Business alliances</u> - Fair practice following corporate	- Business security and	- Service convenience and		
governance and business codes of ethics	continuous joint ventures - Service quality	safety - Financial transaction		
Competitiveness promotion]Public relations and notification	- Value-added creation for	channels Denoir potice		
of corporate information and policies	 Retail shops and entrepreneurs Organization of joint social enterprise activities 	 Repair notice Convenient and rapid contact 		
Rental property owner				
- Continuous business cooperation as per corporate governance	- Public relations and notification of corporate information and policies			
Competitors				
- Free, fair, transparent, and equitable business competition	- Compliance based on decent and honest competition	14		
Creditors				
 Strict compliance with the contract and concerning conditions Analysis of corporate credibility, performances, and future projects 	 Payment potentials and promptly payment Continuous communication and information disclosure 	 Accurate, transparent, and traceable financial status reporting. 		
Communities and society				
 Community economic development Self-reliance community 	 Promotion of accessibility to community markets and sales channels 	 Environmental protection and conservation Responsible business 		
 development Shared value creation 	 Local culture promotion and conservation 	 Operations Social and community 		
- SME agriculturist promotion	- Respect for communities'	activities promotion		
- Product quality development	ways of life	- Assistance for community		
- Community quality of life development	- Educational opportunity provision	damages caused by crises Mobilization of people's		
 Knowledge provision Surveillance and alleviation of negative impacts on society and 	Empowerment of sustainable vocational skillsCommunity employment	conscience in natural resource and environmental conservation.		
environment of the communitiesCommunity partnership	promotion - Listening to communities'	- Development of community collaborative projects for		
- Consistent community	voices - Human right respect	creating benefits for the society		

Expectation Issues of Stakeholders

NGO/opinion leaders/scholars		
 Establishment of good relations with the communities Creation and development of what is available in the communities Creation of mutual benefits throughout the supply chain. Transparent communication and information disclosure Creation of knowledge and understanding of SD Environment Good environmental management 	 Human rights in the supply chain Environmental Impact Assessment The conduction of Social enterprises projects Responses to climate changes Human rights respect 	 Sustainable procurement Animal welfare Responses to social needs Insightful accessibility to people of new generations Opportunities for collaborations in driving sustainability issues. Application of knowledge for supporting collaborative projects
 Mass media and bloggers Understanding creation and conflict reduction in the community areas. Product quality and safety Innovations for facilitating product payment Corporate positive image creation and development 	 Corporate governance Advancement in organizational mobilization Corporate information and news provision. An opportunity for a face-to- face interview with top executives. Transparent information disclosure. 	 Creation of participation and coordination Environmental packaging Corporate operational improvement Rapid, correct, complete, and timely information communication

Expectation Issues of Stakeholders

Table 4.3 and the above Table, show that Thai listed companies specify their stakeholders diversely. However, two main types are found to be common: 1) primary stakeholders, i.e., shareholders, investors, customers, consumers, business partners, suppliers, community, society, and employees, and 2) secondary stakeholders, i.e. government sectors and offices, the committees, regulating agencies, business alliances, competitors, creditors, debtors, mass media, NGO, opinion leaders, scholars, and the environment, as summarized in Figure 4.25

Besides, the expected issues of each group of stakeholders are all different and diverse, depending on their goals and objectives for participating in such business conducts. Particularly, Thai listed companies analyze and have diverse materiality, i.e., the materiality of the groups of shareholders and investors, employees and their families, customers and consumers, business partners and suppliers, and communities and society, since they are the affected, either directly or indirectly from the corporate sustainability operations. Accordingly, these companies necessarily should give importance to and analyze the genuine needs of these groups thoroughly, profoundly,

and congruently with the actual behaviors of each group to use the findings as guidelines for determining a communication process for responding to the needs of each stakeholder group properly.

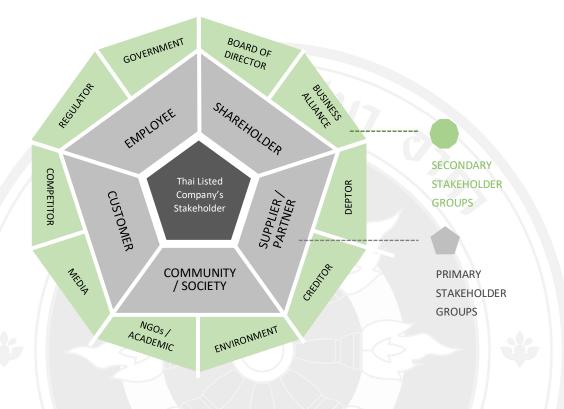


Figure 4.25 The classification of stakeholder groups of Thai listed companies

From the above information, it indicates components of major input factors that affect a communication process for SD involve the framing and structures for supporting sustainability operations and communication. Furthermore, it involves the analysis of receivers' behaviors, needs, and expectations, applicable for determining SD communication goals towards efficiency. Significant input factors affecting the SD communication process of Thai listed companies are summarized in Figure 4.26.

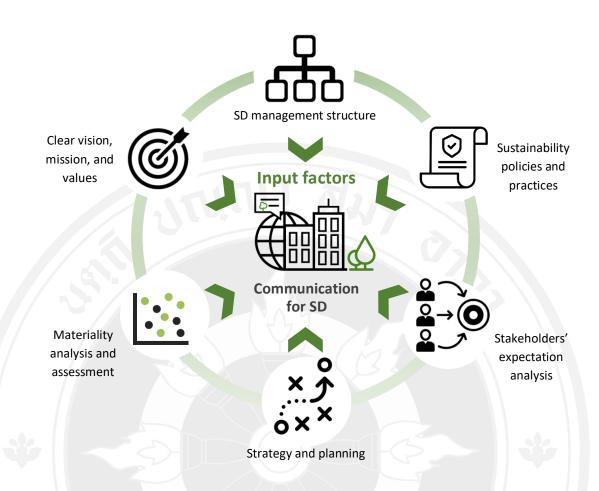


Figure 4.26 Input factors of the SD communication process

4.2 Process Factors

An organizational communication process means steps or methods of transmitting organizational SD information to stakeholders to perceive, understand, and trust in the organization's operations following sustainability approaches. Typically, for effective strategic communication, purposes, a form, focus, and direction of organizational communication must be specified. (Chaisamret, 2015) Thus, an effective communication process among stakeholder groups is important for enhancing mutual understanding based on the corporate SD operational direction. (Newig et al., 2013)

Therefore, the SD communication process is a major factor for creating collaboration and influencing behavioral changes towards the corporate SD direction

as per the frame of strategy, mission, values, and strategic plans specified by each company. It also requires congruence with and responses to each group of stakeholders' expectations via an appropriate channel for each group. Generally, a communication process composes of the following factors:

4.2.1 Message Specification and Design

After the materiality analysis and assessment that covers all dimensions, the analysis and prioritization of stakeholders' expectations, and the determination of SD strategies and action plans, which also includes communication strategies, each company will proceed with their strategies as planned by designing proper and accordant message for its stakeholders, which includes SD operations covering economic, social, environmental, and corporate governance dimensions following the determined strategic plans.

Firstly, SD issues are difficult to understand but have lots of channels to do. Thus, so many people have done on such issues. I think communication of only main ideas is necessary. We don't have to communicate everything, but only key messages. Normally, there may be thirty or forty issues, but only four or five are important. We then focus on those issues. You can see in a sustainability report, there are hundreds of pages, but people seldom read them because there are too many to read. Therefore, we must select what to communicate, or pick up only major issues because too much content can blur readers or receivers. (Key informant No. 1)

Normally, corporate strategies will regulate the content by determining where to go each year or which subject will be focused. For instance, now we are highlighting the concept of greenhouse gas so we plan how to reduce it or how we can take care of the environment. Thus, everybody will try to determine the content that goes along with the concept and supports one another towards accomplishment. (Key informant No. 4)

First, we must control our content by objective. Thus, we must know what is our goal or purpose. For the board committee, the content will be broad to illustrate the overall view for igniting or inspiring people to ask themselves why they live. When the top sees such a view, i.e., to see people have good lives and what good lives look like, then several answers may be given, i.e., some people may not concern about money. To define what a good life means for each organization is then questioned. Besides, the term 'sustainability is also defined differently." Then, what can we do? It must start from the top to the practitioners. Each goal is to inspire or to provide a guideline framework to show how to do or practice. (Key informant No. 19)

Not only the design of proper and congruent content for each group of target receivers, but an organization must also concern about all related features of the message, i.e., punctuation marks, signs, abbreviations, forms, colors, and sizes of letters, that can have some impacts on receivers' perception and sensation. (Kang & Park, 2018) Another thing to which an organization gives importance is to design the message under the main theme specified in each year as the main theme to be conveyed to stakeholders. Moreover, the design must be harmonious with organizational identity: color, image, symbol, graphics, including mood and tone, etc. to create receivers' perception, recall, and positive attitude towards corporate SD image. Additionally, message design must be interesting and portray a success model as a world citizen. (GTZ Rioplus, 2006)

SD content is all alike. Simply, what a company contributes to the country, society, and the environment. For a company that may cause severe environmental impacts, it must communicate how to reduce all the possible risks and damages. Therefore, the mood and tone of a message must go in the same way of illustrating our contribution to society or how we protect our natural resources and environment, and how all of these will return to them or the society. Shortly, in our report, we report our afforestation of thousands rais, but eventually, we must reflect how the afforestation is beneficial for the surrounding communities. (Key informant No. 23).

The corporate brand will cover all of these things or everything representing our identity. The main things are that we have to create alignment. If we can do it, then it is achieved. Alignment is not only colors or logos, but it is the concurrence of organizational strategy or all organizational concepts. After we can get what we want to tell, the next step is to control all, including yielded outcomes. However, it must be a process: people responsible for the process, all materials, etc. that goes in the same direction. After that, we will measure if we get what we want. We focus on visibility so the reflection of the organizational identity is through colors, colors, etc. The most distinguishing feature to identify our identity is color. (Key informant No. 3)

We spread our message to every channel with our key message. If our CEO wants to communicate some key messages, each agency must communicate to its stakeholders with such key messages, but they must be adjusted to suit each group of stakeholders. Our method is called "CI" or a template, i.e., to show where a local should be placed to make all parallel. (Key informant No. 9)

It depends on by which channel you want to communicate. For example, if you choose an annual report as a channel, you have to write it long, but if you want to communicate as short news, the content must be brief. Generally, people prefer precise content rather than elaborative one. To use language for communication, it's better to have different patterns, not all the same. In short, the channel you choose will determine the content. The importance is the content must be precise, understandable, and visible. If it is visualized, that will be very cool. Therefore, we can see that nowadays infographic has been used widely since one picture can tell a thousand words. Content is thus very significant, but how we can communicate to make receivers understand is important too. (Key informant No. 11)

The sustainability topic may seem to be irrelevant for organizational personnel; therefore, if such a topic must be communicated, communication may not start with sustainability, but with something else or something that makes them feel that we understand them and are on the same side with them. We can also tell some stories to make them more receptive first. (Key informant No. 27) Most of all, message design must control the content to respond to the communication objective as specified in the strategic plans and to the needs and expectations of stakeholders mainly. Besides, the content must be correct, accurate, traceable, and certified by external experts or agencies. Moreover, the presentation of content must be transparent and beneficial for both the organization and concerned stakeholders.

Communication with stakeholders is not only for reaching their utmost satisfaction as it is impossible. For instance, stakeholders may ask how much dividend they will get this year while business partners want to get the lowest price for the best product. Two of these expectations are contradictory. Therefore, it is impossible to provide the highest satisfaction for all stakeholders. Thus, what is important in communicating with stakeholders is to create a balance among them. The creation of content then needs to make stakeholders feel that we have created a good balance for them, more or less. (Key informant No. 19)

Of course, the message must go along with a proper channel. At present, there have been so many diverse channels. Notably, the transmitted message must carry facts, but it should not be only a one-sided message. If we transmit only positive content without negative one, it is seemingly an advertisement. Accordingly, the presented information must be facts, which can be comparative. The content must be accurate, easy-to-understand, and certified by the third party, including being transmitted through a proper channel. This is another key factor. (Key informant No. 10)

Accordingly, the transmitted message related to sustainability must be explicit, accurate, and congruent with all required dimensions, including being adaptable to different contexts of receivers as well. (Djordjevic A. & Cotton, 2011). The presented content must be the essence or main theme of the message about the organizational sustainability operations. It must be inclusive and easy to understand. From the study, each company was found to determine and design its SD message as follows:

CPALL designs its message by considering the congruence with each group of stakeholders' interests, needs, and expectations, including the compatibility with information perceptual channels of each group. Moreover, the message has to be accordant with the organizational policies, vision, and missions. Most of all, the message is determined by communication objectives for each group of stakeholders. The communication channels used are websites and annual reports. The SD report is the main communication channel, in the form of document and electronics, with all SD images, content, and stories of the company's SD operations that have been accomplished, are going to be accomplished and will be accomplished in the future. The message covers all SD dimensions: economic, social, environmental, and corporate governance, with quantitative data (i.e. statistics) and qualitative data (description), that is certified by SD regulating agencies, with a summary of information disclosure complying with universal standards.

The design and sequence of the message appearing in the SD report (CPALL (2019b) is a significant communication medium to narrate about the corporate stories, aimed to give importance to organizational leaders, i.e., the President, and CEO, who give their commitment to operating SD approaches to make their stakeholders be assured and trusted. Importantly, the success of SD operations in the previous year is included. Besides, the content portrays the overall SD strategies covering organizational vision, missions, and values explicitly, namely "Heart, Health, Home", which are the major framework for the corporate operations and scope of message presentation as well. The content in the "heart" part is the integration of corporate governance content in social dimension, which is divided into 5 sub-issues: 1) the organization of transparent governance (i.e., the content about corporate governance, risk management, ethics and working regulations. 2) Adherence to honesty and "anticorruption" (i.e., the content about complaints and whistleblowing, grievance management, etc. 3) Respect for human rights by committing to universal principles for creating a peaceful society (i.e., the content about risks relating to human rights, risk and impact assessment, labor treatment, etc. 4) Openness to a diversity towards public benefits (i.e., the content about the relationship establishment and responses to all 11 groups of stakeholders. (See 4.1.6). 5) Combining commonalities and integrating differences by empowering employees to be decent and capable as a

unified human capital (i.e., the content about leadership and human resource management, skill development, opportunities for career growth throughout the employees' career path sustainably, positional transcendence planning, etc.)

The message relating to "Health" presents external social-dimension content comprises 1) Intellectual innovation for increasing business value (i.e., the content about technology and innovation management, the establishment of the technology and innovation center, the development of information and digital technology, innovation culture, in-house and outside innovative projects, etc.) 2) The elevation of occupational health and working safety (i.e., the content about employees' and contractors' well-being, reduced risks, ergonomics and stress management.) 3) The selection of green food and consumers' health care. (i.e., the content about nutritious food, product quality, and safety, GMO product management, the collaboration between the government and private sector in promoting access to well-being. 4) Educational opportunities, occupational and career path promotion. (i.e., the content about the foundation of academic institutes for developing the youth towards professionalism. 5) Opportunity-sharing and social value creation. (i.e., the content about the promotion of agriculturists' quality of life through more than 15 projects, etc.).

The content relating to "Home" illustrates the content relating to the environment mainly, while integrating it with a social dimension that is relevant to the environment. The content composes of 1) Coping with climate change and utilizing circular energy. (i.e., the content about risk assessment and climate change, environmental shops, logistics for the environment, packaging innovation for the environment, the conscience of the environment, etc.). 2) Protecting ecosystems and commitment to Green Concept (i.e., the content about the protection of ecosystems and biodiversity, waste management.) 3) Water management with appreciation and maintenance of life balance (i.e. the content about water risk assessment all through the supply chain, sustainable water management, etc.). 4) Inheritance of responsibilities all through the value chain (i.e., the content about the SD operation process for business partners, sustainable sourcing of raw materials, animal welfare, etc.). 5) Fulfillment with love and creation by heart for strengthening communities

(i.e., the content about the creation of acceptance, reduction of communities' anxiety, stakeholders' complaints management, etc.).

CPF designates the Committee of Social Responsibility and Sustainable Development, chaired by the CEO, to play a role in determining the direction and strategies, and evaluating operational performance. The SD operations are mobilized by specific working groups and agencies, through both internal and external organizational communication to communicate their operations to the stakeholders accurately and transparently through various communication channels. Most of the content will be transmitted through the organizational websites, intranet, and annual reports. The main communication channel for SD communication is the specific website focusing on sustainability content and SD annual reports, in the form of printed and electronic media. The presented content is the SD operational performance of the previous year, operations being conducted at the moment and to be conducted in the future, which covers all SD dimensions. The design and sequence of the message in the main channel are as specified by the SD strategy framework of CPF.

Regarding the sequence of the message in the main channel, it starts with the overall image of the organization and the policies presented and committed by top executives following SD approaches. Then the success awards are presented, followed by policies and strategies used as an operational framework, the collaboration with other networks, and the audits of external regulating agencies respectively. The content on strategies of CPF is "Food Security, Self-sufficient Society, and Balance of Nature," based on SD. The content composes of 1) corporate governance (i.e. the content about governance structure, risk management, law compliance, etc.) 2) Respect for human rights and labor treatment (i.e., the content about human rights and labor treatment).

The "Food Security" part presents the main business operations, which comprises 1) food innovation (i.e., the content about innovation management, health, and nutrition, etc.). 2) Animal welfare. 3) The access to food and knowledge of sustainable consumption (i.e., the content about food quality and safety, the promotion of access to knowledge of sustainable food, nutrition, and consumption, responsible market and product labeling, food waste and food waste management,

etc.). The "Self-Sufficient Society" part emphasizes the social dimension. The content consists of 1) personnel (i.e., the content about human resource management, personnel management, working engagement, safety, and occupational health, etc.). 2) Business partners (i.e., the content about the elevation of business partners' capabilities, responsible sourcing, etc.). 3) Community (i.e., the content about communication development and promotion, vocational and well-being development, community activities and social enterprises promotion, etc.). The "Balance of Nature" part presents the environmental dimension mainly. It covers 1) sustainable packaging (i.e., the content about packaging management, such as the design of sustainable packaging, the reduced use of packages, the creation of awareness, and participation in plastic-product management). 2) The environmental impacts (i.e., the content about climate change management, energy management, water and waste management, etc.). 3) Biodiversity (i.e., the content about biodiversity and ecosystems, conservation, protection, and rehabilitation of biodiversity of the land and maritime ecosystem.) (CPF, 2019b).

CPN determines and designs its message by combining SD content into the annual report, which is the main channel for communicating the SD content to the stakeholders by presenting operational performance in economics, society, and the environment based on GRI standards, including the frame of preparing a report specified by IIRC, social responsibility standards (ISO 26000), and 10 universal principles of UNGC, by connecting to the operations following SDGs. The content starts with the organizational vision, mission, and values, as a frame for receivers to be informed of the direction and the purpose of the overall operations, including major financial information of the previous year. Then, the message from the committee is presented in combination with a report of governance results of each sub-committee. About the SD issues, they are classified into three categories distinctively, namely sustainable development, SD operational performance, and good corporate governance all through the value chain of the company completely. The content is also divided into three sub-topics: 1) The development and construction (i.e., capital sourcing, allocation and possession of the areas, the feasibility study of the projects, the design and construction of the projects, etc.). 2) The administration of shopping malls and buildings (i.e., the worthwhile resource utilization towards utmost

benefits, the selection of alternative resources, service towards maximal satisfaction, the sales of space, and the organization of marketing activities. 3) The promotion inducing excellent practices (i.e., infrastructure management, human resource management, innovation and technology research and development, fair trade partners sourcing, insightful information of customers, and new experiential creation for customers regularly.)

For the SD operational performance of the previous year, both quantitative and qualitative data is presented based on strategic plans as follows: 1) the investment-risk distribution and the creation of new business ecosystem (i.e., business expansion in geography and types of real estates, joint investment with business alliances, etc.) 2) The development of "Center of Life" shopping center. (i.e., the development of shopping malls with customer orientation and responding to all lifestyles, excellent service provision, the application of technology and innovation, etc. 3) The supervision and relationship establishment with stakeholders (i.e., store management and development, personnel management and employee engagement, supply chain management, community responsibility, and development, etc.) 4) Excellence in natural resource and environmental management (i.e., energy utilization and climate change management, water, and wastewater management, trash and waste management, climate quality management, air quality management, the development and green building management, ecosystem and biodiversity management, the development and maintenance with the community (CPN, 2019a).

HMPRO determines and designs the message by focusing on the significant SD operational process and performance for business operations and stakeholders of all sectors by combining the SD content with the vision of the company, "A Leader in Home Solution and Living Experience," of Thailand and Southeast Asian region through five SD operational strategies. The company communicates the SD content via the company's websites, annual reports, and Form 56-1, and PR news. Besides, the company also presents SD reports separately in another category. Remarkably, the design and sequence of the message start with the message and reports of all committees to display the company's determination and commitment to operate the business based on the benefits of stakeholders, including their follow-up throughout the previous year, to let receivers be informed. The content discloses general

information of the organization, financial information, corporate governance, organizational structure, risk management, and SD information. Regarding the SD content, it starts with the presentation of the SD accomplishment award of the previous year, followed by the business operations framework and the creation of shared value, and the analysis of stakeholders' expectations. Then, it presents the content according to the sequence of five operational strategies, as follows: 1) Quality products and service (i.e., seamless e-commerce, green products, packaging management, products for the elderly, quality service, the surveillance of product security, a survey of customers' satisfaction, personal data confidentiality policies, information-processing technology security, and management policies, etc.). 2) Employee care (i.e., employee recruitment, the employment of the elderly, personnel training and development, vocational growth employees' medical treatment, human rights, the employment of the disabled, health and safety, etc.). 3) Increased effectiveness (i.e., environmental management system, electric energy utilization, trash and waste management, ecosystem management, water management, the promotion of worthwhile use of water, operations of sub-companies, etc.). 4) Management (i.e., criteria for choosing business partners, governance and assessment of business partners, the standardization of business partners' service, the elevation of anti-corruption, the creation of an innovation organization, automatic inventory systems, etc.). 5) The surveillance of the society and community (i.e., projects for increasing quality of life of the society and communities, such as Young Entrepreneur (Thao Kae Noi) Project, Home Pro Academy, Community Enterprise Project, BU Craft, etc.). (HMPRO, 2019c)

KBANK communicates about its SD operations to its stakeholders through a variety of corporate channels, especially the annual report and SD report. The message design concerns the appropriateness for the target groups. Especially in the SD report, which is the main communication, the content is organized according to the SD guidelines and the bank's business operational strategic framework. It starts with the message from the bank committee to display their determination and assurance for the stakeholders on the company's governance under the SD approaches consistently. Then, the overall SD operational performance and major materiality are presented, including the stakeholders' needs and expectation, which are displayed by

the SD dimensions as follows: 1) Economic dimension (i.e., corporate governance, business codes of ethics, risk management, customer-orientation, responsible credit granting and investment based on the environmental, social, and governance criteria, safety and personal data confidentiality, sustainable supply chain management, etc.). 2) Social dimension (i.e., accessibility to financial service and financial knowledge provision, human resource management, human right operations, social operations, etc.). 3) Environmental dimension (i.e., risk and the possibility of climate change management, financial support for businesses friendly to the environment, the bank environment management, and operational performance in all dimensions qualitatively and quantitatively. Then, the SD awards and assessment from Thai and foreign external agencies, including the certification from external agencies. (Kasikornbank, 2019b)

MINT communicates its SD operations through a variety of channels, both online and offline. The main channel is the SD report organized for communicating economic, social, and environmental impacts caused by business operations. The goal of communication is to convey the integration between responsible and sustainable business operations with the working process of the company. The design and the sequence of the message are based on the corporate SD principles in three domains: People, Value Chain, and Planet, and the other two supporting strategies: corporate governance and the creation of shared value. It starts with the communication of the overall portrayal of corporate business to make receivers have a basic understanding of the company's variety of products and services, including its domestic and foreign businesses. Then, it presents the message of the President and CEO, SDGs, and the overall view of major events in the previous year. The message is presented in quantitative and qualitative data, which connects with SD dimensions under the SD framework specified by the company as follows: 1) People is the presentation of social-dimension content (i.e., human resource management, the empowerment of high-potential executives and leaders, the development of personnel's well-being, safety and occupational health, support of community members, the conscience of responsibility through activities.) 2) Value Chain is the economic-dimension content (i.e., the empowerment of business partners, sustainable supply chain management, a procurement process by block-chain technology, sustainable procurement, the

strengthening of relations with business alliances, customer engagement, safety, and food sourcing traceability, etc.). 3) Planet is the environmental-dimension message (i.e., the reduction of environmental impacts, the conservation of biodiversity, etc.) 4) Good governance (i.e., corporate governance, anti-corruption policies, honesty and righteousness, human rights, etc.) 5) the creation of shared values (i.e., value the organization gained from the past year nationally and internationally, SD operational performance in all dimensions with explicit and easy-to-understand statistics. (Minor, 2019b)

PTT has paid high attention to communication for SD for a long time and continuously. The most message conveyed by the company presents the economic, social, and environmental performance, including that of corporate governance, through a variety of corporate channels. The main channel for transmitting SD messages is the SD report like other listed companies, in the form of printed and electronic media, and people can download information from the corporate website. The message covers all SD dimensions: economic, social, environmental, and corporate governance. The message begins with the message from the CEO to assure the stakeholders of its business operations under the SD guidelines. Then, the overview of the organization is presented as fundamental information for making the receivers understand the company's operations by highlighting three important corporate strategies as follows: 1) Corporate governance (i.e., organizational governance, anti-corruption and transparency, risk management, internal control, etc.) 2) Economic dimension (i.e., energy security, future growth establishment, project management, supply chain management, product and service responsibility, innovation promotion and development, innovation promotion for employees, green products and services, customer relations management, etc.) 3) Social dimension (i.e., human resource management, employee engagement, knowledge management, organizational values, human rights, decent organizations for the society, human, community, and social development, safety, and occupational health and security, etc.). 4) Environmental dimension (i.e., environmental management, climate change and energy management, biodiversity, environmental investment, etc.). The next content is the presentation of SDG accomplishment awards in the past year and the

certification of the external regulating agencies to assure and certify the correctness of the information to the stakeholders. (PTT, 2019b)

SCC is another leading company that has given importance to communication for SD for a long time and continuously, aiming to communicate the company's operations that have been accomplished, are going to be accomplished, and will be accomplished in the future. The content covers all SD dimensions: economic, social, environmental, and corporate governance through a variety of corporate channels, i.e., the annual report, Form 56-1, corporate websites, and PR media. Still, the main communication channel for SD to stakeholders is the SD report, in the form of printed and electronic media. Besides, another highlight version of summarized major content is also organized. Generally, the content in the report starts with the message from the Managing Director like other companies, which illustrates the corporate vision and commitment communicated to the receivers. Then, the overall picture of organizational products and services, including management structure is also presented to make the stakeholders understand the overall business operations. The next part is the portrayal of the operational progress in following SD strategies in three dimensions: circular economy, security, and coping with climate change. Then, each dimension of SD issues is presented in order as follows: 1) Economic dimension comprises of the content on "innovation and technology" (i.e., product development by digital innovation and technology, the investment expansion in a new business model, the promotion of innovation culture of the organization, etc.), "the creation of sustainable value for business partners" (i.e., collaboration establishment with business partners, the increased safety standards, the development and activation of business partners' potentials towards sustainability, development training for employees and business partners, etc.), and "the creation of customers' experience" (i.e., SCG Marketing Way, Customer Journey Co-Creation, etc.). 2) Environmental dimension comprises the content on product and service responsibility (i.e., solutions for decreasing the bank's energy utilization, the use of technology for reducing waste based on circular economy principles, product development for raising people's quality of life, etc.),

"Waste management" (i.e., waste management for recycling and turning the waste to be products, energy from the waste, the reduction of risks by integrative water management, the increased effectiveness of water utilization for production and products, the restoration of ecosystem related to water resource, and water supply for communities/agriculture, etc.), "biodiversity and ecosystems" (i.e., biodiversity of birds in a mine in Lampang, the universal indicator development for restoring limestone mine, the progress of the biodiversity management plans, the study of biodiversity in Ban Pla, Trang Province, the training for agriculturists on sustainable forestry management, etc.). 3) Social dimension comprises the operations on human rights, aimed to be a prototype organization of human rights. The content focuses on the supervision and development of the employees (i.e., Re Skill-Up, skills for dealing with business changes, adaptation in human resource management, a survey on organizational engagement, etc.) The content ends with the statistical performance covering all SD dimensions and the certification of external agencies. (SCG, 2019c)

From the analysis of message invention and design of all 8 listed companies, it illustrates that each company has different message designs because of different target receivers and types of business operations, including different sustainability goals and strategies used for operations. Thus, it is apparent that the message design and communication patterns must be appropriate and congruent with each group of stakeholders since the purpose of communication for SD has different response goals. Some groups may need information for making investment decisions, while some need information for supporting organizational operations. Some groups may want to assess the effectiveness of business operations that may affect the society and community environment, etc.

However, if analyzing the materiality of all companies, it is found that every organization aims to communicate its information related to sustainability in all four dimensions: economic, social, environmental, and corporate governance. Such information is also connected qualitatively or quantitatively. The language used is rather semi-formal but easy to understand. The content utilizes beautiful illustrators, infographics, icons, etc. for supporting the content and leading to the topic to be presented, based on the organizational identity, that determines the images and message patterns through the use of characters, colors, and corporate logos. The finding accords with the notion of James (2010), who specifies that a company can create sustainability content to draw people's attention in the following ways: 1) creating unexpected or beyond-expectation content, 2) using images for conveying meanings to enhance more understanding and recalls 3) using content to stimulate feeling or creating motivation towards changes, 4) narration by simulations to increase learning and practices, including creating inspiration for stimulating memory and positive image towards such simulated stories.

For the sequence of the content, most Thai listed companies present and organize their content not so differently. Notably, the content presentation can be divided into two groups. The first group of listed companies starts to narrate the story by presenting the success of their SD operations in the previous year, followed by the presentation of their SD operations in all dimensions. The other group presents the SD operations first, followed by the success or awards each company received. However, the sequence of presented issues is not so different either, possibly because all of them have to comply with the criteria and guidelines of reporting based on the framework of both Thai and foreign regulating agencies. Therefore, both communication issues and the sequence of messages are similar.

Before becoming a listed company, mostly the company is a big company having universal standards, i.e., the DJSI standards on the information disclosure have a clear guideline. Generally, each company will issue guidelines that comply with GRI criteria, and handbooks for buying, markets, etc. Now, it adjusts the form of displaying information to cover ESG, which should be effective by two years or around that. It should go in parallel. For the companies that have international businesses, they may have another sustainability report separately. To combine or separate the reports is not so important, but the content is. Key informant No.18)

In short, the content reflecting SD issues Thai listed companies is communicated to the stakeholders is as illustrated in Table 4.5, as follows:

Sustainable Devel	opment Content of Thai List	ed Company
General content of the		
organizations	- Vision, mission, and values	- Strategic/ development
- Objectives / Goals / Purpose	- Organizational strategies	plans
- Organizational structure	 Types of business operations 	- Relevant laws
- Business group structure	 Numbers and types of 	- Contact information,
- Shareholding structure	employees	location, and branches
- Article of association	employees	location, and branches
Economic content		
- Financial status/ operational	- Market and competition	- Non-financial indicators,
performance	condition	i.e., market shares
- Remuneration of the board and	- Dividend payment/non-	- Auditor/ audit fee
executives	payment	- Supply chain management
- Compensation and welfare of	- Tax strategy and operation	 Possession and diffusion
employees	- Operational assessment/	of innovation
- Financial assistance/ support		
 Innovation and technology for 	quality - Financial balance	- Operational system improvement
production and service	- Capital/ brand management	Improvement
Social content	- Capital/ brand management	
	Business norther treatment	Eradiation of noverty
- Employee treatment	- Business partner treatment	- Eradication of poverty
- Employee appraisal	Debtor treatmentCreditor treatment	- Elimination of hunger
- Employment		- Knowledge and education
- Good health, safety, and	- Community/society	provision
occupational health	treatment	- Creation of a peaceful
- Respect for human rights	- Labor treatment	society
- Customer/ consumer treatment	- Stakeholders' participation	- Human capital
- Competitor treatment	and support	development
- Social capital	- Social partnership	 Impacts on community/ society
Environmental content		society
- Resource utilization for business	- Biodiversity	- Quality and safe product
operation	- Cautions in operations	or service
- Compliance with environmental	causing environmental	- Climate change/ disaster
standards	impacts	strategy and coping
- Effective use of resources	- Elevation of environmental/	- Development and
(water, forestry, air, energy,	eco-industrial responsibility	dissemination of
plants, and animals)	- Restoration of ecosystems	innovative technology that
- Environmental/natural resource	caused by corporate	is friendly to the
management	operations	environment
- Waste management	operations	- Animal welfare
Corporate governance content		
- Profile and qualifications of the	- Shareholders' rights	- Securities holding and
board and top executives	- External auditing	changing
- Types of committees	- Channels and a process of	- Information stability and
- Roles and responsibilities of the	complaint and	security, i.e., use of inside
board/ executives	whistleblowing management	information or insider
- Scope and authority of the	and protection	trading, cybersecurity, etc.
board/executives	 Risk/ opportunity assessment 	- Operational governance
- Nomination of the board/ top	and risk/crisis management	and internal audit
executives	- Discretion examination	- Ethics/ codes of ethics
- Fair and equal treatment of	- No law/regulation violation	- Conflict of Interests
shareholders and stakeholders		
	- Privacy protection Board Componsation	- No intellectual property
 Related Party Transactions 	 Board Compensation 	violation

 Table 4.5
 Sustainable Development Content of Thai Listed Company

Sustainasie 201		olea company
Anti-corruption content		
- No corruption of any form	- Gifts, service, and other	- Fraud-risk assessment
- Political support	expenses	- Use of government
- Donation for charity	- Inquiries and suggestions	property
- Giving or gaining financial	- Internal control	- Prevention of corruption
support	- Follow-up and review	in a wide range
- Procurement/ material sourcing		- Measure implementation

Sustainable Development Content of Thai Listed Company

4.2.2 Planning and the Use of Communication Channels

A communication channel is another important factor of a communication process for SD as it is the mediator in transmitting sustainability message to stakeholders. Thus, message design must be congruent and appropriate for a communication channel. Especially, nowadays there has been a more variety of communication media, devices, and channels. The compatibility between the roles of organizational communication and the use of media is therefore very crucial and must be considered cautiously. (Beger, 2018)

We have plenty of channels, depending on each group of our stakeholders. Mostly, we have to consider first which group of stakeholders we want to communicate with. Generally, we communicate regularly with our stakeholders. While communicating with them, we can ask and assess which channel is proper for them and our available media. A sustainability report is another medium or channel we communicate to them. We also have websites, Facebook, Line official for both internal and external groups, etc. Shortly, we have various channels, but it depends on which channel can access each group of them. (Key informant No. 4)

A company should identify each step of communication and which agency or office is responsible in each step. If it is internal communication, who should be responsible, and who should be responsible for external communication. Then, it enables the company to check the transmitted message more easily and avoid an overlapping, i.e., a practitioner had told about this, but another practitioner told about this again. It is a crucial point. (Key informant No. 11). For the deployment of top-down communication, it is necessary for a top executive to know how to answer to respond to the target goal. The media we use to support this can be emails, signage, etc. Thus, it must be commonly understood that both media must be used, not one of them. (Key informant No. 8)

...After being transmitted from a top executive, we must consider through which channel we should transmit the received message further, i.e., through an announcement at the town hall, media, face-to-face notification, etc. (Key informant No. 19)

Communication channels are very vital. Once we have a good message, we must have a good communicator as well. We must choose the right communication channel for a specific group of receivers. For example, if we will communicate about integrated agriculture to tribes in the distant area, the channel should be personal media or face-to-face communication with community leaders or knowledge provided in groups at the area since they do not watch TV so much, nor access the internet due to the limitation of online media exposure. All of these restrictions must be considered. (Key informant No. 24)

Therefore, communication channels are very crucial and each company has to reveal the corporate channels that are convenient and easy for use, including providing facilities for each group of their target receivers to be able to search for or to obtain the corporate information, advice, complaints notification, interaction, and participation properly. From the study, each company plans and generates media appropriate for each group of its stakeholders as follows:

CPALL focuses on promoting all organizational units to participate with all groups of stakeholders via communication channels and activities that are suitable for each of 11 groups: employees, store partners, customers, business partners, suppliers, shareholders and investors, community/society/and the environment, government sector, NGO and opinion leaders, mass media and bloggers, debtors, and rental-place owners. The purpose of communication is to understand the stakeholders' perspectives, expectations, and suggestions towards organizational operations, including finding opportunities to communicate the corporate SD operations to all groups of stakeholders. Generally, different media is used for communicating with each group of stakeholders as follows: 1) Customers: channels are used for acquiring their opinions via information service center and customers' complaints, websites, and social media, including an opinion survey and a direct interview or talk with them. 2) Trade partners and suppliers: meetings, seminars, corporate policies announcement, visits for listening to opinions, a meeting with trade partners, innovation co-creation projects, an annual satisfaction survey, interviews, conversations, and the customer relations center is used. 3) Community and the environment: Communication channels are 7-11 stores, call center, online and social media, suggestion box in front of the sub-district administrative organizations and merchandise distribution centers, community visits every quarter, community relations activities surrounding the factory and company areas in some occasions, billboards, and PR media. 4) Employees: Communication channels are internal grievance channels, visits of branches, offices, and merchandise distribution centers, intranet system, domestic journals, daily information announcement via digital channels, meetings, and an annual survey of employees' satisfaction and engagement. 5) NGOs and Opinion Leaders: Communication channels are used for listening to and exchanging perspectives and ideas, including opening an opportunity to participate in all activities, activity or project support. 6) Mass Media and Bloggers: Communication channels are the annual activity of promoting media producers, award granting, organization of community and social support projects with mass media, interviewing, interactions, social online, support, and participation in mass media's activities. 7) Government Sectors: communication channels are direct contact with government officers, visits and inspections, participation in developing projects, opinion expression on stage, open relationship establishment activities, and collaboration and support project activities. 8) Rental-Place Owners: communication is conducted through Call Center, PR via SMS, and an opinion survey. 9) Store Partners: Communication is through Call Center, journals and monthly printed media, seminars and corporate activities, and a yearly engagement survey. 10) Shareholders and Investors: Communication channels are the organization of the Analyst Meeting every quarter, the Annual General Meeting of Shareholders, financial statement reports,

annual reports, SD reports, and Annual Information Registration Form (56-1), prospectus, documents, information-processing, websites, telephones, emails, faxes, letters, domestic and international roadshow activities, store/factory/inventory visits, assessment by national and international regulating agencies. 11) Creditors: Communication is through a meeting, consultation upon request, printed media, letters, and information processing. (CPALL, 2019b)

CPF communicates to all groups of stakeholders inclusively and gives importance to their participation via activities and communication channels continuously, to know the stakeholders' needs, perspectives, ideas, doubts, and suggestions, which will be useful for applying to develop practical guidelines that accord with sustainability operations properly and fairly. However, the frequency of communication with each group of stakeholders is different due to the corporate operational plans and stakeholders' needs. Typically, the main communication channels used to convey sustainability messages to all eight groups of the stakeholders are as follows: 1) shareholders and investors: Communication is through conferences, calls, roadshows, corporate visits, quarterly meetings, and the Annual General Meeting of Shareholders. 2) Employees and Families: Communication is through CEO Town Hall annually, CEO Corner, intranet, CPF Connect, mobile application, emails, E-newsletters, HR communications (video clips, announcement), conversations, meetings, an opinion survey, a welfare board quarterly meeting, a meeting of the safety committee, and annual performance assessment. 3) Customers and Consumer: Communication channels are meetings, customers' complaint center, CPF consumers center, field visits, examination, and the annual opinion survey. 4) Business Partners: Communication is through telephone, emails, meetings, seminars, field trips, special collaboration projects, annual collaborative projects, annual assessment, and an opinion survey. 5) Community and Society: Communication is through grievance channels, the annual opinion hearing and survey, dialogue, annual field trip, and quality of life promotion activities. 6) Government Agencies: Communication is through occasional meetings, seminars, development collaboration, and support projects and public benefits activities. 7) Civic and Academic Sector: Communication is through monthly opinion hearings and exchanges, networked working support, company visits, and monthly seminars. 8) Mass Media:

Communication is through all types of communication devices, press conferences, monthly interviewing, activity participation support, and mass media's company visits (CPF (2020a).

CPN conducts communication with and participation of stakeholders of nine big groups by determining communication channels that can respond to each target group's needs and behaviors differently as follows: 1) Customers: Communication channels are Facebook, Instagram, YouTube, Line, and social media on Application Line under the name of "@Central Life" for exploring customers' satisfaction and behaviors. 2) Tenants: Communication is through business ethics handbook, tenant meetings at each branch and in each quarter, entrepreneur training and development, special activities for meeting tenants, and the annual survey of tenants' satisfaction via an online system. 3) Employees: Knowledge is provided through emails and newsletters, training and seminar for potential development and leadership, health promotion activities, organizational engagement creation, sustainability assessment once a year, one-time CG Individual Assessment for general employees, two-time executive assessment (at the deputy-director level up), one-time by 360-degree assessment at the middle-management level. Besides, communication is through emails, posters "Admired Plus", CPN radio, internal TV or CPN Channel, social media application called "CPN GEN WE" and additional communication via platform "Workplace by Facebook," which supports the live broadcasting of the meetings, Group Calling, and information analysis system. Besides, Artificial Intelligence system is adopted via Chatbot named "Nong Cee" for answering employees' questions particularly, i.e., employees' welfare, leave days, holidays, including telephone numbers of internal calls, activities, i.e., annual employee relations, family day activity, sports activity, free-time recreation activities, "Moment That Matters" activity (by writing a recognition card to express good feelings and appreciation to colleagues or co-workers), energy day, workshops on good governance, anticorruption, and bribery activities, and a leader prototype based on the organizational values called "I CARE4." 4) Business Partners: Communication channels are one-onone Luncheon Talk with new alliances, consultation meetings with business partners for creating a new business model based on the circular economy, various channels, such as information disclosure on websites, through letters, telephone, for

communicating major policies to business partners and relevant stakeholders, Application Line to communicate major policies, i.e., no gift acceptance to customers and business partners to be acknowledged and comply with. 5) Community: Communication is through the visiting or study trips and collaborative consultation on the environment under the project "CPN Love the Earth," or "Central Do" Project, in which the company collaborates in agricultural and community development, knowledge provision and sharing about safety and fire extinguishment activity, volunteer activities, including the activities for increasing green areas of the country and doing good deeds with heart, totally 134 activities, communication in the shopping malls on the worthwhile use of resources, campaign activities, PR marching, and "Turning off light for one hour to decrease global warming" campaign. 6) Government and academic sectors, including NGOs and other organizations in the society: Communication is through periodic consultation with government agencies, comments from the experts of SET Sustainability Excellence Awards, advice and recommendations from the independent entity (twice), a consultation meeting on waste management and green area expansion projects with the Bangkok Metropolitan Administration Agency, provincial municipality, business and social networks, an opening area for study activities and knowledge-sharing with academic agencies. 7) Shareholders: Information is disclosed through the website (www.cpn.co.th), the annual report, a survey on major sustainability issues from the shareholders' perspective (1 time), responses on the assessment form, and "Opportunity Day" or the meeting day between the listed companies and investors, organized every quarter. 8) Business Competitors: Communication is through a consultation meeting for achieving unified operations to comply with the government policies and laws. Besides, the Thai Shopping Center Association was established as one of the collaborative projects among companies in the same line or group of business, aimed to exchange experiences and business operations towards common benefits. The information from the Association is communicated through several channels, i.e., news conferences, media interviews, disseminated documents, seminars, etc. The main theme of the transmitted information is to provide useful and updated knowledge and information about the shopping center business to the general public. 9) Creditors: The information is disclosed through the website www.cpn.co.th.

Besides, there is Opportunity Day, which is the quarterly meeting activity between the listed companies and investors, the annual report, and direct contact with a financial management agency. (CPN, 2019a)

HMPRO organizes a variety of channels for communicating with external stakeholders, i.e., Website, email, social media (such as corporate Line and Facebook), etc. Besides, agencies with direct responsibilities in communicating significant information to stakeholders regularly are assigned, including the arrangement of complaints or grievance channels and the management of whistleblowing systems, to make the employees and external people be assured that their appeals would be scrutinized transparently, honestly, and fairly, including being kept confidential within the appropriate time. The company has the following communication channels with its stakeholders: 1) Customers: Communication channels are a survey of customers' satisfaction, suggestion boxes at every branch, Call Center no. 1284, customer service center, complaint channel via the corporate website, PR activities, or communication through social media. 2) Employees: Communication is through information provision for employees, a satisfaction survey questionnaire, functional meetings, training via E-learning system, intranet systems, notices, new employee orientation, letters, a top-down communication from top executives to employees via Town Hall activity, organizational intranet, emails, and mobile application, complaint handling units, HR units, direct appeals to the top executives, or via Email Hotline, and HR Clinic. 3) Business Partners: Communication is through Vendor Relationship Management system (VRM), business operations code of ethics, policies, and regulations of joint ventures, corporate and inspection visits, training programs for business partners, and corporate websites for contacting the executives. 4) Creditors: Communication channels are corporate websites and telephone. 5) Shareholders and investors: Communication is through the annual report, shareholder meetings, the telephone contact number of the Investors Relations Division, email, and corporate websites. 6) Community: Communication channels are visits of surrounding communities, contact through a branch manager, and corporate websites. 7) Government sectors and other organizations: Direct contact with the management, official divisions, and corporate websites. (HMPRO, 2019c)

KBANK gives high importance to communication that responds to the stakeholders' needs and expectations by organizing communication operational plans and practical guidelines, including encouraging participation of the stakeholders of all the nine groups through various channels as follows: 1) Shareholders: Communication is through general and extraordinary meetings of shareholders, information disclosure via SET Portal systems, the bank's websites, domestic and external printed media, the direct meeting with and knowledge provision to shareholders, investors, and general people individually or as a group, of both Thai and foreign, an inquiry channel via websites, and the response of the questionnaires. 2) The Bank Committee: Communication channels are a monthly board meeting (except for urgent cases), an independent board meeting before the official board meeting, information provision through the bank's various channels. 3) Regulating Agencies: Communication is through meetings for acquiring corporate policies and governance guidelines and direct coordination with the regulating agencies. 4) Employees: Communication channels are orientations, an inquiry of employees' and chiefs' needs for preparing a proper learning program, suggestion channels, a survey of employees' satisfaction, employee engagement activities of both online and offline, i.e., yammer teams, swat, podcasts, Line, Facebook, and face-to-face meetings between a superior and subordinates 5) Customers: Communication channels are the direct supervision of the customer relations division, visits, PR media, channels for suggestions, opinions, and complaints, seminars and training for providing knowledge, a satisfaction survey, the creation of new digital channels via social media, i.e., Line, Facebook, Twitter, YouTube, Pantip Application, etc., and services via the bank's branches and counter services of the bank. 6) Trade and Business Partners: Communication is through the annual meetings, consultation for brainstorming, information provision, visits of trade partners, suggestions and complaints channels, a satisfaction survey. For business partners, communication is through meetings, discussion, and regular annual activities for enhancing relationships. 7) Competitors: Communication is through a meeting, discussion for idea exchanges, periodical collaborations. 8) Creditors: Communication channels are the organization of regular annual activities for enhancing relationships and providing knowledge, and channels for suggestions and complaints. 9) Community, Society, and the Environment: Communication is through survey

interviews for obtaining opinions and needs, organized annually, and the organization of community relations activity via volunteer and social enterprise projects. (Kasikornbank, 2019b)

MINT unites a communication process and a participatory process of stakeholders as a part of business operations. The participation and communication with the stakeholders are done through several channels to enable the company to operate as needed and expected by the stakeholders properly. The communication with each group of stakeholders uses the following channels: 1) Customers: Communication is through the interaction with customers during the services, a survey of customers' satisfaction, Call Center, emails, channels for suggestions via social media and mobile application, monthly marketing research, a monthly and quarterly survey and assessment of brand's satisfaction, interactions, network establishment, corporate visits, exhibitions, product, and service display. 2) Employees: Communication is through a survey for assessing employees' satisfaction, the annual performance evaluation, individual development plans, consistent interactive activities between employees and executives, i.e., Appreciation Week of the Hotel Group activity, Afternoon Tea with CEO organized by new employees, manager meetings, joining breakfast together every week, annual employee party, online seminars, training, corporate visits, newsletters, latest news report through the intranet continuously, division meetings, corporate activities, internal channels for receiving employees' complaints, students' internship programs, and a survey for evaluating the intern's satisfaction, and CSR activities for creating conscience towards social responsibility. 3) Shareholders, investors, and creditors: Communication channels are the annual general and extraordinary meeting of stakeholders, investor relations activities, corporate visits, roadshows, analysts' quarterly meetings and other meetings, meetings with financial institutes for funding, and information notification to shareholders via corporate websites and emails regularly. 4) Business alliances: Communication is through a regular joint meeting, communication of general managers to franchise business entrepreneurs every two month, regional franchise business entrepreneur meetings quarterly, the annual meeting of domestic and international franchise business entrepreneurs, corporate activities, social enterprises, SD projects, and the annual opinion survey, meetings with brand owners,

communication from CEO and top executives to hotel owners, co-investors, and business alliances, communication, and meetings between hotel. 5) Trade Partners: Communication is through meetings, inspection visits, regular product examination per the determined standards, training for trade partners and the organization of activities for enhancing regular participation, annual seminar organization, and a continuous opinion survey. 6) Community: Communication channels are community visits and meetings with community leaders regularly, participation with the community via employment and raw material purchasing, and other community development activities, including being members of local administrative organizations or community committees. 7) Mass Media: Communication channels are news conferences, interviews, public relations, and meet-the-press activities, including communication in various forms both online and offline. 8) Government sectors: Communication is through ministerial meetings, participation in activities, visits of projects organized regularly by government agencies, joining in a collaborative committee initiated by government sectors, and the acceptance of the top executives to be guest lecturers in the governmental seminars for knowledge and experience exchanges. 9) NGOs: Communication is through meetings, seminars, and contact regularly with NGOs. (Minor, 2019b)

PTT creates participation with stakeholders efficiently by listening to their needs, expectation, doubts, and suggestions for analyzing and combining them into the process of strategic planning and communication to achieve stakeholders' satisfaction, trust, engagement, and long-term support to help the company grow sustainably. The channels used to create the stakeholders' participation are diverse, both formal and informal, i.e., an opinion survey, suggestions from the PTT board, complaints through PTT Website/ Whistleblowing, email (pttvoice@pttplc.com), PTT Contact Center (1365), visits of operational areas, activities for investors, the board meeting, corporate relations, etc. The company communicates to each group of stakeholders through the following communication channels: 1) The Country: Communication is through consultation with government agencies every month, visits of operational areas of PTT monthly, seminars, and workshops for creating an understanding with government sectors quarterly. 2) Society and Community:

CSR projects, PTT Contact Center (1365), PTT websites. email or (pttvoice@pttplc.com). 3) Shareholders: Communication is through PTT websites and PTT Debenture Application for shareholders to verify the information of their debenture by themselves, to apply for joining any activity, and to collect their points for special prizes. The monthly activities for shareholders are visits to the PTT group's operations, seminars in economic subjects, the annual general meeting of shareholders, and roadshows in foreign countries to meet and motivate foreign investors. For the investors, there is "Investor Relations," through the email (pttir@pttplc.com). 4) Customers: Communication is through the annual customer seminar, regular customer visits by salespersons and executives as specified in the plan, PTT Contact Center 1365, customers' opinion acquisition through the annual customers' satisfaction survey, joint seminars with customers, the establishment of an effective database through the use of modern information processing technology, customer engagement through activities, the determination of communication mechanism in communication and listening to customers' ideas via its website and social media, including complaint channel through PTT Contact Center 1365. 5) Business Partners: Communication channels are the annual traders' seminar, a new procurement system under the Digital Procurement Project, complaints or whistleblowing through the email (grchelpdesk@pttplc.com or pttvoice@pttplc.com), and training on a system of sustainable procurement. 6) Employees: Channels are provided for receiving employees' opinions. Besides, other communication channels are the monthly meeting of the corporate relations committee, the regular meetings among CEO, Managing Director, top executives, and employees of all levels as planned, training on good corporate governance and anti-corruption for new employees in the orientation program, training of all employees on certain programs, including training through CG E-learning system, the pre- and post-tests of employees' knowledge and understanding in the "GRC Camp" training, communication about GRC via the meetings of different lines or divisions, communication with employees at the operational field, PTT Group CG Day, the risk management handbook via knowledge management systems. (PTT, 2019b)

SCC focuses on transmitting relevant corporate information to all concerned: financial information, operational performances, sustainability information, etc.

correctly, completely, and transparently. Besides, a variety of communication media and channels are developed to be useful for stakeholders, such as the establishment of the investor relations unit; a news conference on the business performance quarterly, including news about investment projects and important activities; a notification of operational performance to investors and analysts every quarter; meeting with employees activities for informing about business policies and operational guidelines; meeting with Thai and foreign investors and stakeholders activities; lectures on several subjects in the national and international seminars, company and factory visits of shareholders, investors, analysts, scholars, community, mass media, and any concerned party; news dissemination via mass media in different forms and channels, i.e., PR, news illustrator, articles, advertisement, and social media; printed and other media for publicizing SCG information, i.e., the annual report, the SD report, debenture journals, customer journals, distributor journals, and employee journals; the dissemination of the message to the employees via electronic media, i.e., intranet, email, social media, and the website (www.scg.com).

Typically, SCC uses the following channels to communicate to each group of the stakeholders: 1) Shareholders/joint ventures or business partners/creditors: Communication is through investor relations channels, the annual general meeting of shareholders, the quarterly meeting of analysts, annual company visits per line of business, roadshow activities, meetings with investors twice a year, and communication of operational performance through the annual and SD report. 2) Employees: Communication with the employees is both formal and informal through several channels, i.e., employees' skill development projects, leadership activities, Forum every quarter, quarterly employees meeting with the executive activities, a survey of employee engagement every two years, Employee CONNECT Application, the notification of corporate information and movement, i.e., Business Movement, Regional Movement, Inno Update, SD Update, SCG Circular Way, via emails and other channels, such as the creation of awareness and working behavioral modification towards safety culture, Facebook Fan Page, and whistleblowing channels (i.e., https://whistleblowing.scg.com). 3) Business Partners: Communication is through telephone, corporate websites, the support of the operational knowledge on the environmental, social, and good governance dimension of ESG principles, sharing

of knowledge and new trends, and the creation of awareness and working behavioral modification towards safety culture. 4) Customers: Communication is through email, Line, etc. by integrating with service and solutions that can respond to customers' needs completely, consultation for customers via 24-hour Home Buddy Application, customers' complaints, advice, and comments via 24-hour SCG Contact Center, and the co-development of products with customers of the same line of business. 5) Community: Communication is through telephone, corporate websites, Facebook Fan page, monthly community visits for listening to the community's ideas, suggestions, and needs, the annual survey of a community's satisfaction, and being companions, consultants, and community helpers in various dimensions of community development based on the organizational potential. 6) Government Offices: Communication is through telephone, corporate website, channels for listening to government sectors' opinions and advice, and for delivering corporate feedback, ideas, and suggestions to the government regulations and practices, the creation of participation with government sectors, and the sharing of best practices for the government sectors to disseminate widely to other organizations. 7) Mass Media: Communication is through telephone, emails, corporate websites, Facebook, Fan Page, a quarterly news conference of operational performance, visits of corporate operation, and thanks to the journalist activity, organized annually. 8) Civil society, scholars, and opinion leaders: Communication is through telephone, websites, listening to opinions and suggestions, and collaboration in social sustainability promotion projects. (SCG, 2019c)

From the above information, Thai listed companies communicate to each group of their stakeholders through a variety of channels and media: printed, mass, electronic, personal, activity, and new media, for transmitting content of sustainability operations, covering all target groups of the organization. Major channels used to communicate and create participation of the stakeholders of Thai listed companies are summarized in Table 4.6.

Channels for Stakeholder Groups	CPALL	CPF	CPN	HMPRO	KBANK	MINT	TT	SCC
Employees	\checkmark	\checkmark	~	✓	√	√	✓	√
- Meeting/ conversation	~	1	~	\checkmark	✓	✓	✓	✓
- Direct complaint channel	\checkmark	1	1	~	\checkmark	\checkmark	\checkmark	\checkmark
- Notice/ announcement		X	1	~				
- Poster			V					
- Letter				•				
- Newsletter	./		1			_ v		
- In-house journal	v		v				1	
 Handbook/ guideline Public Address Voice System 			1				•	
- In-house TV			· ·					
- Video Clip		1						
- Video Conference			1					
- Hot Line				\checkmark				
- HR Clinic				~				
- Intranet	\checkmark	1		\checkmark		\checkmark	\checkmark	\checkmark
- Corporate website	~	~	\checkmark	\checkmark				\checkmark
- Mobile Application	1	\checkmark	1	\checkmark	\checkmark			\checkmark
- Social Media				1	\checkmark			\checkmark
- Email	\checkmark	\checkmark	1	\checkmark		\checkmark		1
- e-Newsletter		\checkmark	\checkmark					\checkmark
- e-Learning			1	\checkmark			\checkmark	\checkmark
- AI Chatbot			\checkmark					
- CEO Town Hall/Executives Meet Employees		1		\checkmark			\checkmark	\checkmark
- A role-model person/ executive			\checkmark			✓		\checkmark
- Employee relations activity (organizational			~		\checkmark	~	\checkmark	~
engagement)								
- CSR activity	\checkmark	\checkmark	~	~	~	1	\checkmark	1
- Campaign activity (CG Day)							\checkmark	
- Corporate/branch visits	✓	,	,			~		
- Orientation	√	✓	~	~	1	\checkmark	1	×
- Conference/ seminar	√	~	~	~	~	1	×	v
- Knowledge and skill development training	~	V	~	~	~	-	~	✓
- Opinion survey	V	~	~	~	~	× ,	v	v
- Annual assessment	v	V _	~	V	~	V	✓	✓
<u>The country</u>		4					√ **	k
Board/ Committee					•			
- A board meeting					•			
- A committee meeting					•			
- Reports					↓			
- Corporate websites	~	√	~	√	· ·	√ *	√	✓ *
<u>Shareholders and Investors</u> - Annual report	↓	↓	∨	∨	↓	• .⊼ √	∨	• * •
- SD report	✓	• ✓	• √	↓	√	√	, ,	√
- Annual registration information form	✓	• •	✓	✓	√	✓	✓	√
 Prospectus / information processing 	✓	✓	✓	✓	✓	✓	✓	✓
- Telephone / Conference Call	\checkmark	\checkmark		1	1			1
	\checkmark				\checkmark			
- Fax	\checkmark				\checkmark			

Table 4.6 Major channels used to communicate and create participation of the stakeholders of Thai listed companies

Channels for Stakeholder Groups	CPALL	CPF	CPN	HMPRO	KBANK	INIM	PTT	SCC
- Letter	√							
- Email	v	/	/	v	/	v	/	•
- Corporate website	v	v	v	v	v	v	v	v
- Mobile Application	v		./	./	./	./	•	./
- Report to regulating agencies, SET, SEC	v	v	v	v	•	v	v	v
- Direct approach	1	1			v	./	1	
- General meeting/seminar	1	1	1	1	1	• •	•	1
 Analyst Meeting/Opportunity Day (quarterly) General meeting/ extraordinary meeting (annually) 	1	1	ý.			1	· ✓	· ✓
- A news conference of major issues, i.e., financial		1	1	· •		$\mathbf{\dot{\mathbf{v}}}$	· ✓	· ✓
statement		- 1						•
- Corporate/ office/ branch visit	\checkmark	\checkmark				\checkmark	\checkmark	\checkmark
- Roadshow: domestic and abroad	√	1			1	\checkmark	\mathbf{V}	√ -
- Opinion survey			\checkmark		1			
- Assessment by regulating agencies	\checkmark							
Government sectors and agencies	\checkmark	✓	~	~		~	✓	$\overline{}$
- Telephone								\checkmark
- Meeting/direct coordination	~	1	~	\checkmark			\checkmark	\checkmark
- Meeting / Seminar	\checkmark	1	~			\checkmark	\checkmark	
- Operational inspection/visits	~		1			\checkmark	\checkmark	
- Activity/project support	\checkmark	1						
- A stage for expressing and listening to opinions	\checkmark		\checkmark			\checkmark		\checkmark
- Open relationship establishment project	\checkmark							
- Joint activity/ project	~	~				\checkmark		\checkmark
- Knowledge-sharing/lecturer						\checkmark		~
- Corporate website				~				\checkmark
Customers/consumers	✓	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	✓	\checkmark
- Service branch/ point of service					\checkmark	\checkmark		\checkmark
- Meeting /direct conversation and interview	1	\checkmark			\checkmark	\checkmark	~	~
- Information service center and customers'	\checkmark	\checkmark		\checkmark	\checkmark	~	~	~
complaint								
- Suggestion box				~				
- PR media					~			
- Corporate website	\checkmark			~			~	v
- Email	,	,				~		~
- Social media (FB, IG, YouTube, Line)	✓	v	~	~	1	~	× .	1
- Mobile Application		~		~	~	~	~	~
- Meeting/ seminar		V			~		~	,
- Knowledge training					1		1	~
- Field trip		~			~		✓	
- Company visits						•		
- Exhibition/ product display		1				v		
- Assessment		v				./		
- Marketing research/ customer database	1	1	./	1	1	v ./	v √	./
- Opinion survey	•	•	•	•	•	•	• √	• -/
Business Partners/Suppliers	•	•	*	•	•	v	v	•
- Face-to-face meeting, conversation/interview	v	• •	• ./	• ✓	v			• ./
- Telephone		v	•	v				v
- Letter			• √	1				1
 Handbook and guidelines (business ethics) Email 		1	•	¥			1	•
- Email - Corporate website		•	\checkmark	\checkmark				\checkmark
- Social media (FB, Line)			✓	-				
			-					

Channels for Stakeholder Groups	CPALL	CPF	CPN	HMPRO	KBANK	MINT	PTT	SCC
- Meeting/ seminar	\checkmark							
- Training				\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
- Announcement of corporate major information	\checkmark							
- Visit at the area	\checkmark	\checkmark			\checkmark			
- Operational visit				\checkmark				
- Joint activity/ project	~	\checkmark				\checkmark		
- Customer relations center	~					,		
- Annual opinion survey	~	1			~	✓		
- Annual assessment		\checkmark		\checkmark				
Business Alliances	\checkmark		✓			\checkmark		
- Meeting/ conversation			~			\checkmark		
- Direct telephone	,					\checkmark		
- Call Center	√							
- Journal and printed media	√		,					
- Meeting/ seminar	√		\checkmark			~		
 Notification of corporate policy and direction 	\checkmark							
- Annual opinion survey	-		~					
- Knowledge development training			1					
- Get-together/ celebration meeting			~					
- Social enterprise						✓		
- Admiration/ award granting activity		\sim				\checkmark		
Competitors			\checkmark		\checkmark			
- Foundation of the Association			~					
- Meeting/ conversation			1		~			
- Meeting/ seminar		4	~		~	,		×,
Creditors	√		~	V	\checkmark	√ *		√ *
- Contact with direct agency	¥		\checkmark	~				
- Letter/ information media	× /							
- Printed media/ document	V				,			
- Telephone				~	✓			V
- Meeting/ seminar	~					~		~
- Knowledge training					~			
- Relationship creation activity					× /			
- Corporate website			~	~	~	× .		×
- Email						~		~
- Annual report			•					v
Community and Society	•	V	-	~	~	~	~	•
- Store/ corporate space	v		v		×			•
- Call Center	•						•	•
- Corporate website	•			~	~		•	V
- Email							✓	/
- Social media	V							V
- Complaint channel, i.e., suggestion box	V	V	1		v			
- Meeting/ seminar		v	×					
- Knowledge training (safety)			v					
- Corporate visit	./		v	./				./
- Community visit	v	v		•	v	•	./	•
	v	v	v	v	v	v	v	v
- Community relations/ voluntary social promotion								
activity			1					
activity - PR marching			√					
activityPR marchingCampaign activity (turning light off for one hour to			√ √					
activity - PR marching			✓ ✓					

Channels for Stakeholder Groups	CPALL	CPF	CPN	HMPRO	KBANK	MINT	PTT	SCC
- Local administrative member/ community						\checkmark		
committee	,							
- Billboard	√							
- PR media	✓	,			,			,
- Annual opinion survey	V	~			\checkmark			✓
NGOs/ civil society sector	\checkmark	\checkmark				\checkmark		\checkmark
- Hearing / Face-to-face conversation		\checkmark				\checkmark		\checkmark
- Meeting/ seminar	\checkmark	~				\checkmark		
- Telephone						\checkmark		\checkmark
 Activity/project support 	\checkmark	\checkmark						\checkmark
- Corporate visit		\checkmark						
- Activity participation	\checkmark							
- Corporate website								\checkmark
Mass Media/ /Blogger	\checkmark	\checkmark				1		\checkmark
- Telephone								~
- Giving an interview	\checkmark	~	~			\checkmark		
- Meeting/ conversation	✓					\checkmark		
- News conference		1	~			\checkmark		\checkmark
- Social media	\checkmark					✓		\checkmark
- Email								\checkmark
- Corporate information center		~						\checkmark
- Project/ activity support	\checkmark	\checkmark						
- Award granting	✓ ✓							
- Joint projects for social/ community support	~							
- Corporate visit		\checkmark						1
- Thanks to the press activity				Y				\checkmark
Rental-space owner	\checkmark							
- Call Center	1							
- SMS	1							
- Opinion survey	\checkmark	(\mathbf{Z})						
Regulating agencies		V J			\checkmark		-	$\overline{7}$
- Meeting					\checkmark			
- Visit					\checkmark			
- Telephone					1			

Note:

* MINT and SCC assess stakeholders by combining creditors with shareholders and investors group despite their different expectations.

** PTT specifies the country as the major stakeholder of the company. However, from analyzing group characteristics, it belongs to the government sector/ agencies group.

From the above Table, it shows the types of channels Thai listed companies use to communicate and create participation with groups of stakeholders through a variety of channels so that they can transmit SD message to each target group most effectively. From the analysis, the following interesting issues of communication channels are found: 1) Employees are significant stakeholders in driving and creating participation in the SD approaches. All Thai listed companies give importance to communicate organizational stories through internal communication channels as the major channels, as follows:

(1) Personal media, i.e., face-to-face conversation or meeting, in the form of informal and informal communication. Notably, personal media is always influential on the perception of SD content for this group of stakeholders.

(2) New media, i.e., intranet, corporate website, and email, are channels to which companies give importance for communicating with internal stakeholders. For the intranet, it can carry information, provide knowledge, report operational performance, and evaluate employees' performance effectively.

(3) Activity media, i.e., CSR activity, meeting, seminar, knowledge and skill development training, etc. Activities are media that all companies choose to communicate with their employees continuously. However, the activities must be accordant with the SD guidelines as determined by the organizations, especially the orientation activity, which is the first or initial activity for creating sustainable value and corporate culture for new employees so every company communicates SD concepts in this activity. The other two types of activity for examining feedback from communication for SD are an opinion survey, i.e., perception, satisfaction, loyalty, and participation; and annual assessment by containing it as a part of the indicators of the employees' operational performance

2) Shareholders and Investors are external stakeholders to which every company gives importance since they are the group that can affect organizational operations constantly. Thus, every company aims to communicate its SD practices through the following important channels:

 Printed media is still paid a high attention by this group. It can be an annual report, the SD report, Annual Registration Statement report (or Form 56-1), prospectus, and information media that transmit a message directly to shareholders and investors to be informed of the detailed corporate information.

(2) Electronic media, i.e., a telephone is a major channel for communicating with the companies whenever shareholders or investors are interested

in any issue. Most companies provide telephone numbers of the investor relations section so that they can contact the companies immediately and directly

(3) New media, i.e., corporate websites are important channels enabling investors to search for information and follow the movement of the companies. Remarkably, every company classifies the investor category separately from sustainability. Thus, the design of the websites must be interesting and present relevant content that is explicit, easy-to-understand, and updated.

(4) Activity media that are essential for shareholders and investors are Analyst Meeting/Opportunity Day, the annual general meeting of the shareholders, new conference of major issues required by regulating agencies. Therefore, every company organizes these activities. Roadshows, domestic and abroad, are channels for stimulating investors' decisions and assurance; thus, they must be well-planned and prepared.

> For investors, shareholder meetings and analyst meetings are important. It may not be necessary to organize it every quarter, but can be organized as a separate session, similar to knowledge sharing to make investors understand. They can be organized twice a year instead or before holding any analyst meeting or before presenting business performance. For instance, we may say that since we will have some plans by the end of the year, we should come half an hour earlier to organize this session especially, i.e., visits or meetings with the executives. The main point is it should not be too frequent. For me, once a year is enough. (An institutional investor)

Besides these four media, the investors also follow information via mass media and other information sources additionally, such as analytic information from regulating agencies, or SD assessment agencies, both Thai and international, for making their decisions for their investment with the companies.

> For information disclosure, the companies disclose a large amount of information since they must be open to comply with GRI

standards. However, is it sufficiently communicated? I think communication is still little. Lately, it seems to be more. Now we can meet at least once a quarter at the analyst meeting or when the performance will be reported. In the past, they will talk about business or financial performance only, but now they start to talk about sustainability. Still, it is not so much, but just a part, a small part in the report...

Mostly, I will be exposed to general news from the media, i.e., looking at corporate websites sometimes, but not so often. Nowadays, we invested our shares in SET, but we cannot reach SET100. We have no time to follow it. However, we have to balance between sustainability and financial return. For sustainability issues, we will look at them after they have proceeded and we have to do ESG scores. However, we are not experts in G or S, so it's quite difficult for us to score both of them. For G, we can score it because we know what the company looks like after knowing it for a while, but for E and S, we cannot score them. Instead, we have to buy information from MSCI, as a part of our information of ESG research. We still cannot cover them all. There is a lot of information, but at least we get the information. (An institutional investor).

3) Government Sector/ Agencies are another important group since every business has to coordinate with government officials, especially in the governance, follow-up, and request permission for the business to proceed. Most organizations thus give high importance to this group of stakeholders. The important channels used to communicate with them are as follows:

(1) Personal media is in the form of meetings, contact, and coordination with government agencies with direct responsibilities, including notification, conversation, and consultation in several issues. Importantly, a company should select personnel with good communication skills and have relevant knowledge and skills as the company's representatives. (2) Activity media, i.e., meeting, seminar, inspection visit, opinion sharing, and participation in joint projects which the government sector emphasizes. Thus, a company must support and participate in such activities for communication and creating good relationships continuously, based on the foundation of good governance and business sustainability mainly.

4) Customers and Consumers are the stakeholder groups every company highlights, as witnessed from Customer-Centric policies that several companies apply as business operational strategies. They are the major groups that can affect business survival enormously. Accordingly, the companies aim to communicate SD issues to these groups continuously through the following main channels:

(1) Personal media is influential on customers' and consumers' purchase decisions, especially in the service area. Therefore, the companies must select proper personnel and develop their communication skills for conversing and interacting with customers directly to create confidence and trust in the companies' product and service, including creating a good image of sustainability.

(2) Electronic media plays an important role in coordinating and creating participation with the companies through customers' comments, suggestions, and complaints, i.e., through telephone, contact center, etc. The companies thus have to select personnel with communication skills and service mind to communicate and be good representatives for the companies.

(3) New media, i.e., websites and mobile applications, are used by several companies as a channel for communicating with their customers since such media can access them rapidly. Consequently, the function must be easy to use, convenient, and attractive. The popular channel is social media so every company chooses to communicate to its customers by the corporate Facebook, Instagram, YouTube, and Line. Therefore, other companies should consider using proper social media for continuous communication with their customers.

(4) Activity media, particularly a customers' opinion survey in various dimensions: satisfaction, purchase behaviors, engagement, etc. is a crucial channel the companies use for receiving feedback about their communication results and corporate operations. Such a survey should be conducted regularly and

continuously to follow the movement and improve their sustainability operational strategies promptly.

5) Business Partners are the stakeholder group with close relationships with the companies that help to promote and mobilize business towards continuous growth and goal accomplishment as planned. Besides, they can strengthen organizational competitiveness. Therefore, all eight companies give significance to this group of stakeholders as the organizational supply chain. Mostly, the communication of the companies is through the following important channels:

(1) Personal media is very influential for this group as risks in business operations may occur if there is a lack of conversation, meeting, and coordination, leading to sufficient understanding of SD guidelines. Therefore, the companies have to choose skillful personnel who adhere strictly to sustainability principles to perform as role models for their business partners and support them towards collaborative business development.

(2) Activity media is another important channel for developing knowledge, skills, and potentials. Moreover, it can transmit essential concepts of organizational operations to the company's business partners. Most companies use meetings, seminars, and training as main channels.

6) Creditors play a significant role in enhancing business financial fluidity. Therefore, to comply with creditors' conditions is what the listed companies never ignore. Mostly, their communication channels are electronic and new media, namely corporate websites, to follow the movement and business operational performance.

7) Community and Society are important stakeholder groups since they are the groups affected, both directly and indirectly, by organizational operations, which, consequently, may affect organizational sustainability as well. Accordingly, Thai listed companies focus on communication and participation for enhancing community and social acceptance, and trust. The main channels used are the following:

(1) Personal media is in the form of meeting and visiting communities, which must be conducted continuously by personnel with

communication skills and good human relations as the company's representatives to perform communicators of SD concepts.

(2) Activity media is paid a high attention by the companies, especially the activities related to community relation, quality-of-life promotion, volunteer projects, and collaborative development, that the companies have to conduct continuously to create share values for the communities, society, and the companies. Besides, an opinion survey is another activity that helps to inform well about organizational performance.

Although several companies do not specify communication channels clearly for other groups of stakeholders, it does not mean that they do not communicate to these groups. For instance, the group of regulating agencies is another influential group in determining and revoking a company's rights to operate. Accordingly, the communication channel with this group focuses on formal channels, both online and offline. The main channels are reports disclosing corporate information to the public, i.e., the annual report, Registration Statement Form (Form 56-1), SD report, etc. Moreover, the channels can also be confidential reports, such as the board meeting reports that have to be submitted to the regulating agency for being informed, including corporate websites, a database of regulating agencies, etc. Information about corporate SD can be traced from mass media, i.e., newspaper, television, and social media, as well. Furthermore, another important channel is to meet concerned organizational personnel to obtain information and guidelines for continuous SD development.

We follow from corporate websites. (Regulator No. 2)

Sometimes, we follow from the published news. If we need more information, we can get it from a company's website that disseminates needed information. Also, an award granting ceremony is another channel that helps to indicate the fame of the company is taking good care of the SD issues. However, the most detailed information will appear in the annual report of each company. (Regulator No. 1)

At present, we can know about the listed companies' news or information through various channels, but the channel we use the most is a company's report. There are many types of reports: open and confidential. Open reports are the annual report, SD report, etc. Confidential reports are supplementary documents for assessment, i.e., the report of the board meeting, etc. All of the information lets us know how much progress each company gets. Then we can use it for assessing each company's SD operational performance. Besides, we can get more information from SET Portal. Most published news will show up on the SET website. Thus, it is a channel of the market while the other channel is of the public or mass media, such as newspaper news, online news, etc. Several networking sites of social media are also information channels of the listed companies. (Regulator No. 6).

There might be some informal channels that are not reports or websites, but the information comes from our work. When we visit a company, we will provide some information, then the company delivers its feedback or communicate back to us. It's ok to be confidential, but we can use such information for guiding such a company for further improvement in its organization. (Regulator No. 7)

Notably, some groups of stakeholders may be specific target groups and accordant with the companies' business operational nature; therefore, they are analyzed and specified with certain communication channels. On the other hand, some other groups may be the secondary groups; thus, no definite communication channels and participation are explicitly specified. Still, Table 4.8, illustrates that Thai listed companies apply diverse communication channels, both internal and external, for SD communication. The researcher analyzed and classified types of media and channels used by Thai listed companies for SD communication into groups, as illustrated in Table 4.7

	Stakeholder														
Type of Channels / Media	Employee	The country*	Board/committee	Shareholder/ investor	Government sector	Customer/ Consumer	Supplier	Business partner	Competitor	Creditor	Community/society	NGO/civil society	Mass media/blogger	Rental place owner	Regulating agency
Personal media				<u> </u>			01		Ŭ	Ĩ.	Ť			_	
- Visit/conversation	1			~	\checkmark	\checkmark	\checkmark	~	~	~	~	\checkmark	\checkmark		\checkmark
- Direct complaint channel	\checkmark														
- Role model employee/	\checkmark														
executive															
- Affiliate network											~				
Printed media	M						M	11							
- Announcement/notice	$\sim \checkmark$										\checkmark				
- Poster/brochure/leaflet	1					\checkmark					\checkmark				
- Letter	V			~			\checkmark			\checkmark					
- Newsletter	√							-							
- Journal/magazine	\checkmark							v							
- Handbook/guideline	v						v								
- Document/ operational			\checkmark	\checkmark						\checkmark					
report - Annual report				1						\checkmark					
- SD report				1						·					
- Registration Statement															
(Form 56-1)				~											
- Prospectus				\checkmark											
Electronic and Broadcasting N	Aedia										///			11	
- Public Address Sound	~														
System (P.A. System)	v														
- In-house TV	\checkmark														
- Video Clip	\checkmark														
- Video Conference	~														
- Telephone /Hot Line	\checkmark			\checkmark	\checkmark	~	~	~		V	~	~	\checkmark	\checkmark	\checkmark
- Fax				\checkmark											
- SMS							2							✓	
New Media	1														
IntranetCorporate website	~		./		./	./	1			./	./	./			
- Mobile Application	~		v		v	v	V			v	v	v			
- Social Media	• ✓			•		1	1				\checkmark		1		
- Email	√			\checkmark			✓			\checkmark	./		· ✓		
- e-Newsletter	✓					•							-		
- e-Learning	✓														
- AI Chatbot	\checkmark														
Activity Media															
- CEO Town	\checkmark												\checkmark		
Hall/Executives Meet															
Employees															

 Table 4.7
 The classification of media and channel types based on the stakeholders' expectations and participation.

	Stakeholder														
Type of Channels / Media	Employee	The country*	Board/committee	Shareholder/ investor	Government sector	Customer/ Consumer	Supplier	Business partner	Competitor	Creditor	Community/society	NGO/civil society	Mass media/blogger	Rental place owner	Regulating agency
- Relationship building	1				~			~		~	~		~		
activity					·						· ·				
- CSR activity	~							~							
- Campaign activity	\checkmark				1				,		\checkmark		,		
- Joint project/activity					~		~		~		\checkmark	~	~		
 Inspiration/honor award activity 								~					~		
- Exhibition						\checkmark									
- Visit	\checkmark			✓	~	\checkmark	\checkmark				1	\checkmark			
- Roadshow				1											
- Orientation	~														
- Meeting/seminar	\checkmark		\checkmark	~	\checkmark	1	10	~	\checkmark	\checkmark	~	\checkmark			\checkmark
- Annual general meeting				~											
- Knowledge and skill	\checkmark				~	~	1	1		\checkmark	\checkmark				
development training															
- Sponsorship					 ✓ 							~	\checkmark		
- Opinion expression stage					~	1.	,	-			,			,	
- Opinion survey	V			~		~	1	~			~			~	
- Annual assessment	✓			✓		✓	✓		\geq	_	\geq			9	
Mass media															
- News conference				~									✓		
- Giving an interview													✓		
Other media															
- Suggestion box	5				~						•				
- Service area						V					~				
- Information center	4		-	\rightarrow	\rightarrow			-					V		

Note: * PTT specifies "the country" as a group of stakeholders. However, from analyzing its group characteristics, it can be classified under the same group of government sector/agencies.

From the above Table, media or channels are classified into seven groups based on the stakeholders' expectation and participation, namely personal, printed, electronic, broadcasting, news, activity, and mass media, including other types of media. Interesting issues of each type of media are presented as follows:

1) Personal media is influential and almost every group of stakeholders expect to perceive or obtain information and participation from this type of media, especially in the form of conversation and direct interaction. Therefore, the companies should assign or appoint appropriate and acceptable personnel with communication skills as a major channel or medium for transmitting SD issues to the stakeholders of each group efficiently.

2) Printed media. Despite its relatively less important roles, many groups of stakeholders still give importance to this kind of media, especially PR media in different forms, i.e., posters, brochures, leaflets, or direct mails, that help them to be informed of organizational SD operations continuously and explicitly. Besides, all relevant reports in the form of a document can also respond to the expectation of some groups because of the nature of this kind of media that can demonstrate more detailed information clearly and be used as empirical evidence, which can create credibility and acceptance from the stakeholders.

3) Electronic media is still useful for most stakeholders, especially the telephone. Organizations should provide channels or telephone numbers ready for receiving information all the time and congruent with each group of stakeholders. A capable staff with communication skills should be assigned for answering each group of stakeholders. Moreover, organizations have to disseminate and communicate to the target groups to know about convenient, explicit, and easy-to-remember telephone numbers.

4) New media is another type of media companies should emphasize for creating and organizing proper forms, including being an important channel that most stakeholders use for obtaining corporate SD information. Companies should thus classify "SD" as another category distinctively. New media preferred by most stakeholders is official social media, i.e., Facebook, Line, YouTube, etc. Emails are also channels for communicating and presenting corporate SD operational performance to each group of stakeholders.

5) Activity media is influential and can create participation with each group of stakeholders very well, especially in the form of meetings or seminars. Besides, being an effective channel for communicating SD issues, it helps to know the stakeholders' feedback and opinions rapidly, including helping to plan new operations and communication promptly. Another interesting activity media is training as it can communicate and develop SD knowledge and skills to stakeholders simultaneously. Visiting is also an activity media that opens an opportunity for stakeholders to visit the companies or organizations, including inspecting SD operations as committed by the companies. It thus helps to increase stakeholders' trust and perception of a corporate good image. On the other hand, organizations can also visit each group of their stakeholders to exchange ideas and perceptions, including acceptance of the corporate operations. Besides, activity media helps to follow, regulate, and supervise operational performance and communication with the target groups directly. Another activity the organizations should not ignore is a continuous survey of stakeholders' opinions for improving SD operations and adjusting them to respond to their expectations as much as possible. Similarly, a relationship-building activity must also be conducted continuously to keep good relationships with each group of stakeholders and induce a good image of the organizations.

Mass media and other types of media also obtain attention from some groups of stakeholders. Therefore, companies or organizations necessarily consider the appropriateness and worthiness for selecting each type of channel and integrating them towards the utmost effectiveness. Each company may select to use different communication channels, i.e., an integrated report, SD report, websites, or any printed media for disclosing its information that can be comparable promptly. Proper communication channels can help stakeholders to receive relevant information easily, comparably, and duly. (Colombo Stock Exchange, 2019)

Still, every kind of media may have some strengths and weaknesses. In other words, no type of media will be best for every purpose and situation. Hence, integrating media in good balance is another important key Outcome Factor, which depends on communication objectives and stakeholders. Accordingly, companies can apply communication media and channels that are compatible with the business operational model, communication objectives, target groups, budgets, and readiness of the media available for the companies. (GTZ Rioplus, 2006)

4.2.3 A Communication Process for Sustainable Development

A communication process for sustainable development is a specific procedure that Thai listed companies highlight at present as it is a process of transmitting corporate stories and information to both internal and external stakeholders to perceive, understand, and be aware of the significance and direction of business operations to which the organizations plan to go forward towards sustainability. Besides, it can bring about a positive attitude for the organizations and stimulate behaviors towards SD for every group of stakeholders. Accordingly, Thai listed companies have to integrate a communication process with every working process congruently and integrally.

Nowadays, information communication, besides the CG part or any other part, i.e., employee, safety, internal organizational management, etc., is a shift of employees' and executives' behaviors and mindset to comply with the established objectives and goals. Of course, by doing so, important information in the process must remain for encouraging people in the organization to make major decisions. (Key informant No. 26).

What does communication in an organization look like? It can reflect in two ways. First, we can tell from the organizational personnel's repeated behaviors until they become a visible culture without verbal language. Secondly, it is indicated by organizational public relations. Corporate websites will show their identity and what they will create to communicate to us. Then, it becomes unified communication. Such unity is what the company is and everyone under this unified communication will speak the same language. (Key informant No. 2).

What many companies face as a problem is they have done so many things, but they do not know how to disclose them or they do not integrate what they have done into the internal organizational process. Therefore, indicators of several issues may face problems. (Key informant No. 18)

Therefore, a communication process must be conducted strategically as planned to achieve the goals and missions of each organization.

From the data collected by an interview with Thai listed companies, (totally eight companies as the samples, but only seven companies allowed to have an interview, while CPALL and CPF, as the same group, have a similar communication process for SD; their information is grouped under CPF), a communication process for SD of each company is as follows:

CPF initiated its communication for SD by sales and marketing teams after being informed of their customers' and business partners' needs and expectations regarding sustainability. Especially, there has been a legal requirement as a major mechanism driving SD policies to be proposed to the top management and CEO. After getting approved, communication started and was followed by report submission. The concept had been continuously developed until the Division of Sustainable Development was established, with explicit plans, which have been integrated with all business unit works up to now. The head of each business unit (BU) is responsible for mobilizing the implementation of plans to be concrete all through the organization. Thus, SD strategies are specified as a major driving approach under the supervision of the committee who will regulate and determine policies and direction following the overall SD guidelines. Therefore, all affiliate companies will apply such guidelines that are proper for each type of business operation.

Annually, the company will analyze and assess the corporate materiality, including the stakeholders' needs and expectations for planning its strategic operations and communication that accords with organizational vision, missions, and value. Questionnaires and interviews are used in a survey, in combination with the assessment results and advice from supporting units, both domestic and abroad. After that, operational and communication plans are drawn. Social responsibility and SD offices play a role as a source of SD gathered information and activities. They are also responsible for preparing and disseminating the overall SD guidelines, including disclosing or reporting SD information to the stakeholders.

Moreover, they also collaborate with Corporate Communication and Public Relations Division to determine the mood and tone for designing the message through communication channels that are compatible with the business characteristics and needs of each group of stakeholders. Furthermore, the company has to prepare a handbook, which contains organizational goals and key success indicators. The evaluation of operational performance based on the determined criteria is conducted annually, while the review of plans every 3-5 years. Typically, the main channels are the SD report and corporate website, which are classified into internal and external organizational communication. The internal communication is executed by HR

Department by developing SD knowledge and skills to the employees or personnel continuously, and by organizing a learning program and assessment tests through online channels or E-learning of the intranet system, depending on each line of business. Besides, such knowledge is also contained in the employees' orientation to cultivate new employees towards the organizational SD approaches.

For the external organizational communication, the annual report, websites, and SD report are the main communication channels. Besides, communication is through activity media to acquire the stakeholders' needs throughout the supply chain. For instance, Capacity-Building Activity is the activity for learning about the needs of business partner groups and an important channel for sharing SD information among them. Personal media is also another significant media that the company uses to communicate directly with its stakeholders. For example, customers are communicated by personal media, i.e., salespersons, marketing staff, etc. for exchanging ideas with the customers directly. Agriculturists are communicated through their representatives, whose SD knowledge and understanding is enhanced by the company continuously

CPN. Sustainability concepts have been executed in business operations under good governance principles for a long time, even before the concept of SD is popular. Thus, the company faces no difficulty in adjusting itself. Most of its mobilization comes from SET and global trends, which emphasize the concept of SD increasingly. Besides, the company was also invited by DJSI; thus, it made the management see the importance of the SD concepts and was proposed to the top executives for approval. Consequently, SD concepts have been integrated into the corporate operational strategies since then. Moreover, structures were established for supporting the SD practices by appointing a Governance and SD committee, chaired by the CEO, and having the top executive of each department be a committee for mobilizing the concepts into concrete actions all through the organization. However, such a committee is also regulated under the Good Governance Committee, which determines policies and the direction of organizational sustainability.

The Business SD Department under the Excellence management is mainly responsible for determining strategies and SD communication as a whole, by working with Corporate Communication Division in disseminating information to the stakeholders. At the first stage, the company focused on internal communication eminently by inviting external consultants to draw a road map and specify the KPI of SD practices. Subsequently, it collaborates with the Organizational Strategic Division to integrate SD strategic plans with the organizational strategies. The indicators of the overall organizational performance and each division are determined clearly so that the development of all divisions will go in the same direction. The expectation of each group of stakeholders is explored and analyzed, while the strategic plans will be reviewed consistently in combination with the annual corporate SD operations assessment.

Besides, the Business SD Department also collaborates with Human Resource Division to create employees' perception and participation through an important internal communication channel, namely personal media. A top executive will be selected as a role model and functions as a spokesperson and supervisor of each particular issue of SD guidelines, which is called the "SD Champion Role." Besides being a role model, the spokesperson also plays a role in mobilizing and stimulating employees under the line of authority. Not only is personal media utilized, but a variety of media, i.e., a standee, meeting, booth, questionnaire, guest speaker, etc. is also used for creating the SD environment for the employees continuously, including encouraging their participation based on their main responsibilities. Generally, every party has to jointly report SD operations to the Department for gathering information to write the annual report. For external communication, the Department will collaborate with PR Division to communicate with external stakeholders through both online and offline media that accords with receivers' media exposure behaviors. For example, Facebook Fan Page named "Central Tham" is used to communicate with the public, while shareholders are communicated through the meeting and an opinion survey and suppliers through a joint meeting, etc. The main purpose is to communicate through employees' participation in various activities, which is also a good opportunity for listening to their opinions at the same time. From the interview, some key informants perceived that genuine sustainability does not only make the stakeholders feel it but also responds to the expectation of every group of the stakeholders continuously.

KBANK. The executive responsible for supervising communication for SD explained about a communication process of the company that it was originated from universal standards with which all accredited companies have to comply, especially the investor group who pays attention to corporate SD that passes the DJSI assessment. Thus, the company had to apply SD principles to practice in the organization and proposed to the Bank Committee for consideration and approval. The Committee thus determined the policies and all guidelines for every party in the organization to hold and comply with, including governance as specified in the policies. Besides, the Committee organized a structure for supporting the operations properly. Then, the management team, comprising the top executives of all functions, collaboratively prepared SD strategies and strategic plans, including containing them into the organizational vision, missions, and values. Since the approval by the Bank Committee, all SD plans and guidelines were communicated to all lines of authority. The SD information was gathered and submitted to the company's secretary for information disclosure, preparing reports, and publicizing to the stakeholders. Each year, SD operational performance is assessed based on the Bank's sustainability strategies.

Typically, the secretary divides communication for SD into two groups: one of the Office of Corporate Communication and Relations and the other of the Secretary Office, which plays a role in determining SD strategies and including them as a part of corporate strategies with clear indicators and practical guidelines with which all in the organization can comply. The Office of Corporate Communication and Relations performs the role of communicating SD guidelines to external stakeholders through all kinds of channels in the form of 360-degree dissemination. The main focus is to communicate the three dimensions of SD completely. Annually, the content and theme are determined and conveyed to receivers with an easy-to-understand language. For this year, the content emphasizes the environment, while the theme focuses on climate change concerning the issues of the reduction of plastic objects, trash or waste sorting or separation, the reduction of energy use, etc. Communication is divided into internal and external communication like other companies.

For communication within the bank, an operational system with clear goals is established with the annual meeting of all working functions to collaboratively plan and execute plans for communicating with the employees. Responsible units are assigned to gather and organize corporate SD information following both Thai and universal assessment criteria. Typically, internal communication adheres to the annual theme and communicates to create the SD environment through various channels, i.e. the intranet, Line group, billboards, exhibitions, SMS, meetings, and through TV. The bank has its television station for disseminating corporate information or the materiality to branches all through the country simultaneously. Moreover, campaigns are disseminated through both online and offline channels to promote knowledge and stimulate participation, including cultivating the concept of SD via activity media. Besides, the main and major media of internal communication is personal media, especially the CEO, who performs as a communicator of SD materiality continuously. Thus, a part of key success comes from the roles of the top executives and CEO, who express their importance to the SD concept and to make a commitment that they will operate a business under the sustainability principles strictly, in combination with regular communication of SD materiality to increase assurance and trust, and mobilize the organization towards changes.

For the external communication, each year after SD policies are approved, strategic plans will be implemented by communicating the content of SD policies, projects, and activities, gained from information analysis. The creation of content and presentation methods are required to convey the corporate identity that can be identified immediately through all kinds of the bank's media, both online and offline, covering all target groups and responsive to the needs of each group of the stakeholders. For instance, vendors will be communicated through a meeting or consultation about the annual corporate policies, customers, and creditors through personal media at the operation site, the general public through mass media, and teen customers through social media, etc. Importantly, communication contexts and the response to each group's genuine needs and expectations must be seriously considered. Besides, the follow-up and evaluation of the stakeholders' perception towards the corporate image must be conducted consistently.

MINT. From the interview with one of the executives responsible for communication for SD, it was found that a communication process for SD of the company was initiated from the meeting between the corporate CEO and SET about SD concepts and SD assessment at the international or universal standards, namely Dow Jones Sustainability Index or DJSI. Then, such concepts were mobilized within the organization. Personnel with knowledge and expertise in SD were recruited to supervise the SD operations under the governance of the Chief People Officer (CPO) three years ago before Chief Sustainability Officer (CSO) was appointed to mobilize SD missions particularly, for this year. CSO has to coordinate with the SD committee, comprising top executives of all groups, continuously to follow, regulate, and govern SD operations of the whole group every quarter of the year. Then, a report of operational performance will be submitted to the corporate committee during the meeting organized every quarter. The main duty of the corporate committee is to determine the vision, missions, and values that are congruent with the SD approaches, including considering and approving 5-year SD operational strategic plans.

SD Division is responsible for implementing the policies from the committee concretely and successfully as specified in the strategic plans. Tasks and procedures of all business groups are prioritized to enhance the operations of each group. Remarkably, MINT is quite different from other businesses in the way that it possesses a wide variety of business groups: food, hotels, lifestyle, etc., and each group has its brand with several sub-groups and brands, i.e., the Pizza Company, Sizzler, Burger King, Swensen's, Dairy Queen, etc. Each brand of affiliate group will communicate to its stakeholders within the specified framework. For organizational communication, SD Division will collaborate with PR Division to place its brand's positioning and to plan collaborative communication for SD. Internal and external communication is delegated with explicit KPI indicators to assess SD operational performance. The main goal is to enable the whole company to operate its business by SD principles holistically. A quarterly report of operational performance will be assessed regularly if it accomplishes the set goals. However, the efficiency of communication for SD can be reached only if the organization has practiced sustainable development to be witnessed first.

The materiality related to the corporate business will be analyzed and determined, based on predominant economic, environmental, and social impacts on the company and its stakeholders. Operational steps are based on Global Reporting Initiative (GRI) Standards, which will be reviewed and whose materiality will be prioritized every year. (See details in 4.14). Communication then is proceeded as determined. Besides, a 5-year SD strategy with 3E important communication strategies, namely Educate, Embed, and Enhance, is also operated for mobilizing each group of stakeholders.

For internal communication, mostly it is communication for asking for every employee's collaboration in complying with the SD frame stipulated by the company, and for promoting participation in working. Teams are formed as a driver to mobilize each business group through internal organizational channels. The important internal channel is the "intranet" or the channel established by each group. Besides, SD knowledge is provided through online training to cultivate employees to have SD as a part of their daily life and as something involved in every step of their work. Typically, fundamental knowledge in the broad view will be provided before more indepth knowledge will be given, such as the accomplishment of SDGs Goals, policies. Activity media, i.e., Good Deeds on Birthday Activity, sustainability awards, etc. is often used or inserted to enhance more knowledge and better understanding. Furthermore, the company highlights human resource management since for the business to be operated sustainably, it requires personnel with potential and expertise, who are ready to grow with the company. Participation results have to be reported in parallel to the annual operational performance assessment.

For external communication, SD operations and marketing communication of each affiliate brand will be integrated to communicate and adapted to be suitable for its brand. For example, Sizzler runs a program about the plant base through communication and marketing campaign related to customers directly, while the central office will communicate with external stakeholders through the company's main channel, namely the annual SD report, and the corporate website regularly by gathering and presenting all information of SD operations of all business units and affiliate brands as determined by the corporate goals. Besides, Investor Relations Division organizes and publicizes news to investors via the annual report and the analyst report, including online channels. (See details in 4.2.2). Moreover, the annual theme is set collaboratively and delivered to the creatives for designing the relevant content. In 2020, the annual theme was CHANGE, and at the end of the year, an assessment was conducted based on the expectation of each group of stakeholders. Besides, the Division also follows up and promote the operation of each business in the network to concern about returns or shared value in the economic, social, and environmental domain. All information is organized and reported as useful information for evaluating if the SD conducts comply with the criteria determined by the national and international regulating agencies.

PTT. Like other companies, PTT started its communication for SD from the meeting between the top management and other agencies and saw the new trend that was going to happen, especially the importance and roles of sustainability on businesses. Therefore, the concepts were proposed to the CEO for consideration. After the approval, studies were introduced and a pilot project was conducted at the initial stage. After that, the SD report has been organized continuously, including the establishment of the supporting structure, i.e., PTT Group Sustainability Management Committee or GSMC. GSMC is responsible for setting the organizational direction and strategies, including the mobilization leading to the integration of SD guidelines into all business units under the regulation of the Good Governance Committee, and implemented by the Organizational Management Division as determined by the top management.

The annual strategic plans will start from the review of the top executives during the "Top Executive Thinking Session," in which all input factors are gathered for reviewing the organizational vision and missions that are still responding to business operations and stakeholders' needs. After that, the plans will be transmitted to the lower top management during the "Strategic Thinking Session" to consider the appropriateness and congruence for practices. In the case of any changes, they will be sent back to the top management for reconsideration and the strategic plans and communication for SD plans are developed and communicated to the next level in the line of authority. Generally, communication for SD is divided into internal and external communication, starting from the thorough analysis of relevant contexts that may affect organizational operations and stakeholders of all groups, i.e., global trends, stakeholders' needs and expectations, management review, the past operational performance, etc. to figure out the organizational materiality used for operational strategy and communication planning, which leads to the arrangement of business plans or action plans with success indicators. The articulated indicators will be evaluated annually, in parallel to the plan review for improving plans to be more appropriate for business circumstances continuously.

Typically, the internal communication of OTT will convey organizational policies, missions, strategies, and goals to all concerned agencies and offices to be informed and understand the SD direction and practices in all three dimensions: economic, social, and environmental. Communication will be transmitted by the hierarchical organizational structure, or from the top, middle, lower-level management, to practitioners through their face-to-face interaction, meetings, and internal communication channels, i.e., emails, video clips, etc.

On the other hand, external communication aims to communicate to the stakeholders: shareholders, business partners, customers, etc. to make them understand the objectives, goals, and guidelines for practices and production, and lead to collaborative compliance with the determined approach. The major communication channel used for all groups of stakeholders is the SD report, which summarizes both advantages and disadvantages, including the overall view of organizational operations throughout the year concerning the SD guidelines. Besides, the Corporate Communication Division also works with Organizational Management Division to determine communication content and strategies to external agencies by focusing on PR media in various forms that suit the media exposure behaviors of each group of external stakeholders.

SCC. The Social Enterprise for SD Committee determines the overall organizational SD policies and guidelines by imposing the policies through the Managing Director and the SCG SD Committee, comprising top executives of all business groups, to mobilize the imposed policies to be implemented and follow the operations to comply with those policies. (See details of the structure in 4.1.1.) Subcommittees are appointed as working groups to follow the sustainability practices in each area: occupational health and safety, energy, climate change, etc. These subcommittees or working groups are responsible for managing and implementing the set policies in the ways suitable for the nature or characteristics of the business group or business line for which they are responsible. Such groups or committees are separate from the SD Committee of the headquarter at Bangsue, which is responsible for the

overall SD activities of the central part and connecting them to other business groups. Thus, all sub-committees will report the results to the board of directors committee.

Once SD policies and guidelines are transmitted to the lower-level management, they will be transmitted further to the employees under control by the organizational hierarchical structure. In general, SD communication starts from the board meeting via "leadership forum" every quarter of the year in which all materiality and stakeholders' expectation are drawn to lay SD operational strategies to be conveyed to the employees annually. From the top management, the strategies are then transmitted to the lower-level management, or the immediate managers or department chiefs of all business groups to communicate through Town Hall to all employees at all levels. Each business group will thus proceed with its communication practices per guidelines given by the central office in parallel to the SD knowledge provision to its employees. The Internal Communication Division will function as a central office to communicate SD content through internal channels, both online and offline, i.e., Line group, digital signage, TV, and others in the offices, such as posters, notices, etc. One of the major internal channels is emails and intranet systems. Besides, the Division is responsible for following up the employees' perceptions and behaviors for improving the organizational internal communication.

To control the message to go in the same direction, the Internal Communication Division will have a monthly meeting with the External Communication and Branding Division for considering communication issues collaboratively, including imposing central policies for every business group to follow. For the external communication, a responsible agency will be assigned for each group of stakeholders to communicate under the imposed guidelines via appropriate channels and responding to the expectation of each group of stakeholders. (See details in 4.1.6). For instance, for investors, the Investor Relations Office will communicate directly with the shareholder group, while the community group will be supervised by the Community/Society Office, etc. The main channels for communicating with all groups of stakeholders are the annual report and the SD report. Besides, the operational performance assessment of every group is conducted regularly.

It is remarkable that all eight listed companies, despite their differences in patterns or nature of business operations, business operational structure, and goals, their communication process for SD is very similar. (As shown in Figure 4.1). Most of their communication starts at the policy level by the top management, who had been trained in SD concepts from Thai and foreign regulating and SD supporting agencies, or had meetings with other agencies, both government and private, including their media exposure. From the acquired information and knowledge, the top management knows about SD trends and directions at the national and international level, including the stakeholders' expectation, especially that of investors who are major drive and an important input factor encouraging the top management to apply the SD issues to be integrated with the business operations.

From analyzing the communication process of Thai listed companies in compliance with communication for SD guidelines (Newig et al., 2013), it is remarkable that after the acknowledgment of the universal sustainability trends, the management will assign the concerned operational offices to study the preliminary information and propose it in the board meeting for imposing it as SD strategy to be included into business operations. This stage is Communication of Sustainability or CoS. SD strategy then is proposed to the board committee for further approval. During the process, SD information is exchanged or Communication about Sustainability (CaS) occurs. Typically, the major input factors are global trends, SDGs, laws, regulations and new practices, new risks, and materiality, including stakeholders' needs and expectations.

Still, communication for SD of Thai listed companies reflects a top-down information flow or a flow by the hierarchical organizational structure to induce enforcement and the creation of common understanding and agreement to operate a business based on sustainability principles throughout the organization. Some companies may appoint the president of SD specifically to express their strong determination and importance to SD concepts explicitly and to regulate their business operations following the sustainability principles (as illustrated in Figure 4.27 that all units of communication for SD structures are green, while the important agency related to communication for SD is dark green). It shows that all parties must integrate the SD concepts into each party's missions that need to be accomplished as planned. Besides, every party must communicate and transmit the SD concept to the employees under control, and report the SD operational performance to responsible agencies and superiors according to the line of authority to ensure the utmost effective communication for SD.

Besides the preliminary information, every company will designate a specific SD responsible agency to gather, analyze, evaluate, and report, including communicating SD information to other agencies, both internal and external, through various channels. Moreover, some companies also establish a particular unit to be responsible for each domain or SD issue, such as corporate governance, investor relations, social and environmental responsibility, etc., which have to collaboratively communicate about sustainability (CaS) to each group of stakeholders. On the other hand, SD agencies of some companies will function as a source of SD information only, but coordinate with the Corporate Communication Division to communicate to internal and external stakeholders via some specific channels that are congruent with the needs and expectations of each group of the stakeholders.

After the receipt of sustainability information, both internal and external stakeholders of various groups will transmit their feedback in various forms to the organizations, which can be measured, by a survey of stakeholders' perception and understanding, as the output of communication for SD, i.e., the effectiveness of resource utilization, the occurrence of innovations, better or improved operations, prompt crisis management, decreased complaints statistics, more positive news or fewer negative or fake news, transparent and traceable information disclosure and reporting, etc. The consequences of effective communication for SD yield efficiency in various ways, such as satisfaction, trust, and acceptance of business operations and organizational communication, more participation, increased shared values, positive image, and fame, etc., which lead to stakeholders' pride, sense of belonging, and support, including loyalty to the organization, as a result of the capabilities of the organization in responding to the stakeholders' needs properly.

Such outputs and accomplishments then will be delivered back (feedback) to the responsible agencies to be informed and to use the results for improving their working process and communication effectiveness. Such feedbacks are also transmitted to the top management as major information for reviewing and planning future strategies and operations, including policy setting. The received feedback can help to review policies and make decisions on business operations that accord with and maintain a good balance with each group of the stakeholders' expectations the most. Such a communication process then reflects a bottom-up information flow, which is important for balancing the systems of social surveillance, worthwhile use and maintenance of resources, and effective communication.

Accordingly, Communication for Sustainability or CfS comprises both Communication of Sustainability (CoS) and Communication about Sustainability (CaS) in parallel all through the process, which can be reflected in the information flow and the interactive collaboration under the strategic framework and plans between the top management to the board committee to determine the communication direction, responsible agencies, and timing, including success indicators via operational activities and communication in various forms. However, every party or sub-unit must comply with the corporate guidelines and adapt them to be suitable for their working environment by considering the received feedback as well. (Wijitjammaree, 2002)

Therefore, another important factor of a communication process for SD that should always be concerned is the business operational environment or system environment, i.e., business size, nature of business operations, organizational vision, missions, objectives, and value, business codes of ethics, supply chain, budgets, risks, materiality, and regulations, etc., imposed at the policy level or by the management as an organizational operation framework, including being regulators of content, channels, and communication methods to all groups of stakeholders following organizational objectives to accomplish SDGs, which are the ultimate goals. The communication process for SD of Thai listed companies is summarized and illustrated in Figure 4.27.

The Figure illustrates a communication process for SD that is more specific or individuated than general communication or public relations and advertising, due to different goals. The main goal of communication for SD is business sustainability created by the balancing of economic, social, environmental, and corporate governance dimensions through the support and collaboration from stakeholders, including the support of social, environmental, and national changes in a more positive way continuously from the business operations. Thus, it can be considered as communication for change as well.

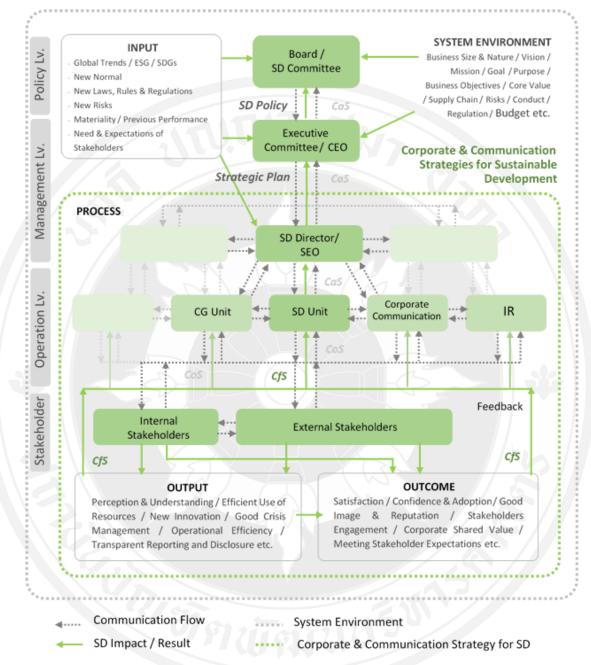


Figure 4.27 A communication process for SD of Thai listed companies

Remarkably, strategic communication for SD is special because of 1) its complexity because SD involves science, economics, laws, business administration, politics, and human behaviors, which are all interconnected and responsive. 2) A large "Comprehension Gap" of SD knowledge of experts and general people. 3) Personal

Impacts stimulating some irrationality, i.e., emotion, belief, etc. 4) Risk elements, which is often found in sustainability especially under the situation in which there is a difference between passive elements or something uncontrollable and active element, such as intent or determination involved. (GTZ Rioplus, 2006)

What must we do since it is the mobilization of a big policy? It is not a kind of charity or something we do to help others, but actually, it is our job and conversely, stakeholders have to support us. It is called balance creation, but how can we mobilize it? If not, all our imposed master plans or SD strategies will be put aside or be just unusable paper that is being reported only. Sustainability is not mobilized or it is lifeless. Thus, we do not talk about only a report, but all communication needed in every step of our work. (Key informant No. 19)

Furthermore, a communication process is necessarily regulated and followed consistently in every step to assure the effectiveness of operations and communication since the stakeholders' needs and expectations are dynamic and change all the time. Besides, universal trends and new risks all affect organizational sustainability without ceasing. Accordingly, regular governance from the policy or management level can help to create a good balance for a communication process for SD.

In the communication process, we can see three elements: a sender sending a message to a receiver. First, senders must understand clearly why they have to present sustainable operational performance. They must understand its consequence, which leads to an increase in the organization's management capabilities regarding sustainability. In terms of the message to be disseminated, the question is whether it complies with the stakeholders' expectations. It may be difficult to be accomplished in the first year, but if it is a correct process, it means there is an organized and continuous hearing and reporting system of stakeholders' feedback that can be used for improving communication content and reports in the future. Today, it is in the form of sending feedback through answering a prerequisite form, etc. If such a process is strengthened and continuous, it surely yields more correct information communication increasingly. (Key informant No. 10)

Some organizations may have "integrity" as their corporate culture, or they require employees to have integrity. However, contrarily, there is so much news about the corruption of such organizations by top executives, i.e. procurement, etc. Thus, integrity can never become genuine corporate culture. It is simply a written policy or corporate culture. In other words, it is just a form, but not deployment. It has not been genuinely practiced to reflect what the result is. This means that there is no process of a follow-up nor regulations. It reflects a gap. (Key informant No. 26)

For effective communication, it can identify who or which group to be assessed in the audit since each group of stakeholders is different. Thus, if we have clear principles of having a system that can be measurable, we can identify the impact. Now, UN established SDG goals, so we have to plan how to accomplish them. (Key informant No. 18)

To achieve the efficiency and effectiveness of a communication process for SD, it requires not only a diagramed process but also several factors, i.e., the applications for communication for SD, media properties, updated message design, evaluation methods, etc. (Genç, 2017). From the study, some significant factors for enhancing the effectiveness of communication for SD are summarized as follows:

1) Organizational leaders must understand and highlight SD principles

Organizational leaders are the principal sender of an organization. Generally, communication is one of the main functions of a leader. Besides, leaders are required to possess some major qualifications to reflect their leadership. Surji (2015) defines "leaders" as "persons with authority or power to operate an organization and who lead others to accomplish the common goals." From such a definition, it reflects that we can have leaders at every level, not only at the policy or executive level. Therefore, leaders in communication for SD must be influential persons who can lead practitioners to accomplish SD goals. Therefore, to enable others in the organization to be aware of business operations based on SD guidelines, leaders themselves must see the importance of SD principles first and should be equipped with sufficient SD knowledge and understanding so that they can communicate or transmit intended meaning to all groups of stakeholders effectively.

Nowadays, communication must start from the executives first before any organizational communication, i.e., an emphasis on the importance of business codes of ethics. If the executives cannot provide them valid portrayal, the chance of communicating about this as corporate culture or CG culture is hard to be accomplished. (Key informant No. 27).

I think executives must see and give importance to SD and mean to exercise it. If not, but doing it because of some pressure, they then cannot communicate nor make people believe in it. Besides, they may do it not fully or try to do it as best as they can to get good results. Sometimes, it takes time. People who want to do it will know how to do it. (Key informant No. 1).

For the internal communication, mostly the first person to talk about this is the CEO, i.e., it is some new things or something important employees have to do, why is it important? Or how can employees collaborate to do it? Besides the CEO, the Department Chief or Head will explain to let employees know and do. Such message will be transmitted to all in the organization for collaborative operations. (Key informant No. 8)

Communication is like big veins that flow from the commanding brain and flow without any obstacles. Once the brain orders, hands, legs, and the body have to follow the order. (Key informant No. 19)

Besides, leaders must see the importance of SD principles and have a strong determination to make practitioners be confident and comply with what they are requested to do, leaders must be role models of genuine practices to inspire and encourage both internal and external stakeholders towards collaboration. They must communicate SD issues or materiality continuously and consistently while performing as a role model all the time. In the case of any changes, they must communicate to their subordinates to be informed clearly, including letting them know about future operational plans so that every party will understand the organizational goals and move forward in the same direction.

> As I told you, what executives think or want to do must be communicated to their subordinates. For our company, we have communication from our executive very frequently. Our CEO has a meeting with our employees four times a year, the lower level management, i.e., deputy, practitioner, etc., or four times for each person at each level, etc. Every four-month, our executives will let us know in which direction we are now, what operational performance is compared with the imposed plans, and what our organization will do in the next three months, what we have to prepare, etc. All of these questions are internally communicated very frequently. (Key informant No. 4).

> For organizational communication, people at the top management level play a significant role in driving policies to be implemented at the operational level consistently. At the same time, they must stimulate their practitioners to be aware as well. (Key informant No. 13).

> To communicate to leaders to understand and be able to transmit message naturally without a script is important. The message must come from the executives or their vision, their true visions. (Key informant No. 21)

> Importantly, before communication, it should be influenced by some impacts, then we can communicate well. The message should not contain only the input content. Otherwise, it will become the only PR for creating some images. If you are in the working process, suppose you are the board president, you must set what you will communicate. What is your purpose? Sustainability must be a fundamental topic or a central pole of the corporate. If the message goes this way, all involved

must go in that direction. However, if the president says that don't talk to you about sustainability, it's nonsense. My purpose is for business benefits. Then, communication for SD is impossible. (Key informant No. 18)

From the key informants' opinions, as shown above, it indicates that most of them give high importance to roles of organizational leaders who must see the importance of SD principles and operations and perform themselves as role models to let employees see their wills and determinations, including gaining employees' acceptance and compliance. Haan, Jansen, and Ligthart (2015) state that SD leaders are different from general leaders as they have to possess the following characteristics:

(1) Sustainability mindset or strong determination in integrating financial performance with a long-term goal.

(2) Systems thinking or the ability to view the overall picture, including other related details and shifting their perspective from focusing only on financial benefits to strategy development for creating inspiration for the stakeholders.

(3) Good relationship building or the ability to understand people across cultures and support cultural diversity, to stimulate productivity and long-term relationships with stakeholders continuously.

2) Communication by the same understanding

Besides perceiving the importance of SD, leaders must have good communication skills and be able to transmit a meaningful message to accomplish the goal. They should also be aware of the transmission effect or the meaning of the content may be altered or diminished during the transmission, especially through the hierarchical structure or through several transmitters. Such an effect can cause receivers' different understanding of the message. On the other hand, the major concerned agencies and communicators responsible for communication for SD have to receive the same information transmitted by the leader in the same direction. Thus, it is essential for reviewing the receivers' perception and understanding. Besides, a central database or communication channels, either personal media or mediated channels, should be provided for both internal and external stakeholders to search for corporate SD information conveniently and rapidly, which can help receivers to get the same message leaders to intend to deliver to them effectively.

> For me, I think the understanding after we send our message is important. When executives or CEOs say something, the message is deployed in descending order before reaching the employees. However, employees at each level have different backgrounds and understanding. Thus, it is the duty of middle managers or immediate supervisors to check if their subordinates understand the message sent by the executives correctly. If there is an issue they don't understand or get the wrong message, the superiors must repeat the message or clarify what the message means or what the executives intend to convey. Moreover, they have to take their subordinates' feedback back to the top management as well. (Key informant No. 4)

> IR should know ESG as well. They don't have to be able to answer all questions. However, in the case investors need some superficial information, IR should be able to answer it. However, for more insightful information, IR can contact any agencies or divisions responsible directly for this duty to answer such questions. At least, they should know to whom investors can talk or contact. (Key informant No. 1)

> Once ESG becomes a part of corporate culture, everybody in the organization has to understand it. For instance, when questioned what is the organizational vision or who you are, everybody must understand the same meaning. They have to know what they have to think of when mentioning their organization. When they read the organizational vision, what do they think of it? It is important to make all people in the organization understand the organizational vision commonly and not interpret it differently. (Key informant No. 11)

This is the reason why those who are responsible for communication for SD need to have knowledge and understanding of the sustainability approach well enough, including understanding how to mobilize the organization. Training can be provided to increase internal stakeholders' knowledge and communication skills, or for external stakeholders as well so that they can perceive, understand, and accept SD guidelines in common.

> Another tough problem is people working in this area or communication for SD must understand SD, which is a gigantic topic. The concept of SD has been modified from CSR in the past. CSR is an after-process issue, but SD is an in-process issue. It means that you have to understand the communication process of the company in each area very well so that you can apply where to insert the concept of SD. After the application, a modification may be needed so you cannot proceed with the same process. SD thus will determine how to think, to do, measure, and report. Thus, it is important to have sufficient knowledge to understand the process, while the process must also support the operations. Otherwise, it will be 'gone with the wind' as having nothing to hold it. (Key informant No. 3)

> For the supply chain, we have to communicate why we have to integrate sustainability into our operations. We have been selecting our suppliers for two years until we are one of the industrial bases in the Dow Jones Sustainability Index for two consecutive years. Therefore, it shows that we have to understand the concept first. People who work with us have to understand it. Otherwise, they will not understand and see no importance of it; thus, it will be useless. (Key informant No. 16)

> One thing I think of is when you communicate directly with your target or when you communicate through someone else, i.e., via reporters, the news agency must make the target receiver understand by writing what we want to convey. This is thus a kind of art that needs to be deployed a lot since it is quite difficult to have direct contact with all the targets. (Key informant No. 11)

Therefore, the understanding of business operations, sustainability, and communication, including the understanding of the stakeholders' needs and expectations are very important for positive changes and creating sustainability. Communication for SD must be accessible and easy to understand. Hence, senders have to consider not only what they want to communicate but how to communicate to make the stakeholders understand also. (UNEP & Futerra, 2005).

3) Communication with facts or correct information

The message transmitted from a sender to stakeholders in a communication process for SD needs to be factual information that has been proved for its correctness, completeness, and sufficiency to respond to the needs of each group of stakeholders. Besides, SD information must be disclosed transparently as supplementary information for the stakeholders' investment decisions

> Importantly, communication must contain a valid, complete, correct, transparent, and straightforward message to let receivers know what is the objective of the message so that they can decide if they want to participate in the process or not. (Key informant No. 26)

> I think firstly a sender must have a strong intention to communicate and the communication must be rapid. For instance, when something happens, a conference should be called for immediately. This can reflect an intention to disclose the information. It may not be necessary to disclose information right away but disclose the facts. If it's good, then just tell it's good or contrarily. If something has not been done, we can tell them that we have not done it yet, but just tell them when it will be done. Many people misunderstand that the message we will tell investors should be only positive. It is not true. We'd better tell the truth or confess this is our weaknesses. However, we have to assure them that we are fixing them or what are our plans At least, it can create our credibility. Some companies may say one thing but have another behavior, or some may talk only about good things. All of these can discredit them. When they speak the

truth, people may not believe it. Thus, it is very important to keep ourselves look credible. (Key informant No. 1)

Accordingly, message design must be inspected or examined thoroughly if it is correct, relevant, useful, or inspiring to induce stakeholders to do or behave as wished. Moreover, a message must contain the main theme under the organizational goals and communication strategies. The message should be verified and tested carefully to see if it is appropriate for the type of media and target groups to save budgets and time. (GTZ Rioplus, 2006)

4) Communication must be easy to understand without complexity

Besides concerning correct and factual information that can be disclosed, a sender must make sure that communication is easy and not too complex to understand. Especially, SD is full of details and connects with several dimensions: economic, social, environmental, and corporate governance, so it is difficult to make general people understand it. Therefore, a message must be designed and presented with easy words and appropriately for each group of stakeholders. However, the main theme and organizational objectives must still be maintained

> The matter of message is quite difficult. Generally, a message must be easy. Otherwise, when we talk about SD, people may not understand. Nowadays, people may not quite understand what SD is. Some people understand that donating things or buy lunches for children is CSR, but they don't understand SD. Therefore, we have to transform the language or the word "SD" to something else, such as SD is something that makes our world better or more pleasant to live, we do this kind of thing for our descendants, or do you know what you do today can make our world better bit by bit. (Key informant No. 3)

> To use any language, it's better to analyze first who are the targets you want to communicate or who the receivers are. Then, we can use the language that makes them understand easily, but still keeps the main theme or content. (Key informant No. 11)

For communicating to the management board at three levels, we have to use the same content, but can adjust the language to make it easier to understand. How do we let people know that they can affect corporate sustainability? Thus, the message must be digested to be easier and must make it relevant to them. (Key informant No. 21)

Communication for SD is challenging for practitioners who have to design and determine content, materiality, and language patterns, both verbal and nonverbal. Especially, the sustainability issues are complex and easily confuse receivers. Consequently, senders should screen information and refine too complex concepts by using easy vocabularies and avoid technical terms. (Amfori, 2018) to make the message perform its role in creating perception and understanding for stakeholders easily.

5) Continuous communication

Nowadays, SD becomes a major approach for business operations towards long-term success. The main goal is to change stakeholders' behavior to be in harmony with sustainable guidelines. Thus, communication strategies for SD cannot be accomplished within a short time but require inclusive and continuous communication planning in the short, medium, and long term. Companies should communicate SD operations regularly to let stakeholders perceive the movements and can use such information for their decision-making. Furthermore, the corporate SD information can bring about a positive attitude and desirable behaviors to support business operations further.

> I think there should be a performance report too. Suppose today is our starting day to do this or that after time passes by, we should be able to tell when we start. Besides, we have to give our future plans; for example, in the future, our site will have production capacity increased from hundreds to thousands in five years. On the way, we have to report from where we start that now we have 200-300. People can see the progress of our operations. If we want to change something, it's fine, but once we change, we have to adhere to the determined direction. (Key informant No. 1)

SD is not just purely communication, but it is also a part of the culture, which matters. To change people is timely and a large amount of content needs to be created. (Key informant No. 25)

Mostly, our stakeholder analysis and management systems are quite good, but sometimes it may lack continuity. For the continuity, I will try to look at it from two perspectives all the time. First, our company may not do it ourselves, and secondly, when our policy changes, we have to stop doing something. Thus, what we used to commit is stumbled and we do not communicate right away that we discontinue doing such a thing, which might affect our stakeholders' satisfaction in the long term. (Key informant No. 26)

For ESG, we perceive that it's a journey, which we cannot see the results in one or two days, a month or two months, or probably years. It has to be continued on and on. (Key informant No. 11).

It can say that SD communication and information disclosure have been increasing markedly by stakeholders' needs of information. The important things are thus continuous reports and communication about the operational progress towards SDGs to make them understand, and, on the other hand, respond to their needs (GRI et al., 2016). Besides, it is important to maintain trust between stakeholders and the organization. Such relationships and interaction can lead to information sharing and prevent conflicts that may occur. (GTZ Rioplus, 2006)

6) Communication through appropriate, convenient, and rapid channels.

Besides message design that needs to be correct and easy to understand, senders must concern about the transmission of SD messages through proper and prompt channels as now in several situations, it requires rapidity for information processing to stakeholders. For instance, investors need urgent information for their investment decisions, reporters need updated information for writing news, regulating agencies need information for assessment, etc. Therefore, an organization should have appropriate channels that respond to the stakeholders' expectations, and each group of stakeholders has different media exposure. Accordingly, channels must be easy to access, convenient, and quick. Responsible personnel should be assigned to be ready to provide SD information as well.

Another thing that can create credibility is people can contact us. Suppose something happens, IR must be ready to be contacted immediately and promptly to tell what has to be done. For instance, if there is a case of a gas leak in the sea, people must be able to contact IR, and IR can tell right away that the situation is being assessed and will contact back soon. At least, it can make people confident that they can contact us. On the contrary, if people cannot contact us, i.e., our phone is always busy, fear and anxiety then occur. People will complain that when something happens, they cannot contact us or they find nobody, it will decrease our credibility. Therefore, this is our image. We have to be ready for communication promptly. (Key informant No. 1)

Our delivery of message needs to be more flexible and realtime so that our communication can be really useful for both internal and external stakeholders. (Key informant No. 9).

Communication must be in the right place at the right time. If any delay occurs or to wait for perfect information, it may be too late. Thus, there should be ways for communicating to receivers promptly, at least, for making them understand the situation roughly. We don't have to wait for 100% information as it may be too late. (Key informant No. 11)

Moreover, companies may use a variety of channels, including in the form of an integrated report, SD report, websites, or printed media to disclose information about sustainability, which can be compared and used promptly. Correct and appropriate channels can help investors to easily access and receive relevant and comparable information duly. (Colombo Stock Exchange, 2019)

7) Communication is connected and inclusive. (Content, channels, and receivers)

Amfori (2018) specifies that successful communication often starts with inclusive plans, which help to indicate what and how an organization aims to reach. Organizational strategy and communication strategies can determine how to narrate corporate sustainability transparently, collaboratively, and meaningfully. To be able to do so, communication must be inclusive and connect the content of all dimensions of sustainability. Moreover, a variety of channels covering all groups of stakeholders must be applied.

> Mostly, the delivered message is news, which may be multilayer. We thus can collaboratively prove it before transmission, starting from the first draft. A subordinate can ask his or her chief to read it. If content relates to any division or party, let staffs of the division prove it to assure that the message is most inclusive of both content and ways of communication. (Key informant No. 15)

> Our company has a variety of media. We have TV broadcasting throughout the country. We have intranet systems, a Line group, etc. We also use below-the-line media, i.e., exhibitions, SMS, meetings, etc. In other words, we use almost every media that is available as we believe that no single medium can cover all. The difficult part is how to use media to reach target groups most widely. (Key informant No. 3).

> For internal communication about sustainability, we need to cause a change and communication can be unique or individuated. However, external communication, should not be overlapping with others of external communication agencies. We should not distort it either as it will damage our branding. Therefore, we have to integrate it. In short, we may have unique communication, but it must connect with the overall image of the organization that we portray. (Key informant No. 19)

A communication process for SD must be an integrated and holistic communication process for connecting all parties to make stakeholders understand while helping to organize and unite communication approaches and operations related to the content, channels, and time congruently to increase communication effectiveness. Thus, the important thing is to consider the content, communication patterns, and processes, including the design of the related physical characteristics and interesting patterns of communication.

Moreover, communication also involves the transmission of meanings through products and services, which are required to use resources with social and environmental responsibility, and the design for attracting consumers towards sustainable products and service. Too much detailed information may be risk factors for an organization as well. (Bittner-Fesseler & Weicht, 2020). Hence, an organization must always realize that all through a communication process, communication must be inclusive and connecting all dimensions to be united.

8) Participatory communication

From the above-mentioned communication process, groups that play significant and influential roles for the business survival are stakeholders, both internal and external. Accordingly, communication for SD must establish participation in every process since the analysis of materiality and stakeholders needs and expectation for determining policies, practices, and communication strategies, including communication procedure and communication effectiveness and efficiency measurement from the received feedback for improving a communication process. Therefore, the creation and promotion of participation in a communication process is a major challenge for an organization that operates by sustainability approaches.

> Participation is important. Communication will be successful or not depending on the collaboration of people in an organization. From what we see at present, most organizations will establish participation by setting a working group, which is one approach. Is it OK? Yes, it is, but only for the short term. A working group represents the division or office group members are working for. When they work together, each of them will define the term sustainability from his or her standpoint or context. (Key informant No. 10)

We emphasize employee engagement, but it is not just a oneway communication. Rather, it tends to be collaboration or collaborative communication, or learning from one another. (Key informant No. 25)

For communication, besides the ways we write or deliver a message, we may have to invite some journalists or third-party representatives to join with us in various activities. In a face-to-face situation, i.e., news conference, there will be direct questioning, depending on each situation. The important thing that makes these people feel attached with us is our invitation for letting them participate in our activities. (Key informant No. 13)

GTZ Rioplus (2006) perceives that for efficient stakeholders' participation, it depends on the scope of good understanding about organizational goals and the acceptance that participatory communication aims to causes attitudinal, behavioral, and institutional changes. Thus, strategy development relies on two-way communication between an organization and its stakeholders via information communication and media use. Besides, participatory communication focuses on the creation of social interactions in the long term to bring about a common understanding of sustainability and its impacts, including promoting their capability in finding problem-solutions together.

9) Communication that responds to stakeholders' genuine expectations

Besides participation in a communication process, another important goal of communication for SD is to respond to the expectation of each group of stakeholders whose expectations and needs are diverse. An organization is responsible for searching for them to be used as guidelines for utmost communication effectiveness. However, some stakeholders may not collaborate or do not specify their true needs and expectations clearly; thus, an organization must find proper ways to access them and communicate with information and issues that can respond to their needs as much as it could. A lack of concern or study on stakeholders' expectation cannot convey the message that responds to their expectation truly. (Key informant No. 28).

Another important thing is to communicate what stakeholders want to know. The understanding of stakeholders' genuine needs and expectations helps us to communicate right to what they need and expect. It's a major challenge. (Key informant No. 4).

Regarding communication, what matters is how to make receivers perceive that what we tell them is useful for them and how it is useful for the organization. It is core message because if they perceive no usefulness, they will not participate to let it happen. (Key informant No. 9)

When you say something to someone and expect that person to know, belief, feel, or act, you have to recall of what you have said. First, is it useful or meaningful? Second, is it true? And three, is it relevant to him or her? Thus, communication comprises several subfactors. Is it the right time or at the right place? And how about does it respond to his or her needs? It must be the right message for that person. (Key informant No. 7).

Accordingly, communication that responds to stakeholders' genuine needs is very vital in a communication process for SD. GRI (2016)states that the important impact on business is stakeholders' expectation, so company executives have to consider SD materiality thoroughly and integrate the needs and perspectives of major stakeholders who might be affected by business operations. Besides, GRI standards specify that a company should identify corporate stakeholders clearly and explain how the company can respond to their expectations while maintaining business benefits. On the other hand, RobecoSAM (2019a) determines that a company should disclose and report information about the perspectives of each group of stakeholders.

10) A communication context is important.

Communication for SD can be efficient if senders understand the roles of their communication context and that of their stakeholders first. A context connects the meaning between a sender and a receiver towards common understandings of sustainability.

> For instance, in the past, we used to launch a campaign to persuade African people to have hot food. We did it fully, but we did not concern about their value. For them, to eat hot food is for dead people. We do not understand the concept of sustainability. Thus, we have to understand the context of the place where we go. If we don't understand it truly, it will be simply a theory. We don't truly understand what we communicate. (Key informant No. 3)

> Before we can make communication plans, first, we have to understand the organizational structure and perspective. 2) We have to understand its culture. When we work on sustainability, we have to design our framework to accord with its structure. For example, when we do a campaign about a power plant, we have to know how many BUs it has. If it's a state enterprise, how many branches does it have? Thus, communication may be different, not the same for everyone. Finally, do we know what are the behaviors of people in your organization? You cannot communicate if you don't understand their behaviors. (Key informant No. 19)

A context involves what has to be known before communication and to what extent both a sender and receiver have known about each other in common, including to which they can refer in their communication. A context controls how to handle information and interactions, which involves culture, values, and social norms. Therefore, a communication context comprises a message, relationships between a sender and receiver, space, and time. (Adair, Buchan, Chen, & Liu, 2015). Accordingly, a sender has to understand a communication context truly to assure that communication for SD can convey a sender's intended meanings to a target receiver correctly and completely.

11) Communication can be sustainable by conducting sustainability first.

Communication for SD can reach the utmost efficiency if a sender of an organization complies with sustainability principles. Most key informants perceived that if an organization runs its business without concern about sustainability, it is difficult to communicate to its stakeholders to understand such a concept. If an organization cannot comply with any SD guideline, sound reasons should be given or disclosed. Likewise, if a person performing as a sender, especially a leader of an organization, cannot be a role model, it will surely affect the receivers' or stakeholders' acceptance and trust in the conveyed message.

> Without serious awareness of SD importance, in some cases, SD may be reported only for being assessed by external organizations only. What is disclosed is not what is practiced truly. (Key informant No. 28)

> From the perspective of communication, I think an organization should have sustainability, but what is more important is a real practice. For instance, if there is corruption in an organization whose corporate culture is integrity, the organization's image will surely be worse since you say you have integrity, but you cannot make it. It even contradicts with the direction the organization claims to go. (Key informant No. 26)

> If communication is perceived as an effort in making surrounding people understand, it means to communicate what a company does since communication for SD can be sustainable only when it is executed, followed by communication. (Key informant No. 11).

> If you do, then you write. If not, you should not write. Thus, if you do, you have to communicate, but it does not mean that you have to communicate everything you do. You have to choose the right time and occasion. (Key informant No. 18)

> We cannot communicate about sustainability if we do not comply with sustainability approaches truly. Communication is one of

the steps, the last step in the sustainability process of each working place. Therefore, we have to make sustainability happen in our work first before we can communicate it out. This is important. (Key informant No. 16)

Therefore, a communication process for SD can be successful when a company or a sender complies with sustainability approaches first before any communication will be conducted. GTZ Rioplus (2006) suggests what should do and should not do in communication strategies for SD. It states, "Do what is good first before saying. Don't say first if good things have not been done." Thus, only what has been accomplished and empirical operational performances should be used for communication.

4.3 Output Factors

Output factors are consequences of a communication system from the dissemination of an organization to both internal and external stakeholders. If the consequences or results are as determined goals or objectives, it means that such a communication system is effective. If not, it means a system has some flaws or drawbacks, so the process or system, or the factor that causes the consequences, should be improved. (Phongphiphatwatthana, 2017)

Littlejohn, Foss, and Oetzel (2017) state that communication output can be verbal and nonverbal, which will be feedback returning to input factors once again, and affecting the content determination in the future. Moreover, the output can be financial and non-financial, which will reflect the use of organizational resources through the KPI (Ahlin, 2019).

Therefore, the output of communication for SD is the consequence of communication operations based on the imposed strategic plans. It may be products, activities, or services, which are tangible outputs i.e., printed media, activities (including meetings, workshops, mediated or face-to-face seminars or discussion), articles, websites, digital platforms, infographics, media and social media activities,

video, podcast, images, and others (Cassidy & Ball, 2018), and intangible outputs caused by communication activities. (Parsons, Gokey, & Thornton, 2013)

From the study, most listed companies give importance to the output of a communication process in the form of the SD report, partly because it is required by the regulating agencies to prepare and disseminate to the public. It is a communication of SD operational performance to the stakeholders. However, each company has a different form of reports. Especially, now more investors want to read SD reports increasingly for using the disclosed information for their investment decisions. Besides, shareholders also want to know which benefits the companies can gain from SD operations (Corporate Social Responsibility Institute, 2013). Moreover, regulating and SD promotion agencies use the SD report as a major channel for measuring and assessing the effectiveness of SD operations of each organization. Accordingly, the SD report must disclose updated information transparently, completely, and inclusively, and the report should integrate both financial and non-financial operational performances.

After that, we look for communication channels for tracing general standards as follows: 1) Sustainability Report and Annual Report. Annual Report is compulsory, but Sustainability Report is voluntary. Since our company has so many activities, we have to prepare several separate reports. 2) Like other companies, we also disclose our information on websites. For information that needs to be updated quite often, we will disclose it on the websites to avoid it being outdated. We disclose news as general communication, but mainly, it is Sustainability Report. We also submit it for the assessment at the national and international level to know where our performance is, and how much confidence they have in us. (Key informant No. 23)

...What is integrated with the management approach, starting from purposes, missions, visions, values, policies, and operational strategies. However, the knowledge assessment uses the integration of both financial and nonfinancial outputs, but it does not mean that we mix two projects in the same report. Thus, the organization can disclose integrated information by the management approach or organizational systems. If they are not integrated, we cannot do it. (Key informant No. 19)

Reports in different forms organized by each company are a part of the output of communication for SD. Besides, the outputs from SD operations in various dimensions are also determined by the Key Performance Indicator (KPI) of sustainability, which helps to reflect the companies' progress and SD operational success. (Boonchuan, 2019). However, a good KPI of sustainability must connect the relationship between the SD materiality of corporate operations and the impacts on the stakeholders. The SD issues thus will be united into the corporate strategies and action plans as declared by each company.

Besides returns, your SD operational performance must be active too. CEO will deploy it for each department and assign roles and responsibilities, which are also tied with KPI as well. (Key informant No. 10)

Firstly, we have to understand that it is an evolution. I think we have done properly in terms of preparing a report, KPI, SDGs, and performance against KPI. For some KPI we have not done, we must do them. (Key informant No. 16)

Once the practical scope is set, real practices must be done. To consider if some SD has been practiced, we must choose some KPI to reflect the operational performance, both financial and non-financial. However, the setting of scope and KPI should be developed by operational capabilities and change tendency, by determining them as one of the organizational KPI by using scores from the external organizations' assessment or any related award as a KPI. (Key informant No. 28)

Eventually, you have to determine the goal of what you will get from SD practices, For the indicators of DJSJ, it states clearly what is the goal for doing this or that and if you have reached it or not. However, you must also have clear explanations why you cannot reach it and how you can jump to this point next year. Stakeholders may not be happy if you cannot tell them how to prove it. This is a really important indicator. (Key informant No. 3)

If you have a good communication process, it must be two-way communication. Of course, if it reflects that this organization has good care of employees, we can tell from the turnover rate of the employees or the employment rate. However, for the employee rate, I think it can be overrated. The indicators of stakeholders of each group are not the same. For customers, they will measure by customers' satisfaction and the rate of re-purchases. Thus, it is a kind of communication process. Eventually, no matter what the indicators are, it will end up with the expectation of each group of stakeholders, i.e., government agencies expect to see some indicators of your compliance with the regulations and how to measure it, as there is no fine, but you do not violate the laws. (Key informant No. 26)

Sustainability involves business operations. Even for the corporate governance dimension (CG), I keep telling our staff that it is the culture that you have to do. It may be something others won't do, but we will do. As told, we have laws and standards to comply with; although, laws may not explicitly be written. For instance, for a board committee, laws do not specify clearly how many minutes a chairperson has to say... In a board meeting, you have to define which standards you want the board to have, i.e., every board committee must participate, etc. Then, how can you enforce everyone to participate? You have to tell everyone to participate. After that, you have to consider which issues you have to communicate to external stakeholders to let them know for what purpose and why we are doing this, especially why we have to do more than what the laws require us to do. We will write about this, and disclose it to others. (Key informant No. 18)

From the above-mentioned statements, most key informants agree that the output of communication for SD is to achieve the goals as determined by KPI, which has to be in accord with each group of stakeholders mainly. Accordingly, the KPI determination must be proper and be able to persuade all in an organization to adhere to and comply with. However, to achieve such goals, an organization must enable to make all employees have a common understanding through the use of effective approaches, tools, and communication plans, especially employees' united

commitment in performing their duties and responsibilities to be harmonious with the agreed objectives of the organization specified by KPI. (Jaichansukkit, 2012)

Still, some stakeholders view that only determine KPI for measuring the efficiency of communication and sustainability operations may not be appropriate for some sustainability dimensions that are dynamic, such as social and environmental dimensions. Therefore, the application of KPI should be flexible, or combine with OKR or Objective Key Result, to help the operations towards the goals more effectively.

In the case of KPI, the problem is not that KPI is not good, but because it is too rigid. For example, we launch our KPI at the beginning of the year, then the process finishes at the end of the year. However, for OKR, it is continuous and we have to change our communication all the time. Thus, it's better to consider which domain should use fixed KPI, i.e., financial dimension, which may not be proper for measuring social dimension that keeps changing or is dynamic. Thus, KPI may not be suitable for some sustainability issues. In the case of the social dimension, communication plays a significant role in changing an organization and enables rapid responses. Thus, for me, KPI or OKR is just a name, and I don't pay much attention to the terms. In other words, the major point is to make people communicate and respond. (Key informant No. 19).

Consequently, the measurement of the output of communication for SD can apply both KPI and OKR by considering the goal and objectives of the operations and communication predominantly. An organization may determine KPI as minimum requirements for everyone in the organization and OKR as supplementary requirements. At present, several organizations turn to apply OKR increasingly due to new challenges and rapid changes in business situations caused by both technology and consumers' behaviors. (Thai Institute of Directors Association, 2018b). Generally, it is found that Thai listed companies determine output factors of communication for SD as follows:

4.3.1 Performance assessment of the board committee and top executives

The Securities and Exchange Commission determined good corporate governance practices for the listed companies in 2017 in many ways. The board committee should organize the annual operational performance assessment of the board committee, sub-committees, and individual committees for improvement. Besides, it stipulated that the board committee should disclose criteria, procedure, and assessment results in the annual report to communicate to the stakeholders to be informed. (The Securities and Exchange Commission, 2017a)

Therefore, to ensure the occurrence of sustainability, organizational leaders are considered key persons. Besides performance evaluation and governance of compliance, working process of the committees, structure, and components of the board committees, the promotion and support towards organizational sustainability is another issue to be contained as an indicator for assessing the performance of the board committee and top executives annually.

The committees have to know SD regulations and practical guidelines to see what they have to practice and comply with. (Key informant No. 3) Sustainability is determined as one criterion for assessing the performance of the committees and top executives. We have this agenda regularly in the board meeting for following the results and the development continuously. (Key informant No. 28)

Thus, the assessment of the committees' performance is one of the major mechanisms in maintaining and increasing the working effectiveness of the committees and enabling them to review and improve their working. An organization then must be assured that the board committee and top executives can still perform their duties effectively and comprise knowledgeable persons who can catch up with changes that are occurring or may occur in the future so that they can lead the company towards sustainable growth. (Thai Institute of Directors Association, 2018b)

4.3.2 The perception and understanding of organizational SD approaches

One of the important communication goals is to create perception and understanding. Most key informants agreed that the output of communication for SD is to create stakeholders' perception and understanding of organizational SD approaches and guidelines. However, sometimes the receivers' or stakeholders' perception (or belief about a company) may not be as a company is, possibly caused by miscommunication, misinterpretation, or wrong anticipation (Beger, 2018). Thus, to ensure the receivers' correct perception and understanding per the organizational imposed goals is challenging and requires major indicators of a communication process for SD.

A critical challenge is correct understanding about corporate SD. (Key informant No. 28)

Of course, receivers should be knowledgeable and equipped with sufficient literacy to know which impacts they are facing. Thus, a company has to educate them as well that its duty is not only to read information but also to educate them about the information it communicates. (Key informant No. 10)

Communication involves with both senders and receivers. Thus, when we communicate, we must know if our receivers understand our communication purpose. For instance, in the case of internal communication, executives have to communicate to internal stakeholders at all levels: employees or practitioners up to the immediate and middle management. Everybody has to understand the same communication purposes. The challenge is how we can communicate to make all of them understand in the same direction, especially if external receivers are included. It will be more difficult to ensure that suppliers, contractors, etc. will understand too and be ready to walk together with us. (Key informant No. 4)

We did assess receivers' perception. We did in a large picture. In the past year, what do you think about our communication? Were you informed of the issues you wanted to know? We conducted a survey. For campaign activities, we also measured the results of each campaign activity to see how many people it could reach, and what the suggestions were. In terms of content, we checked from their feedback. Such feedback can let us know about their understanding if it corresponds to our goals. I understood, do they practice them? If practiced, do they reach the determined goals? If not completely, what should they do additionally? They also have an indicator for this year and next year. Then, it will be called a success. Namely, the SD principles must be applied to the jobs or to what people do. Then, they will understand about sustainability. (Key informant No. 3)

Normally, when we communicate, we have an indicator, i.e., employees' awareness, etc. Basically, after our communication, are they aware of or do they understand it? What do they understand? It is the awareness at the perception level. (Key informant No. 9)

If our goal is to make stakeholders understand, and if they understand, it means we achieve our goal despite some dissatisfaction or their genuine needs. To understand is not equal to satisfy, is it correct? If they wonder why we have to do it, it's still fine. If they are even satisfied with it, that is an extra. (Key informant No. 11)

The creation of perception is an important process that facilitates information exchanges and induces common understanding for developing essential knowledge, capabilities, and skills needed for attitudinal and behavioral changes in the same SD direction. (Sayers, 2006) Therefore, an organization should keep following up on the efficiency of a communication process and use it for improving its communication.

4.3.3 More effective resource utilization

One of the important goals of SD is an organization's utilization of resources with utmost and worthwhile benefits by considering the impacts that may determine the damage or the existence of resources for people of the next generation. Accordingly, the communication output for SD focuses on the stakeholders' awareness and appreciation that leads to the improvement in management methods and resource utilization. For diverse businesses like this, circularity is a main issue. For instance, my team is responsible for waste composition or management of restaurants. We started with our biggest brand first. We watched randomly all day in the peak and off-peak seasons to see what and how much their waste or trash is. You can read this in our report. We found that 1) most of the waste was paper 2) food waste, and 3) plastic. (Key informant No. 16)

From our analysis, we found that plastic problems are one top concern at present. We read the news of Mariam's death and we understand clearly that single-use plastic is hazardous and causes severe environmental impacts, so the deployment goal was introduced. Specifically, during 2020-2024, the deployment of single-use plastic will be decreased by 75%. (Key informant No. 16)

Eventually, it must reflect if business costs decreased or not. If you concern about the environment, the question is whether you use resources or energy more effectively or not. All of these will answer about business valuation. (Key informant No. 26).

The effectiveness of resource utilization will be bounced back to the organization in the form of financial returns or decreased costs and increased income and non-financial returns or corporate image and fame, including stakeholders' trust in the product brand and the organization. Therefore, organizational leaders should be aware and give high importance to resource utilization as determined by Thai Institute of Directors Association (2019a), which provides guidelines for organizational leaders for promoting and supporting effective resource utilization. Besides, resource utilization is also determined as a policy and required information disclosure to the stakeholders.

4.3.4 Product and service innovation that is friendly to the environment and society.

Some key informant viewed that one of the important output factors of communication for SD is the development and creation of product and service innovation that is friendly to the environment and facilitates increased benefits for communities, including being developed as corporate property and value in the long term, i.e., intellectual property, patent, etc., which can be applied as indicators of SD operational performance.

In terms of sustainability, we emphasize products that are friendly to the environment, or green products increasingly. It can respond to the main focus of society nowadays. However, how many KPI for determining products annually? We don't have KPI for specifying our sustainability products or green products. We try to support innovation management for promoting more green products, including activities for encouraging our employees to develop innovations, but we have not developed KPI yet. It takes at least one or two years to develop it. Some innovations require testing, especially long testing. Rather, we promote awareness-creation activities for mobilizing our employees. (Key informant No. 4)

A communication process, either internal or external, on sustainability can provide information that affects decisions to do or not to do. Sometimes, it brings about new ideas and concepts that are the core of the communication that can be used for improving business processes. It can also induce innovations, business intellectual property, which is intangible or nonfinancial value, but is a long-term value. (Key informant No. 26)

As a result, the goals of communication for SD are to bring about new perspectives, ideas, and creation, including innovations that help to improve and develop business operations continuously, while yielding the least environmental and social impacts. Khotchanan (2015) states that innovation is a vital weapon for organizational improvement, enhancement, and extension. It enables business sectors to increase their competitiveness with foreign businesses, including developing economics towards sustainability.

4.3.5 More effective operational performance

To create stakeholders' perception and understanding of SD operational guidelines, an organization must utilize resources effectively and introduce

innovations that are friendly to the environment. All of these are a part of the output factors of effective organizational operations. Therefore, key informants perceived that the effective operations of the concerned agencies that accord with SD approaches and imposed goals of the organization is a crucial indicator that reflects the efficiency of communication for SD.

To adapt our operations to be accordant with all required assessment criteria involves several agencies. We have to talk to many concerned agencies and offices. Until the last stage of assessment, we will talk to them to see if what we have done complies with the assessment goals or not. Are the ways to improve our operations in the right direction at the universal level? (Key informant No. 4)

Now, what we are interested in is an index, especially SD index, which is used to reflect our performances. (Key informant No. 7)

The above opinions are congruent with the research findings of Eccles, Ioannou, and Serafeim (2014), which found that the high sustainability firms were found to give more importance to long-term communication with both internal and external stakeholders, by providing information about their norms and values at a statistical significance level. Besides, it was found that these firms were also assessed to have higher effectiveness in the long term, in stock markets, and in accounting operational performance at a statistical significance level as well. In short, the improved operational performance in each area reflects the efficiency of communication for SD.

4.3.6 Better or improved operational performance

Besides more effective operational performance, some key informants viewed that the output of communication for SD can reflect the creation of shared value, leading to better or improved business operational performances in economic, social, and environmental dimensions. First, we have to educate those who want to run with us. After educating all, it's the implement stage. Don't leave them alone. We have to go with them and let them witness the results, which require enhancement by 3E towards the creation of shared value, including the company's benefits, and social and environmental benefits as well, which are important outputs. (Key informant No. 16)

Responsible business operations can increase the effectiveness of the operations while reducing costs from external fund-raising. On the contrary, operations that do not comply with SD guidelines may affect not only less efficient operations and higher costs for external fund-raising, but they may also affect organizational reputation so severely that top executives might be shifted, while regulating agencies may be punished. The worst case is the business can be taken over. (Deutsche Börse Group, 2013)

4.3.7 Prompt risk and crisis management

Some key informants viewed that efficient communication for SD can reduce risks and help to manage crises rapidly and promptly so that business can be operated continuously. Nowadays, more companies communicate to their stakeholders through online media as they expect that they can convey an important and urgent message in time. Thus, it helps to increase stakeholders' or the public's trust, confidence, and acceptance, and to control information leaks as well. (Havard-Williams, 2019)

The distinctive role during a crisis or any immediate situations is the use of skills or a thinking process related to the situation. This will prove if our thinking ability and preparation according to the ESG principles can be applied in the real situation or not. In many cases, both internal and external, we could accomplish our missions under a specific situation, i.e., environmental problems, etc. If practitioners can apply what they are trained in in a process, they can solve the problems promptly. Thus, it can prove that such an approach or guidelines can be used to help the company to further its operations. (Key informant No. 13)

Accordingly, effective crisis management helps to reflect how efficiently an organization has imposed its operational strategies and communication strategies for SD. Busch (2018) states that crisis management and social responsibilities are closely connected and a company should apply them as preventive guidelines to reduce the crisis impacts as much as possible.

4.3.8 The induction of stakeholders' SD behaviors

Most of the key informants agreed that the output of communication for SD is stakeholders' attitudinal and behavioral changes in congruence with SDGs, i.e., energy conservation and saving, increased participation, etc., Their behaviors are different depending on the received information and stakeholders' characteristics.

Moreover, communication for SD is a major tool for stimulating human beings to adapt their behaviors towards sustainability (Godemann & Michelsen, 2011). Thus, behavioral changes that occur, i.e., recycling objects or trashes, increased numbers of electricity users who turn off their lights at night, more authority for employees to change their working style, etc., are a part of communication for SD. (Djordjevic A. & Cotton, 2011)

For internal communication, employees have to understand first what sustainability is and what is the corporate commitment. One thing that can be measured is education. If we educate them and do activities with them, and they can adapt what they learn in their work, it means they can apply sustainability concepts as part of their working system, I think it can be considered as successful as they understand now what sustainability is. (Key informant No. 17).

For the output, we have to ask first what we want. Do we want only communication behavioral changes? Then, we have to ask further which image we want to create? How can we create people's awareness? Finally, which behaviors need to be changed? What is written can turn to be a culture and then become new behavioral patterns after such behaviors are learned. However, it does not mean that all 100% can be changed. However, when everybody has the same behaviors, it means learning takes place. (Key informant No. 2)

Outputs come from the indicators, i.e., something telling us that today we communicate about sustainability, and we are successful. Besides growth and stakeholders' satisfaction, the potential of organizational employees must be increased too. However, how can we tell that their potential is increased? We have to look at their behaviors. To what extent do their behaviors comply with organizational values? We have to measure behaviors and assess their competency annually, which I think, every organization is doing. (Key informant No. 26)

For me, the indicator from the measurement is behavioral change. It means that when someone's behaviors change, everybody follows him or her. For instance, how does the slogan of 'to eat hot food and use a serving spoon' change our behaviors? Then, we come to evaluate if it is successful to convey such message. (Key informant No. 2)

It means if our conveyed content can get receivers' performance in return. If we communicate about the reduced use of coal, decreased pollution, and reduced water waste, etc. The performance we will trace is their reduced behaviors of doing such things. (Key informant No. 23)

Consequently, the follow of communication operational progress can help to transmit SD stories continuously and induce stakeholders to support the organization. The output can be assessed by accessibility, i.e., Did people spend more time on the organizational website? Were there any increased downloading or clicks? How many people were disseminated with SD information in the brochure? How many interactions occurred on corporate social media, i.e. pressing likes, comments, or forwards? Did the organization receive additional comments or questions from customers? And was there any behavior change, i.e., sales rates, POs, increased numbers of customers? (Amfori, 2018)

4.3.9 Statistics of lower appeals or complaints

Some key informants perceived that the efficiency of communication can be evaluated by the statistics of the overall appeals or complaints. If the statistics of those are decreased continuously, it reflects that both internal and external stakeholders comply with SD guidelines as communicated. Oliver (2004) states that communication failures can yield extraordinarily stakeholders' increased appeals, employees' dissatisfaction, increased doubts in the transmitted information, loss of motivation, and decreased effectiveness of working capabilities.

We consider from statistics and rates of stakeholders' complaints. (Key informant No. 28)

We start our assessment deeply to the group of major and ordinary shareholders. Personnel responsible for communicating to this group will have their indicators, i.e., after communication, are there more analyses about it? For secondary shareholders, they will evaluate from the numbers of received complaints: decreased or increased? Thus, we will always measure the value sending back to the company. However, if stakeholders are not shareholders, but they are employees, we may assess the success of our communication by our goal of zero accidents. Therefore, successful communication will lead to zero or decreased cases of accidents with lower expenses, including decreased bad images about frequent accidents. These are the values returning to the organization. (Key informant No. 27)

Therefore, an organization should follow and manage the received appeals and complaints regularly by evaluating feedback for improving a communication process towards more effectiveness. Moreover, the Securities and Exchange Commission (SEC) functions as a regulating committee to provide a mechanism and management process (records, progress, report, etc.) for dealing with stakeholders' appeals, supervising various and convenient grievance channels, and disclosing grievance channels on the website or the annual report. (The Securities and Exchange Commission, 2017a)

4.3.10 Increased positive news, decreased negative and fake news

The roles of the SD communicator are very challenging as they have to control and regulate the impacts caused by negative or fake news to gain stakeholders' acceptance and support for continuous business operations. Therefore, some key informants perceived that the important output of communication is the ability to manage organizational information and create the highest value to the organization from the disseminated information by increasing the proportion of positive news and decreasing the numbers of negative and fake news to the level that will cause no impacts on business.

Regarding media and organizational communication, they have the measurement of negative news or the proportion between positive and negative news. If the latter is higher, they have to analyze the cause. Like general communication for correcting information, explanations are provided. It is a challenging issue for general companies. Every kind of business faces fake news. Thus, we have to communicate with correct information and truth rapidly. However, before correct information will be consolidated and rechecked over and over to make sure of its correctness, lots of people have been exposed to fake news, and possibly believed in the fake news already. Thus, when we try to explain, it is like we are making excuses. That's why it's a challenge. (Key informant No. 4)

Indicators of a communication process can be reflected in many forms. For direction communication, they might measure from PR value and information inquiry. If there is no controversial issue or very little negative news about the company, it may also reflect from PR value partly as well. (Key informant No. 26)

Remarkably, fake and negative news that occurs may cause damages for business operations and reduce stakeholders' trust in the corporate SD operations. Pyrcek (2020) states that fake news is the information intended to distort receivers' understanding or to deceive receivers for some purposes, i.e., political, commercial, or personal. Thus, the challenge is a company has to deal with such complexity caused by incredible information and other interventions and find ways to create stakeholders' trust in the company again.

4.3.11 Transparent, complete, correct, sufficient, and timely information disclosure

Information disclosure is an important mechanism that helps the listed companies to follow, assess, and review the past operational performance. At present, the disclosure of only financial information may not be sufficient for the stakeholders' needs. Therefore, the disclosure of operational performance in the environmental, social, and good governance (or ESG) dimension is more important as it connects with financial operational performance, while reflecting the organization's good corporate governance, transparent management, effective risk management, concern on stakeholders, competitiveness potential, and good returns in a long term. Moreover, correct, transparent, and prompt information disclosure and operational performance reporting bring about advantages for a company to help regulatory agencies and stakeholders to access updated information easily for their decisionmaking.

At the employee level, the information is disclosed to the internal stakeholders. (Key informant No. 4)

I think at least investors know because we can answer analysts. We disclose information transparently. We passed DJSI and we got the SET Award. I think stakeholders know that we are distinguished in this part. Even at the executive level, they all know about this. (Key informant No. 25)

Information disclosure is a process of capital markets to which investors access to evaluate the status of the company, good or bad. Earlier, when we considered this, we would look at the financial statement only. We would consider if there was any news that affected the profits or caused decreased profits. However, nowadays we have a new perspective that if we will disclose information, we have to disclose it all. Besides, today in the process of business risk management, we can see that risks also cover social and environmental issues, including new risks, i.e., what in the emergence list that may affect our business. The business now has to be aware of all things around. In the past, the disclosure of risk management was perceived as a traditional list of operations. While human capital involves sustainability, but business does not see it that way. Therefore, we have to train our people that they have to think all around. Thus, they have to concern which risk issues can bounce back. (Key informant No. 26)

GTZ Rioplus (2006) states that the worst problem in applying communication strategies is not to deliver information promptly or non-readiness of essential production or service, with the expectation that the target receivers will change their practices as wished by the sender. Typically, a company should explain to stakeholders to make them understand transparent and sufficient SD operations, including how to prioritize the importance of information sources. Besides, the provided information must be correct and help to follow SD operational performance duly. (Deutsche Börse Group, 2013)

Still, considering from major or primary communication channels Thai listed companies uses to publicize to the public, i.e., the annual report, SD report, and websites, it is found that all companies give importance to communication about the success of SD operations and the awards received during the past year. These are major indicators most companies determine to assess communication operations and SD reports. However, some key informants viewed that awards and success of the past year may not reflect the efficiency of communication for SD genuinely.

Talking about the image, I think sometimes concerning too much about the image turns it to be an award-hunter, with the main goal of being awarded so that I can belong to this division, or stay in this league. However, it brings no benefits when talking about sustainability. Sustainability is subjective and if you do not make it concrete or make it concrete by connecting to awards, it is useless. Suppose the company is under crisis, that agency will be the first lay off because it is costly but yields no benefits. Sustainability is an extended part of operating business in every domain and bringing about some mechanism for mobilizing business operations in the long term. The SD agency is organizational value, but not mainly for getting awarded. Frankly speaking, the answering to CGR assessment form of SET probably bases on the expectation of belonging to this classified group or of getting an award. However, for me, I think it is rather a by-product. If you do something good, people should recognize you, but it is not the essence of sustainability aims. Eventually, such business may not be sustainable. (Key informant No. 26)

Sustainable Business Development Center (2020) specifies four principles of quality ESG information disclosure: 1) Materiality means the disclosure of sustainability issues briefly and precisely for application and avoidance of disclosing too much information that may not respond to the information users' needs. 2) Timeliness means the consistent disclosure of fresh and updated information at least once a year. 3) Value chain means the disclosure of information that covers the business value chain from upstream to downstream for reflecting potentials and effectiveness of business operations inclusively. 4) Comparability means the disclosure of information of operation performances by determining systematic qualitative and quantitative indicators for information users to evaluate their operational performance and see the development direction continuously.

From the above output factors, it indicates that when an organization communicates for SD to groups of stakeholders, the output of communication can be in various forms, both quantitative and qualitative, which help to reflect the efficiency of a communication process and can be used for determining indicators of the efficiency of communication for SD. Nevertheless, such output factors are just a part of factors from the perspectives and opinions of the key informants in this study. Thus, there might be other factors, depending on the goals of each organization. Output factors of a communication process for the sustainability of Thai listed companies can be summarized and illustrated in Figure 4.28.

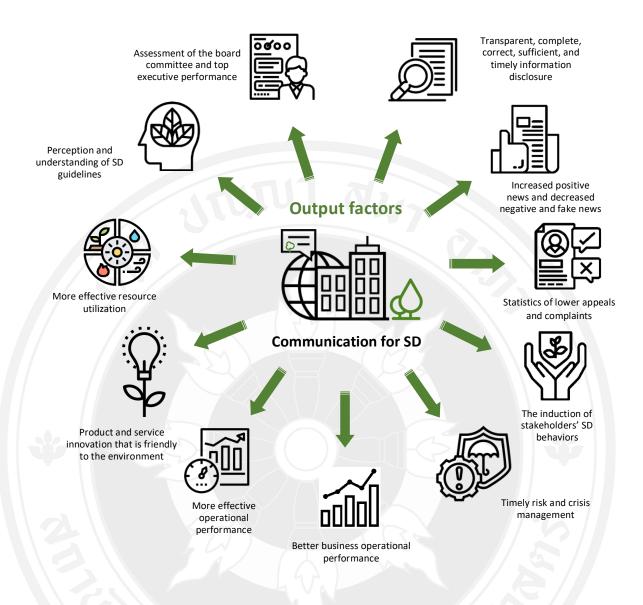


Figure 4.28 Output factors of a communication process for SD of Thai listed companies

4.4 Outcome Factors

Outcome Factors are consequences of communication. Generally, they often bring about changes in knowledge, attitude, or behaviors of the target receivers, from the perspective of media or message exposure of an organization. Typically, a developed message leads to clear accomplishment, which helps an organization to be assured of being able to attract target stakeholders and accomplish the goals as planned, including being able to communicate risks effectively through supporting information of statistical facts and successful cases. (World Health Organization, 2017)

Besides, most stakeholders agreed that the key success of communication for SD is to enable an organization to reach the determined indicators and achieve the objectives as imposed in the strategic plans in the short, middle, and long term, including accomplishing organizational vision and missions. It also helps to achieve SDGs and create a balance in all dimensions: economic, social, and environment, including responding to internal and external stakeholders' expectations properly.

Success may be the output of a community or the impact an organization wants to occur through the efforts of several groups who aim to reach the first step of success, namely the creation of collaboration, to enhance communication effectiveness and create stakeholders' participation widely. (Social Entrepreneurs, 2011) Nevertheless, success must also be audited and assessed to be used as lessons and suggestions for reviewing and correcting communication strategies for SD via repeated processes. Therefore, the knowledge system that an organization will apply must be integrated from the collection, analysis, auditing, and communication of information. (Dalal-Clayton & Bass, 2002)

We measure the output from the achievement of our vision or what our vision determines since vision is something we want to be or want to go in 5 or 10 years ahead. Therefore, the achievement of strategies is our annual indicator. The achievement of organizational vision is our 5-year or 10-year indicator. Communication for SD is communication that makes an organization sustainable, and achieve the imposed vision and missions. (Key informant No. 4)

It helps to let us know who we are or what is our identity. The main principle of communication is that. Therefore, it means you present who you are. Suppose the core of your company is sustainability, it means 1) I can be auditable. I can be trusted. I won't take advantage of others. 2) I care for my customers, communities, and the environment. Just that. Then, people can interpret the message without telling that I want to be sustainable. (Key informant No. 25) The most important thing is the impact on receivers. Is what I tell them useful for them? This is the key challenge, either for internal or external stakeholders. It is not just you say what you do, but it must go further than that. What you do must have some impacts on me, at the individual, group, societal, community, and national level, or even global level. (Key informant No. 7)

Accordingly, an effective communication process for SD must be determined and assessed continuously to facilitate decision-making and adapt operational guidelines and communication strategies to accord with the business situation and environment properly. From the study, Thai listed companies have the following approaches or guidelines for assessing the effectiveness of their communication for SD.

4.4.1 Satisfaction with SD operations

Some key informants viewed that the destination of communication for SD is to make stakeholders satisfied with business operations, which must be explored continuously. The higher level of satisfaction reflects the effectiveness of organizational communication, the more positive attitude of stakeholders, and their support for further operations.

An interesting indicator is the survey of stakeholders' satisfaction. (Key informant No. 28)

It depends on what we have communicated to the public. Is the satisfaction of stakeholders of each group increased? If we measure from the downstream. However, a process, requires techniques, methods, and a lot of variety. Eventually, the ultimate goal is to make stakeholders have more satisfaction. That's all. (Key informant No. 26)

Consequently, any efforts an organization exerts for operating its business with social responsibility and sustainability will strengthen the reputation of the organization. Moreover, customers will have loyalty and intention to use or buy products and services of the organization further. (Ohlsson & Riihimäki, 2015) Therefore, the satisfaction of customers and stakeholders will be major indicators that reflect the effectiveness of communication for SD distinctively.

4.4.2 Sustainable business operation trusts and acceptance

Some key informants perceive that one of the key Outcome Factors of communication is to gain stakeholders' trust, confidence, and acceptance of the organizational policies, vision, mission, goals, strategic plans used by an organization as guidelines for business operations, governance, and risk management, including for the overall procedure process and treatment for stakeholders. It includes the stakeholders' trust in the professional and leadership of an organization's leader. All of these are what stakeholders follow, are interested in, and use for their decision-making, including for their support for organizational further operations. Accordingly, communication does not involve only the transmitted message or persuasion encouraging people towards changes, but it also involves the establishment of trust, knowledge and experience exchanges, identification and examination of problems, needs and opportunities, prioritization, and corrective approaches. (Mefalopulos, 2005)

We have to understand. When someone asks why we believe that this company is sustainable, we must be able to answer it at a certain level. Why? Since the coal business is not good? We must answer because now they have been fewer coal ports and no more expansion. Now, it changes to construct more power plants instead and it tends to be more in the future. Thus, a business can still grow but grows from this point. Thus, the company has to answer this or tell what it will do to be called "sustainable." It must be something it can do. (Key informant No. 1)

At the same time, it is the disclosure of corporate policies and practices to inform stakeholders so that they can follow and give advice to the company, leading to mutual understanding. Besides, it also leads to their acceptance of and confidence in the company, which will be advantageous for long-term investment and leads the company towards sustainability. (Key informant No. 28) It may be a little overlapping for stakeholders to make some decisions. For instance, investors may decide to invest from trusting in the provided information. It looks ok for them. They feel confident of it. Thus, this is the goal of the report. (Key informant No. 19)

Sustainability becomes business materiality that each company tries to communicate increasingly. Thus, the challenge businesses have to confront is to explain their major missions to help solve complicated social and environmental problems by communicating about the genuine efforts for solving them. All of these then can call for an organization's trustworthiness and credibility and can gain stakeholders' trust and acceptance. (Amfori, 2018)

4.4.3 Organizational image and reputation

Companies can express their determination towards SD approaches and the level of adherence to ethical standards of the industry and SD working framework of both national and international organizations. Typically, stakeholders' participatory communication can increase organizational reputation. (Colombo Stock Exchange, 2019), and create credibility for the organization. Most key informants agreed that the good image and reputation of an organization are crucial Outcome Factors of communication for SD.

Image is influential. If the image is good because of their consistent good deeds, we tend to believe that their good deeds will be continued. Thus, what they say will look credible. (Key informant No. 1)

I think it's a kind of challenge that a brand must look renewed and ok all the time. On the other hand, it must be interpreted as sustainable as well, which is rather difficult. Besides, communication for SD must go in SD directions. In other words, it must be blended into the brand. (Key informant No. 25)

We also conduct a survey, and the main survey is on communication that reflects our reputation. Each type of business will have its measurement, probably through a survey by questionnaires or in-depth interviews. (Key informant No. 9).

Communication can create an invisible property, i.e. brand reputation, corporate culture, etc., which is a part of the corporate total value. Therefore, it is essential to manage organizational reputation properly to represent the whole organization (i.e., the CEO's communication). Positive fame and a strong brand does not only involve the organizational environment but al the creation of the strong identity of an organization. (Zerfass & Viertmann, 2016)

4.4.4 Organizational and brand engagement and loyalty

Some key informants viewed that stakeholders' pride, engagement, and loyalty for a brand or an organization are one of the key Outcome Factors of communication for SD. Engagement and pride can increase the level of good relationships and stimulate stakeholders to desire to participate in supporting an organization's products or service continuously, including collaborating in developing and mobilizing the organization for long-term growth.

We have done so many good things. We use healthy ingredients, while others do not, so why won't we communicate to let our consumers know so that they will come to buy our products. They will be proud of us and develop a sense of brand loyalty. (Key informant No. 16)

It will create a connection within the company by bringing a problem up to be solved, which leads to sustainability. Employees will have engagement and love their company increasingly. On the other hand, it helps executives to have more understanding of the overall problems of their employees as well. (Key informant No. 21)

We may use the level of relationship between stakeholders and our business. For example, if they are major or primary customers or a big rawmaterial manufacturer, and if they have SD policies, they could push or drive us to have SD practices too. Thus, we may have to give importance to the group with possible impacts on our business. (Key informant No. 13) The beginning of the failure in creating an organizational sustainable growth is the decline of customers' loyalty and engagement. Thus, if an organization has employees who keep creating negative experiences for customers, customers' loyalty and engagement will be decreased enormously. Therefore, for sustainable growth, an organization must begin with the creation of employee engagement (Tharahirunchote, 2013) and the engagement of all groups of stakeholders. Firstly, an organization must understand all groups of its stakeholders via a process of engagement establishment to be able to respond to their needs and expectations, including through proper and effective CSR operations. (Noonin, 2018)

4.4.5 Stakeholders' participation and engagement

Stakeholders' participation and engagement in the organizational SD operations is another Outcome Factor specified by most key informants. Such a factor helps to indicate communication effectiveness or to what extent organizational communication creates both internal and external stakeholders' confidence and positive attitude, which leads to their acceptance and support, including their participation in organizational operations. Besides, it is important information an organization uses for improving its working process and developing its business to respond to stakeholders' expectations the most.

Some organizations even perceive communication as a channel for asking guidelines from their stakeholders, especially those who work together with the organizations. Although some issues may not be able to manage, at least to have stakeholders participate in a working process, it can bubble that decrease the crash with stakeholders, especially when the operational performance is not so successful. At least, we express our sincerity to provide an opportunity for them to work together. (Key informant No. 10)

...Secondly, brand value will be higher. Sometimes, the brand may not reflect an organizational image, but it is what stakeholders want to engage with without knowing what the essence is. Thus, if a brand is communicated effectively, stakeholders will want to engage with it. (Key informant No. 26)

The important measurement to indicate if our communication is understandable or successful or not is the level of employees' participation and engagement. In doing campaigns, we let employees participate. Previously, we did below-the-line media so that our employees could go to see around. Besides, we had campaigns via online channels, i.e., Fan Page to get engagement. (Key informant No. 3)

This goal cannot be accomplished at all without all employees' participation. Once a goal is set, deployment is to create understanding and inspire people to get involved. This kind of thing must be a goal of everyone in the organization because it requires everyone to collaboratively go in the same direction. Then, such a goal can be accomplished. (Key informant No. 9)

...To acquire something, a person may not be able to do it by himself, nor to have egoism. It requires collaboration from every sector, including communities and people surrounding him to buoy him up. It is like letting all participate. He has to view it as a journey that he has to make the business a normal practice in everyday life. Then, he can pass all crises. (Key informant No. 11)

Communication for SD is considered as a major tool in helping to create effective participation, starting from the determination of vision, negotiation, decision-making, plan development, and operations, up to the following of the impacts. Communication plays a role in information exchanges, creating consensus among diverse opinions and benefits, creating knowledge, and facilitating decisionmaking and operations. Therefore, communication is the heart of sensitive collaboration among the government, civil society, and private sectors. (GTZ Rioplus, 2006) It enables investors customers, or employees, major or primary stakeholders, to collaborate with an organization to operate a business efficiently and following organizational objectives, all SD action, and operational plans. Therefore, all operational plans should determine the roles of communication for SD. (Bhatia, 2020).

4.4.6 The creation of shared value and concurrent development

The creation of shared value (CSV) is the creation of economic value by the business model in combination with the ability in making profits and the creation of organizational competitiveness through the proper use of resources and principal expertise in creating socio-economic value simultaneously towards long-term profits. (Thaipat Institute, 2014) Accordingly, most key informants perceived CSV and concurrent development of stakeholders all through the supply chain are critical indicators of communication for SD effectiveness.

For effective communication of no matter what the content is, including SD content, it is essential to make sure that receivers understand why we are doing this, what benefits they will gain, or for whom the benefits are. (Key informant No. 9).

Message must emphasize shared value. Sometimes, we can list about 7-8 groups of stakeholders that involve with SD materiality, or SD content can be for some groups, not every group. However, I think ultimately the value must be for every party and every stakeholder, no matter in the role of givers or payers, the benefits will return to them. If so, they will be more aware of sustainability. (Key informant No. 27)

Within these five years, starting from 2020, I have to achieve holistic plans. Namely, if you have done something good internally, you have to communicate to let consumers know. We must also track all dimensions, i.e., profits or corporate finance in the economic dimension with the socio-environmental dimension, which is the use of shared value for capturing everything. Therefore, shared value is something we have to work for. It is my passion to make it happen. (Key informant No. 7).

For SD, the question is who is sustainable. Based on the universal principle, it is society, economics, and the environment. Shortly, all of them have to be sustainable together or concurrently. It will not be beneficial for only me, but only for you. However, we must have common switch spots, or shared benefits, which are genuine, leading to SD. (Key informant No 7)

If you want to communicate, i.e., to make people change, etc., you have to propose what kind of impacts you need. The first question is why do we have to do this subject? Why do we have to do it this way? What and how can we do? What will happen? For changes in sustainability concepts or issues, communication is crucial, not only for creating an image but for igniting and inspiring people. In other words, we communicate to stimulate and inspire stakeholders. (Key informant No. 19).

Notably, the creation of shared value in the context of sustainability is a method of integrating stakeholders in business management. Each company will use its specific communication strategies to communicate its SD activity operational performance. Still, a company can create more participation of stakeholders by providing an opportunity for them to participate in organizational SD. (López & Monfort, 2017), which will not only create shared value between stakeholders and the organization and maintaining business continuity, participation can help an organization to improve and impose its communication for SD effectiveness increasingly in the following years.

4.4.7 Response to expectations

Communication for SD aims to support and respond to the needs of all groups of stakeholders, but with different requirements and expectations, in terms of information disclosure patterns and details of the information. A company has to understand the types of information needed by each group of stakeholders. However, some key informants viewed that communication effectiveness is the ability of an organization in responding to the needs while balancing the expectation used for making decisions and supporting the organizational operations continuously.

Now, the actual sustainability is interpreted as stakeholder engagement, involving stakeholder requirements and expectations. Stakeholders do not claim that we have to be sustainable, but we have to respond to their expectations. Thus, is this successful communication? (Key informant No. 25) In the past, we can see that stakeholders were not so complicated. However, due to present context and dynamism, the expectations of stakeholders are very dynamic. In the past, if the business operational performance was ok, then the business could be continued. Then later, the additional accumulated profits were partly distributed for society in the form of charity, donation, or financial support, which we called 'returning profits to the society,' then we felt satisfied. However, nowadays only financial assistance or distribution or donation may not be perceived as good. To give someone money needs some strategies: a sense of giving without any expected returns, while receivers sometimes may perceive such granting or assistance in another way. This is complication, it is more complex. (Key informant No. 10).

First, we must go back to the issue of content. What do we want to communicate? To whom? The question of what to be communicated means something that we must do or is a part of organizational systems. It is not a checklist to check which CG issue we want to communicate. Besides, impacts should be focused, not input, i.e., what will be the impacts on the stakeholders? (Key informant No. 18).

Therefore, effective organizational communication for SD must support and respond to stakeholders' needs under the requirements and diverse expectations in terms of patterns and details of the information. (Deutsche Börse Group, 2013) Moreover, it should reflect expectations and advice for future improvement by prioritizing SDGs and support the establishment of standards. (Godemann & Michelsen, 2011)

4.4.8 Increased securities holding and higher stock value

Some key informants perceived that one interesting Outcome Factor is the higher stock value and the increased securities holding as a result of good business operational performance and business continuous growth, influenced by the acceptance and trust of stakeholders and investors in the organizational SD operations. Consequently, they are good indicators of SD communication effectiveness as well.

Sustainability involves stakeholders. I think I'm interested in one company, but I'm not sure if a company is not a listed company of SET, can it implement SD plans? If people believe that a company is truly sustainable, they will buy its stocks no matter they are short-term or long-term. Thus, if a company communicates that it is sustainable and people can buy its stocks confidently, it seems to be credible. The proportion of institutional investors should be increased as well. I think so. (Key informant No. 25)

Although key informants did not suggest much about this indicator in the study because they may perceive that there might be other factors that affect the higher stock value and increased securities holding, such indicators may be reflected from the perspective of stakeholders of the firms with negative returns or yields lower than that of their competitors. Therefore, companies should concern about the needs of people in the longer term. Besides, organizational leaders should communicate the purposes of an organization that will help to increase stock or share prices and trade volume in the next days as investors can perceive its value from the conveyed information. (Serafeim, 2020)

4.4.9 Effective organizational adaptation

Some key informants expressed their idea that each organization may use a different indicator to measure the effectiveness of a communication process for SD, depending on business types and objectives of business operations. However, one major indicator that every organization uses to measure the overall organizational effectiveness is its adaptability during the crisis and ability to operate business continuously. Therefore, internal personnel and stakeholders must be able to adapt themselves and respond to changes caused by the business environment rapidly.

Moreover, the factor that makes organizational sustainability fail is the lack of organizational and its personnel's adaptability. Adaptation is the ability of an organization in accepting changes and adapting itself to the changing environment. However, adaptation is not a one-stop process of changes, but it is an ongoing and continual process by an organization's life cycle. (Nurdin, Stockdale, & Scheepers, 2012)

One thing that can prove that an organization can pass its crisis or some crashes against it, is based on four expectations of CG code: survival, adaptability, and growth. What do we use to measure it? Each company will use different criteria. However, generally, it is the ability to pass the crisis despite some difficulties, but an organization can still stand. Thus, it must involve with adaptation. (Key informant No. 11)

The basic qualification that makes an organization sustainable is a responsible organization that has continual development and purposes that leads to the creation of balances. However, another key factor is the rapidity of organizational changes. Changes here are social changes and the environment. An organization must be able to respond to changes rapidly too. However, during the transitional period, it requires a mediator, which is communication. Thus, one of the important goals of communication is to enable to induce an organization's timely change, while enabling it to have a quick response as well. (Key informant No. 19).

An organization that can adapt itself tends to be very tolerant to failure in business administration and can manage its ecosystem by using general standards to create proper interactions and diminish obstacles to reach the objectives for creating trust from stakeholders. Additionally, flexible organizational structure and decentralization of power can be effective drivers to increase an organization's adaptability. Sometimes, an organization needs to shift its working pattern to be segmented (or silo) by having smaller adept units or modular units that help to yield more independent communication, while inducing proper integration that accords with the situation. (Reeves & Deimler, 2011)

4.4.10 A balance of all sustainability dimensions

It can say that a communication process for SD involves a well-balanced communication that has to connect all sustainability dimensions, and reflects both positive and negative perspectives of sustainability operational performance for evaluating organizational performance. (Deutsche Börse Group, 2013) Besides, it is the creation of a proper balance between details of information to be disclosed and the creation of a story to inspire stakeholders as a part of life, which is the main challenge of communication for SD (Amfori, 2018). Moreover, it helps to keep the equilibrium of "internal communication" that is top-down communication and bottom-up communication, (GTZ Rioplus, 2006), and "external communication," which is communication that can respond to the expectation and needs of all stakeholders. Thus, all points out that the important factor of communication for SD is the creation of balance of all concerned components.

Similarly, for communication effectiveness, an organization aims to use communication towards a balance in every dimension of sustainability by maintaining the balance of profit performance towards growth. On the other hand, it can enable the society to have confidence, trust, and support for business operations with worthwhile resource utilization and the least environmental impacts under effective corporate governance to make the organization, communities, society, the country, and human beings sustainable. All key informants agreed that the ultimate success of communication for SD is the occurrence of balance in all sustainability dimensions.

I think sustainability involves the balance, i.e., profits, society, environment, etc. However, to be transparent, both sides must be balanced (financial and non-financial). Then, let's see how much we can get. (Key informant No. 4)

If an organization needs to stay for another hundred years, you have to do something to lead to that destination. However, today business does not view it that way, it views SD as the matter of brand and image creation without any negative news. Remarkably, SD is misinterpreted. People think that afforestation, building a dyke, or give scholarships, etc. means sustainability already. They do not look at their own business. The essence of SD is the balance of business and environmental survival. The fertile environment may not be sustainable. It means that nowadays, business perceives only single dimension. (Key informant No. 26)

SD, for me, is a major change. It is a very huge change. If an organization wants social responsibility in the organization's mindset, it must not be just a charity, but it is the social responsibility that must be balanced with business growth. It must be a balance of social growth, both internal and external, and the environmental sustainability. (Key informant No. 19)

Therefore, a profit organization of every size must concern about the integrated strategies on social and environmental impacts increasingly since most problems occur because companies cannot create a balance between business and these two dimensions. Accordingly, an organization must impose communication plans and CSR activities by stimulating the stakeholders' understanding, while connecting society, communities, economics, and ecosystems together. (Pezet & Casalegno, 2017)

Besides, the success of a communication process for SD can be considered from two perspectives: 1) Institutes and mechanisms that create decision-making by establishing a balance of social, economic, and environmental purposes and regulating the implementation, i.e., a process and steps of planning and policies, especially the conduct of EIA and stakeholders. 2) Basic activities that add guidelines for good social, environmental, and economic practices for what might be clearer goals, i.e., a new model for natural resource management, integrated development project, etc. (Dalal-Clayton & Bass, 2002)

From the above information provided by key informants, there are Outcome Factors of a communication process for SD that help to reflect the effectiveness of communication for SD, which can be used as guidelines and indicators for a communication process for SD of Thai listed companies. The Outcome Factors of a communication process of SD of Thai listed companies are illustrated in Figure 4.29.

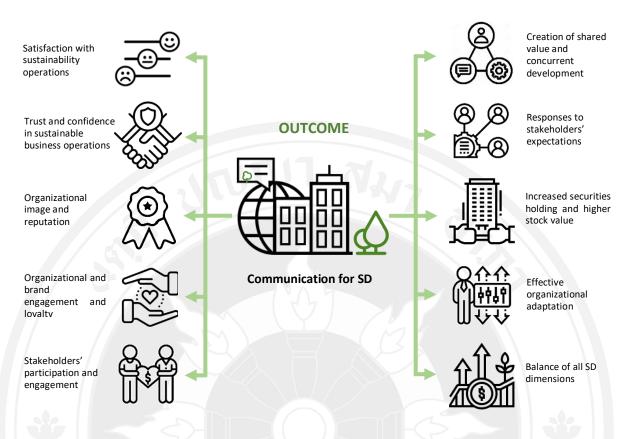


Figure 4.29 Key factors of a communication process for SD of Thai listed companies

4.5 The system environment

Communication for SD of Thai listed companies is a communication system consisting of input factors or the use of information from the environment. Then, the "input" information is transformed and transmitted as "throughput" to concerned units and processed to be "output," which yields an exchange process and "feedback" to the system. All of these factors need an exchange with the system environment. Therefore, an organization that exchanges with the system environment all the time tends to survive amidst the rapidly changing (Miller, 2012) since the advancement of technology, globalization, the global market expansion, and population changes enforce organizations to necessarily adopt or change their operational approaches. (Jones, 2005)

A good system will always seek for and maintain an equilibrium through exchanging with the environment via feedback that helps to indicate how a system has to be changed. Thus, exploration of system operations including their components will increase more cautions against system failure (Heil, 2017). Hence, companies that aim to create sustainability by employing communication as a tool should realize, understand, and monitor the system environment regularly for proper strategic planning, including improving the process used for monitoring organizational communication systems towards equilibrium and utmost efficiency.

One of the key factors is the ability of an organization to answer about these things as there are plenty of significant things. They are quick to sense and respond to changes. These changes are what I told you must cover changes in society, the environment, and regulations, and they must be quick. (Key informant No. 19)

In short, the system environment that influences a communication process for SD is as follows:

4.5.1 Business size

Most key informants agreed that business size is an important factor affecting the communication process for SD. Business size reflects organizational structure, management, resource, and capital allocation, numbers of stakeholder groups, stakeholders' needs and expectations, and organizational valuation and readiness to operate under sustainability guidelines, which are all different, especially SMEs with some investment limitation for communication and reporting organizational SD information. (Deutsche Börse Group, 2013)

Sustainability is a matter that everybody starts to concern about. However, there is a big gap between large, medium, and small-sized companies. They are all different in the valuation of information disclosure by.... Business size does affect it. Small-sized family businesses may not feel so obliged, but for large-sized family businesses like Central or CP, sustainability is compulsory for them because of several drives. Because of being big, it relates to a lot of other people; thus, we will get some pressure. For a small business, you can sell domestically in a small area. For small-sized companies, it is difficult for contacting for information because they don't have IR teams. If you want to talk to CFOs, it's difficult too because they have no time and hard to reach them. (Key informant No. 1)

For medium and small-sized listed companies with not so big resources, it is possible for them to understand about sustainability issues. Although some companies still perceive that ESG does not involve with their business, some of them understand, acknowledge, and realize the importance of sustainability, but their resources including human resources are limited. Thus, for information disclosure or communication, they do not have sufficient resources. Briefly, they understand but they cannot communicate to their stakeholders so effectively. (Key informant No. 12)

There are many sizes of the listed companies: large, medium, and small. Therefore, a sustainability process has to be considered based on each company's size, readiness, and necessity at a certain time. Some companies may give some concerns for their survival or to keep business at some levels and gradually insert ESG principles into their business with different weight. Thus, it depends on the context and sizes of companies. Their readiness is also different. (Key informant No. 13)

For family businesses, they will think by one way. For executives as an employee of a large company or a small company may think by other ways. Thus, communication is very influential, but will be different for each level. (Key informant No. 19)

It depends on the sizes of each business. Thus, the deployment of each company will be different. Thus, it must be adapted to the available flow of each place. Suppose they have no SD node, they may not necessarily have it, but they must think about how to make it as a SD strategy. Thus, it will be deployed by their existing flow. (Key informant No. 9)

For a large company or enterprise, i.e., some of them are state enterprises or regulating offices controlling the national resources or public facilities, it will be even more difficult because the scale of their stakeholders covers people of the whole nation. Therefore, what are the expectations of these people as a whole? It is a limitation. (Key informant No. 10)

However, some key informants gave some interesting notion that sustainable business operations do not involve business size. Mostly, it is just an excuse for not applying SD principles. Instead, it depends on perspectives of business operations and corporate determination. The importance is that companies that will operate sustainability approaches must adapt their thinking and perspectives to the sustainability principles first, and then apply them into each step of the operational process so that they can communicate properly to their stakeholders as truly practiced.

For sustainability, there may be something we did not comply with, but we adapt to be suitable for us, i.e., we adapt some tools to be our applicable tools. For instance, regarding the setup of the sustainability sub-committee, our question is whether we can have a working group instead. For me, it should be ok. If the CG scores are given to a company that has the SD subcommittee, it may force unready companies to form a sub-committee only for getting such scores. It will be an obstacle in reaching the ultimate goal of sustainability. Companies do it because of scores without genuine sustainability practices. It must not be a copy from some other companies either. We must do what applies to us. We may not get full scores of 5, but we are complete in our way. (Key informant No. 27)

I think it starts with the wrong message. It's a mistake. As I told you before, sustainability does not involve sizes. No matter the size a company is, small or big, SD concepts can still be applied. It is not that I have money so I will do it. It is a mindset. Thus, firstly policies must be determined clearly. They are included in a business process already, so we don't have to segment them. (Key informant No. 26)

Although communication planning and sustainability operations should concern about an organization's size for assessing its potential and readiness. However, the awareness and practices of sustainability may not involve the size of the organization so much as it is rather a process of thinking and belief, or mindset, to determine if the organization wants to make it happen or not. However, there are no communication or SD reports suitable for companies of all sizes because each company has different major or primary stakeholder groups. Therefore, its receivers and purposes of communication for SD are different accordingly. (WBCSD, 2018)

4.5.2 Business nature

Some key informants perceived that communication for SD has to consider the nature of business operations since each type of business has a different process, management, products, and services, including sustainability risks, numbers, and needs of stakeholders. Moreover, large-sized businesses are often different from medium and small-sized businesses in many aspects, while having relatively a more variety of products and services. Therefore, communication for SD must be well-planned and consider the nature of the business to a great extent.

Regarding sustainability, lots of people often think of E or environment mainly, but it depends on the nature of business. Some businesses emphasize E, and some S (social dimension). For G (governance), it's the basic principle already. However, sometimes, it does not mean that if our business is not related to some dimensions, we don't have to execute them. For instance, if the business is commerce or a trading company, it should not concern about E, so it does nothing about E. E can be applied in some parts. For S, it is related to the extent we supervise or take care of our employees or what and how we can do. This can be done. (Key informant No. 1).

We have to tell first that our company deals with so many brands. Thus, our ESG will not be the same as those of manufacturing companies or factories with single products or a group of products. Therefore, communication is very challenging for us. We will consider it in the overall view, not specifically. For our businesses, it's very complicating and will be surely unlike manufacturing nature of business. (Key informant No. 16) Accordingly, communication for SD aims to create motivation for a variety of stakeholders to stimulate unique aspects of consumers and different business groups. Besides, it can be a shield to protect an organization and its stakeholders against wrong decisions from the sustainability guidelines. (Clarity Sustainability, 2014). Business nature may affect the way of communicating diverse business operational information. At the same time, communication can assure stakeholders to choose to buy products and services from the companies that comply with sustainability principles. On the other hand, it leads an organization to look for and develop new products and services that respond to the needs of stakeholders increasingly and continuously.

4.5.3 Budgets for communication for SD

Budgets must be allocated for a communication process for SD to manage and operate the imposed strategic plans, especially media production and dissemination of organizational sustainability information via various channels, i.e., printed media, mass media, electronic media, new media, and activity media. Especially, stakeholders are diverse; thus, an organization must communicate to cover all groups inclusively. Some key informants indicated that all these factors need quite high budgets for operating communication towards efficiency.

...From my experience, companies that disclose a lot of information have to spend a lot of money as it is rather costly. On the other hand, the reason they disclose a lot of information is because of their huge capital and their knowledge about SD. (Key informant No. 1)

Although budgets affect a communication process for SD, a lot of budgets should not necessarily be spent on successful campaigns but should be utilized optimally for proper planning and creating collaboration with various agencies. (UNEP & Futerra, 2005) Therefore, budgets each organization allocates are not so important as a worthwhile resource, capital, and budget utilization and the ability to communicate about sustainability towards the most efficiency.

4.5.4 Communication innovation and technology

Some stakeholders explained that one of the environmental factors that influence communication for SD is innovation and technology that changes so rapidly, but enables stakeholders to access information and follow timely information about organizational operations. On the other hand, it may cause information errors and distortion due to the rapid diffusion of digital technology. (UNESCO, 2018) Accordingly, innovation and communication technology play a great role in the communication process for SD and reporting about organizational sustainability inevitably.

On the other hand, the SD report or integrated report can add perspectives on innovation, which is used for measuring the value an organization creates for its stakeholders based on SDGs of the United Nations. Moreover, technology is used for making a report brief and respond to users genuinely. (Chen & Perrin, 2017). Consequently, business sectors tend to prepare an integrated report by combining the increased use of technology continuously. Thus, key informants perceived the importance of environmental factors on organizational communication for SD.

If we look at the trend of consumer-facing AI, our company has done it. However, related to sustainability, I think it is interesting, we have to further study and manage how we can do about this. For reporting based mainly on GRI, it is even more challenging because people started to use more digital tools. Before 2018, our report was over 150 pages, this year we have only approximately 100 pages, excluding performance data. Therefore, next year, excluding performance data, I challenged my team that I prefer digitized reports, so can the length of my report decrease by 30%, or about 70 pages? (Key informant No. 16)

Every company tries to reduce the number of SD reports' pages; thus, each company will place QR Code for performance data in the report or highlight it. Therefore, performance data that needs to be frequently updated, a QR code will be placed and eventually, it will pop up on the website on which there has an application for scanning a QR code. (Key informant No. 23) We have tried to make more shortcuts and focus on more highlights. In the future, we will aim to digital use and how to apply more information. We don't want a thick report and fewer people read it. We may use other media to supplement it and apply content to such media. Like this year, in our Annual report, SD report, we also apply digital content additionally. (Key informant No. 9)

From the advancement of digital technology and the internet, companies have more choices than the traditional printing way to access, develop participation, and creating interesting and responsive content., including improving towards more explicit information display to help stakeholders to gain better experiences. (WBCSD, 2018). Thus, the challenge is the application of new technologies for communicating and reporting sustainability content and expanding the scope of information communication that is ubiquitous to enhance stakeholders' understanding more conveniently, rapidly, precisely, and to respond to a variety of information needs of investors promptly. It can also draw attention in parallel to the creation of organizational value and image by new media innovation.

4.5.5 Organizational risk factors

Organizational risk factors are another important issue that always influences and affects business operations. Companies must consider and analyze risk factors thoroughly and inclusively throughout the supply chain of the companies. Besides, they always manage risks to make SD operations and communication smooth. Most key informants agreed that in an unexpected situation, communication can be stumbled and the message has to be adapted appropriately and congruently to the emergency. Moreover, the analysis of risk factors can help to see opportunities for adapting operational and communication patterns as well.

...For the energy group, they have plenty of risk issues, so they do a lot of them and disclose a lot of information about what they have done. (Key informant No. 1)

The challenge should be there have been a lot of situations that we never expect to happen increasingly, such as climate change, or other situations that happen on the way and make our communication get stuck as there will be more important issues to be communicated, or something happen urgently. (Key informant No. 9).

Sometimes many companies perceive sustainability as risks that need to be prevented to yield negative impacts. It reflects in the cost for reducing the impacts. Once it becomes expenses, it may not be suitable for the economic condition where expenses should be decreased. Therefore, sustainability can be both opportunities and risks. Risks here mean the willingness to pay. For opportunities, we have seen lots of them in many businesses that use social or sustainability issues to develop new services. They look for opportunities, from the perspective of a sender. (Key informant No. 10)

Risk factors can occur within and outside an organization and become the environment that affects the communication process for SD. Therefore, understanding opportunities and risks that may affect business operations is a facilitating factor towards the accomplishment of sustainability. (The Securities and Exchange Commission, 2017a) Moreover, companies must be ready for anticipating risks that might occur and can manage them promptly. Risk management in all dimensions: environmental, social, or governance, should be an important factor for business operations and risk culture, including appearing in the systems and policies all through business operations too. (Deutsche Börse Group, 2013) Risk factors thus are an influential and important environment for communication for SD of Thai listed companies.

4.5.6 Drives from investors and stakeholders

Most key informants agreed that the environmental factors that influence a communication process for SD are the drive from investors and stakeholders because every company has to deal with a variety of stakeholder groups, especially Thai listed companies that give high importance to investors and shareholders. These groups of

stakeholders will stimulate and drive an organization to manage its operations towards good operational performance to compensate for the investment in the form of dividend or speculative profits from the stock market. Furthermore, companies that expand their business or have customers aboard will even be compelled by both Thai and foreign investors to establish credibility and trust by complying with sustainability guidelines. Moreover, it involves strict legal and international enforcement of regulating agencies. Besides investors and regulating agencies, other stakeholder groups, i.e., a board committee, employees, customers, business partners, etc. are all influential and keep stimulating an organization to operate and communicate sustainability regularly.

Now, investors all around the world or stakeholders of the listed companies look for sustainability information as a factor for their investment decision or for doing business with a company. (Key informant No. 18).

It is the investors' expectation or of any concerned people. As told you, companies cannot live by themselves, but they have to concern about their stakeholders. Therefore, driving forces from markets will surely affect companies more or less, depending on each company. All companies are not equal. (Key informant No. 11).

One factor is investors, which seem to be increasing. They look for something that they can gain increasingly. Therefore, for us, in my department, we have to judge where we should go, which one we should deploy in the company, or which one is not ready to deploy, etc. (Key informant No. 4).

Principally, they are requirements from customers. No matter what company it is, even in the stock market. However, for Mitr Phol, we are not in the stock market, but customers require that we have to submit a sustainability report for communicating between them, their customers, and business partners. Thus, the main drive is customers' requirements, which is quite compulsory. If we won't do it, we cannot sell. It is a big force that makes the company work on sustainability and issues for communication. (Key informant No. 23) As listed companies, they have to involve with several groups of stakeholders. At present, stakeholders have higher expectations from a company and play more roles in raising challenging questions to the committee. Thus, communication is very vital. (Key informant No. 28)

From the perspective of investors nowadays, especially institutional investors, they started to highlight operational information and disclosure of operational information, both financial performance in the form of accountancy and non-financial performance, i.e. the results of sustainability operational performance. They are the consequences of pressure. General stakeholders also expect SD and are more complicated. Especially stakeholders of a large company who is a manufacturer of mass products, or a leading company, will play significant roles and enforce the company to disclose its operational performance increasingly. (Key informant No. 10)

From the above opinions, they reflect the roles and influence of stakeholders on a communication process for SD in every component, starting from the acknowledgment of expectation and needs as input factors, leading to the SD content design, and planning of proper channels for each group of stakeholders. Besides, organizations can measure communication results by evaluating stakeholders' perceptions, understanding, satisfaction, confidence, trust, and a sense of involvement. Besides, nowadays stakeholders are aware of and informed of SD information substantially so they play more roles and participate with the organization to create sustainability discourse. Thus, an organization needs to understand and determine to comply with sustainability guidelines by interacting and participating in activities with stakeholders for developing and improving sustainability guidelines for stakeholders more effectively. (UNESCO, 2018)

4.5.7 Global trends and New normal

Not only do organizations have to consider stakeholders' needs and expectations that are major drives for companies to communicate sustainability materiality continuously, but they must also follow the global trend and the occurring new norms for applying them to improve and plan business operations and communication to be ready to cope with the global trends that change rapidly. These are an organization's risks that may affect the business's survival or continuity.

Most key informants agreed that problems and environmental situations are enormous while the global trend changes rapidly, i.e., in the political system, world economics, climate change, market motivations towards a shift to using products with low-carbon emission, labor standards, human rights, product safety, (Colombo Stock Exchange, 2019), natural resource shortage, new regulations, impacts of new technology and innovation, (Deutsche Börse Group, 2013), plague, loss of biodiversity, trade competition, and new social norms, etc. (Group of Scientists appointed by the Secretary-General, 2019) Therefore, companies have to understand and follow these situations closely and apply them to plan for coping with them in the future.

Real-time started to be an issue because lately business must be operated more quickly. Speed is what we have to communicate to our employees to encourage them to develop themselves, to work faster, and to respond to changing situations. (Key informant No. 9)

It is like when we talked about governance in the old days. We did not feel about G at all, we might know that G had to be done, but we were still not familiar with it yet. This happened over ten years already. Today, none will ask why we must have governance principles. If you don't do it, investors will not invest or pay attention. For E and S, they are the same components as ESG. Today, we have E and S, but later there will be something like this. If you don't pay attention to these things, i.e., you do not treat your employees well, you use child labor, etc. you will be punished by society in many ways. Eventually, you cannot sell things, you will be in a tough situation. (Key informant No. 1)

...When Covid comes, it faces a new normal, and everything changes. Therefore, this year, we focus on changes. We have to see if a business model will change after Covid. People may or may not get familiar with online shopping, but now online revenue rises abruptly, while shop revenue is zero as we have to close all department stores, so how can we change this new normal? It is believed that the business model must be changed. We have to prepare if the business model has to be changed. Sustainability has to be changed as well. (Key informant No. 16)

It responds to the needs of customers because the world changes. Like everyday issues, today it is a trend about Thai-Chinese relationships. That is the most important issue as it is situational. However, eventually, it is communication that tells how companies respond to the needs of the society on that particular issues or in such a crisis. (Key informant No. 23)

Serafeim (2020) states that companies tend to flexibly confront the crash and tough situation none ever expects. If companies can handle it in the long term and comply with societal megatrends, such handling with the crisis in the long term will increase the perception that the companies are concerned about the needs of the society, not short-term benefits. Therefore, companies have to consider and apply situation trends and new social norms as a frame for proper operational planning, product and service development, and communication for SD.

4.5.8 Rules, requirements, and regulations of regulating agencies

Rules, requirements, and regulations of regulators and sustainability support agencies are another important environmental factor that influences an organization's survival and organizational development towards sustainability. Most key informants view that rules and regulations are the framework for business operations and communication for SD, to which organizations must adhere strictly.

Besides, organizations that have business operations in foreign countries or want to increase their competitiveness with foreign companies have to apply rules and regulations, both national and global. Most regulations and standards will determine guidelines for operations and communication for SD as well. Accordingly, organizations must understand and practice correctly, including communicating and reporting sufficiently and completely as required by the regulating agencies. Moreover, the regulating agencies also use the received information for following, auditing, and assessing the effectiveness of sustainability operations of business sectors as well. Regarding regulating agencies, if they give a hint that sustainability has to be this way or that way, companies may understand, but cannot pass the assessment. Often, they will set up certain criteria and will evaluate by that way. Then, who judges? (Key informant No. 19)

There have been many policies that are universal standards that several organizations apply nowadays because investors will look at them as important factors when want to invest in the listed companies, i.e., SDGs as per DJSI of Dow Jones, such as the issue of carbon emission. Thus, we will use them to determine our goals. (Key informant No. 3)

They are regulations, aren't they? For instance, the Annual Report that we must contain the issues of sustainability is one of the requirements of The Stock Exchange of Thailand. DJSI and CDP also have sustainability analytic, while S&P has ESG Management. They are all important. DJSI makes investors much more confident of the organizations. It also lets us know where we are among those of the same line of business or our peers. Sustainability on the websites or whatever is something we must do to respond to the questions about it. This is our main purpose. Nowadays, what is important is a license to operate. If we don't communicate what we have done for the society and the environment, we will deprive of this license. (Key informant No. 23)

Rules are subject to change. Like now, universal standards have been modified all the time. Suppose today we have accomplished up to this point, they will move and adapt rules to be more difficult. This is a challenge of working on sustainability, especially Thai organizations will have more difficulties applying all rules, unlike foreign organizations. For example, some information we cannot disclose. Companies aboard can disclose the information about their CEO's salaries, but in our country, we cannot as SET must be the one who can request it. Law regulators must consider if it is impossible to do so. It's difficult and due to some rules, it's not easy to do. (Key informant No. 3)

More information is needed by regulators, i.e., SET or SEC because investors, especially institutional investors want to acquire more operational information. (Key informant No. 10) Accordingly, regulating agencies give importance to the disclosure of sustainability information to strengthen the market and help listed companies to attract new investments from their communication and sustainability information disclosure complying with the regulations. (Colombo Stock Exchange, 2019) Besides, it helps to reduce risks and examine compliance with sustainability regulations and other related laws. Consequently, it also helps to improve the operational effectiveness and create new things and bring about growth to the organizations. (Serafeim, 2020)

Nevertheless, due to tremendous rules and regulations for companies to hold and adhere to, companies must have knowledge and understanding of them, and keep to govern the operations and communication for SD to proceed as determined by the concerned agencies. In the case of practices, companies may choose to adopt the criteria that are proper and congruent with the business operational context since some regulations are not compulsory yet. Besides, complying with all regulations may cause some trouble and increase unnecessary burdens, including overusing corporate resources.

The influence of environmental factors on a communication process for SD expressed by key informants indicates that the issues are diverse and are the environment of the systems that occur within and outside an organization, which is a major framework for determining the direction of SD operations and communication. Therefore, listed companies and concerned agencies have to analyze and consider such system environment thoroughly to operate and communicate sustainability towards utmost effectiveness. The system environment as the main framework for a communication process for SD is summarized and illustrated in Figure 4.30.

The above-mentioned factors illustrate that a communication process for SD comprises several factors: input, process, output, success, and system environment, which possess certain details and specificity. However, components of each factor must work in coordination and support one another perfectly. Consequently, it enables a communication process to create changes, while developing stakeholders and organizations towards sustainability. The factors related to a communication process for SD of Thai listed companies are displayed in Figure 4.31.

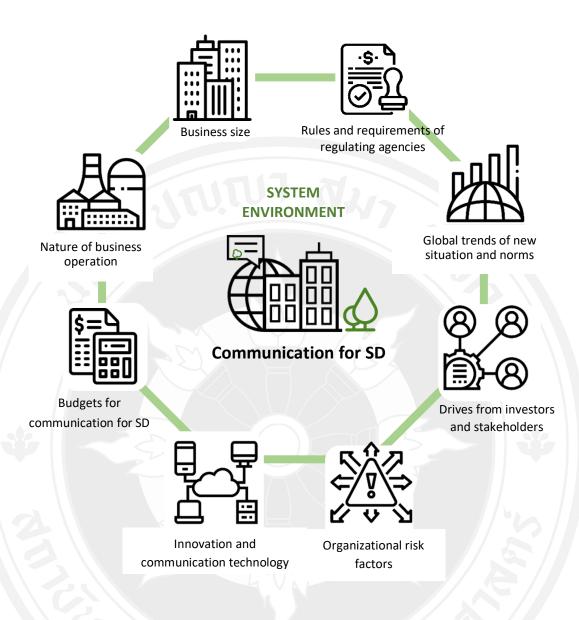


Figure 4.30 The system environment affecting a communication process for SD

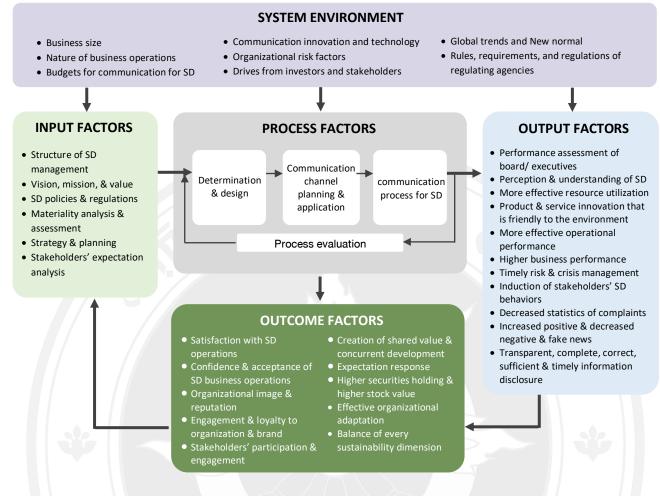


Figure 4.31 A system of communication for SD of Thai listed companies

The above Figure illustrates all components of each factor that are important and related to the SD operations systematically. Thus, if any component fails or is missing, it surely affects a communication process for SD. For instance, if there is no structure of SD management, there will be no people responsible or no experts in the process, which consequently affects the understanding of message design and the use of proper channels, which affects the perception and understanding of stakeholders and decrease stakeholders' satisfaction and organizations' image, etc. Such a communication system is controlled by system environment, which keeps the equilibrium of the system and conditions communication for SD to be more individuated or specific than communication in general contexts, as a consequence of the organization goal in creating changes to the business, society, and the environment, including the organization itself, in a better direction.

CHAPTER 5

COMMUNICATION STANDARDS FOR SUSTAINABLE DEVELOPMENT OF THAI LISTED COMPANIES

The research, "Communication Standards for Sustainable Development of Thai Listed Companies," aims to search for standardized indicators and criteria of communication for SD of Thai listed companies by analyzing factors related to a communication process for SD of Thai listed companies.

"Standards" mean criteria or regulations about desirable characteristics that are generally accepted and used as guidelines for practices in certain issues, and can be applied as a reference, judgment, and assessment of the value, quality, and effectiveness of such practices.

"Communication standards for sustainable development" mean criteria or regulations about desirable organizational communication that is accepted as practical guidelines or operating methods that cover a communication process for sustainable development of an organization. A communication process for SD comprises input factors (i.e., policies, vision, mission, value, etc.), process factors (i.e., both internal and external organizational communication procedures via channels), and output factors (i.e., content, statement, image, infographic, video, clips, etc.), leading to outcome factors from the accomplishment of SDGs. Therefore, this study divides communication standards for SD based on the components of the system as follows:

Input Factors are the factors at the initial stage leading to the operation of a communication process for SD of Thai listed companies, which finally yield output in various forms, i.e., PR media, statements, image, including the SD report, to enhance perception, acceptance, and organizational behavioral modification towards sustainable development approaches. The input factors consist of the SD management structure, SD policies and regulations, vision, mission, value, materiality analysis and assessment, strategy and planning, and stakeholders' needs and expectations.

Process Factors mean steps and operational methods in transmitting or conveying SD information of an organization to its stakeholders to perceive, understand, and be assured of the organizational SD operations. The process composes of message determination and design, media production and utilization planning, and selection of presentation forms and methods.

Output Factors mean the efficiency or output of communication operations for SD that Thai listed companies transmit and convey to both internal and external stakeholders qualitatively and quantitatively, i.e. numbers of customers, views, service users, and participants, including information volume that is presented, income, budgets, attitude towards an organization and its brand, quality of life, satisfaction, and behavioral changes, etc.

Outcome Factors mean consequences from communication operations for SD of Thai listed companies, i.e., stakeholders' perception, satisfaction, acceptance, and confidence, including SDG accomplishment, growing operational performance, sustainable organizational development, certified SD awards, etc.

The researcher applied System Theory and other related theories and concepts in Chapter 2 as a framework for analyzing document and media disclosed to the public by eight Thai listed companies, which were the samples of this study, in combination with the data -obtained from in-depth interviews with people involved in communication operations for SD, regulating agencies or regulators, SD promoting and supporting agencies of Thai listed companies. There was a total of 28 key informants at the management and operational level.

Moreover, the researcher used 27 determined standard statements, together with indicators of each standard statement, which is the measurement variable and indicates desirable and appropriate characteristics of the components of the standards, including criteria for judging standards.

We communicate to change the organization's goal to be more explicit in its purpose, identity, and practice. This purpose is an internal change, which cannot be achieved if stakeholders do not collaborate with us. Therefore, successful communication is to enhance stakeholders' collaboration or their engagement with us to create a balance. (Key informant No. 19). An external communication, I think, is communication that needs social change as well. If we raise our communication level, we can just say what we have done, which conveys hidden meanings that we can create impact as well. It will help society learn that we work on sustainability, finally, we can tell that what impacts we create for the society. (Key informant No. 20)

The most important issue is the impacts on receivers or what is said yields any benefits to receivers? This is a key challenge, not matter for internal and external stakeholders. It is not only the matter of 'you say what you do,' it must go further than that. Namely, what you do yield any impacts on me? It can be any impacts at an individual, group, societal, community, national, or even global level. (Key informant No. 7)

From the above statements, in the judgment of communication standards for SD of Thai listed companies, the researcher determined scores to cover every factor, based on proper proportion and significance of each factor, with the full scores of 100. The scores of outcome factors have the highest proportion of 40% or 40 scores because of the emphasis on SDGs based on SD guidelines at the universal level, namely DJSI (RobecoSAM, 2019a) and MSCI (2020). Besides, all key informants gave importance to the achievement of sustainability, which requires effective communication for SD for all groups of stakeholders to perceive, understand, be satisfied, accept, and be confident of organizational sustainability operations, which is the major mechanism for an organization's survival.

For other factors, i.e., input, process, and output factors, the researcher determined 20% or 20 scores equally because, after the analysis, all three factors are seemingly equally important. The proportion of scores is as illustrated in Figure 5.1

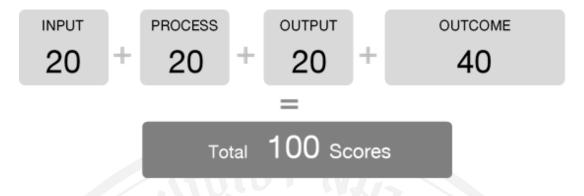


Figure 5.1 The proportion of scores of input, process, output, and outcome factors.

5.1 Input Factor Standards

Input factor standards are fundamental and important factors of a communication process for SD of Thai listed companies. They are the determinant of SD operational and communication direction and the success goals that happen between an organization and its stakeholders.

This factor is fundamental of everything, starting from the establishment of a company, i.e., vision, mission, philosophy, value, declaration, structure, etc., which are different among companies. Still, it is a core value of a company. Before we will look outside the company, we must start from the inside first, starting from Day 1 since employees are recruited, then HR tries to cultivate some value towards continuing and sustainable growth. It is not only for profits, or just do it aimlessly and then close the company. Input factors are very important and should be planted as DNA in all employees to realize that we will grow continuously and sustainably. As the initial factors, they must be solid. (Key informant No. 36)

For input factors in a communication process for SD, they comprise six principal components, which can be determined to be 10 standard statements as follows:

5.1.1 SD management structure standards

SD management structure standards compose of two standard statements:

Standard statement 1 : Clear organizational management structure for supporting SD operations.

The standard in this statement is for supporting an organization to impose a management structure that facilitates proper and concrete sustainability operational environment. The main agency is established with clear responsibilities and hierarchical governance mechanisms at a policy, management, and operational level.

...Directors are leaders who play significant roles in mobilizing SD in the company. (Key informant No. 28).

Sustainability policies can work if they are determined from the top to the bottom. Earlier, we had only CSR Committee, but this year we adjusted it to be Sustainability Committee, which can cover ESG more inclusively. I agree that some policies must be issued from the top management and an agency is assigned to have direct responsibilities, which is ESG Division. I think, for the industry part, it is SD Division. (Key informant No. 20)

Regarding the SD management structure, I recommend having a direct agency to work on SD directly. Without clear agencies or functions, sustainability cannot happen or communication cannot be so powerful. Besides, the sustainability of each company and each line of business is not the same but is all different completely. Even, the representation of each group may not be precise. Thus, for other companies who have no SD function nor have enough workers to do this, they may take a multitasking approach, which can be disadvantageous. (Key informant No. 2).

Indicator: "An organization must have management structure to support SD operations at all three levels: board/policy, management, and operational," with the following sub-indicators:

1.1 Having at least one group of a board of directors or committee or subcommittee (at the board or policy level) with specific roles, duties, and responsibilities in stipulating and governing SD explicitly, and at least one sustainability expert or personnel with experience in sustainability.

- 1.2 Having at least one group of a committee, or sub-committee, or working group (at the management level) with specific roles, duties, and responsibilities in stipulating and governing SD explicitly.
- 1.3 Having at least one division/section/ or department (at the operational level) with specific roles, duties, and responsibilities in stipulating and governing SD explicitly.

Scores: The general score of each standard statement = 1 score, and full scores = 2 scores by assessing organizational management structure, roles, and documents or a handbook of Standard Operating Procedure (SOP). The scores will be given according to the level of supporting organizational structure by considering the board or policy level as the most important level since SD direction and approaches are determined at this level. Besides, if the top management does not value sustainability, other employees cannot accomplish it. On the other hand, at the management level, policies from the board will be transmitted and organized concretely, so this level is ranked as the second important level. The operational level is a sub-unit that implements plans and policies towards efficiency. Although practitioners at this level cannot accomplish their tasks without their superiors' support, insufficient staff (i.e., having only one sub-unit to operate it solely) cannot drive an organization either. Thus, the criteria for scoring are as follows:

- An organization with supporting structure at all levels = 2 scores
- An organization with supporting structure at the policy = 1 score level
- An organization with supporting structure at = 0.75 scores the management level
- An organization with supporting structure at = 0.25 scores the operational level

Examiner: An assigned assessor.

Standard Statement 2: An organization has a mechanism in governing sustainability operations systematically

Sustainability operations and a communication process for SD can occur only if an organization is equipped with a management structure to support or facilitate business operations per SD guidelines. After the establishment of such a structure, a superior will delegate policies, orders, or guidelines to his or her subordinates or through downward communication, as an operational framework and the starting point for a communication process for SD. Another important thing is a mechanism in governing a regular and continuous reporting process of sustainability operational performance. Such reporting can help to examine the past work or the results of operations and it will be reported through a hierarchical chain of command or upward communication. (Wittaya-Udom, 2013).

The board of sustainability was appointed especially because the top management and the board committee value SD and because we have to drive towards it too. Now, we have a meeting with CSO every month, and a board meeting, called sustainability committee, every quarter to see how we have driven the plans. The head of each operation must implement the plans and follow up, including reporting performance against the data of the sustainability committee every quarter. Besides, the report is also proceeded to the board committee every three months, as one of the agenda is sustainability. (Key informant no. 16).

Indicators: An organization is equipped with a mechanism for governing sustainability operations systematically and consistently," with the following sub-indicators:

- 2.1 Having a report on sustainability operational performance to a committee responsible for sustainability explicitly.
- 2.2 A concerned committee has a meeting agenda on the sustainability operational performance at least every three months.
- 2.3 Having a report of sustainability operational performance certified by the Sustainability Committee or Sub-committee regularly every year.

Scores: The general score of each standard statement = 1 score, and full scores

Sustainability Committee, management structure, a report of Sustainability Committee's sustainability operations. The report of sustainability operational performance certified by the Sustainability Committee or Sub-committee is a major mechanism reflecting the responsibility of the committee and their determination in driving the business towards SD principles. Besides, supporting agencies are also determined as practical criteria as empirical evidence that reflects a clear governance process. For instance, Thai Institute of Directors Association (2 0 1 9 a) determined criteria for assessing a project of exploring corporate governance of the listed companies in 2019 in E105, which states, "All sub-committees (only at the board or policy level) prepare their operational performances and disclose such information in the annual report." Therefore, the scores of this part have a higher proportion than other parts.

On the other hand, the organization of sustainability meetings every three months can help to govern the operations continuously, solve problems, and adapt operational approaches promptly. Thus, it is as important as the designation of functional line that indicates the roles and responsibilities of concerned agencies and reflects if sustainability operations are in consideration and governance of the committee directly and consistently or not. Thus, the scoring criteria are as follows:

- Having a direct line to report to Sustainability Committee = 0.6 scores
- Having a sustainability meeting every three months = 0.6 scores
- Having a report on the responsibility of the sustainability = 0.8 scores committee

Examiner: An assigned assessor.

5.1.2 Vision, Mission, and Value Standards

Vision, Mission, and Value Standards compose of two standard statements:

Standard Statement 3: Organizational vision, and/or mission reflects sustainable development guidelines explicitly.

This standard aims to see if an organization determines a vision, and/or mission that reflects a long-term perspective of business operations under the principle of SD. Vision/mission is an important pin in business management towards SD direction successfully and is a fundamental factor leading to an operational

process and organizational communication. Kuntasuwun and Benjarongkij (2019) state that after organizational leaders and top executives determine SD policies, they also determine the organizational vision, but inserting the term "sustainability" in the organizational vision as well. However, in the assessment process, it does not only focus on the use of the term "sustainability" in the organizational vision/mission, but it must display the main concept of SD as well, i.e., responsible business operations, global population's quality of life development, etc., while maintaining the proper level of natural resource utilization without overuses or beyond natural production potential. Moreover, the balance of economic, social, environmental, and governance is focused. (The Stock Exchange of Thailand, 2014), including clear operational plans towards SDGs.

To determine SD in the vision must come from the board's policies. Therefore, it is essential to know which direction an organization will go. Especially, before initiating any engagement, it must start from organizational vision first. Each year in preparing strategic plans of each organization, it has to review if the determined vision has been achieved yet and when it will be achieved. Therefore, to have sustainability into the organizational vision, it will be deployed to be organizational strategies that reflect such issues. (Key informant No. 26)

Indicators: "Organizational vision and/or mission reflects SD operations explicitly," with the following sub-indicators:

3.1 Organizational vision reflects SD operations explicitly

3.2 Organizational mission reflects SD operations explicitly

3.3 Organizational vision and mission are reviewed regularly every year.

Scores: The full score of the standard statement = 2 scores by examining the statements of organizational vision and mission from the annual report, SD report, and websites. The scoring is based on the level of significance given to the vision determination, which is typically a long-term goal and inspiration for business operations, whereas missions are to conquer organizational goals. (Cornelissen, 2004). It is a frame for management towards the imposed goal successfully.

Therefore, both parts are important equally. However, organizational vision and mission must accord with the business environment that changes rapidly and is affected by several factors all the time. Thus, an organization needs to review its goals and guidelines continuously. The scoring criteria are as follows:

- The explicit appearance of SD concept in organizational = 0.6 scores vision
- The explicit appearance of SD concept in organizational = 0.6 scores mission

Having a review and assessment of organizational value = 0.8 scores at least once a year

Examiner: An assigned assessor.

Standard Statement 4: Sustainable development approach is contained as a part of organizational value.

This standard aims to drive an organization to apply the concept of SD into its organizational value as a frame for its practical guidelines and a foundation towards desirable behaviors and corporate culture, including determining patterns and methods for communicating with stakeholders.

...It is important to develop employees' sustainability mindset. Many organizations may add this approach as an organizational image without genuine changes. Can you imagine that? If you will deploy organizational value, it must reflect in business activities, starting from the upstream to the downstream. The importance is how to make such values reflect in the behaviors. (Key informant No. 26).

Sustainability covers everything in an organization. No single person or agency can make an organization sustainable; I want everybody to help publicize that everyone is an important person for driving an organization towards sustainability. (Key informant No. 4).

Indicator: "Sustainable development concepts appear in the organizational value eminently", with the following sub-indicators:

- 4.1 The SD approach is contained as a part of organizational value eminently.
- 4.2 The SD approach appears in the strategic plans for creating value eminently.
- 4.3 The efficiency of organizational sustainability value is assessed and reviewed regularly every year.

Scores: The full score of the standard statement is 2 scores by examining the statements of organizational value shown in the annual report, SD report, and organizational websites, including in the strategic plans for creating organizational value. The scoring is based on the level of significance given to the procedure in determining organizational value, starting from the determination of value that reflects the concept of SD, the determination of strategic plans that cover communication plans towards sustainability, and the regular review and assessment of organizational value. The organization of strategic plans for creating value is considered as important as the determination of value as both are the beginning of the establishment of behaviors and the environment that enhances communication for SD. On the other hand, the review and assessment are significant too as the efficiency and effectiveness will be examined and improved continuously. The scoring criteria are as follow:

- The concept of SD appears in the organizational value = 0.6 scores eminently
- Strategic plans of value creation display SD concepts and = 0.6 scores cover plans to communicate with organizational stakeholders
- Sustainability value is reviewed and assessed at least = 0.8 scores once a year

Examiner: An assigned assessor.

5.1.3 SD Policy and Practice Standard

SD Policy and Practice Standard compose of two standard statements:

Standard Statement 5: An organization stipulates SD policies and practices in writing.

This standard is established for supporting organizational policies and practices related to SD in compliance with best practices determined by both national

and international regulating agencies as guidelines for proper and effective communication for SD. Such policies and practices are considered as the first step of corporate positioning. (Cees B. M. Van Riel & Fombrun, 2007).

They are necessary. Without clear policies, practical guidelines cannot occur or can occur without success because we determine all of these: policies, strategies, implementation, etc. for making them happen and can reflect to let us know about our brand in general. Besides, another advantage is that we can do business everywhere we have invested because we concern of all three dimensions: economic, social, and environmental, in operating our business. (Key informant No. 9).

Indicator: "An organization determines SD policies and practices explicitly in written," with the following sub-indicators:

- 5.1 An organization has explicit written policies and practice.
- 5.2 Organizational written policies and practices cover economic, social, environmental SD dimensions, and communicate to all stakeholders.

Scores: The full score of the standard statement is 2 scores by examining policies and practices (through statements that identify operations concretely). The scoring is based on the level of significance given to policies and practices determined by both national and international regulating agencies. The focus is on corporate governance policies which is the important conceptual base of the SD approach and on the coverage of all SD three dimensions in the plans and communication equally. Both sub-indicators must comprise both policies and practices to get the full scores or 2 scores. The scoring criteria are as follows:

-	Having corporate governance policies	= 0.5	scores
-	Having corporate governance practices	= 0.5	scores
-	Having SD policies covering economic, social, and	= 0.5	scores
	environmental dimension, including communication		
-	Having SD practices covering economic, social, and	= 0.5	scores
	environmental dimension, including communication		

(Remarks: if any organization does not determine SD policies and practices covering all four dimensions: economic, social, environmental, and communication with stakeholders, it will not get scores from that statement.)

Examiner: An assigned assessor

Standard Statement 6: SD policies and practices are enforced throughout an organization.

When a company determines SD policies and practices, the important thing is the enforcement of these policies and practices all through the organization, which requires communication to let all employees be informed and encourage them to comply with the said policies and practices strictly to achieve sustainability operations concretely and distinctly.

The duties of SD Division are to pass the issue to the board or CEO to be informed and announce as policies before appointing a specific working group. Thus, it is like organizational development and every unit has to comply. SD then comes to support and adopts changes to each unit. Besides, it is responsible for following the new issues, passing them to the top management, and waiting it to be approved. It will be a process like this. (Key informant No. 19).

Indicator: "Corporate SD policies and practices are enforced all through the organization," with the following sub-indicators:

- 6.1 SD policies and practices are certified by the committee or subcommittee responsible for sustainability distinctly.
- 6.2 A company has a mechanism in making all employees acknowledged and comply with SD policies and practices strictly.

Scores: The full score of the standard statement = 2 scores by examining the statements of the policies and practices certified by the committee or sub-committee and signed by employees to acknowledge them. The scoring is based on the level of significance given to the enforcement situation in which SD policies and practices are ordered from the top management. At the same, it indicates that there is a mechanism

of making employees perceive, acknowledge, and adhere to the SD policies and practices to assure effective enforcement. Both statements are considered equally important. The scoring criteria are as follows:

- SD policies and practices are certified by the committee = 1 score or sub-committee
- SD policies and practices are acknowledged by employees = 1 score distinctly

Examiner: An assigned assessor

5.1.4 Standard of the materiality analysis and assessment

Standard of the materiality analysis and assessment comprises 1 standard statement as follows:

Standard Statement 7: The analysis of the assessment of organizational SD materiality is complete and well-rounded.

To be able to initiate communication strategies and mobilize sustainability throughout the organization, the important thing is the analysis and assessment of materiality to acquire and determine relevant risk issues and opportunities, including the prioritization of the issues that may affect business operations and organizational sustainability, i.e., Thai and international rules and standards, global trends, SDGs, same-industry competition condition, etc. The determination of materiality must be conducted thoroughly, completely, entirely, correctly, and congruently with the happening surrounding situation. Such materiality is considered as the key factor in determining and designing a message, including planning communication strategies for SD to transmit to stakeholders towards the utmost efficiency.

Based on the GRI principles, to determine the materiality or to consider which issue is the key issue of the company in which all our stakeholders are interested. Then, it will be used for precise communication. We do according to the process of reporting. We gather information from internal and external stakeholders. External stakeholders are investors, business partners, customers, etc. They expect that what we can do well, we have to expect what they think we can do well and what they expect from us. (Key informant No. 23)

It has to be proper, and should cover new rules that may affect us, including determining our commitment that is concrete and responds to the stakeholders' needs, which can lead to sustainable changes in the long term. (Key informant No. 39)

Indicator: "The organizational analysis and assessment of materiality in SD are complete and well-rounded," with the following sub-indicators:

- 7.1 An organization analyzes and identifies the materiality
- 7.2 An organization prioritizes the materiality of organizational sustainability
- 7.3 An organization examines the materiality and has a follow-up continuously
- 7.4 An organization reviews the materiality and reports development outcomes continuously.

Scores: The full score of the standard statements = 2 scores by examining the SD materiality from the report. The scoring is based on the level of significance given to the materiality analysis and assessment as determined by the international regulating agency, which requires a process of four steps: identification of the important issues, prioritization of the issues, review of the issues, and follow up and report the consequences of the issues. Thus, all four steps will be scored equally by the following scoring criteria:

- Sustainability issues that are influential for business = 0.5 scores operation is identified thoroughly and entirely
- Sustainability issues are prioritized through a credibly = 0.5 scores academic survey and analysis process
- The correctness of the assessment and prioritization = 0.5 scores of the materiality is examined and followed up continuously
- The materiality is reviewed and the results of its = 0.5 scores development is reported continuously

Examiner: An assigned assessor

5.1.5 The Standard of communication for SD strategy and operational planning

The Standard of communication for SD strategy and operational planning composes of one standard statement.

Standard Statement 8: An organization determines sustainability strategy and operational planning explicitly

Communication for SD strategies and operational planning will be stipulated after the well-rounded analysis and assessment of the SD materiality. Strategy and planning may be in the form of strategic and action plans that an organization collaboratively formulates as guidelines for operations towards imposed goals by connecting with the nature of business operations and corporate available resources. Thus, indicators and important goals will be determined for an organization to use for conducting communication for SD to reach the planned goals.

One thing an organization does not pay much attention to is to have a roadmap for organizational communication. We communicate to cause behavioral changes. Therefore, we recommend that you must have plans and guidelines. You may have everything, but don't forget to establish guidelines for communication for changes as well. (Key informant No. 19)

Indicator: "An organization stipulates strategies and planning for sustainability operations clearly," with the following sub-indicators:

- 8.1 An organization stipulates strategies and planning for sustainability operations clearly
- 8.2 An organization stipulates strategies and planning for communication for SD operations clearly

Scores: The full score of the standard statement is 2 scores by examining SD strategic and action plans, including organizational communication plans. The scoring is based on the level of significance given to the determination of organizational sustainability strategies and operational plans, which the samples used as a framework for operating every kind of business group and for the overall operations

harmoniously. The other important thing is communication for SD, which is a crucial mechanism in transmitting information from the policy to the operational level, leading to acceptable behaviors and attitudes and support of every stakeholder group. Thus, success can be achieved by clear and effective communication for SD strategic planning. The scoring criteria are as follows:

- Having clear sustainability strategy/operational strategies = 1 score
- Having clear communication strategies and operational plans = 1 score for supporting SD

Examiner: An assigned assessor

5.1.6 Stakeholders and expectations Standards

Stakeholders and expectations standards compose of two standard statements.

Standard Statement 9 : The determination of every major group of organizational stakeholders

Stakeholders are groups of crucial people who affect organizational sustainability operations greatly. Generally, stakeholders are divided into internal and external stakeholders. Still, stakeholders are diverse and will cause negative impacts on business operations without good and consistent care, attention, and communication. GRI (2 0 1 5) specifies that an organization must explain how to determine and prioritize stakeholders' expectations and benefits, including the reasons why it chooses certain practical guidelines for them. Accordingly, an organization should study and determine each group of stakeholders clearly so that it can plan the operations and communication properly. Besides, it should analyze behaviors of stakeholders as receivers, which will help to conduct communication for SD to the stakeholders for promoting and supporting the organization, including creating business sustainability concurrently.

The most important thing is to understand behaviors of customers and stakeholders of each group, types of communication channels to access them effectively, especially those in their daily life that can make them follow easily. (Key informant No. 26).

I want to recommend to classify the groups that we want to communicate clearly. That will be the most effective. For some companies, their supply chain may not be so long or be single. However, for us, we have to consider what we want to communicate to this group or that group. Thus, it is essential to group receivers we want to communicate first. (Key informant No. 23)

Indicator: "An organization stipulates organizational stakeholders of every group clearly, which include shareholders/investors, customers/consumers, business partners/suppliers, community/society, and employees," with the following sub-indicators:

- 9.1 An organization explores, analyzes, identifies, and prioritizes the significance of every major stakeholder group clearly.
- 9.2 An organization reveals the details of determination and prioritization methods, including the relevance to each group of stakeholders clearly.

Scores: The full score of the standard statements = 2 scores by examining from the organizational stakeholder analysis report. The scoring is based on the level of importance in determining major stakeholder groups by exploring, analyzing, identifying, and prioritizing the importance of each stakeholder group who are influential on business operations, including revealing details and relevance of each group of stakeholders clearly. All of these are considered equally important by the following scoring criteria:

- Having exploration, analysis, identification, and prioritization = 1 score of the importance of stakeholder groups
- Having the detailed revealing of the determination and = 1 score prioritization methods and the relevance to each stakeholder group

Examiner: An assigned assessor

Standard Statement 10: Detailed analysis and assessment of stakeholders' expectation

Besides, the identification of stakeholder groups, another important thing is the analysis and assessment of each stakeholder group's expectation to know issues each group expects on organizational business operations, which are different. From the analysis, it will help an organization to plan their operations and communication for SD properly to respond to genuine needs and expectations of each stakeholder group effectively.

We have to talk with stakeholders of each group before any communication will be transmitted in the direction that is beneficial for the organization and stakeholders. We have to understand each stakeholder's needs and expectations. If we don't understand or know it..... It is like a friend. If we can't read his mind, we will not be able to respond to his expectations. (Key informant No. 27)

Indicator: "An organization conducts detailed, correct, and complete analysis and assessment of stakeholders' expectations," with the following sub-indicators:

- 10.1 Having thorough, correct, and complete analysis and assessment of stakeholders' expectations.
- 10.2 Having a review of stakeholders' expectation regularly every year

Scores: The full score of the standard statement = 2 scores. The scoring is based on the level of significance given to the analysis and assessment of stakeholders' expectations, which an organization must explore, analyze, and evaluate by academic principles and the consideration of their congruence with business operations and organizational goals. However, due to dynamism and changes in stakeholders' expectations, timely operational plans and communication must be conducted. Therefore, an organization needs to review the expectations of each stakeholder group consistently and continuously. The scoring criteria are as follows:

- Having an analysis and assessment of stakeholders' expectations = 1 score
- Having a review of stakeholders' expectation regularly = 1 score every year

From the above information and rationale, the researcher synthesized all input factors with a total score of 20 scores. The indicators, criteria, and scoring are summarized in Table 5.1.

Input Standard	Indicators	Scorin (20)
SD Management Structure Stan	<u>idards</u>	
1. The clear organizational management structure for supporting SD operations (2 scores)	An organization has a clear organizational management structure for supporting SD operations covering all three levels: board/policy, management, and operational.	
	- Having at least one committee or sub-committee (at the board/policy level) with a clear designation of roles, duties, and responsibilities in SD determination and governance	1
	- Having at least one committee, sub-committee, or working group, (at the management level) with a clear designation of roles, duties, and responsibilities in implementing SD policies.	0.75
	- Having an agency, division, department, or functional unit, (at the operational level) with a clear designation of roles, duties, and responsibilities in operating by SD guidelines.	0.25
2. A systematic mechanism in sustainability operational governance. (2 scores)	An organization has a systematic and consistent mechanism in sustainability operational governance.	
	 Having a clear direct line for reporting sustainability performance report to the Sustainability Committee 	0.6
	- Having a meeting agenda for being informed of the sustainability operational performance at least once every three months	0.6
	- Having a report on sustainability performance certified by the board committee or sub-committee regularly every year.	0.8
Vision, Mission, and Value Stan	dards	
3. Organizational vision, and/or mission, reflecting	Organizational vision, and/or mission reflect the SD approach clearly.	
the SD approach clearly. (2 scores)	- Organizational vision reflecting the SD approach clearly.	0.6
	- Organizational mission reflecting the SD approach clearly.	0.6
	- The review of organizational SD vision and mission at least once a year	0.8
4. SD guidelines are contained as a part of organizational	SD concepts appear in organizational value explicitly	
value. (2 scores)	- The SD approach is contained as a part of organizational value eminently.	0.6

Table 5.1 A summary of standard scores of the input factors

Innut Stor	dord	Indicators	Scorin
Input Stan	laara	Indicators	(20)
		- The SD approach appears in the strategic plans for creating value eminently.	0.6
	- The efficiency of organizational sustainability value is assessed and reviewed regularly every year.	0.8	
SD policies and re	gulation stand	ards	
Input StandardIndicatorsInput Standard- The SD approach appears in the strategic plans for creating value eminently. - The efficiency of organizational sustainability value is assessed and reviewed regularly every year.D policies and regulation standardsS. An organization determines SD policies and practices in writtenAn organization determines sD policies covering economic, social, and environmental dimension, including communicationAn organization (2 scores)SD policies and practices are certified by the committee or sub-committee responsible for sustainability distinctly.A company has a mechanism in making all employees acknowledged and comply with SD policies and practices strictly.Materiality analysis and assessment standards			
	- Having corporate governance policies	0.5	
	Input StandardIndicatorsInput Standard- The SD approach appears in the strategic plans for creating value eminently. - The efficiency of organizational sustainability value is assessed and reviewed regularly every year.Diolicies and regulation standard- An organization determines SD policies and practices in written explicitly - Having corporate governance policies - Having corporate governance policies - Having SD policies covering economic, social, and environmental dimension, including communicationSD policies and practices are enforced throughout the organization (2 scores)SD policies and practices - Having SD policies and practices are enforced throughout the organization (2 scores)SD policies and assessment of materiality analysis and assessment of materiality (2 scores)- An organization has a complete and well-rounded analysis and assessment of materiality thoroughly and wholly. - An organization stipulates - An organization stipulates strategy and operational planning (2 sores)- An organization stipulates SD strategy and planning clearly. - An organization stipulates Strategies and planning for sustainability via estrategies and planning round and planning clearly. - An organization stipulates strategies and planning for sustainability via strategies and planning round planning clearly. - An organization stipulates strategies	0.5	
		and environmental dimension, including	0.5
		and environmental dimension, including	0.5
are enforced	throughout		
the organizatio	the organization (2 scores)	committee or sub-committee responsible for	1
		employees acknowledged and comply with SD	1
Materiality analys	is and assessm	ient standards	5
		-	0.5
		organizational sustainability via credibly	0.5
			0.5
			0.5
Strategy and plan	ning standard		
SD strategy and	- E		
	nning (2		1
			1

Innut Standard	Input Standard Indicators	Scoring
input Standard		(20)
Stakeholders and expectation st	andards	
9. The determination covers all groups of stakeholders (2 scores)	An organization determines stakeholders covering all groups clearly: shareholders/investors, customers/consumers, business partners/suppliers, community/society, and employees.	
	- An organization explores, analyzes, identifies, and prioritizes the significance of every major stakeholder group clearly.	1
	 An organization reveals the details of determination and prioritization methods, including the relevance to each group of stakeholders clearly. 	1
10. Thorough analysis and assessment of stakeholders' expectations	An organization conducts analysis and assessment of stakeholders' expectation thoroughly, correctly, and completely	
	- Having thorough, correct, and complete analysis and assessment of stakeholders' expectations.	1
	 Having a review of stakeholders' expectation regularly every year 	1

5.2 Process Standards

Standards of a communication process for SD of Thai listed companies comprise three principal components, which can be diversified into 7 statements as follows:

5.2.1 Standards of the SD message determination and design

Standards of the SD message determination and design comprise two standard statements:

Standard Statement 11: An organization determines SD content inclusively.

To implement imposed strategic communication plans, it is important to start with the determination of a yearly message to present to stakeholders. However, the message must connect and reflect business operations at every stage: past, present, and future, with all SD dimensions, which is important for a communication process for SD. ...SD content will be transmitted hierarchically... Besides objectives, communication will follow by stakeholders too. If you want to communicate with them, what do you want them to know? Thus, to communicate to stakeholders, your objective must cover what you want to occur to stakeholders. It must cover all dimensions. (Key informant No. 19)

Indicator: "An organization determines SD content covering all organizational sustainability dimensions," with the following sub-indicators:

11.1 The stipulation of general content that relates to the organization.

11.2 The stipulation of economic content

11.3 The stipulation of social content

11.4 The stipulation of environmental content.

11.5 The stipulation of corporate governance content.

Scores: The full scores of standard statements are 2 scores by examining the statements disseminated by the corporate media to the public, both online and offline. The scoring is based on the level of significance of the clear stipulation of SD content by connecting to economic, social, and environmental dimensions based on corporate governance. Therefore, companies have to communicate all four dimensions in balance. Nevertheless, general information of an organization is also important and required by both Thai and international regulating agencies to communicate to stakeholders to make them understand the overall operations of an organization. The scoring criteria are as follows:

- Having general content related with an organization = 0.5 scores

= 0.5 scores

= 0.5 scores

= 0.5 scores

- Having economic content
- Having social content
- Having environmental content
- Having corporate governance content = 0.5 scores

Examiner: An assigned assessor.

Standard Statement 12: An organization has a proper SD message design

Besides the stipulation of the content covering all sustainability dimensions, another important thing is message design that is proper and congruent with each group of receivers by considering message arrangement, content connection, use of language, and presentation of the detailed content of operations, that are diverse and complex to be precise and attractive under the corporate annual theme and the determined corporate identity to make receivers perceive SD content easily and quickly.

The message that has to be conveyed is to project stakeholders to see what their future industry will be, what their company will face, and by opportunities and threats they will find, what will they manage? Thus, what we try to do is to reduce all those risks and capture the opportunities by the way. (Key informant No. 1)

When we apply language for communication, we cannot apply by one same pattern. It depends on through which channel we communicate, then the language used will go that way. Importantly, it must be precise, understandable, and visible. If the message is visualized, receivers can see the planned picture, which will be very cool. Therefore, if we look at the format and types of information people used nowadays, the infographic has been widely used lately as one image can tell a thousand words. (Key informant No. 11)

Regarding corporate identity, our main duty is to create alignment. If the alignment is successful, it is ok. However, it does not mean only colors or logos only. Alignment is strategy. All corporate concepts must go in the same way. (Key informant No. 3)

As we are a Thai company, so we do everything in Thai. It should require to have both languages and everything must represent something. For instance, on several websites, you can see two languages, but when you look at an English page, it is written in Thai. This is not O.K. because it is not fair for foreign investors. (Key informant No. 36).

Indicator: "An organization has a proper and effective SD message design," with the following sub-indicators:

- 12.1 The content presents the past operational performance, the present operations, and the future plans.
- 12.2 The content contains details that connect to every sustainability dimension clearly, with precise and well-organized content, that is easy to understand.
- 12.3 The content is designed with and presented by verbal and nonverbal language (i.e., illustrations, graphics, icons, etc.) via diverse and attractive techniques.
- 12.4 The content is designed and presented under the specified main theme and corporate identity.
- 12.5 The content an organization communicates to stakeholders via main corporate channels must be written in both Thai and English.

Scores: The full scores of standard statements are 2.5 scores by examining the content publicized through corporate media in the form of both online and offline media to the public. The scoring is based on the level of significance given to the SD message design. The content must be organized properly and connect to the past operational performance, what is doing at present, and what will do in the future under the SD concept through both verbal and nonverbal language that helps each stakeholder group perceive and understand easily. The content must be publicized in both Thai and English, while the presented message must represent the main theme and corporate identity that is determined annually to induce communication in the same direction. Therefore, every statement is equally important. The scoring criteria are as follows:

- The message presents the past operational performance, = 0.5 scores what is doing at present, and what will do in the future
- The message contains details that connect to every = 0.5 scores sustainability dimension clearly, and is precise and well-organized for easy understanding
- The message is designed with and presented by verbal = 0.5 scores and nonverbal through diverse techniques
- The message is designed and presented under the = 0.5 scores corporate main theme and corporate identity

The content that is communicated to stakeholders via = 0.5 scores corporate main channels are publicized in both Thai and English
 Examiner: An assigned assessor

5.2.2 Standards of communication channel planning and usage for SD

Standards of communication channel planning and usage for SD compose of two standard statements:

Standard Statement 1 3 : An organization plans the use of media and channels that are proper for stakeholder groups.

When an organization sets up and designs a message, the message must be suitable for the available media and channels, which are also convenient for stakeholders to access easily. Therefore, an organization needs to plan the use of communication channels that are proper and cover every major stakeholder group. The media and channels that can transmit SD information to stakeholders effectively (See details of findings in 4.2.2) are as follows: 1) Personal media through direct contact or interaction, 2) printed media, i.e., mails, posters, leaflets, brochures, or any document or reports for stakeholders, 3) electronic media through 24-hour corporate phone or hotline, 4) new media, i.e., corporate websites, emails, and social media, and 5) activity media, i.e., meetings, seminars, training, company visit or field trip, relationship-establishment activities, joint activities/projects, and opinion surveys.

It is like you are selling a consumer product, but you don't know who your customer is. Will you go to TV, the internet, or others? A clear frame must come first to know to whom you must communicate, i.e., shareholders, investors, etc. You also have both individual and institutional investors. Now there's a huge company from abroad organize an analyst meeting. They will give one whole session to talk about only sustainability. It is like a webinar, which talks about organizational sustainability only. Some companies highlight each story and blend it into product information. For instance, some companies in our group write on a box 'this product is a 100% recycle, etc. Therefore, I think for this kind of thing you should make a plan and make it as the main pillar of the organization, not just a piece of home furniture. (Key informant No. 18)

Mostly, we put more weight on planning because, without it, action cannot occur. (Key informant No. 32)

Indicator: "An organization plans proper communication channels that are suitable for each stakeholder group," with the following sub-indicators:

- 13.1 Having a plan for using proper communication channels for each group of stakeholders
- 13.2 Having effective corporate media or communication channels that cover every stakeholder group, i.e., personal, printed, electronic, new, and activity media.

Scores: The full scores of standard statements are 2.5 scores by examining the statements from the media the companies use to publicize them to the public, in the form of online and offline media. The scoring is based on the level of significance given to the planning of communication channels that are appropriate for each group of stakeholders. Thus, an organization should prepare plans or have thorough planning of communication channels planning as a frame and guidelines for practicing communication for SD successfully. The scoring criteria are as follows:

- Having plans for using communication channels suitable = 1.5 scores for each stakeholder group.
- Having media or communication channels cover all groups of major stakeholders, i.e.,
 - Continuous contact/ meeting with stakeholders = 0.2 scores
 - Letters, posters, brochures, leaflets, and documents = 0.2 scores or reports
 - Having telephone numbers that can contact 24-hour = 0.2 scores
 - Having a website, emails, and social media = 0.2 scores
 - Organizing meetings, seminars, training, company = 0.2 scores visit or field trip, relationship-establishment activities, joint activities/projects, and opinion surveys.

Examiner: An assigned assessor

Standard Statement 14: An organization provides communication channels for promoting stakeholders' participation and responses

Communication channels planned by an organization should be proper and respond to stakeholders' expectations genuinely, including encouraging each target group to participate in the organizational operations following the corporate governance principles aimed to promote the transparency of information disclosure. Participation is a part of a continuous communication process with stakeholders to access their expectations, needs, and impacts, i.e., economic, social, or environmental, incurred to them. Such a communication process can also reduce negative impacts and magnify positive impacts continuously and effectively. Besides, it can help to review and improve communication guidelines to be more appropriate and respond to each stakeholder group's needs as much as possible. From the analysis of communication channels in 4.2.2 (Table 4.8), it indicates that the major channels Thai listed companies use for communicating and create stakeholders' participation are different by the nature of their media exposure. Still, every organization should provide proper communication channels to the following groups: employees, shareholders and investors, the government agencies, customers or consumers, business partners, creditors, community, and society.

The reason why the proportion of scores on policies and employees is larger because they are significant groups. (Key informant No. 29)

Indicator: "An organization provides communication channels for promoting stakeholders' participation and responding to their expectation effectively," with the following sub-indicators:

- 14.1 An organization has a communication channel for encouraging stakeholders to participate in organizational operations.
- 14.2 Organizational channels accord with the expectation of each major stakeholder group (they can be the same channel or media, such as new media is used for publicizing corporate websites, or they can be corporate Facebook or Line group, etc.). The following communication channels are provided for each stakeholder group:

- Personal media, new media, and activity media suitable for the employee group.
- Printed media, electronic media, new media, and activity media suitable for the shareholder or investor group.
- Personal media and activity media suitable for the government agency group
- Personal media, electronic media, new media, and activity media suitable for the consumer or customer group.
- Personal media and activity media suitable for business partners
- Electronic and new media suitable for creditors
- Electronic media and activity media suitable for the community or societal group.

Scores: The full scores of standard statements are 2.5 scores by examining the statements from the media the companies use to publicize them to the public, in the form of online and offline media The scoring is based on the level of significance given to the provision of communication channels to facilitate the participation of each stakeholder group in organizational operations following the corporate governance guidelines via channels and methods and following information disclosure standards at the universal level. The scoring criteria are as follows:

- An organization provides communication channels for = 1 score promoting interactive participation of every major group of stakeholders
- The provided communication channels can respond to the expectation of each stakeholder group by covering the following groups: (If covering all groups, the score = 1.5)
- Electronic media and activity media suitable for the community or societal group.
 - Personal media, new media, and activity media = 0.3 scores suitable for the employee group.
 - Printed media, electronic media, new media, and = 0.2 scores activity media suitable for the shareholder or investor group.
 - Personal media and activity media suitable for = 0.2 scores the government agency group

- Personal media, electronic media, new media, = 0.2 scores and activity media suitable for the consumer or customer group.
- Personal media and activity media suitable for = 0.2 scores business partners
- Electronic media and activity media suitable for = 0.2 scores the community or societal group.

Examiner: An assigned assessor

5.2.3 Standards of a Communication Process for SD

Standards of a Communication Process for SD Compose three standard statements.

Standard Statement 15: Organizational leaders are determined to operate a business under the concept of sustainable development.

Organizational leaders are important persons who keep determined and plan organizational operations towards SDGs and create stakeholders' perception and awareness via policies and operational guidelines. If organizational leaders do not see such importance, it will be difficult for employees to help to mobilize them, which consequently affects external stakeholders too. Therefore, good leaders must be determined and perform themselves as role models. Besides, they have to promote and support both internal and external stakeholders in the direction the organization wants to go with one accord towards SDGs successfully.

Those who are responsible for working on sustainability, including the board, must acquire knowledge and compare their industry standards with DJSI. They have to compete with themselves all the time. (Key informant No. 18)

We have one main channel, namely a meeting with CSO monthly. After that, we have a board meeting called Sustainability Committee every three months to drive the plans. Heads of each operation must adopt the plans to be implemented and follow up, including reporting their performance against the data of the Sustainability Committee quarterly. (Key informant No. 16) If no commitment from the policy level, all of these subjects will not be aware in the business operational process. Something is what business must do in its regular operations as it involves how the business will survive. (Key informant No. 26)

Leaders' personality will be reflected in organizational personality. Therefore, to see if any organization pays attention to sustainability issues or not or just does it superficially, you have to look at No. 1. (Key informant No. 20)

We have both internal and external communication for SD. However, leaders must be prototype and role models. They are key persons. If they can be a role model, it's easy for employees to follow, not a compulsion. Truly, the organization will be as they are. (Key informant No. 22).

Indicator: "Organizational leaders are determined to operate a business under the concept of SD," with the following sub-indicators:

- 15.1 Organizational leaders attended meetings or training on SD in the past year.
- 15.2 Organizational leaders have a joint meeting for stipulating policies and organizational sustainability operational guidelines.
- 15.3 Organizational leaders communicate concepts and guidelines of SD to their employees regularly.
- 15.4 Organizational leaders commit to operating business by SD concepts.
- 15.5 Organizational leaders perform themselves as role models concerning SD to both internal and external stakeholders.

Scores: The full score of the standard statements is 4 scores by examining the statements from the annual report, organizational communication performance report, and opinion surveys of employees. The scoring is based on the level of importance of organizational leaders' exposure to and learning of the new world's direction to be applied in the organization via their policy-making and collaborative practices to induce participation and acceptance of the new trends to be applied in the organization. Moreover, leaders must give a priority to SD issues by committing and performing themselves as role models to make organizational personnel confident and

comply. Besides, they are personal media that is a significant channel to communicate to both internal and external stakeholders to perceive and accept business operations under the concept of SD. Thus, all leaders' roles and responsibilities are important. The scoring criteria are as follows:

- Organizational leaders attended meetings or training = 0.8 scores on SD in the past year
- Organizational leaders have a joint meeting for = 0.8 scores
 stipulating policies and organizational sustainability operational guidelines
- Organizational leaders communicate concepts and = 0.8 scores guidelines of SD to their employees regularly.
- Organizational leaders commit to operating business = 0.8 scores
 by SD concepts.
- Organizational leaders perform themselves as role = 0.8 scores models in relation to SD to both internal and external stakeholders
 Examiner: An assigned assessor

Standard Statement 16: Communication for SD is integrated and covers all groups of stakeholders

Organizational development can occur if stakeholders related to business operations perceive, understand, and have a positive attitude towards the organization, leading to their acceptance and behavioral modification that supports business operations continuously, through effective communication and integration. However, the challenge is how to cover and distribute the SD concepts to every group of stakeholders towards the determined goals. Organizations thus have to communicate continuously and have a mechanism for promoting stakeholders' participation and listening to the needs and diverse perspectives of internal and external stakeholders, in combination with a large amount of information. Thus, systematic information management and compilation are used to communicate to the target groups effectively and congruently. Communication is dialogue. Dialogue is the most challenging two-way communication. The question is how to bring about dialogue, not one-way communication. (Key informant No. 7)

I think participation is something we determine to yield benefits to everyone, not only one group who determines it. All is win-win for everyone if we do it together, but just an organization, but also external stakeholders. It must be for all. It should be that way, I think. (Key informant No. 8)

Indicator: "Communication for sustainable development is effective and covers all groups of stakeholders," with the following sub-indicators:

- 16.1 Having a mechanism for integrating the concept of communication for SD into operations of every working unit of the organization.
- 16.2 Executing communication for SD by the line of authority throughout the organization.
- 16.3 Having a mechanism for listening to subordinates' opinions and suggestions for SD operations transparently and equally.
- 16.4 Having a mechanism for promoting external stakeholders' participation in SD operations.
- 16.5 Having an organizational SD information center and information management
- 16.6 Communicating stories of SD operations and reporting SD operational performance to stakeholders consistently and continuously (SD report)

Scores: The full score of the standard statement is 3 scores by examining the statements from the annual report, SD report, organizational communication performance report, and surveys of stakeholders' opinions. The scoring is based on the level of significance given to the effective conduction of communication for SD according to communication strategies and plans, which covers all groups of stakeholders. Besides, a mechanism is created to open an opportunity for both internal and external stakeholders to participate in the process by applying the obtained information for operational planning to respond to stakeholders' expectations the most. On the other hand, for internal communication, information must be transmitted hierarchically from the top to the bottom (top-down or downward

communication), while a channel for listening to stakeholders' opinions from the bottom to the top (bottom-up or upward communication) is provided for improving communication. For external communication, communication must be continuous and covers all groups of stakeholders. The scoring criteria are as follows:

- Having a mechanism for integrating the concept of = 0.5 scores communication for SD into operations of every working unit of the organization
- Executing communication for SD by the line of authority = 0.5 scores throughout the organization.
- Having a mechanism for listening to subordinates' = 0.5 scores opinions and suggestions for SD operations transparently and equally.
- Having a mechanism for promoting external = 0.5 scores
 stakeholders' participation in SD operations.
 - Having an organizational SD information center= 0.5 scoresand information management
- Communicating stories of SD operations and reporting = 0.5 scores
 SD operational performance to stakeholders consistently and continuously
 Examiner: An assigned assessor

Standard Statement 17: The regulation and assessment of communication for SD effectiveness

During the process of communication for SD, an organization necessarily has a mechanism for regulating and following communication per the imposed strategic plans to avoid missing the goals, including monitoring regularly to prevent negative impacts that may occur. Furthermore, it helps to adjust communication approaches promptly. Hence, after the annual operations, an organization should prepare the evaluation of communication for SD operational performance regularly and continuously₃ for further improvement and future planning. Accordingly, it brings about a well-balanced communication process, as a consequence of the listening of stakeholders' opinions on the organizational SD operations. The role of leadership is very vital. Leaders must communicate clearly and correctly. Communication is not only spoken words, but it includes a follow-up. We can see some organizations have communication without a follow-up. Therefore, when the top management says any illusion without any action nor attention, nothing can happen. (Key informant No. 20)

Suppose we plan to work on the circular economy in 3 or 5 years, we have to specify what will be the expected output and outcome to be measured. Thus, it means we have to measure how many percentages we have achieved in three months, etc., and review why we cannot achieve what is planned within that time frame. Therefore, during the process, we have to monitor, and consider if it is still an issue that we have to continue or not. (Key informant No. 7)

To communicate about sustainability, especially statements, it must be concrete to make stakeholders understand and access more easily. Also, it must be monitored continuously to see the genuine efficiency and the value gained, that will lead to long-term sustainability. (Key informant No. 39).

Indicator: "An organization monitors, regulates, and assesses communication for SD effectiveness continuously," with the following sub-indicators:

- 17.1 Having a mechanism for continuous following, monitoring, and regulating communication for SD operations as specified in the strategies and plans.
- 17.2 Evaluating communication for SD performance continuously

17.3 Reviewing the effectiveness of communication for SD continuously.

Scores: The full score of the standard statements are 3 scores by examining the statements from the annual report, SD report, organizational communication performance, and surveys of stakeholders' opinions. The scoring is based on the level of significance given to the monitoring, regulation, and assessment of communication for SD effectiveness. An organization should provide regular monitoring and regulations of operations as specified in the plans. After the completion of plans, an organization should assess its success or failure for planning communication in the future. The assessment findings can be used for correcting, improving, and reviewing

strategic plans and communication operational strategies; thus, it is another important input factor of a communication process for SD. The scoring criteria are as follows:

- Having a mechanism for continuous following, monitoring, = 1 score and Regulating communication for SD operations as specified in the strategies and plans.
- Evaluating communication for SD performance continuously = 1 score
- Reviewing the effectiveness of communication for = 1 score
 SD continuously.

Examiner: An assigned assessor

From the above information and rationale, the researcher synthesized a communication process of SD with a total score of 20 scores. The indicators, criteria, and scoring are illustrated in Table 5.2.

5	Process Standard	Indicators	Scoring (20)
Stand	ards of SD message stipulatio	n and design	
	e stipulation of inclusive SD ntent (2.5 scores)	An organization determines SD content covering all organizational sustainability dimensions:	
		- Having general content related to an organization	0.5
		- Having economic content	0.5
		- Having social content	0.5
		- Having environmental content	0.5
		- Having corporate governance content	0.5
12. Proper SD message design	oper SD message design 5 scores)	An organization designs SD message properly and effectively	
(2		- Message presents operational performances of the past year, what is being operated nowadays, and what will do in the future.	0.5
		- Message contains clear details that connect with all sustainability dimensions and is precise and well-organized for easy understanding.	0.5
		 Message is designed and presented by verbal and nonverbal via diverse techniques. 	0.5
		- The message is designed and presented under the main organizational theme and corporate identity.	0.5
		- Content conveyed to stakeholders via main	0.5

Process Standard	Indicators	Scoring (20)
	corporate channels is publicized in both Thai and English.	
Standards of communication chann	el planning and usage for SD	
13. An organization plans proper communication channels that are suitable for stakeholders	An organization plans proper communication channels that are suitable for each stakeholder group	
(2.5 scores)	- Having plans for using communication channels suitable for each stakeholder group.	1.5
	 Having media or communication channels cover all groups of major stakeholders: 	
	Continuous contact/ meeting with stakeholders	0.2
	 Letters, posters, brochures, leaflets, and documents or reports 	0.2
	 Having telephone numbers that can contact 24- hour 	0.2
	 Having a website, emails, and social media 	0.2
14. An organization provides communication channels for promoting stakeholders'	 Organizing meetings, seminars, training, company visit or field trip, relationship- establishment activities, joint activities/projects, and opinion surveys. An organization provides communication channels for promoting stakeholders' participation and responding to their expectation effectively 	0.2
participation and responding to their expectation (2.5 scores)	- An organization has a communication channel for encouraging stakeholders to participate in organizational operations.	
	 Organizational channels respond to the expectation of each major stakeholder group. The following communication channels are provided for each stakeholder group: 	
	 Personal media, new media, and activity media suitable for the employee group. 	0.3
	 Printed media, electronic media, new media, and activity media for the shareholder or investor group. 	0.2
	 Personal media and activity media for the government agency group 	0.2
	 Personal media, electronic media, new media, and activity media for the consumer or customer group. 	0.2
	 Personal media and activity media for business partners 	0.2
	 Electronic and new media for creditors 	0.2
	 Electronic media and activity media for the 	0.2

Process Standard	Indicators	Scorin (20)
	community or societal group.	(20)
Standards of a communication proc		
15.Organizational leaders are determined to operate a	Organizational leaders are determined to operate a business under the concept of SD	
business under the concept of SD (4 scores)	- Organizational leaders attended meetings or training on SD in the past year.	0.8
	 Organizational leaders have a joint meeting for stipulating policies and organizational sustainability operational guidelines. 	0.8
	- Organizational leaders communicate concepts and guidelines of SD to their employees regularly.	0.8
	 Organizational leaders commit to operating business by SD concepts. 	0.8
	- Organizational leaders perform themselves as role models concerning SD to both internal and external stakeholders.	0.8
16. Communication for SD is integrated and covers all groups of stakeholders (3 scores)	Communication for SD is integrated and covers all groups of stakeholders	
	- Having a mechanism for integrating the concept of communication for SD into operations of every working unit of the organization.	0.5
	- Executing communication for SD by the line of authority throughout the organization.	0.5
	- Having a mechanism for listening to subordinates' opinions and suggestions for SD operations transparently and equally.	0.5
	- Having a mechanism for promoting external stakeholders' participation in SD operations.	0.5
	- Having an organizational SD information center and information management	0.5
	- Communicating stories of SD operations and reporting SD operational performance to stakeholders consistently and continuously (SD report)	0.5
17. The regulation and assessment of communication for SD	An organization monitors, regulates, and assesses communication for SD effectiveness continuously	
effectiveness (3 scores)	- Having a mechanism for continuous following, monitoring, and regulating communication for SD operations as specified in the strategies and plans.	1
	- Evaluating communication for SD performance continuously	1
	- Reviewing the effectiveness of communication for SD continuously.	1

5.3 Standards of Output Factors

Standards of output factors of a communication process for SD of Thai listed companies compose of three principal components, which are determined to be 4 standard statements as follows:

5.3.1 Standards of communication for SD efficiency

Standards of communication for SD efficiency compose of one standard statement.

Standard Statement 18: Organizational Communication for SD is Efficient.

After the completion of a communication process for SD, outputs are yielded in many forms as determined as indicators of project and activity operations. If the output is as planned, it will help communication and sustainability operations to accomplish the goals smoothly, including creating continuous growth because of good response from stakeholders. Besides, successful communication for SD can create competitiveness due to corporate positive image in SD at the national and global level. All of these indicate the efficiency of SD operations and organizational communication very well.

Normally, there are topics, such as corporate governance, finance, and risk management. If we can add this, it will be good because it is the board that sets corporate policies from the beginning. Therefore, the assessment should start from the top management hierarchically. (Key informant No. 36).

There have been indicators of operational performance at the organizational level, especially at the top management level. It is important to assess if the indicators of each level that were determined since the beginning, i.e., at the employee level or middle management level, etc. have been achieved as imposed or not. Finally, it will reflect through the indicators at the organizational level. (Key informant No. 4).

Companies should have a clear goal of where they want to go. For instance, the environmental dimension covers plenty of subjects, i.e.,

pollution, waste, etc. Thus, this company identifies its goal clearly with clear indicators. It will show its target for us to see. However, there might not be only one goal, i.e., pollution, etc., or in the future, it may have to reduce the proportion of the port subject, i.e., coals, etc. Then, if we reduce coals to ..%, what else will we add? Thus, we will monitor this. (Key informant No. 1)

We have to reduce negative impacts first, then we will add to create positive impacts. In terms of positive impacts, we have to know if these are important statements or not. When we communicate, we have to communicate the same story. For instance, when we showed we were shooting about a forest, we also shot a school of the older kids to show their development during these 3-5 years. What was their development? Their quality of life? We look at the standards of the indicator, which is the continuity. (Key informant No. 2)

Everybody talks about SD, but none does it. They may say because their boss told them to say, but changes do not occur. What to be changed? Should the climate or the environment be changed to induce changes? In short, we must change behaviors. (Key informant No. 2).

Indicator: "Communication for SD of an organization accords with strategic plans and strategies determined by the organization," with the following sub-indicators:

18.1 Sustainability is one of the topics evaluated by the committee.

- 18.2 Sustainability is one of the topics evaluated by top executives
- 18.3 Better business performance
- 18.4 More effective resource utilization
- 18.5 Introduction of new product and service innovation
- 18.6 Timely crisis management
- 18.7 A decrease in complaints statistics
- 18.8 An increase of positive news and a decrease of negative and fake news
- 18.9 Stakeholders' adoption of SD behaviors.

Scores: The full score of the standard statements is four scores by examining the statements from assessment policies and criteria of the committees and top executives, the operational performance report and financial statements, the annual report, the Registration Statement Form (Form 56-1), SD report, news analysis reports, and surveys of stakeholders' opinions, including from the media that companies use to publicize the statements to the public. The scoring is based on the level of significance given to the efficiency of communication for SD that accomplishes the determined indicators. However, such indicators are numerous and different in each company. From the study, the indicators related to communication for SD that most key informants suggested (See 4.3) are a total of 11 issues. However, when classifying, it was found that there are only 8 issues that relate to communication plan indicators determined by Thai listed companies, which are equally important. The scoring criteria are as follows:

-	Sustainability is one of the topics in the evaluation of	= 0.5 scores
	the committee and top executives	
-	Better business performance from last year	= 0.5 scores
-	More effective resource utilization	= 0.5 scores
-	Introduction of new product and service innovation	= 0.5 scores
	that is friendly to society and the environment	
-	Timely crisis management	= 0.5 scores
	A decrease of complaints statistics	= 0.5 scores
-	An increase of positive news and a decrease of	= 0.5 scores
	negative and fake news	
6	Stakeholders' adoption of SD behaviors.	= 0.5 scores
Ех	xaminer: An assigned assessor	

5.3.2 Standards of the perception and understanding of organizational SD

Standards of the perception and understanding of organizational SD comprise one standard statement.

Standard Statement 19: Perception and understanding of the organizational SD approach.

The main goal of communication is to create perception and understanding of a sender's objective. Therefore, communication for SD has the main goals of making both internal and external stakeholders perceive corporate operations per the SD approach and understand business operations and organizational management, which enables stakeholders to accept and have a positive attitude towards the organization, leading to their collaboration and support continuously.

When you communicate, do they listen to you? When you communicate, actually they must listen to you and understand what you say. However, if you tell them, but they don't listen, communication cannot be accomplished, or it is 100% failure. (Key informant No. 19)

Indicator: "Stakeholders perceive and understand the organizational SD approach," with the following sub-indicators:

19.1 Stakeholders perceive the organizational SD approach.

19.2 Stakeholders understand the organizational SD approach

Scores: The full score of the standard statements is 2 scores by examining from the annual survey of stakeholders' perception and understanding. The scoring is based on the level of significance given to the evaluation of stakeholders' perception and on their understanding of organizational operations following SD guidelines, which are crucial indicators that reflect the efficiency of communication for SD. Both indicators are considered equally important. The scoring criteria are as follows:

- Stakeholders' perception of the overall organizational = 1 score
 SD approach at a high level
- Stakeholders' understanding of the overall organizational = 1 score SD approach at a high level

Examiner: An assigned assessor

5.3.3 Standards of SD information disclosure and the report

Standards of SD information disclosure and the report compose of two standard statements.

Standard Statement 20: The information disclosure and SD report are transparent.

Most Thai listed companies agreed that the output of communication for SD is the disclosure of information and SD report as regulated by the governance agencies or regulators and SD supporting agencies, both Thai and international. It can reflect an organization's potential and capabilities in organizational management per SD guidelines distinctly through reporting of operational information that is precise, complete, correct, and detailed, both quantitatively and qualitatively, without complexity to make it easy to understand and convenient to be used by stakeholders for their decision-making. On the other hand, reporting will be inefficient if the information is not disclosed in the time frame and under the situation determined by the regulator or needed by stakeholders. Therefore, information disclosure and reporting are very significant for the communication for SD efficiency.

A report, no matter it is GRI or others, is often used for disclosing information transparently for stakeholders' decision-making. For the integrated report, the importance is not the integration of the content, but between non-financial and financial performance. (Key informant No. 19)

Indicator: "Information disclosure and the SD report is transparent," with the following sub-indicators:

- 20.1 Correct information disclosure and reporting under SD information disclosure regulations of both Thai and universal.
- 20.2 Detailed information disclosure and reporting by connecting both quantitative and qualitative information.
- 20.3 Timely information disclosure and report that is appropriate for the situation.
- 20.4 Information disclosure and report that is easy to understand, precise, and is not complicated.

Scores: The full score of the standard statements is 4 scores by examining information from the annual report, the Registration Statement Form (Form 56-1), SD report, and from the media that publicizes information to the public. The scoring is based on the level of significance given to the transparency of information disclosure and SD report, which are required to be correct and accordant with the regulations of

both Thai and universal regulating agencies. Besides, the connection of both qualitative and quantitative information must be sufficiently detailed. For a report, information disclosure must be easy to understand, timely, and updated, as determined by the regulating agencies and needed by stakeholders. Therefore, they are equally important. The scoring criteria are as follows:

- Correct information disclosure and reporting following = 1 score SD information disclosure regulations of both Thai and universal.
- Detailed information disclosure and reporting by connecting = 1 score both quantitative and qualitative information.
- Timely information disclosure and report that is appropriate = 1 score for the situation.
- Information disclosure and report that is easy to understand, = 1 score precise, and is not complicated.

Examiner: An assigned assessor

Standard Statement 21 : The organizational SD information disclosure and report are complete and sufficient.

Besides transparent information disclosure and SD report, one important thing of reporting is the disclosure of information that is complete and sufficient based on the SD guidelines, determined by regulating and supporting agencies. Besides, being an indicator of communication efficiency, an organization can apply it for reviewing communication strategies and planning its operations appropriately. Moreover, SD information disclosure has to cover all dimensions: economic, social, environmental, and corporate governance, including general information of the organization. The issues that have to be disclosed are analyzed in Tables 2.1 and 4.7.

Indicator: "Information disclosure and SD report are complete and sufficient," with the following sub-indicators:

21.1 Disclosure and report of organizational general information.

- 21.2 Disclosure and report of economic information.
- 21.3 Disclosure and report of social information
- 21.4 Disclosure and report of environmental information
- 21.5 Disclosure and report of corporate governance information

Scores: The full score of the standard statements is 10 scores by examining the information from the annual report, the Registration Statement Form (Form 56-1), SD report, and media that publicizes information to the public. The scoring is based on the level of significance given to the complete and sufficient information disclosure and SD report. The information must cover all dimensions: economic, social, environmental, and corporate governance, including general information of the organization, to let stakeholders be informed and understand the organizational information clearly. Information of all dimensions is equally important. The scoring criteria are as follows:

- Disclosure and report of organizational general information. = 2 scores (comprising 1) name of the organization, 2) nature of business operations, 3) a brief history, 4) products and services, 5) contact channels, 6) business size, 7) supply chain, 8) objectives/goals, 9) organizational value, 10) numbers of employees, 11) organizational structure, 12) location, 13) achievement and awards, and 15) related laws and regulations.)
- Disclosure and report of economic information = 2 scores (comprising 1) analysis and explanations of the management, 2) related party transactions, 3) financial status/operational performance, 4) auditor report, 5) financial statement, 6) market and competition/market shares, 7) significant changes, 8) returns and welfare, 9) research and development, 10) technological and innovation application and 11) dividend payment.)
- Disclosure and report of social information = 2 scores (comprising 1) equal employment and labor treatment, 2) labor relations,
 3) diversity, 4) occupational health and safety, 5) knowledge training, 6) community and social development, 7) labels and packaging, 8) quality and safe product and service presentation, 9) human rights respect, 10) supply chain management, 11) personal data confidential, 12) impacts on community and society, 13) participation and support of stakeholders.)

- Disclosure and report of environmental information = 2 scores (Comprising 1) effective management and utilization of natural resources, energy, and the environment, 2) compliance with the environmental standards, 3) innovative technology development that is friendly to the environment, 4) biodiversity, 5) carbon emission, 6) the coping with climate change, 7) packaging management, 8) waste management, 9) environmental impacts, and 10) the accomplishment of SDGs)

- Disclosure and report of corporate governance = 2 scores (Comprising 1) fair and equal treatment of stakeholders, 2) no law and regulation violation, 3) appeals management and whistleblowing protection, 4) risk management, 5) ethics/business codes of ethics, 6) operational governance, 7) internal and external audit, 8) conflict of interests, 9) use of inside information or insider trading, 10) cyber security, 11) anti-corruption, 12) governance structure, 13) profiles and qualification of the committee and top executives, 14) roles and responsibilities of a board committee and top executives, 15) diversity of the committees, 16) leadership, 17) nomination, 18) compensation, 19) scope and authority, 20) shareholding structure, 21) responsibility report of the board committee and sub-committee, 22) anti-corruption, and 23) securities holding.

Examiner: An assigned assessor

From the above information and rationale, the researcher synthesized output factors with total scores of 20 scores. The indicators, criteria, and scoring are illustrated in Table 5.3.

Output Standard	Indicators	Scoring (20)
Standards of Communic	ation for SD Efficiency	
18. Organizational Communication for	Communication for SD of an organization accords with strategic plans and strategies determined by the organization	
SD is Efficient (4 scores)	- Sustainability is one of the topics in the evaluation of the committee and top executives	0.5
	- Better business performance	0.5
	- More effective resource utilization	0.5
	 Introduction of new product and service innovation that is friendly to the environment 	0.5
	- Timely crisis management	0.5

Table 5.3 A summary of standard scores of output factors

Output Standard	Indicators	Scorin (20)
	- A decrease in complaints statistics	0.5
	- An increase of positive news and a decrease of negative and fake news	0.5
	- Stakeholders' adoption of SD behaviors.	0.5
Standards of the perce	eption and understanding of organizational SD	
understanding of	Stakeholders perceive and understand the organizational SD approach.	
organizational SD	- Stakeholders perceive the organizational SD approach.	1
approach (2 scores)	- Stakeholders understand the organizational SD approach	1
Standards of SD informa	ation disclosure and reports	
Output Standard Indicators Output Standard - A decrease in complaints statistics - A decrease in complaints statistics - An increase of positive news and a decrease of negative and fake news - Stakeholders' adoption of SD behaviors. - Stakeholders' adoption of SD behaviors. Standards of the perception and understanding of organizational SD approach (2 scores) - Stakeholders perceive and understand the organizational SD approach. 9. The information disclosure and reports - Stakeholders perceive the organizational SD approach. 20. The information disclosure and report are transparent. - Correct information disclosure and reporting following SD information disclosure and qualitative information. (4 scores) - Direct information disclosure and report that is appropriate for the situation. 21. The organizational SD information disclosure and report that is appropriate for the situation. - Timely information disclosure and report that is appropriate for the situation. 3D information disclosure and report of organizational SD information, disclosure and report of organizational SD information, 2) a ther of history, 4) products and services, 5) contact channels, 6) business size, 7) supply chain, 8) objectives/goals, 9) organizational value, 10) numbers of employees, 11) organizational status/operational value, 10, numbers of employees, 11) organizational value, 10, numbers of employees, 11) organizational value, 10, numbers of employees, 11) organizational value, 10, numbers of employees, 9) organizational value, 10, numbers of		
report are transparent.	information disclosure regulations of both Thai and	1
(4 scores)		1
		1
		1
SD information		
report is complete and sufficient	comprising 1) name of the organization, 2) nature of business operations, 3) a brief history, 4) products and services, 5) contact channels, 6) business size, 7) supply chain, 8) objectives/goals, 9) organizational value, 10) numbers of employees, 11) organizational structure, 12) location, 13) achievement and awards, and 15) related laws and	2
	1) analysis and explanations of the management, 2) related party transactions, 3) financial status/operational performance, 4) auditor report, 5) financial statement, 6) market and competition/market shares, 7) significant changes, 8) returns and welfare, 9) research and development, 10) technological and innovation application	2
	equal employment and labor treatment, 2) labor relations, 3)	2

Output Standard	Indicators	Scoring (20)
	community and society, 13) participation and support of stakeholders.	(20)
	 Disclosure and report of environmental information, comprising 1) effective management and utilization of natural resources, energy, and the environment, 2) compliance with the environmental standards, 3) innovative technology development that is friendly to the environment, 4) biodiversity, 5) carbon emission, 6) the coping with climate change, 7) packaging management, 8) waste management, 9) environmental impacts, and 10) the accomplishment of SDGs. 	2
	- Disclosure and report of corporate governance, comprising 1) fair and equal treatment of stakeholders, 2) no law and regulation violation, 3) appeals management and whistleblowing protection, 4) risk management, 5) ethics/business codes of ethics, 6) operational governance, 7) internal and external audit, 8) conflicts of interest, 9) use of inside information or insider trading, 10) cyber security, 11) anti-corruption, 12) governance structure, 13) profiles and qualification of the committee and top executives, 14) roles and responsibilities of a board committee and top executives, 15) diversity of the committees, 16) leadership, 17)	2
	nomination, 18) compensation, 19) scope and authority, 20) share-holding structure, 21) responsibility report of the board committee and sub-committee, 22) anti-corruption, and 23) securities holding.	

5.4 Standards of Outcome Factors

Outcome-factor standards of a communication process for SD of Thai listed companies is the part paid the most attention by key informants since the ultimate goal of SDGs is to enhance business growth continuously, while being able to live in society without damaging the environment or by creating the least impact, and to gain support from the society.

Frankly speaking, what most companies communicate is outputoriented, but is not outcome-oriented. The question is how it affects business significantly or insignificantly. That is what they have to concern. (Key informant No. 7) The standards of outcome factors compose of three principal components, and can be specified to be 6 standard statements as follows:

5.4.1 Effectiveness of communication for SD standards

Effectiveness of communication for SD standards compose of three standard statements.

Standard Statement 22: Stakeholders' satisfaction with organizational SD operations and communication.

Stakeholders' satisfaction is the main goal of organizational operations and communication determined by most companies to create stakeholders' good feeling and understanding of business operations, including responding to their expectation completely after the information exposure. The companies also expect stakeholders to use the conveyed information for their decision-making. Thus, satisfaction is the outcome that reflects the effectiveness of a communication process for SD very well.

If we want to measure the ends, the issue is what we communicate today increases the satisfaction of each stakeholder group or not. However, a process requires a variety of techniques. Eventually, the ultimate goal is how to make stakeholders more satisfied. (Key informant No. 26)

Indicator: "Stakeholders' satisfaction with the organizational SD operations and communication," with the following sub-indicators:

22.1 Satisfaction with the organizational SD operations

22.2 Satisfaction with the organizational communication for SD.

Scores: The full score of the standard statements is six scores by examining the statements from the annual survey of stakeholders' satisfaction. The scoring is based on the level of significance given to the outcome indicators for measuring the effectiveness of a communication process for SD. One of the indicators is the satisfaction of both internal and external stakeholders with organizational operations and communication for SD, which are considered equally important. The scoring criteria are as follows:

- Satisfaction with the overall organizational SD operations = 3 scores

averagely at a high level

- Satisfaction with the overall organizational SD communication = 3 scores averagely at a high level

Examiner: An assigned assessor.

Standard Statement 23: Stakeholders' confidence and acceptance of the organizational SD operations and communication

Besides stakeholders' satisfaction, another major indicator that most Thai listed companies use as a goal in assessing the effectiveness of their communication for SD is stakeholders' confidence and acceptance (See 4.4.2) of the received information and the corporate ability in organizational management and business operations based on SD guidelines. Such confidence and acceptance determine and create stakeholders' behaviors that support and promote the organizational SD operations continuously and sustainably.

After communication, do stakeholders consult with us or provide any opinions or suggestions? If they just inform or answer the form, but never express their ideas or reactions, they just simply do as being requested. (Key informant No. 19)

Indicator: "Stakeholders' confidence and acceptance of the organizational SD operations and communication," with the following sub-indicators:

- 23.1 Stakeholders' confidence and acceptance of the organizational SD operations.
- 23.2 Stakeholders' confidence and acceptance of the organizational communication for SD.

Scores: The full score of the standard statements is 6 scores by examining them from the annual survey of stakeholders' confidence and acceptance. The scoring is based on the level of significance given to outcome indicators relating to stakeholders' confidence and acceptance of the organizational SD operations and communication, which are considered equally important. The scoring criteria are as follows:

- The level of stakeholders' confidence and acceptance of the = 3 scores organizational SD operations as a whole averagely at a high level
- The level of stakeholders' confidence and acceptance of the = 3 scores organizational communication for SD as a whole averagely at a high level Examiner: An assigned assessor.

Standard Statement 24: The organizational image and reputation related to SD.

All operations following SD guidelines aim to create a positive image and reputation for an organization (See 4.4.43), which can be reflected through the received awards and the results of the assessment of SD regulating and supporting agencies at the national and international level. Such achievement helps to support organizations continuously and strengthen corporate brands and organizations. However, if communication for SD cannot create awareness or yield outcome as planned, organizational image and reputation will be affected inevitably, including organizational sustainability.

We have reputation scores as our image indicator, which is measured by our inquiry from external stakeholders annually. It helps to tell how they perceive us and if the result of the annual assessment is better or worse, including their suggestions for our improvement. Thus, scores are an indicator we can see explicitly. (Key informant No. 4).

Indicator: "Positive organizational image and reputation related to SD," with the following sub-indicators:

- 24.1 Organizational image and reputation related to SD
- 24.2 Awards granted by Thai and international regulating and supporting agencies
- 24.3 Organizational SD assessment by Thai and international regulating and supporting agencies
- 24.4 Stakeholders' engagement with and loyalty to the organization and brand.

Scores: The full score of the standard statements is 8 scores by examining the statements from the annual survey of organizational image and reputation, organizational SD operational performance report, the annual report, and SD report, including the admiration certificates from SD regulating and supporting agencies. The scoring is based on the level of significance given to the outcome indicators related to organizational image and reputation on SD, achievement awards, and the assessment of both Thai and international regulating and supporting agencies, including stakeholders' engagement and loyalty. The scoring criteria are as follows:

- Organizational image and reputation related to SD is = 2 scores averagely at a good level.
- The receipt of SD awards from Thai and international = 2 scores regulating and supporting agencies in the past year
- The result of SD assessment by Thai and international = 2 scores regulating and supporting agencies at a good level in the past year
- The stakeholders' average engagement and loyalty to = 2 scores
- the organizational brand at a high level Examiner: An assigned assessor

5.4.2 Standards of shared value creation with the stakeholders

Standards of shared value creation with the stakeholders compose of two standard statements.

Standard Statement 25: A response to stakeholders' expectations and the creation of their participation.

The promotion, support, and development of the agencies of both Thai and foreign countries towards stakeholders' participation, either direct or indirect, in the organizational SD operations via some mechanisms of the agencies, is a crucial outcome factor. Stakeholders' participation is stipulated as organizational policies with clear practices in creating all stakeholder groups' participation. Besides, the organizations are required to monitor and report the consequences of such participation creation to the agencies regularly to assure organizational sustainable stability, which is expected by stakeholders as well. Accordingly, the creation of participation mechanisms and opportunities, including participatory communication will help an organization to respond to its stakeholders effectively.

I think it is important to communicate to all groups of stakeholders to understand what the company is doing. This is to respond to sustainability since every group, i.e., investors, customers, or business partners, etc. all wants to be assured of the way we are, which can be sustainable in the future. It is a global trend, but can a company adapt itself to such a trend? Therefore, 1) communication must respond to the global trend, and 2) the company must respond to the stakeholders' requirements too, i.e., customers, partners, etc., and understand what they expect from us. (Key informant No. 23)

A communication process is the starting point of awareness creation. However, the value-added is not from awareness creation, but from what you will do about it: to change stakeholders' mindset or attitude, including a process that stakeholders do not engage, we have to make them engage. (Key informant No. 26).

The most important thing is stakeholders' feedback to tell us what we have to improve or which operation we did not do well. We take their feedback for improving our operations to respond to their needs and expectation. That's the most important part. (Key informant No. 4)

Indicator: "A response to stakeholders' expectation and creation of their participation," with the following sub-indicators:

- 25.1 Stakeholders' participation in organizational operations for SD.
- 25.2 A response to stakeholders' expectation of organizational operations for SD.

Scores: The full score of the standard statements is 5 scores by examining the statements from the annual survey of stakeholders' expectations and participation. The scoring is based on the level of significance given to the creation of stakeholders' participation to understand their needs and expectation clearly and use them for determining operational guidelines and communication strategies for SD properly. However, all of these can occur only if an organization responds to stakeholders'

expectations precisely. Thus, both statements are considered equally important. The scoring criteria are as follows:

- Stakeholders' participation in organizational operations =2.5 scores for SD.
- A response to stakeholders' expectation of organizational =2.5 scores operations for SD

Examiner: An assigned assessor.

Standard Statement 26: The creation of shared value between the organization and society

The creation of shared value is the creation of economic value for the business and society concurrently towards long-term achievement by focusing on the establishment of common benefits for shareholders and society through the utilization of corporate assets and expertise to solve social problems and develop common economic value, which can be divided into three levels: 1) the level of new product invention needed by the society, especially markets and customer groups whose needs have not been responded yet, i.e., the access to funding or funding sources, nutrition and health improvement, energy-saving product development, learning and educational media development, etc. 2) The level of new norm determination by giving importance to social issues all through the value chain, i.e., resource/energy utilization effectiveness, agricultural development, green-house gas emission and waste control, value-added in procurement, labor's health and safety, local resources allocation, product and service distribution to distant areas, etc. 3) The level of collaborative clusters development in the local area for facilitating business, i.e., a joint community development program, vocational skills development, skill, and education enhancement, campaigns towards behavioral change, the empowerment of human rights, etc. (Yodprudtikan, 2014)

Policies involve environmental, social, safety, etc. They are measures and methods, but something higher than that is our belief that we are valuable. We then use it to create value. (Key informant No. 2) Easy principles for me are: 1) create shared value between internal and external shareholders, it is not either internal or external, but both. 2) Communication tools depend on each stakeholder group but should have clear indicators, i.e., what they measure, which depends on each project, etc. (Key informant No. 2)

Indicator: "The creation of shared value with the society," with the following sub-indicators:

- 26.1 The development of products and services that respond to society's genuine needs.
- 26.2 Productivity development in combination with the value chain.
- 26.3 The development of local collaborative clusters that facilitates business.

Scores: The full score of the standard statements is 7.5 scores by examining the statements from the operational performance on the shared value with the society, the annual report, the Registration Statement Form (Form 56-1), SD report, and the annual survey of stakeholders' opinions, including from the media that publicizes such statements to the public. The scoring is based on the level of significance given to the level of shared-value creation between the organization and society at three levels: new product invention, productivity development in combination with the value chain, and local collaborative clusters development for facilitating business, which is considered as equally important. The scoring criteria are as follows:

- The development of products and services that respond =2.5 scores to society's genuine needs.
- Productivity development in combination with the value chain. =2.5 scores
- The development of local collaborative clusters that =2.5 scores facilitates business.

Examiner: An assigned assessor

5.4.3 A Standard of the Creation of Sustainability Equilibrium in all dimensions

A Standard of the Creation of Sustainability Equilibrium in all dimensions compose of one standard statement.

Standard Statement 27: Effectiveness of organizational SD operations in all dimensions.

The outcome almost every organization emphasizes in the communication process for SD is sustainability equilibrium in all dimensions: economic, social, and environment, as a consequence of organizational operations following sustainability approaches, which is a major indicator for business survival and increasing competitiveness in a long term. The main goal of the economic dimension is the increase of overall stock or share values and continuously increased numbers of investors' securities holdings. In the social and environmental dimension, it is expected that the organization can confront obstacles or problems and can adapt itself to cope with all social and environmental crises effectively, including being able to accomplish the SDGs as determined by both the Thai government and the United Nations.

...For the THSI index, the assessment is twice a year and focuses on the proportion of stock sales; although some groups of investors may want to hold their stocks for the long term, the markets say they want more trades. While the list of sustainable shares focuses on a long-term holding, the index measures the trade-in and trade-out 5% in six months. (Key informant No. 30).

Communication standards cover social, economic, and environmental issues. The social dimension is aimed to get more people involved in the process, so is the environment dimension. However, the relative importance is economic dimension: life difficulty, trouble or happiness, etc., which should be started with. When economics is satisfactory at a certain level, then we come to manage the environment. When the environment is well managed, then good economics will follow. The problem is we work on economics solely or mainly, so our society is not pleasant for living. (Key informant No. 2)

Sustainability means to create change. For what? Why an organization needs a change? What we are talking about is the fundamental qualifications or what will make organizations sustainable or corporate sustainability. Organizations must be responsible and need continuous development. The final goal is to create a balance or equilibrium, or triple bottom line. (Key informant No. 19)

Indicator: "Effectiveness of organizational SD operations in all dimensions," with the following sub-indicators:

- 27.1 More securities holdings and increased share values
- 27.2 Effective adaptability of the organization in crises
- 27.3 The accomplishment of or a response to SDGs.

Scores: The full score of the standard statements is 7.5 score by examining the statements from the sustainability operational performance report in the annual report, the Registration Statement Form (Form 56-1), SD report, and the annual survey of stakeholders' opinion, including the media that publicizes the statements to the public. The scoring is based on the level of significance given to the sustainability equilibrium creation to cover economic, social, and environmental dimensions, as a result of SD operations and communication, which is the ultimate goal and expectation of both stakeholders and the organization. They are thus considered equally important. The scoring criteria are as follows:

-	More securities holdings and increased share values	=	2.5 scores
Y	Effective adaptability of the organization in crises	=	2.5 scores
_	The accomplishment of SDGs.	=	2.5 scores

Examiner: An assigned assessor

From the above information and rationale, the researcher synthesized outcome factors with a total score of 40 scores. The indicators, criteria, and scoring are summarized and illustrated in Table 5.4.

Table 5.4 A summary of scoring of outcome factor standards

Outcome Standard	Indicators	Scoring (40)
Standards of stakeholde	rs' satisfaction with organizational SD operations and commu	nication
22. Stakeholders' satisfaction with	Stakeholders' satisfaction with the organizational SD operations and communication	
organizational SD operations and	- Satisfaction with the organizational SD operations	3

Outcome Standard	Indicators	
communication (6 scores)	- Satisfaction with the organizational communication for SD.	(40) 3
23. Stakeholders' confidence and	Stakeholders' confidence and acceptance of the organizational SD operations and communication	
acceptance of organizational SD operations (6 scores)	- Stakeholders' confidence and acceptance of the organizational SD operations.	3
operations (o scores)	- Stakeholders' confidence and acceptance of the organizational communication for SD.	3
24. Organizational	Positive organizational image and reputation related to SD	
image and reputation related to	- Organizational image and reputation related to SD	2
reputation related to SD (8 scores)	 Awards granted by Thai and international regulating and supporting agencies 	2
	 Organizational SD assessment by Thai and international regulating and supporting agencies 	2
	- Stakeholders' engagement with and loyalty to the organization and brand.	2
Standards of shared valu	e creation with the stakeholders	
25.A response to stakeholders'	A response to stakeholders' expectation and creation of their participation	
expectations and the creation of their participation. (5 scores)	- Stakeholders' participation in organizational operations for SD.	2.5
	- A response to stakeholders' expectation of organizational operations for SD.	2.5
26. The creation of	The creation of shared value with the society.	21
shared value between the organization and	- The development of products and services that respond to society's genuine needs.	2.5
society (7.5 scores)	- Productivity development in combination with the value chain.	2.5
	- The development of local collaborative clusters that facilitates business.	2.5
A Standard of the Creati	on of Sustainability Equilibrium in all dimensions	
27. Effectiveness of	Effectiveness of organizational SD operations in all dimensions	
organizational SD operations in all	- More securities holdings and increased share values	2.5
dimensions	- Effective adaptability of the organization in crises	2.5
(7.5 scores)	- The accomplishment of or a response to SDGs.	2.5

From the standard statements of communication for SD of Thai listed companies, scoring, indicators, and criteria are summarized by fundamental structural factors of the system as follows:

Table 5.5A summary of scoring, indicators, and criteria of standards of
communication for SD of Thai listed companies by fundamental
structural factors of the system.

Factor	Standard	Standard Statements	Number of Indicators	Number of criteria	Scoring (100)
Input	Management structure	1	3	3	2
		2	3	3	2
	Vision, mission, and value	3	3	3	2
		4	3	3	2
	SD policies and practices	5	2	4	2
		6	2	2	2
	Materiality analysis and assessment	7	4	4	2
	Strategy and planning	8	2	2	2
	Stakeholders and expectation	9	2	2	2
		10	2	2	2
Process	Message stipulation and design	11	5	5	2.5
		12	-5	5	2.5
	Communication planning and	13	2	6	2.5
	utilization	14	8	8	2.5
3	A communication process	15	5	5	4
		16	6	6	3
		17	3	3	3
Output	Communication for SD efficiency	18	9	8	4
	SD perception and understanding	19	2	2	2
	Information disclosure and	20	4	4	4
	reporting standards	21	5	5	10
Outcome	Communication effectiveness	22	2	2	6
		23	2	2	6
		24	4	4	8
	Creation of shared value with	25	2	2	5
	stakeholders	26	3	3	7.5
	Creation of sustainability equilibrium in all dimensions	27	3	3	7.5
		Total	96	101	100

The above Table illustrates the determined standards compiled and analyzed from the key informants' information consist of 27 standard statements, 96 indicators, and 101 criteria. The assessment of communication standards for SD of Thai listed companies needs to consider the standards of every factor, standard statement, indicator, and criterion, so that the total scores from the assessment can evaluate communication standards further.

Therefore, the assessment of the overall communication standards for SD comes from the evaluated scores of all factors: input, process, output, and outcome. The total full score is 100 scores and are divided into 5 level of assessment criteria as follows: (Wijitjammaree, 2002)

Standard level	The total score		
Excellent	Higher than 86%		
Good	75 - 85 %		
Fair	60 - 74 %		
Pass	50 - 59 %		
Need to improve	Lower than 50 %		

From the level of standard scores as shown above, they can be compared with the level of communication standards for SD of Thai listed companies, classified by each factor, as illustrated in Table 5.6.

Table 5.6 The level of communication standards for SD of Thai listed companies

Standard	Scoring	Excellent (86 %)	Good (75-85%)	Fair (60-74%)	Pass (50-59%)	Need to improve (Lower than 50%)
Input factors	20	17.2	15-17.1	12-14.9	10-11.9	Lower than 10
Process factors	20	17.2	15-17.1	12-14.9	10-11.9	Lower than 10
Output factors	20	17.2	15-17.1	12-14.9	10-11.9	Lower than 10
Outcome factors	60	51.6	45-51.1	36-44.9	30-35.9	Lower than 30
Total	100	86	75-85	60-74	50-59	Lower than 50

Standard Level	Excellent (86 %)	Good (75-85%)	Fair (60-74%)	Pass (50-59%)	Need to improve (Lower than 50%)
Percentage	Higher than 86%	75-85%	60-74%	50-59%	Lower than 50%
Total scores	Higher than 86	75-85	60-74	50-59	Lower than 50

Table 5.7 The level of communication standards for SD of Thai listed companies as a whole

The above Table illustrates that organizations that gain higher than 86 scores from the full score of 100 scores are assessed as having communication standards for SD at an excellent level. On the contrary, if any organization gains lower than 50, its communication for SD needs to be improved. Besides, organizations can consider their scores of each factor for applying them as guidelines for improving the quality of organizational communication for SD towards better standards.

Still, since the standard scores of each factor are combined, to assess at which standard level a Thai listed company is, it has to look at the total scores of all factors with the full score of 100, as illustrated in Table 5.7. Therefore, the level of standard scores can determine the overall effectiveness of communication for SD of Thai listed companies, which helps to use communication as a mechanism for driving the organization towards sustainability as wished by each company.

CHAPTER 6

ACCEPTANCE VALIDATION AND THE APPLICATION OF COMMUNICATION STANDARDS FOR SUSTAINABLE DEVELOPMENT OF THAI LISTED COMPANIES

In the previous chapter, the researcher synthesized standards, indicators, and criteria of communication for sustainable development (SD) through the analysis of the fundamental structure of the system, which is divided into input, process, output, and outcome factors, by the qualitative content analysis. Besides, the findings will be used for testing the acceptance of communication standards by practitioners in the field of communication for SD in Thai listed companies.

In this chapter, the researcher will present the testing results of the tool assessment by the experts and scholars involved with communication standards for SD, including the results of the preliminary test with 20 samples who are not the population of the study, including the results of the survey on the acceptance of 27 standard statements, including indicators and assessment criteria from the point of view of 75 Thai leading listed companies whose communication for SD performance was selected in the list of sustainable stocks in 2019. The findings of the tool assessment and the acceptance of communication standards for SD of Thai listed companies are as follows:

6.1 A Summary of the Assessment Tool Validation

The tool developed from the related concepts, theories, and studies was tested by the experts, scholars, and practitioners related to communication for SD of Thai listed companies to acquire the acceptance survey that is proper and accords with the research objectives the most. The tool was validated by the following methods:

6.1.1 Content Validity

The validity of content in the questionnaire was tested by IOC (Index of Item Objective Congruence), from the opinions of five experts, both academic and professional, in communication standards for SD. (The name list is shown in 3.4.1: Content Validity)

From the test, it was found that the IOC = 0.82, which passes the determined quality criteria at .50. From the analysis of standard statements, indicators, and criteria in each standard issue, most of them were found to pass the quality criteria at .50, except some indicators and criteria that do not pass the criteria at .50, namely the indicator 18.1 "Better business performance," the criterion 18.2 "Better business performance than last year," indicator 27.1 "a higher number of investors' securities holding and the overall increased share value," and the criterion 27.1 "a higher number of investors' securities holding and the overall higher share value than last year." Accordingly, such indicators and criteria were cut out, as recommended by the scholars and experts. In short, the results of content validity are illustrated in Appendix D.

Besides, all five scholars and experts provided some recommendations for improving standard statements, indicators, and standard criteria to be more complete and can be used as an instrument for collecting data appropriately. The issues that most experts recommended were the modification of words to be clearer, unambiguous, and congruent with the issues to be measured. Moreover, the proportion of scoring must be proper and reliable, and being accordant with the standards of information disclosure and reporting at the universal level, i.e., GRI, DJSI, etc. The detailed recommendations are as follows:

The indicator 1.1 of the standard statement 1. The word "the management level" was recommended to change to "administrative level," and "the management structure" to "administrative structure." Thus, the researcher modified the words as recommended.

The indicator 1.1 of the standard statement 9: The sentence "the organization stipulates organizational stakeholders to cover all groups clearly by covering the groups of" was recommended to change to "the organization stipulates

stakeholders clearly to cover at least the following major groups:..." Thus, the researcher corrected the sentence as recommended.

Indicator 12.2 of the standard statement 12: Indicator 12.2 "quality of the content, i.e., completeness, clarity, " was recommended to move to Indicator 11 for more appropriateness. Besides, Indicator 12.3 was recommended to correct from "designed message" as a passive form to be less passive. (in Thai connotative meaning), and also "presented under the main concept of..." to "present the main concept of...," including the indicator 12.5 from "published in Thai and English," to "published in Thai, and/ or English, and/or other languages expected by stakeholders." Thus, the researcher corrected the word as recommended.

The criterion 15.3 of the standard statement 15: Some experts observed that "the monitoring of sustainability operations" appears in Indicator 17. Besides, for Indicator 15.4 some experts suggested elaborating the following content "Organizational leaders commit to operating business" to be more concrete, i.e., identifying the name of a document, or the indicator that can be considered from the policies, a message from the board committee and top executives that appear in various corporate channels (without being restricted to the document only). However, for these comments, the researcher opened an opportunity for Thai listed companies to consider as appropriate so the same wording remained.

The indicator 16.1, 16.3, and 16.4 of the standard statement 16, and the indicator 17.1 of the standard statement 17: Some experts recommended clarifying the word "have a mechanism" to be more explicit, so the researcher revised it to be "have guidelines" to make it more explicit as recommended.

The indicator 18.3-18.9 of the standard statement 18: An expert advised to adjust the topic to be "the organizational image." However, the other four experts did not comment on this. Besides, the said content is about the output factor caused by a communication process for SD, which is a different part from the organizational image. Therefore, the researcher kept such indicators and standard criteria as before. However, in Indicator 18.5, some experts suggested adding the word "new working process innovation," so the researcher added it as recommended. Besides, in Indicator 18.1 "better business performance" and Criterion 18.2 "better business performance than last year," was recommended to cut them out because better business

performance may be caused by several factors, not from communication for SD only. Besides, in concurrence with the result of content validity, such indicator and criterion did not pass the test, so the researcher cut them as recommended.

The indicator 19.1-19.2 of the standard statement 19: Some experts advised to modify the statement to be more precise by specifying the level of perception and understanding, so the researcher clarified them as recommended.

Indicator 20.1 of the standard statement 20, and Indicator 21.1-21.5 of Standard statement 21: Some experts recommended adjusting the word from "the information disclosure and report" to "the preparation of an information report." However, the other four experts did not give any comment about this. Besides, the standard statement must be in congruence with the criteria of information disclosure and reporting, so the researcher kept the indicator and standard criteria as before. Moreover, Indicator 20.3 was recommended to revise from "timely and suitable reporting for the situation" to "reporting information to be timely and suitable for the situation." However, such indicators and standard criteria followed the regulations of information disclosure of the regulating agencies, and the other four experts did not recommended to be specified more clearly and focused with only the main issue, so the researcher revised it as recommended.

The criterion 21.4 of the standard statement 21: Some experts suggested moving "to accomplish the SDGs" to criterion 21.1 because SDGs involve an organization, so they must cover economic, social, and environmental dimensions. Besides, the issue of "knowledge management (KM)" was recommended to be added. Moreover, in Criterion 21.5, some experts suggested adding the issue "the evaluation of the board committee," so the researcher corrected as advised.

Indicator 22.1-22.2 of Standard statement 22: Some experts recommended revising the statement to be more precise by specifying it to be "the level of stakeholders' satisfaction," so the researcher revised it as recommended.

Standard statement 23: Some experts advised to add the issue of the sufficiency of information, which also appeared in Standard statement 21, and to add "the acceptance and making decisions in stakeholders' participation," so the researcher added as recommended.

Indicator 24.3 of Standard statement 24: Some experts suggested modifying the indicator to be clearer by adjusting from "an organizational sustainability is evaluated" to "an organizational sustainability is ranked," so the researcher revised the word as recommended.

Indicator 26.3 of Standard statement 26: Some experts advised to adjust the sentence to be clearer from "the development of collaborative clusters at the local level" to "the development of collaborative clusters with communities at the local level," so the researcher added the word as suggested.

Indicator 27.1 of Standard statement 27: Most experts suggested cutting it because it might not reflect the outcome of organizational SD operations genuinely because there might be other factors that might affect share values. Moreover, the increased number of securities holding might not reflect corporate sustainability either. In addition, from the content validity, such an indicator did not pass the criteria, so the researcher cut it as recommended. On the other hand, some experts proposed that one of the major outcomes was the creation of a proper balance or equilibrium of each stakeholder group's needs and expectations, so the researcher cut the old one and replaced it with the proposed outcome indicator.

Accordingly, the researcher adjusted the standard statements, indicators, and standard criteria to be more complete and precise as recommended and proposed by all five experts until a draft of communication standards for SD of the Thai listed companies was achieved. Then, the drafted standards were tested with a reliability test to assure the credibility of the questionnaire before the acceptance validation of the standards with Thai listed companies in the form of a survey of acceptance of the instrument of "Communication Standards for Sustainable Development of Thai Listed Companies" to be conducted in the next stage.

6.1.2 Reliability Test

To ensure that the developed evaluation form or questionnaire can measure or assess communication standards for SD effectively, the researcher conducted a preliminary test or a pilot study with 20 practitioners and experts in communication for SD, who were not the samples of this study to examine the internal consistency between the standard statements, standard criteria, and indicators, and processed information with the SPSS Package to estimate the reliability value of the questionnaire using the estimation formula of Cronbach's Alpha Coefficient.

From the reliability test with 20 samples, it was found that the reliability coefficient or alpha coefficient was at a high level ($\alpha = 0.978$), so the value is higher than the generally accepted criteria or 0.80, as illustrated in Figure 6.1. It means that the developed questionnaire is reliable and can be used for collecting information from the target samples.

Case Processing Summary					
		N	%		
Cases	Valid	20	100.0		
	Excluded ^a	0	.0		
	Total	20	100.0		

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics					
	Cronbach's				
	Alpha Based on				
Cronbach's	Standardized				
Alpha	Items	N of Items			
.978	.973	224			

Figure 6.1 The calculation result of Cronbach's Coefficient Alpha

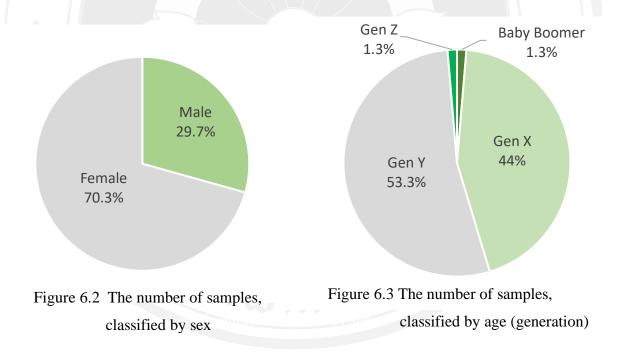
6.2 A Summary of the Standard Acceptance Test

75 Thai listed companies that were selected in the list of Thailand Sustainability Investment (THSI) were the samples for testing the acceptance of communication standards for SD. Each company assigned a representative to answer the developed questionnaire, so the total number of respondents was 75. (See the name list in 3.3.3: Verification of standard acceptance). Respondents were requested to consider all standard statements, indicators, and standard or scoring criteria. Four choices or alternatives were given: agree, disagree, not sure, no opinion, and respondents could express their ideas freely in the "correction or suggestion" column.

The data from the acceptance survey of communication standards for SD of Thai listed companies were analyzed by descriptive statistics, i.e., frequency, and percentage of respondents towards the given standard statements, indicators, and standard criteria. After that, the proportion of supporters on the standard statements, indicators, and standard criteria were analyzed by Z-test at a 95% confidence level.

6.2.1 General information of the respondents

Of the total of 75 respondents, 53 respondents were female (70.3%) and 22 of them were male (29.7%). From classifying generations based on the concept of Francis and Hoefel (2018), 40 of them were Gen Y or aged between 26-40 (53.3%), followed by 33 of Gen X or aged between 41-60 years old (44.0%), 1 of Gen Z or aged between 10-25 years old and Baby Boomer or aged between 61-80 years old equally (1.3%). The average age was 41.20 years old, the age ranged from 25-61 years old, as illustrated in Figure 6.2 and 6.3.



Regarding working experiences in communication for SD, 32 respondents worked for 0-5 years (42.7%), followed by 5 years one month -10 years (28 respondents or 37.3%), and 10 years one month -15 years (10 respondents or 13.3%)

respectively. The range of working experience was 10 months – 39 years and the average working experience was 8 years, as illustrated in Table 6.1.

Experiences (years)	Frequency	Percentage
0-5	32	42.7
5.1 – 10	28	37.3
10.1 – 15	10	13.3
15.1 – 20	3	4
20.1 – 25		-
25.1 - 30		1.3
30.1 - 35		-
More than 35.1	1	1.3
Total	75	100

Table 6.1 Frequency and percentage of the respondents classified by working experience

Regarding the level of education, 45 respondents graduated with a master's degree (61.3%), followed by a bachelor's degree (28 respondents or 37.3%), and a doctoral degree (1 respondent or 1.3%) respectively. Concerning fields of study, 32 respondents graduated from Business Administration (42.7%), followed by Communication, Journalism, and Management (9 respondents or 12.0%), and Economics (8 respondents or 10.7%) respectively. The lowest number of respondents graduated from other fields of study: Engineering Technology, Accountancy, Humanities, Political Science, Education, and Architecture (1 respondent each or 1.3%), as illustrated in Table 6.2.

 Table 6.2
 Frequency and percentage of the respondents, classified by the graduation

 field of the highest degree

Field of Graduation	Frequency	Percentage
Management	9	12
Marketing	2	2.7

Field of Graduation	Frequency	Percentage
Engineering Technology	1	1.3
Law	2	2.7
Communication Arts /Journalism	9	12
Business Administration	32	42.7
Accountancy	1	1.3
Humanities	1.	1.3
Political Science	-1	1.3
Science	3	4
Engineering	4	5.3
Education	1	1.3
Economics	8	10.7
Architecture	1 1	1.3
Total	75	100

The above Table displays that communication for SD practitioners graduated from several fields of study or disciplines. Remarkably, almost half of the respondents graduated from Business Administration. This reflects that Business Administration is an essential field of study for those interested in working in this area. However, people who can perform the task in communication for SD are necessary to have good knowledge and skills of Communication or Journalism.

6.2.2 Standard Acceptance Test

The results were gained from the survey of the acceptance of communication standards for SD of Thai listed companies, conducted with 75 representatives of Thai listed companies. The respondents were requested to consider all standard statements, indicators, and scoring criteria. Frequencies and percentage of the respondents' opinions, comprising of the following alternatives: agree, disagree, not sure, no opinion. The results of the respondents' opinions or acceptance on each standard statement are summarized and illustrated in Table 6.3.

Table 6.3 Respondents' opinions on the standard statements of communication standards for SD

ort SD operations explicitly.75732-ainability operations systematically.75 (97.3) (2.7) -ainability operations systematically.75 75 stainable development guidelines explicitly.75 74 -1stainable development guidelines explicitly.75 72 21is a part of the organizational value.75 72 21in writing.7575211in writing.7575in writing.7575SD materiality is complete and well-7573(1.3)(1.3)ind operational stakeholders7574-1set* expectation7574-13set* expectation7574-13set* expectation7574-113set* expectation7574-111set* expectation7574-1111set* expectation7574-1111111set* expectation757411111111111111111111111111111111<		Standard Statement	Numbers of respondents	Agree (%)	Disagree (%)	Not sure (%)	No opinion (%)
ization has a management structure to support SD operations explicitly. 75 73 2 - 73 2. 1 (2.7) (2.7) (2.7) (2.1)	Inpu	t Factors					
ization has a mechanism in governing sustainability operations systematically. 75 (97.3) (2.7) (100) (2.7) (100) (2.7) (100) (2.7) (13) (2.7) (13) (2.7) (13) (2.7) (13) (2.7	1.	The organization has a management structure to support SD operations explicitly.	75	73	2	ı	I
ization has a mechanism in governing sustainability operations systematically. 75 73 74 - 1 (100) (100				(97.3)	(2.7)		
izational vision, and/or mission reflects sustainable development guidelines explicitly. 75 74 74 1.3 72 2.1 1.3) able development approach is contained as a part of the organizational value. 75 75 72 2.1 1.3) ization stipulates SD policies and practices in writing. 75 75 75 75 $ -$ s and practices are enforced throughout the organization. 75 75 75 75 $ 1(100)$ is of the assessment of the organizational SD materiality is complete and well- ization determines sustainability strategy and operational planning explicitly 75 73 11 1 ination of every major group of the organizational stakeholders ination of every major group of the stakeholders' expectation 75 73 71 $ 3$ ization determines SD content inclusively. 75 74 $ 1$ intraction determines SD content inclusively. 75 74 $ 1$ intraction determines SD content inclusively. 75 74 $ 1$ intraction of every major group of the organizational stakeholders 75 74 $ 1$ intraction determines SD content inclusively. 75 74 $ 1$	6.	The organization has a mechanism in governing sustainability operations systematically.	75	75		ı	ı
izational vision, and/or mission reflects sustainable development guidelines explicitly. 75 72 2 1 (1.3) able development approach is contained as a part of the organizational value. 75 75 72 2 1 (1.3) ization stipulates SD policies and practices in writing. 75 75 75 75 75 75 75 75 75 75 75 75 75				(100)			
nable development approach is contained as a part of the organizational value.75 72 21ization stipulates SD policies and practices in writing.75 75 7 2 1 ization stipulates SD policies and practices in writing.75 75 7 2 1 ization stipulates SD policies and practices in writing.75 75 75 2 1 is of the assessment of the organizational SD materiality is complete and well- 75 75 75 2 1 1 ization determines sustainability strategy and operational planning explicitly 75 73 1 1 1 1 ination of every major group of the organizational stakeholders 75 74 $ 1$ 1	ю.	The organizational vision, and/or mission reflects sustainable development guidelines explicitly.	75	74	I	1	I
andle development approach is contained as a part of the organizational value.757221ization stipulates SD policies and practices in writing.7575is and practices are enforced throughout the organization.7575is of the assessment of the organizational SD materiality is complete and well-7575is of the assessment of the organizational SD materiality is complete and well-7573111ization determines sustainability strategy and operational planning explicitly7573(1.3)(1.3)(1.3)ination of every major group of the organizational stakeholders7574-11y analysis and assessment of the stakeholders' expectation7574-3(1.3)(1.3)ination of every major group of the stakeholders' expectation7574-3(1.3)(1.3)ination determines SD content inclusively.7574-33ization determines SD content inclusively.7574-311ization determines SD content inclusively.7574-31133ization determines SD content inclusively.7574-133113111111111333333333331111<				(98.7)		(1.3)	
ization stipulates SD policies and practices in writing. 75 75 75 $ 75$ 75 $ 75$ 75 $ 75$ 75 $ 75$ 75 $ -$	4.	The sustainable development approach is contained as a part of the organizational value.	75	72	2	1	I
ization stipulates SD policies and practices in writing. 75 75 75 75 75 75 75 75 75 75 75 75 75				(0.96)	(2.7)	(1.3)	
is and practices are enforced throughout the organization. 75 75 75 75 $-$ - 75 75 75 $-$ - 75 75 75 $-$ - 10000 $-$ - 1000 $-$ - 1000 $-$ - 10000 $-$ - 10000 $-$ - 10000 $-$ - 100000 $-$ - 1000000 $-$ - $100000000000000000000000000000000000$	5.	_	75	75	ı	·	ı
s and practices are enforced throughout the organization. $\begin{array}{cccccccccccccccccccccccccccccccccccc$				(100)			
sis of the assessment of the organizational SD materiality is complete and well- 75 75 75 $-$ - 1000 $-$ - 1000 $ 1000$ $ 1000$ $ 1000$ $ -$	6.	SD policies and practices are enforced throughout the organization.	75	75	1	ı	I
sis of the assessment of the organizational SD materiality is complete and well- 75 75 7 $ 1000$ (100) 1.30 (1.3) (1.3) (1.3) (1.3) mination determines sustainability strategy and operational planning explicitly 75 73 1 $ 1$ (1.3) (1.3) (1.3) mination of every major group of the organizational stakeholders 75 74 $ 1$ 75 74 $ 3$ (1.3) (1.3) (1.3) (1.3)				(100)			
ization determines sustainability strategy and operational planning explicitly 75 73 1 1 1 nination of every major group of the organizational stakeholders 75 74 -1 (1.3) (1.3) y analysis and assessment of the stakeholders' expectation 75 71 -3 71 -3 (4.0) (1.3)	7.	The analysis of the assessment of the organizational SD materiality is complete and well-	75	75	I	ı	I
ization determines sustainability strategy and operational planning explicitly 75 73 1 1 1 97.3) (1.3) (1.3) nination of every major group of the organizational stakeholders 75 74 $ 1$ 98.7) (1.3) (1.3) y analysis and assessment of the stakeholders' expectation 75 71 $ 3$ (94.7) (94.7) (4.0) (1.3) ization determines SD content inclusively. 75 74 $ 1$		rounded		(100)			
nination of every major group of the organizational stakeholders 75 74 -1 (1.3) (1.3) y analysis and assessment of the stakeholders' expectation 75 71 -3 (1.3) (98.7) (1.3) $(1.3)(1.3)ization determines SD content inclusively. 75 74 -1$	<u></u>		75	73		1	I
nination of every major group of the organizational stakeholders 75 74 - 1 (98.7) (98.7) (1.3) (98.7) (1.3) (94.7) (1.2) (1.3) (94.7) (1.2) (1.3				(97.3)	(1.3)	(1.3)	
y analysis and assessment of the stakeholders' expectation 75 (98.7) (1.3) (94.7) - 3 (94.7) (4.0) (1.3) (1.	6	The determination of every major group of the organizational stakeholders	75	74	,	1	ı
y analysis and assessment of the stakeholders' expectation 75 71 - 3 (94.7) (4.0) (ization determines SD content inclusively. 75 74 - 1				(98.7)		(1.3)	
ization determines SD content inclusively. (4.0) (75 74 - 1	10	Materiality analysis and assessment of the stakeholders' expectation	75	71		б	-
ization determines SD content inclusively.				(94.7)		(4.0)	(1.3)
75	Proc	ess Factors					
	11	The organization determines SD content inclusively.	75	74	,	1	ı

		Numbers of	Agree	Disagree	Not sure	No opinion
	Standard Statement	respondents	(%)	(%)	(%)	(%)
			(98.7)		(1.3)	
12	The organization has a proper SD message design	75	73	I	1	1
			(97.3)		(1.3)	(1.3)
13	The organization plans the use of media and channels that are proper for stakeholder groups.	75	71	ı	З	1
			(94.7)		(4.0)	(1.3)
14	The organization provides communication channels for promoting the stakeholders'	75	70		5	ı
	participation and responses		(93.3)		(6.7)	
15	The organizational leaders are determined to operate a business under the concept of sustainable	75	73		1	1
			(97.3)		(1.3)	(1.3)
16	Communication for SD is interested and exverse all resume of stabaholders	75	73	I	2	I
10	Communication for 5D is integrated and covers an groups of staticity descriptions		(97.3)		(2.7)	
17	The regulation and assessment of communication for SD effectiveness	75	73	-) 1	ı
			(97.3)	(1.3)	(1.3)	
Out	Output Factors					
18	The organizational communication for SD is Efficient.	75	70		5	ı
			(93.3)		(6.7)	
19	Perception and understanding of the organizational SD approach.	75	72		б	ı
			(0.96)		(4.0)	
20	The information disclosure and SD report are transparent.	75	74	ı	1	I
			(98.7)		(1.3)	
21	The organizational SD information disclosure and report are complete and sufficient.	75	75	ı	ı	I
			(100)			
Oute	Outcome Factors					
22	Stakeholders' satisfaction with the organizational SD operations and communication.	75	71	1	1	1
			(94.7)	(1.3)	(1.3)	(1.3)

	Standard Statement	Numbers of Agree respondents (%)	Agree (%)	Disagree (%)	Not sure (%)	No opinion (%)
23	Stakeholders' confidence and acceptance of the organizational SD operations and communication	75	72 (96.0)	ı	3 (4.0)	
24	The organizational image and reputation related to SD.	75	73 (97.3)	ı	2 (2.7)	ı
25	A response to stakeholders' expectations and the creation of their participation.	75	73 (97.3)	T	1 (1.3)	1 (1.3)
26	The creation of shared value between the organization and society	75	75 (100)		ı	I
27	Effectiveness of organizational SD operations in all dimensions	75	71 (94.7)		4 (5.3)	

From analyzing each statement, it is found that 6 standard statements were accepted or agreed, namely No. 2: The organization has a mechanism in governing sustainability operations systematically, No. 5: The organization stipulates SD policies and regulations in written, No. 6: SD policies and regulations are enforced throughout the organization, No. 7: The analysis of the assessment of the complete and sufficient, and No. 26: The creation of shared value between the organization and society. Thus, it means that all samples organizational SD materiality is complete and well-rounded, No. 21: The organizational SD information disclosure and report are Table 6.3 indicates that more than 90% of the respondents expressed their agreement or acceptance of all standard statements. agreed with these six standard statements.

Besides, the number of the respondents who agreed with the given standard statements can be ordered by the highest to the lowest as follows, Standard Statement No. 3, 9, 11, and 20 were agreed or accepted the most (98.7%), followed by No. 1, 8, 12, 15, 16, 17, 24,

and 25 (97.3%), No. 4, 19, and 23 (96.0%),	10,	13, 22,	and 27	(94.7%)	respectivel	ly. The	standard state	ments that	No. 10, 13, 22, and 27 (94.7%) respectively. The standard statements that were agreed or
accepted are 14 and 18. (93.3%).									
		,	,					•	

For the indicators, a summary of the number of respondents who agreed, disagreed, were unsure, and had no opinions, towards the indicators and criteria of scoring standard statements is illustrated in Table 6.4

wards SD management structural standards.	
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Table 6.	
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Standard Statement	Numbers of respondents	Agree Disagree (%) (%)	Not sure (%)	No opinion (%)
SD management structure standards	R	ſ		
1 Clear organizational management structure for supporting SD operations.				
Indicators:				
1. Having at least one group of a board of directors or committee or sub-committee (at	75	73 1	1	ı
the board or policy level) with specific roles, duties, and responsibilities in stipulating		(97.3) (1.3)	(1.3)	
and governing SD explicitly, and at least one sustainability expert or personnel with				
experience in sustainability.				
2. Having at least one group of a committee, or sub-committee, or working group (at the	75	73 1	1	I
management level) with specific roles, duties, and responsibilities in stipulating and		(97.3) (1.3)	(1.3)	
governing SD explicitly.				
3. Having at least one division/section/ or department (at the operational level) with	75	73 1	1	ı
specific roles, duties, and responsibilities in stipulating and governing SD explicitly.		(97.3) (1.3)	(1.3)	
Criteria: Assessing organizational management structure, roles, and documents or a				

Standard Statement	Numbers of respondents	Agree (%)	Disagree (%)	Not sure (%)	No opinion (%)
handbook of Standard Operating Procedure (SOP).	C. B.				
- The organization has a supporting structure at the policy level	75	72	1	2	
		(0.96)	(1.3)	(2.7)	
- The organization has a supporting structure at the management level	75	72	1	2	·
		(0.96)	(1.3)	(2.7)	
- The organization has a supporting structure at the operational level	75	72	1	2	ı
		(0.96)	(1.3)	(2.7)	
2. The organization has a mechanism in governing sustainability operations					
systematically					
Indicators:					
1. Having a report on sustainability operational performance to a committee responsible	75	71	1	3	ı
for sustainability explicitly.		(94.7)	(1.3)	(4.0)	
2. A concerned committee has a meeting agenda on the sustainability operational	75	71	1	б	I
performance at least every three months.		(94.7)	(1.3)	(4.0)	
3. Having a report of sustainability operational performance certified by the	75	71	1	3	ı
Sustainability Committee or Sub-committee regularly every year.		(94.7)	(1.3)	(4.0)	
Criteria: Assessing sustainability operational performance certified by Sustainability					
Committee, management structure, a report of Sustainability Committee's sustainability					
operations.					
- Having a direct line to report to Sustainability Committee	75	73	1	1	
		(97.3)	(1.3)	(1.3)	
- Having a direct line to report to Sustainability Committee	75	73	1	1	ı

respondents (73) (1.3) (1.3) (79) (90) Having a report on the responsibility of the sustainability committee 75 73 (1.3) (1.3) (1.3) Table 6.4 illustrates that most respondents agreed with the indicator in Standard Statement No. 1 (97.3%). While only 1.3% disagreed and were unsure equally. For the criteria, most respondents agreed with them (96.0%), were unsure (2.7%), and disagreed disagreed (1.3%) respectively. For the criteria, most respondents agreed with the indicators (94.7%), were unsure (4.0%), and disagreed disagreed (1.3%) respectively. For the criteria, most respondents agreed with the indicators (94.7%), were unsure (4.0%), and disagreed disagreed (1.3%) respectively. For the criteria, most respondents agreed with them (97.3%), disagreed, and were unsure equally (1.3%). However, no respondents proposed any modification or correction of the standard statements, indicators, and criteria. Table 6.5 Respondents' opinions towards vision, and value standards. Numbers of Agree Not sure Not sure Standard Statement (%) (%) (%) (%)	(9) (9) (9) (96. (10) (13%), dii (13%), dii ments, in	(%) (97.3) 73 (97.3) (97.3) (97.3) (97.3) (97.3) (97.3) (97.3) (10%), we cators (9 isagreed, ndicators,	(%) (1.3) 1 (1.3) Vo. 1 (97.3 tre unsure tre unsure 4.7%), wei and were u and criteri	(%) (1.3) (1.3) %). While %). While (2.7%), and (2.7%), and insure equa	(%) - - - - - - - - - - - - - - - - - - -
 Having a report on the responsibility of the sustainability committee Table 6.4 illustrates that most respondents agreed with the indicator in Stand disagreed and were unsure equally. For the criteria, most respondents agreed with the (1.3%) respectively. For the criteria, most respondents agreed with them (97. However, no respondents proposed any modification or correction of the standard statem Table 6.5 Respondents' opinions towards vision, mission, and value standards. 	() dard Stat hem (96. the indic 7.3%), dii ments, in	7.3) 73 ement h ement h 0%), we ators (9 sagreed, dicators	(1.3) 1 (1.3) Vo. 1 (97.3 re unsure 4.7%), we and were and criter	(1.3) 1 (1.3) %). While %). While (2.7%), and e unsure (insure equa a.	- only 1.3% l disagreed 4.0%), and lly (1.3%).
 Having a report on the responsibility of the sustainability committee 75 Table 6.4 illustrates that most respondents agreed with the indicator in Stand disagreed and were unsure equally. For the criteria, most respondents agreed with th (1.3%) respectively. For Standard Statement No. 2, most respondents agreed with them (97. However, no respondents proposed any modification or correction of the standard statement Nover, no respondents proposed any modification or correction of the standard statement. Table 6.5 Respondents' opinions towards vision, mission, and value standards. 	(9) dard Stat hem (96. the indic 7.3%), dii ments, in	73 97.3) ement 0%), we ators (9 sagreed, dicators	1 (1.3) Vo. 1 (97.3 re unsure 4.7%), we and were and were	1 (1.3) %). While (2.7%), and (2.7%), and e unsure (. insure equa a.	- only 1.3% l disagreed 4.0%), and lly (1.3%).
Table 6.4 illustrates that most respondents agreed with the indicator in Stand disagreed and were unsure equally. For the criteria, most respondents agreed with th (1.3%) respectively. For the criteria, most respondents agreed with them (97. disagreed (1.3%) respectively. For the criteria, most respondents agreed with them (97. However, no respondents proposed any modification or correction of the standard statem Table 6.5 Respondents' opinions towards vision, mission, and value standards. Numbe Standard Statement	(9) dard Stat hem (96. the indic 7.3%), dis ments, in	7.3) ement 1 0%), we ators (9 sagreed, dicators	(1.3) Vo. 1 (97.3 re unsure 4.7%), we and were 1 and criter	(1.3) %). While (2.7%), and e unsure (. insure equa a.	only 1.3% l disagreed 4.0%), and lly (1.3%).
Table 6.4 illustrates that most respondents agreed with the indicator in Stand disagreed and were unsure equally. For the criteria, most respondents agreed with th (1.3%) respectively. For Standard Statement No. 2, most respondents agreed with them (97, disagreed (1.3%) respectively. For the criteria, most respondents agreed with them (97, However, no respondents proposed any modification or correction of the standard statem Table 6.5 Respondents' opinions towards vision, mission, and value standards.	dard Stat hem (96. the indic 7.3%), dis ments, in	ement 1 0%), we ators (9 sagreed, dicators	Vo. 1 (97.3 re unsure 4.7%), we and were and criter	%). While (2.7%), and e unsure (insure equa a.	only 1.3% l disagreed 4.0%), and lly (1.3%).
disagreed and were unsure equally. For the criteria, most respondents agreed with the (1.3%) respectively. For Standard Statement No. 2, most respondents agreed with them (97. disagreed (1.3%) respectively. For the criteria, most respondents agreed with them (97. However, no respondents proposed any modification or correction of the standard statem Table 6.5 Respondents' opinions towards vision, mission, and value standards. Numbe Standard Statemet	hem (96. the indic 7.3%), dis ments, in	0%), we ators (9 sagreed, dicators.	re unsure 4.7%), wei and were i and criteri	(2.7%), and e unsure (- insure equa a.	l disagreed 4.0%), and lly (1.3%).
 (1.3%) respectively. For Standard Statement No. 2, most respondents agreed with them (97. disagreed (1.3%) respectively. For the criteria, most respondents agreed with them (97. However, no respondents proposed any modification or correction of the standard statem. Table 6.5 Respondents' opinions towards vision, mission, and value standards. 	the indic 7.3%), div ments, in	ators (9 sagreed, dicators	4.7%), wer and were 1 and criter	e unsure (. insure equa a.	4.0%), and lly (1.3%).
disagreed (1.3%) respectively. For the criteria, most respondents agreed with them (97. However, no respondents proposed any modification or correction of the standard statem Table 6.5 Respondents' opinions towards vision, mission, and value standards. Standard Statement	7.3%), di ments, in	sagreed, dicators	and were I and criteri	insure equa a.	lly (1.3%).
However, no respondents proposed any modification or correction of the standard statem Table 6.5 Respondents' opinions towards vision, mission, and value standards. Numbe Standard Statement	ments, in	dicators	and criteri	а.	
TAN (B)					
1.00		Agree	Disagree	Not sure	No opinion
		(%)	(%)	(%)	(%)
Vision, Mission, and Value Standards					
3. The organizational vision, and/or mission reflects sustainable development guidelines					
explicitly.					
Indicators:					
1. The organizational vision reflects SD operations explicitly	5	72	1	I	2
	Ŭ	(0.96)	(1.3)		(2.7)

	Numbers of	Agree	Disagree	Not sure	No opinion
Standard Statement	respondents	(%)	(%)	(%)	(%)
2. The organizational mission reflects SD operations explicitly	75	72	1	I	2
		(0.96)	(1.3)		(2.7)
3. The organizational vision and mission are reviewed regularly every year.	75	72	1	ı	7
		(0.96)	(1.3)		(2.7)
Criteria: Examining the statements of organizational vision and mission from the annual report,					
SD report, and websites.					
- The explicit appearance of the SD concept in the organizational vision	75	67	-	9	1
		(89.3)	(1.3)	(8.0)	(1.3)
- The explicit appearance of the SD concept in the organizational mission	75	67	1	9	1
		(89.3)	(1.3)	(8.0)	(1.3)
- Vision and mission are reviewed and assessed at least once a year	75	67	1	9	1
		(89.3)	(1.3)	(8.0)	(1.3)
4. Sustainable development approach is contained as a part of the organizational value.					
Indicators:					
1. The SD approach is contained as a part of the organizational value eminently.	75	68	3	б	1
		(60.7)	(4.0)	(4.0)	(1.3)
2. The SD approach appears in the strategic plans for creating value eminently.	75	68	3	б	1
		(60.7)	(4.0)	(4.0)	(1.3)
3. The efficiency of the organizational sustainability value is assessed and reviewed	75	68	б	С	1
regularly every year.		(60.7)	(4.0)	(4.0)	(1.3)
Criteria: Examining the statements of organizational value shown in the annual report, SD					
report, and organizational websites, including in the strategic plans for creating organizational					

Standard Statement	Numbers of respondents	Agree (%)	Disagree (%)	Not sure (%)	No opinion (%)
value.	C. B.				
- The concept of SD appears in the organizational value eminently	75	68	4	1	2
		(90.7)	(5.3)	(1.3)	(2.7)
- Strategic plans of value creation display SD concepts and cover plans to communicate	75	68	4	1	2
with organizational stakeholders		(20.7)	(5.3)	(1.3)	(2.7)
- Sustainability value is reviewed and assessed at least once a year	75	68	4	1	2
		(60.7)	(5.3)	(1.3)	(2.7)
From Table 6.5, it indicates that most respondents agreed with the indicators in Standard Statement No. 3 the most (96.5%), 2.7%	ors in Standa	rd Stateme	ent No. 3 th	le most (96.	5%), 2.7%
had no opinion, and 1.3% disagreed. For the criteria, most respondents agreed with them (89.3%), 8.0% were unsure, 1.3% disagreed and	h them (89.3	3%), 8.0%	were unsui	e, 1.3% dis	agreed and
had no opinion respectively. Regarding Standard Statement No. 4, most respondents (90.7%) agreed, 4% disagreed and were unsure	idents (90.79	%) agreed	, 4% disag	reed and w	ere unsure
equally, and 1.3% had no opinion. For the criteria, most respondents (90.7%) agreed with them, 5.3% disagreed, 2.7% had no opinion,	reed with th	lem, 5.3%	disagreed,	2.7% had r	10 opinion,

and 1.3% were unsure respectively. However, there was no respondent who proposed to correct the standard statements, indicators, and criteria. Beside, the reason the respondents disagreed, were unsure, or had no opinion was that they understood that the word "sustainability" must appear in the organizational vision, mission, and value as the indicators and criteria specify to have the concept of SD appear only.

Table 6.6 Respondents' opinion on SD policies and regulation standards

cc Standard 74 - itipulates SD policies and practices explicitly in writing. 75 74 - n has explicit written policies and practices. (98.7) (98.7) - n has explicit written policies and practices cover economic, social, environmental 75 74 - n and communicate to all stakeholders. (98.7) - - - policies and practices (through statements that identify operations 75 72 1 policies and practices 75 72 1 - te governance policies 75 72 1 - - - 1 - - - - 1 - </th <th>Standard Statement</th> <th>Numbers of respondents</th> <th>Agree (%)</th> <th>Disagree (%)</th> <th>Not sure (%)</th> <th>No opinion (%)</th>	Standard Statement	Numbers of respondents	Agree (%)	Disagree (%)	Not sure (%)	No opinion (%)
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	<u>SD Policy and Practice Standard</u> 5. The organization stipulates SD policies and practices explicitly in writing.					
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Indicators:					
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		75	74	ŀ	1	·
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			(68.7)		(1.3)	
(98.7) 75 72 1 75 72 1 (96.0) (1.3) 75 72 1 (96.0) (1.3) 75 72 1 (1.3) 75 72 1 (1.3) (95.0) (1.3)		75	74	-	1	
75 72 1 75 72 1 75 72 1 75 72 1 75 72 1 75 72 1 75 72 1 75 72 1 75 72 1 75 72 1 75 72 1 75 72 1 75 72 1 76:0) (1:3)	SD dimensions, and communicate to all stakeholders.		(98.7)		(1.3)	
ng corporate governance policies ng corporate governance practices ng corporate governance practices ng corporate governance practices ng SD policies covering economic, social, and environmental dimension, including nunication nunication nunication nunication nunication (96.0) (1.3) (96.0) (1.3)	Criteria: Examining policies and practices (through statements that identify operations					
75 72 1 75 72 1 75 72 1 75 72 1 96.0) (1.3) c, social, and environmental dimension, including 75 72 1 (96.0) (1.3) (c, social, and environmental dimension, including 75 72 1 (c, social, and environmental dimension, including 75 72 1 (96.0) (1.3) (96.0) (1.3)	concretely).					
75 72 1 75 72 1 06.0) (1.3) (1.3) c, social, and environmental dimension, including 75 72 1 (c, social, and environmental dimension, including 75 72 1 (c, social, and environmental dimension, including 75 72 1 (e, social, and environmental dimension, including 75 72 1 (96.0) (1.3) (96.0) (1.3)	- Having corporate governance policies	75	72	-	2	ı
75 72 1 c, social, and environmental dimension, including 75 72 1 (96.0) (1.3) (96.0) (1.3) (c, social, and environmental dimension, including 75 72 1 (96.0) (1.3) (96.0) (1.3)			(0.96)	(1.3)	(2.7)	
$\begin{array}{cccc} (96.0) & (1.3) \\ 75 & 72 & 1 \\ (96.0) & (1.3) \\ 72 & 1 \\ (96.0) & (1.3) \\ \end{array}$	- Having corporate governance practices	75	72	1	2	·
$\begin{array}{ccccccc} 75 & 72 & 1 \\ (96.0) & (1.3) \\ 75 & 72 & 1 \\ (96.0) & (1.3) \end{array}$			(0.96)	(1.3)	(2.7)	
$\begin{array}{cccc} (96.0) & (1.3) \\ 75 & 72 & 1 \\ (96.0) & (1.3) \end{array}$	- Having SD policies covering economic, social, and environmental dimension, including	75	72	1	2	·
$\begin{array}{cccc} 72 & 72 & 1 \\ (96.0) & (1.3) \end{array}$	communication		(0.96)	(1.3)	(2.7)	
(96.0) (1.3)	- Having SD practices covering economic, social, and environmental dimension, including	75	72	1	2	ı
	communication		(0.96)	(1.3)	(2.7)	

Ivugur

Indicators:

Standard Statement	Numbers of	Agree	Disagree	Not sure	No opinion
	respondents	(%)	(%)	(%)	(0%)
1. SD policies and practices are certified by the committee or sub-committee responsible for	75	70	2	З	
sustainability distinctly.		(93.3)	(2.7)	(4.0)	
2. A company has a mechanism in making all employees acknowledged and comply with	75	70	2	3	ı
SD policies and practices strictly.		(93.3)	(2.7)	(4.0)	
Criteria: Examining the statements of the policies and practices certified by the committee or					
sub-committee and signed by employees to acknowledge them.					
- SD policies and practices are certified by the committee and sub-committee	75	69	3	3	ı
		(92.0)	(4.0)	(4.0)	
- SD policies and practices are acknowledged by employees distinctly	75	69	ю	3	ı
		(92.0)	(4.0)	(4.0)	
	7				

respectively. For the criteria, most respondents (92.0%) agreed with them, disagreed, and 4.0% were unsure equally. However, no respondents proposed any correction of the standard statements, indicators, and criteria. Besides, some respondents recommended that some SD policies should be driven by some obligation, while some should be optional or voluntary in case that the word "strictly" in the practices means everybody should perform identically without their voluntariness, which sometimes is beyond what is stated in the From Table 6.6, most respondents (98.7%) agreed with the indicators of the standard statement about SD policy and practices disagreed. For Standard Statement No. 6, most respondents (93.3%) agreed with the indicators, 4.0% were unsure, and 2.7% disagreed standards No. 5 and 1.3% were unsure. For the criteria, most respondents (96.0%) agreed with them, 2.7% were unsure, and 1.3% document. Moreover, the ethics of SD of each person may be different. Table 6.7 Respondents' opinions on the materiality analysis and assessment standards

Standard Statement	Numbers of respondents	Agree (%)	Disagree (%)	Not sure (%)	No opinion (%)
Standard of the materiality analysis and assessment					
7. The analysis of the assessment of the organizational SD materiality is complete and					
well-rounded.					
Indicators:					
1. The organization analyzes and identifies the materiality	75	75	1	ı	ı
		(100)			
2. The organization prioritizes the materiality of organizational sustainability.	75	75	1		ı
		(100)			
3. The organization examines the materiality and has a follow-up continuously	75	75		·	·
		(100)			
4. The organization reviews the materiality and reports development outcomes	75	75	1	·	
continuously.		(100)			
Criteria: Examining the SD materiality from the report.					
- Sustainability issues that are influential for business operation are identified thoroughly	75	72	1	2	·
and entirely		(0.96)	(1.3)	(2.7)	
- Sustainability issues are prioritized through a credibly academic survey and analysis	75	72	1	2	·
process		(0.96)	(1.3)	(2.7)	
- The correctness of the assessment and prioritization of the materiality is examined and	75	72	1	2	
followed up continuously		(0.96)	(1.3)	(2.7)	
- The materiality is reviewed and the results of its development are reported continuously	75	72	1	7	ı
		(0.96)	(1.3)	(2.7)	

Standard Statement Nt	Numbers of respondents	Agree	Disagree (%)	Not sure (%)	No opinion (%)
Standard of communication for SD strategy and operational planning					
8. The organization determines sustainability strategy and operational planning explicitly					
Indicators:					
1. The organization stipulates strategies and planning for sustainability operations clearly	75	72	1	2	ı
		(96.0)	(1.3)	(2.7)	
2. The organization stipulates strategies and planning for communication for SD operations	75	72	1	2	ı
clearly		(0.96)	(1.3)	(2.7)	
Criteria: Examining SD strategic and action plans, including the organizational communication					
plans.					
- Having clear sustainability strategy/operational strategies	75	73	1	1	·
		(97.3)	(1.3)	(1.3)	
- Having clear communication strategies and operational plans for supporting SD	75	73	1	1	ı
		(97.3)	(1.3)	(1.3)	

Table 6.7 indicates that all respondents (100%) agreed with the indicators of Standard Statement No. 7 about the materiality

analysis and assessment standards. For the criteria, most respondents (96.0%) agreed with them, 2.7% were unsure, and 1.3% disagreed.

Table 6.8 illustrates that most respondents (96%) agreed with the indicators in Standard Statements No. 8, 2.7% were unsure, and 1.3% disagreed. For the criteria, most respondents (97.3%) agreed, 1.3% were unsure and disagreed equally. However, no respondents proposed any correction or recommendation for the standard statements, indicators, and criteria.

Table 6.9 Respondents' opinions on the stakeholder and their expectation standards

	Numbers of	Agree	Disagree	Not sure	No opinion
Standard Statement	respondents	(%)	(%)	(%)	(%)
Standards related to stakeholders and expectation		,			
9. The determination of every major group of the organizational stakeholders					
Indicator:					
1. The organization explores, analyzes, identifies, and prioritizes the significance of every	75	69		5	I
major stakeholder group clearly.		(92.0)	(1.3)	(6.7)	
2. The organization reveals the details of determination and prioritization methods,	75	69	-	5	I
including the relevance to each group of stakeholders clearly.		(92.0)	(1.3)	(6.7)	
Criteria: Examining from the organizational stakeholder analysis report.					
- Having exploration, analysis, identification, and prioritization of the importance of	75	69	5	б	1
stakeholder groups		(92.0)	(2.7)	(4.0)	(1.3)
- Having the detailed revealing of the determination and prioritization methods and the	75	69	7	С	1
relevance to each stakeholder group		(92.0)	(2.7)	(4.0)	(1.3)
10. Detailed analysis and assessment of the stakeholders' expectation					
Indicator:					
1. Having thorough, correct, and complete analysis and assessment of stakeholders'	75	71	ı	б	1
expectations.		(94.7)		(4.0)	(1.3)

2. Having a review of stakeholders' expectation regularly every year					(0/)
	75	71	ı	С	1
		(94.7)		(4.0)	(1.3)
Criteria: Examining from the survey of stakeholders' expectations.					
- Having an analysis and assessment of stakeholders' expectations	75	72		С	ı
		(0.96)		(4.0)	
- Having a review of stakeholders' expectation regularly every year	75	72	-	б	ı
		(0.96)		(4.0)	
and their expectation standard 67% were insure and 13% disagreed respectively. For the criteria most respondents (92.0%) 4.0%	ed respectively For the	criteria r	most respon	dente (92 ()	07 4 U
and their expectation standard, 6.7% were unsure, and 1.3% disagreed respectively. For the criteria, most respondents (92.0%), 4.0%	ed respectively. For the	criteria, 1	most respon	dents (92.0	1%), 4.0%
were unsure, and 1.2% unsagreed respectively. For standard statements 100, 10, most respondents (94.1%), 4.0% were unsure, and 1.3% discorred respondents (06.0%) acreading to and 1.0% more inclure. However, no	I DIAINUALU DIATEILETIUS INO. 10, 1110SU LESPOLIUELUS (74.170), 4.070 WEIE ULISULE, AILU 1.270	cills (94.7	70), 4.070 W	ere urisure,	or and the or
respondents proposed any correction and recommendation for the star	endation for the standard statements, indicators, and scoring criteria	rs. and sco	oring criteri	a.	wevel, 110
Table 6.10 Respondents' opinions on SD message specification and design standard.	esien standard.		0	ł	
	D				
Standard Statement	Numbers of respondents	Agree (%)	Disagree (%)	Not sure (%)	No opinion (%)

Standard Statement	Numbers of respondents	Agree (%)	Disagree (%)	Not sure (%)	No opinion (%)
Indicator:					
1. The stipulation of general content that relates to the organization.	75	74	·	1	ı
		(98.7)		(1.3)	
2. The stipulation of economic content	75	74		1	ı
		(98.7)		(1.3)	
3. The stipulation of social content	75	74	-	1	ı
		(98.7)		(1.3)	
4. The stipulation of environmental content.	75	74	I	1	I
		(98.7)		(1.3)	
5. The stipulation of corporate governance content.	75	74	I	1	ı
		(98.7)		(1.3)	
Criteria: Examining the statements disseminated by the corporate media to the public, both					
online and offline.					
- Having general content of the organization	75	72	-	3	I
		(96.0)		(4.0)	
- Having economic content	75	72	-	3	I
		(0.96)		(4.0)	
- Having social content	75	72	·	3	I
		(0.96)		(4.0)	
- Having environmental content	75	72	ı	3	I
		(96.0)		(4.0)	
- Having corporate governance content	75	72	ı	б	I
		(0.96)		(4.0)	

Standard Statement	Numbers of respondents	Agree (%)	Disagree (%)	Not sure (%)	No opinion (%)
12. The organization has a proper SD message design	C Per				
Indicator:					
1. The content presents the past operational performance, the present operations, and the	75	74		1	·
future plans.		(98.7)		(1.3)	
2. The content contains details that connect to every sustainability dimension clearly,	75	74		1	·
with precise and well-organized content, that is easy to understand.		(98.7)		(1.3)	
3. The content is designed with and presented by verbal and nonverbal language (i.e.,	75	74	I	1	·
illustrations, graphics, icons, etc.) via diverse and attractive techniques.		(98.7)		(1.3)	
4. The content is designed and presented under the specified main theme and corporate	75	74	1	1	·
identity.		(98.7)		(1.3)	
5. The content an organization communicates to stakeholders via main corporate	75	74		1	
channels must be written in both Thai and English.		(98.7)		(1.3)	
Criteria: Examining the content publicized through corporate media in the form of both online					
and offline media to the public.					
- The message presents the past operational performance, what is doing at present, and	75	71	1	1	2
what will do in the future		(94.7)	(1.3)	(1.3)	(2.7)
- The message contains details that connect to every sustainability dimension clearly and	75	71	1	1	2
is precise and well-organized for easy understanding		(94.7)	(1.3)	(1.3)	(2.7)
- The message is designed with and presented by verbal and nonverbal through diverse	75	11	1	1	2
techniques		(94.7)	(1.3)	(1.3)	(2.7)
- The message is designed and presented under the corporate main theme and corporate	75	71	1	1	2
identity		(94.7)	(1.3)	(1.3)	(2.7)
- The content that is communicated to stakeholders via corporate main channels is	75	71			c

Standard Statement	Numbers of respondents	Agree (%)	Disagree (%)	Not sure (%)	No opinion (%)
publicized in both Thai and English	500	(94.7)	(1.3)	(1.3)	(2.7)
From Table 6.10, it illustrates that most respondents (98.7%) agreed with the indicators of the standard statements No. 11 about	ith the indicat	ors of the s	standard sta	tements No	o. 11 about
the message specification and design standard, and 1.3% disagreed. For the criteria, most respondents (96.0%), 2.7% were unsure, and	riteria, most re	spondents	(96.0%), 2.	7% were u	insure, and
1.3% disagreed respectively. However, no respondents proposed any correction and recommendation for the standard statements,	ction and rec	ommendati	on for the	standard s	statements,
indicators, and scoring criteria.					
Table 6.11 Respondents' opinions on the SD communication channels planning and utilization standard	g and utilizatio	n standard			
Standard Statement	Numbers of respondents	Agree (%)	Disagree (%)	Not sure (%)	No opinion (%)
Standards of communication channel planning and usage for SD		12			
13. The organization plans the use of media and channels that are proper for stakeholder					
groups.					
Indicator:					
1. Having plans for using proper communication channels for each group of	75	69	ı	5	1
stakeholders		(92.0)		(6.7)	(1.3)
2. Having effective corporate media or communication channels that cover every	75	69	ı	5	1
stakeholder group, i.e., personal, printed, electronic, new, and activity media.		(92.0)		(6.7)	(1.3)
Criteria: Examining the statements from the media the companies use to publicize them to the					
public, in the form of online and offline media					

• Having plans for using communication channels suitable for each stakeholders, i.e., 75 68 - • Having media or communication channels cover all groups of major stakeholders, i.e., 75 68 - • Continuous contact/ meeting with stakeholders 75 68 - • Letters, posters, brochures, leaftets, and documents or reports 75 68 - • Having telephone numbers that can contact 24-hour 75 68 - • Having telephone numbers that can contact 24-hour 75 68 - • Having telephone numbers that can contact 24-hour 75 68 - • Having a website, emails, and social media 75 68 - • Organizing meetings, seminars, training, company vist or field trip, relationship- 75 68 - • Organization provides communication channels for promoting the stakeholders' 75 68 - 1. The organization has a communication channel for encouraging stakeholders to 75 65 1 1. The organizational operations. 75 65 1 2. The organizational operations. 75 65 1 1. The organizational channels accord with the expectation of each major stakeholder	Numbers of Agree Disagree N respondents (%) (%)	Not sure No e (%)	No opinion (%)
75 68 75 68 75 68 75 68 75 68 75 68 75 68 75 68 76 68 77 60.7) 75 68 76 68 77 68 77 68 78 68 79 68 75 68 75 68 75 68 76 68 77 66.7)	- 89		ю
75 68 75 68 75 68 75 68 75 68 75 68 75 68 75 68 75 68 75 68 75 68 75 68 76 68 77 68 75 68 76 68 77 68 76 68 77 68 76 68 77 68 76 68 77 66	(90.7)	-	(4.0)
75 68 75 68 75 68 75 68 75 68 75 68 75 68 75 68 76 68 77 68 75 68 76 68 77 68 78 68 79 68 70 66 75 68 75 65 75 65 76 66 77 65 76 65 77 65 78 65 79 65 70 70 75 65 75 65 76 65 77 65 78 65 79 65 70 70 70 70 70 70 70 70 70 70	- 89		Э
75 68 75 68 75 68 75 68 75 68 75 68 75 68 75 68 75 68 75 68 75 68 76 68 77 68 76 68 77 68 76 68 77 68 76 68 77 68 76 68 77 66	(90.7)	-	(4.0)
75 68 75 68 75 68 75 68 75 68 75 68 76 68 77 68 75 68 76 68 77 68 76 68 77 68 78 68 79 68 70 90.7) 75 65 75 65 75 65 76 66 77 65	- 89		Э
75 68 75 68 75 68 75 68 75 68 75 68 75 68 76 68 77 68 75 68 76 66 77 66 78 66 77 66 78 65 77 65	(90.7)	-	(4.0)
75 68 75 68 75 68 75 68 77 68 75 68 75 68 76 68 775 68 76 66 775 66			3
75 68 75 68 75 68 (90.7) 68 75 68 (90.7) 65 75 65 75 65 76 65 75 65	(90.7)	-	(4.0)
75 68 75 68 (90.7) 75 68 (90.7) 75 65 (86.7)			ю
75 68 (90.7) 75 68 (90.7) 75 65 (86.7)	(50.7)	(5.3) (((4.0)
75 68 60.7) (90.7) 75 65 (86.7)	89		С
75 68 (90.7) 75 65 (86.7)	(90.7)	-	(4.0)
(90.7) 75 65 (86.7)			ю
75 65 (86.7)	(60.7)	(5.3) ((4.0)
a communication channel for encouraging stakeholders to 75 65 ional operations. (86.7) muels accord with the expectation of each major stakeholder			
organization has a communication channel for encouraging stakeholders to 75 65 cipate in organizational operations. (86.7) organizational channels accord with the expectation of each major stakeholder			
The organization has a communication channel for encouraging stakeholders to7565participate in organizational operations.(86.7)The organizational channels accord with the expectation of each major stakeholder			
participate in organizational operations. (86.7) The organizational channels accord with the expectation of each major stakeholder	65 1		2
		(9.3) ()	(2.7)
group (they can be the same channel or media, such as new media is used for			
publicizing corporate websites, or they can be corporate Facebook or Line group,			
etc.). The following communication channels are provided for each stakeholder			

Chandland Chatamant					
	Numbers of respondents	Agree (%)	Disagree (%)	Not sure (%)	No opinion (%)
group:	C. B.				
- Personal media, new media, and activity media suitable for the employee group.	75	65	1	L	2
		(86.7)	(1.3)	(6.3)	(2.7)
- Printed media, electronic media, new media, and activity media suitable for the	75	65	1	L	2
shareholder or investor group.		(86.7)	(1.3)	(9.3)	(2.7)
- Personal media and activity media suitable for the government agency group	75	65	1	L	2
		(86.7)	(1.3)	(6.3)	(2.7)
- Personal media, electronic media, new media, and activity media suitable for the	75	65	1	L	2
consumer or customer group.		(86.7)	(1.3)	(6.3)	(2.7)
- Personal media and activity media suitable for business partners	75	65	1	L	2
		(86.7)	(1.3)	(9.3)	(2.7)
- Electronic and new media suitable for creditors	75	65	1	L	2
		(86.7)	(1.3)	(9.3)	(2.7)
- Electronic media and activity media, suitable for the community or societal group.	75	65	1	L	2
		(86.7)	(1.3)	(9.3)	(2.7)
Criteria: Examining the statements from the media the companies use to					
publicize them to the public, in the form of online and offline media					
- The organization provides communication channels for promoting interactive	75	65	1	L	2
participation of every major group of stakeholders		(86.7)	(1.3)	(6.3)	(2.7)
- The provided communication channels can respond to the expectation of each					
stakeholder group by covering the following groups:					
- Personal media, new media, and activity media suitable for the employee group.	75	68	1	3	3
		(90.7)	(1.3)	(4.0)	(4.0)

Ctandard Ctatamant	Numbers of	Agree	Disagree	Not sure	No opinion
	respondents	(%)	(%)	(%)	(%)
- Printed media, electronic media, new media, and activity media suitable for the	75	68	1	З	3
shareholder or investor group.		(50.7)	(1.3)	(4.0)	(4.0)
- Personal media and activity media suitable for the government agency group	75	68	1	3	ю
		(60.7)	(1.3)	(4.0)	(4.0)
- Personal media, electronic media, new media, and activity media suitable for the	75	68	1	3	С
consumer or customer group.		(20.7)	(1.3)	(4.0)	(4.0)
- Personal media and activity media suitable for business partners	75	68	1	3	С
		(50.7)	(1.3)	(4.0)	(4.0)
- Electronic and new media for creditor group	75	68	1	С	ß
		(60.7)	(1.3)	(4.0)	(4.0)
- Personal media and activity media for the community or societal group.	75	68	-1	С	С
		(50.7)	(1.3)	(4.0)	(4.0)

communication channel planning and utilization standard, 6.7% were unsure, and 1.3% disagreed respectively. For the criteria, most respondents (90.7%), 5.3% were unsure, and 4.0% disagreed respectively. Some respondents recommended that for the 24-hour telephone contact number, it might change to online channels in which stakeholders can contact the company, leave a message, etc., Table 6.11 illustrates that most respondents (92.0 %) agreed with the indicators of Standard Statements No. 13 about SD Besides, a call-back should be added too.

respectively. For the scoring criteria, most respondents (90.7%) agreed with them, 4.0% were unsure and had no opinion equally, and For Standard Statements No. 14, most respondents (86.7%), 9.3% were unsure, 2.7% had no opinion, and 1.3% disagreed

1.3% disagreed respectively. However, no respondents proposed any correction and recommendation for the standard statements, indicators, and scoring criteria.

Table 6.12 Respondents' opinions on the communication process for SD standard

Ctondand Ctotomont	Numbers of	Agree	Disagree	Not sure	No opinion
Dialiticat di Staticiticiti	respondents	(%)	(%)	(%)	(%)
Standards of the Communication Process for SD					
15. The organizational leaders are determined to operate a business under the concept of					
sustainable development					
Indicator:					
1. Organizational leaders attended meetings or training on SD in the past year.	75	72	1	1	1
		(96.0)	(1.3)	(1.3)	(1.3)
2. Organizational leaders have a joint meeting for stipulating policies and	75	72	1	1	1
organizational sustainability operational guidelines.		(0.96)	(1.3)	(1.3)	(1.3)
3. Organizational leaders communicate concepts and guidelines of SD to their	75	72	1	1	1
employees regularly.		(96.0)	(1.3)	(1.3)	(1.3)
4. Organizational leaders commit to operating business by SD concepts	75	72	1	1	1
		(0.96)	(1.3)	(1.3)	(1.3)
5. Organizational leaders perform themselves as role models concerning SD to both	75	72	1	1	1
internal and external stakeholders.		(96.0)	(1.3)	(1.3)	(1.3)
Criteria: Examining the statements from the annual report, organizational communication					
performance report, and opinion surveys of employees.					
- Organizational leaders attended meetings or training on SD in the past year	75	71	ı	2	2

Standard Statement	Numbers of respondents	Agree (%)	Disagree (%)	Not sure (%)	No opinion (%)
		(94.7)		(2.7)	(2.7)
- Organizational leaders have a joint meeting for stipulating policies and organizational	75	71		2	2
sustainability operational guidelines.		(94.7)		(2.7)	(2.7)
- Organizational leaders communicate concepts and guidelines of SD to their employees	75	71		2	2
regularly.		(94.7)		(2.7)	(2.7)
- Organizational leaders commit to operating business by SD concepts.	75	71	1	2	2
		(94.7)		(2.7)	(2.7)
- Organizational leaders perform themselves as role models concerning SD to both	75	71	-	2	2
internal and external stakeholders.		(94.7)		(2.7)	(2.7)
16. Communication for SD is integrated and covers all groups of stakeholders					
III dicatol.					
1. Having a mechanism for integrating the concept of communication for SD into	75	11	-	3	1
operations of every working unit of the organization.		(94.7)		(4.0)	(1.3)
2. Executing communication for SD by the line of authority throughout the	75	11		3	1
organization.		(94.7)		(4.0)	(1.3)
3. Having a mechanism for listening to subordinates' opinions and suggestions for SD	75	71	-	3	1
operations transparently and equally.		(94.7)		(4.0)	(1.3)
4. Having a mechanism for promoting external stakeholders' participation in SD	75	11		б	1
operations.		(94.7)		(4.0)	(1.3)
5. Having an organizational SD information center and information management	75	71	ı	3	1
		(94.7)		(4.0)	(1.3)
6. Communicating stories of SD operations and reporting SD operational performance	75	71	ı	б	1
to stakeholders consistently and continuously (SD report)		(94.7)		(4.0)	(1.3)

Standard Statement	Numbers of respondents	Agree (%)	Disagree (%)	Not sure (%)	No opinion (%)
Criteria: Examining the statements from the annual report, SD report, organizational					
communication performance report, and surveys of stakeholders' opinions.					
- Having a mechanism for integrating the concept of communication for SD into	75	71		4	I
operations of every working unit of the organization		(94.7)		(5.3)	
- Executing communication for SD by the line of authority throughout the organization.	75	71	-	4	ı
		(94.7)		(5.3)	
- Having a mechanism for listening to subordinates' opinions and suggestions for SD	75	71	1	4	ı
operations transparently and equally.		(94.7)		(5.3)	
- Having a mechanism for promoting external stakeholders' participation in SD	75	71	1	4	I
operations.		(94.7)		(5.3)	
- Having an organizational SD information center and information management	75	71	1	4	I
		(94.7)		(5.3)	
- Communicating stories of SD operations and reporting SD operational performance to	75	71	1	4	I
stakeholders consistently and continuously		(94.7)		(5.3)	
17. The regulation and assessment of communication for SD effectiveness		7			
Indicator:					
1. Having a mechanism for continuous following, monitoring, and regulating	75	71	1	б	I
communication for SD operations as specified in the strategies and plans.		(94.7)	(1.3)	(4.0)	
2. Evaluating communication for SD performance continuously	75	11	1	б	I
		(94.7)	(1.3)	(4.0)	
3. Reviewing the effectiveness of communication for SD continuously.	75	71	1	б	I
		(94.7)	(1.3)	(4.0)	

Standard Statement Nr	Numbers of Agree respondents (%)	Agree (%)	Disagree (%)	Not sure (%)	No opinion (%)
Criteria: Examining the statements from the annual report, SD report, organizational					
communication performance, and surveys of stakeholders' opinions.					
- Having a mechanism for continuous following, monitoring, and Regulating	75	71		4	
communication for SD operations as specified in the strategies and plans.		(94.7)		(5.3)	
- Evaluating communication for SD performance continuously	75	71	-	4	
		(94.7)		(5.3)	
- Reviewing the effectiveness of communication for SD continuously	75	71		4	
		(94.7)		(5.3)	

Table 6.12 illustrates that most respondents (96.0%) agreed with the indicators of Standard Statements No. 15 about the communication process for SD standard, 1.3% were unsure, disagreed, and had no opinion equally respectively. For the criteria, most 5.3% were unsure. For Standard Statements No. 17, most respondents (94.7%), 4.0% were unsure, and 1.3% disagreed respectively. For the scoring criteria, most respondents (94.7%) agreed with them, and 5.3% were unsure. However, some respondents expressed their idea respondents (94.7%), 2.7% were unsure and had no opinion equally respectively. For Standard Statements No. 16, most respondents (94.7%), 4.0% were unsure, and 1.3% disagreed respectively. For the scoring criteria, most respondents (94.7%) agreed with them, and that it is difficult to measure a communication process for SD since it yields long-term impacts, but no respondents proposed any correction and recommendation for the standard statements, indicators, and scoring criteria.

Table 6.13 Respondents' opinions on the communication process for SD standard

Ctandard Statement	Numbers of	Agree	Disagree	Not sure	No opinion
DUALITARI U DIANETICIU	respondents	(%)	(%)	(%)	(%)
Standards of communication for SD efficiency					
18. The organizational communication for SD is Efficient.					
Indicator:					
1. Sustainability is one of the topics evaluated by the committee.	75	69	1	3	2
		(92.0)	(1.3)	(4.0)	(2.7)
2. Sustainability is one of the topics evaluated by top executives	75	69	1	3	2
		(92.0)	(1.3)	(4.0)	(2.7)
3. More effective resource utilization	75	69	1	3	2
		(92.0)	(1.3)	(4.0)	(2.7)
4. introduction of new product and service innovation	75	69	1	3	2
		(92.0)	(1.3)	(4.0)	(2.7)
5. Timely crisis management	75	69	1	б	2
		(92.0)	(1.3)	(4.0)	(2.7)
6. A decrease of complaints statistics	75	69	1	б	2
		(92.0)	(1.3)	(4.0)	(2.7)
7. An increase of positive news and a decrease of negative and fake news	75	69	1	б	2
		(92.0)	(1.3)	(4.0)	(2.7)
8. Stakeholders' adoption of SD behaviors.	75	69	1	б	2
		(92.0)	(1.3)	(4.0)	(2.7)
Criteria: Examining the statements from assessment policies and criteria of the committees					

and top executives, the operational performance report and financial statements, the annual

Standard Statement	Numbers of respondents	Agree (%)	Disagree (%)	Not sure (%)	No opinion (%)
report, the Registration Statement Form (Form 56-1), SD report, news analysis reports, and					
surveys of stakeholders' opinions, including from the media that companies use to present					
statements to the public.					
- Sustainability is one of the topics in the evaluation of the committee and top	75	67	1	2	5
executives		(89.3)	(1.3)	(2.7)	(6.7)
- Better business performance from last year	75	67	1	2	5
		(89.3)	(1.3)	(2.7)	(6.7)
- More effective resource utilization	75	67	1	2	S
		(89.3)	(1.3)	(2.7)	(6.7)
- Introduction of new product and service innovation that is friendly to society and the	75	67	1	2	5
environment		(89.3)	(1.3)	(2.7)	(6.7)
- Timely crisis management	75	67	1	2	5
		(89.3)	(1.3)	(2.7)	(6.7)
- A decrease in complaints statistics	75	67	1	2	5
		(89.3)	(1.3)	(2.7)	(6.7)
- An increase of positive news and a decrease of negative and fake news	75	67	1	2	5
		(89.3)	(1.3)	(2.7)	(6.7)
- Stakeholders' adoption of SD behaviors.	75	67	1	2	5
		(89.3)	(1.3)	(2.7)	(6.7)

disagreed respectively. For the scoring criteria, most respondents (89.3%) agreed with them, 6.7% had no opinion, 2.7% were unsure, From Table 6.13, for Standard Statements No. 18, most respondents (92.0%), 4.0% were unsure, 2.7% had no opinion, and 1.3%

s proposed any correction and recommendation for the standard statements, indicators, and	
any correction and recommendation	
pondents	
and 1.3% disagreed. However, no respondent	scoring criteria.

Table 6.14 Respondents' opinions on the organizational SD perception and understanding standard

Standard Statement	Numbers of respondents	Agree (%)	Disagree (%)	Not sure (%)	No opinion (%)
Standards of the perception and understanding of organizational SD					
19. Perception and understanding of the organizational SD approach					
Indicator:					
1. Stakeholders perceive the organizational SD approach.	75	69	2	Э	1
		(92.0)	(2.7)	(4.0)	(1.3)
2. Stakeholders understand the organizational SD approach	75	69	2	З	1
		(92.0)	(2.7)	(4.0)	(1.3)
Criteria: Examining from the annual survey of stakeholders' perception and understanding.					
- Stakeholders' perception of the overall organizational SD approach at a high level	75	64	5	9	3
		(85.3)	(2.7)	(8.0)	(4.0)
- Stakeholders' understanding of the overall organizational SD approach at a high level	75	64	2	9	ю
		(85.3)	(2.7)	(8.0)	(4.0)

Table 6.14 illustrates that most respondents (92.0%) agreed with the indicators of Standard Statements No. 19 about the organizational SD perception and understanding standard, 4.0% were unsure, 2.7% disagreed, and 1.3% had no opinion respectively. Some respondents expressed their opinions that each company had a different assessment of its stakeholders' perception and understanding of the organizational SD and some companies might not cover every stakeholder group; therefore, it might not be able to compare them. However, no respondents proposed any correction and recommendation for the standard statements, indicators, and scoring criteria.

Table 6.15 Respondents' opinions on SD information disclosure and report.

Standard Statement	Numbers of respondents	Agree	Disagree	Not sure	No opinion (%)
Ctandards of CD information disclosures and the monort				(0/)	
20. The information disclosure and SD report are transparent.					
Indicator:					
1. Correct information disclosure and reporting following SD information disclosure	75	73	1	1	I
regulations of both Thai and universal.		(97.3)	(1.3)	(1.3)	
2. Detailed information disclosure and reporting by connecting both quantitative and	75	73	1	1	ı
qualitative information.		(97.3)	(1.3)	(1.3)	
3. Timely information disclosure and report that is appropriate for the situation.	75	73	1	1	ı
		(97.3)	(1.3)	(1.3)	
4. Information disclosure and report that is easy to understand, precise, and is not	75	73	1	1	ı
complicated.		(97.3)	(1.3)	(1.3)	
Criteria: Examining information from the annual report, the Registration Statement Form					
(Form 56-1), SD report, and from the media that publicizes information to the public.					
- Correct information disclosure and reporting following SD information	75	73	ı	1	1
disclosure regulations of both Thai and universal.		(97.3)		(1.3)	(1.3)

Standard Statement	Numbers of respondents	Agree (%)	Disagree	Not sure (%)	No opinion (%)
- Detailed information disclosure and reporting by connecting both quantitative and	75	73		-	
qualitative information.		(97.3)		(1.3)	(1.3)
Timely information disclosure and report that is appropriate for the situation.	75	73	ı	1	1
		(97.3)		(1.3)	(1.3)
- Information disclosure and report that is easy to understand, precise, and	75	73	-	1	1
is not complicated.		(97.3)		(1.3)	(1.3)
21. The organizational SD information disclosure and report are complete and sufficient.					
Indicator:					
1. Disclosure and report of organizational general information.	75	74	1	1	·
		(98.7)		(1.3)	
2. Disclosure and report of economic information.	75	74		1	·
		(98.7)		(1.3)	
3. Disclosure and report of social information	75	74	-	1	·
		(98.7)		(1.3)	
4. Disclosure and report of environmental information	75	74		1	·
		(98.7)		(1.3)	
5. Disclosure and report of the corporate governance information	75	74		1	
		(98.7)		(1.3)	
Criteria: Examining the information from the annual report, the Registration Statement Form					
(Form 56-1), SD report, and media that publicizes information to the public.					
- Disclosure and report of organizational general information.	75	75	ı	I	ı
(comprising 1) name of the organization, 2) nature of business operations, 3) a brief		(100)			
history, 4) products and services, 5) contact channels, 6) business size, 7) supply chain,					

Standard Statement	Numbers of respondents	Agree (%)	Disagree (%)	Not sure (%)	No opinion (%)
8) objectives/goals, 9) organizational value, 10) numbers of employees, 11)					
organizational structure, 12) location, 13) achievement and awards, and 15) related					
laws and regulations.)					
Disclosure and report of economic information	75	75		ı	I
(comprising 1) analysis and explanations of the management, 2) inter-transactions or		(100)			
connected transactions, 3) financial status/operational performance, 4) auditor report, 5)					
financial statement, 6) market and competition/market shares, 7) significant changes, 8)					
returns and welfare, 9) research and development, 10) technological and innovation					
application and 11) dividend payment.)					
Disclosure and report of social information	75	75		ı	ı
(comprising 1) equal employment and labor treatment, 2) labor relations, 3) diversity,		(100)			
4) occupational health and safety, 5) knowledge training, 6) community and social					
development, 7) labels and packaging, 8) quality and safe product and service					
presentation, 9) human rights respect, 10) supply chain management, 11) personal data					
confidential, 12) impacts on community and society, 13) participation and support of					
stakeholders.)					
Disclosure and report of environmental information	75	75	ľ	ı	ı
(Comprising 1) effective management and utilization of natural resources, energy, and		(100)			
the environment, 2) compliance with the environmental standards, 3) innovative					
technology development that is friendly to the environment, 4) biodiversity, 5) carbon					
emission, 6) the coping with climate change, 7) packaging management, 8) waste					
management, 9) environmental impacts, and 10) the accomplishment of SDGs)					

Ctenned and Ctentermont	Numbers of Agree	Agree	Disagree	Not sure	No opinion
DIALIDATU DIALEILEIL	respondents	(%)	(%)	(%)	(%)
- Disclosure and report of corporate governance	75	75	ı	ı	
(Comprising 1) fair and equal treatment of stakeholders, 2) no law and regulation		(100)			
violation, 3) appeals management and whistleblowing protection, 4) risk management,					
5) ethics/business codes of ethics, 6) operational governance, 7) internal and external					
audit, 8) conflict of interest, 9) use of inside information or insider trading, 10) cyber					
security, 11) anti-corruption, 12) governance structure, 13) profiles and qualification of					
the committee and top executives, 14) roles and responsibilities of a board committee					
and top executives, 15) diversity of the committees, 16) leadership, 17) nomination, 18)					
compensation, 19) scope and authority, 20) share-holding structure, 21) responsibility					
report of the board committee and sub-committee, 22) anti-corruption, and 23)					
securities holding.					
		0	7		

information disclosure and report standard, 1.3% were unsure, and disagreed equally respectively. For the criteria, most respondents (97.3%), 1.3% were unsure and had no opinion equally respectively. For Standard Statements No. 21, most respondents (98.7%), and 1.3% were unsure. For the scoring criteria, all respondents (100.0%) agreed with them. However, some respondents expressed their idea Table 6.15 illustrates that most respondents (97.3%) agreed with the indicators of Standard Statements No. 20 about the SD that it is difficult to measure the quality of reporting, but no respondents proposed any correction and recommendation for the standard statements, indicators, and scoring criteria.

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Standard Statement	Numbers of respondents	Agree (%)	Disagree (%)	Not sure (%)	No opinion (%)
Effectiveness of communication for SD standards					
22. Stakeholders' satisfaction with organizational SD operations and communication.					
Indicator:					
1. Satisfaction with the organizational SD operations	75	99	3	4	2
		(88.0)	(4.0)	(5.3)	(2.7)
2. Satisfaction with the organizational communication for SD.	75	99	3	4	2
		(88.0)	(4.0)	(5.3)	(2.7)
Criteria: Examining the statements from the annual survey of stakeholders' satisfaction.					
- Satisfaction with the overall organizational SD operations averagely at a high level	75	99	ю	3	С
		(88.0)	(4.0)	(4.0)	(4.0)
- Satisfaction with the overall organizational SD communication averagely at a high level	75	66	3	3	С
		(88.0)	(4.0)	(4.0)	(4.0)
23. Stakeholders' confidence and acceptance of the organizational SD operations and					
communication					
Indicator:					
1. Stakeholders' confidence and acceptance of the organizational SD operations.	75	70	ı	3	2
		(93.3)		(4.0)	(2.7)
2. Stakeholders' confidence and acceptance of the organizational communication for	75	70	ı	3	2
SD.		(93.3)		(4.0)	(2.7)
Criteria: Examining the statements from the annual survey of stakeholders' confidence					
and acceptance.					

l acceptance of the organizational SD	respondents	(%)	(%)	(%)	пошио ого (%)
	75	69	ı	4	2
operations as a whole averagely at a high level		(92.0)		(5.3)	(2.7)
- The level of stakeholders' confidence and acceptance of the organizational 75	75	69		4	2
communication for SD as a whole averagely at a high level		(92.0)		(5.3)	(2.7)
- The level of stakeholders' confidence and acceptance in deciding about the overall 75	75	69	-	4	7
organizational operations at a high level or higher		(92.0)		(5.3)	(2.7)
24. The organizational image and reputation related to SD.					
Indicator:					
1. The organizational image and reputation related to SD 75	75	69	2	4	I
		(92.0)	(2.7)	(5.3)	
2. Awards granted by Thai and international regulating and supporting agencies 75	75	69	2	4	ı
		(92.0)	(2.7)	(5.3)	
3. The organizational SD assessment by Thai and international regulating and 75	75	69	5	4	ı
supporting agencies		(92.0)	(2.7)	(5.3)	
4. Stakeholders' engagement with and loyalty to the organization and brand.	75	69	2	4	I
		(92.0)	(2.7)	(5.3)	
Criteria: Examining the statements from the annual survey of organizational image and					
reputation, organizational SD operational performance report, the annual report, and SD					
report, including the admiration certificates from SD regulating and supporting agencies.					
- The organizational image and reputation related to SD are averagely at a good level. 75	75	72	1	1	1
		(0.96)	(1.3)	(1.3)	(1.3)
- The receipt of SD awards from Thai and international regulating and supporting 75	75	72	1	1	1
agencies in the past year		(96.0)	(1.3)	(1.3)	(1.3)

- The result of SD assessment by Thai and international regulating and supporting according a sources at a coord level in the nast year		(%)	(%)	(%)	(%)
agencies at a good level in the nast year	orting 75	72	1	1	1
abouting at a bood to tot the days for		(0.96)	(1.3)	(1.3)	(1.3)
- The stakeholders' average engagement and loyalty to the organizational brand at a high	a high 75	72	1	1	1
level		(0.96)	(1.3)	(1.3)	(1.3)
Table 6.16 illustrates that most respondents (88.0%) agreed with the indicators of Standard Statements No. 22 about the	with the indicators	of Standa	rd Stateme	nts No. 22	about the
communication for SD effectiveness standard, 5.3% were unsure, 4.0% disagreed, and 2.7% had no opinion respectively. For the criteria,	lisagreed, and 2.7%	had no opi	nion respec	tively. For	the criteria,
most respondents (88.0%), 4.0% were unsure, had no opinion, and disagreed equally respectively. For Standard Statements No. 23, most	reed equally respect	ively. For	Standard St	atements N	o. 23, most
respondents (93.3%), 4.0% were unsure, and 2.7% had no opinion respectively. For the scoring criteria, most respondents (92.0%) agreed	tively. For the scori	ng criteria,	most respo	ndents (92.	0%) agreed
with them, 5.3% were unsure, and 2.7% disagreed respectively. For the standard statements No. 24, most respondents (92.0%), 5.3%	e standard statemen	ts No. 24,	most respo	ondents (92.	.0%), 5.3%
were unsure, and 2.7% disagreed respectively. For the scoring criteria, most respondents (96.0%) agreed with them, and 1.3% were	, most respondents	(96.0%) a	greed with	them, and	1.3% were
unsure, had no opinion, and disagreed equally respectively. However, no respondents proposed any correction and recommendation for	o respondents propo	osed any co	orrection an	d recomme	ndation for
the standard statements, indicators, and scoring criteria.					
Table 6.17 Respondents' opinions on the shared value creation with the stakeholders standard	stakeholders standar	p			
Standard Statement	Numbers of	Agree	Disagree	Not sure	No opinion
	respondents	(%)	(%)	(%)	(%)

Standard Statement	Numbers of respondents	Agree (%)	Disagree (%)	Not sure (%)	No opinion (%)
Indicator:	C.				
1. Stakeholders' participation in organizational operations for SD.	75	68	1	5	1
		(7.06)	(1.3)	(6.7)	(1.3)
2. A response to stakeholders' expectation of organizational operations for SD.	75	68	1	5	1
		(7.06)	(1.3)	(6.7)	(1.3)
Criteria: Examining the statements from the annual survey of stakeholders' expectations and participation					
- Stakeholders' participation in organizational operations for SD. 2.5 scores	75	70	1	ŝ	1
		(93.3)	(1.3)	(4.0)	(1.3)
- A response to stakeholders' expectation of organizational operations for SD	75	70		С	1
	J	(93.3)	(1.3)	(4.0)	(1.3)
26. The creation of shared value between the organization and society Indicator:					
1. The development of products and services that respond to society's genuine	75	74	-	·	1
needs.		(7.86)			(1.3)
2. Productivity development in combination with the value chain.	75	74	-	I	1
		(98.7)			(1.3)
3. The development of local collaborative clusters that facilitates business.	75	74		·	1
		(98.7)			(1.3)
Criteria: Examining the statements from the operational performance on the shared value					
with the society, the annual report, the Registration Statement Form (Form 56-1), SD report,					
and the annual survey of stakeholders' opinions, including from the media that publicizes					
such statements to the public.:					

Standard Statement		73			(%)
- The development of products and services that respond to society's genuine	75		ı	1	1
needs.		(97.3)		(1.3)	(1.3)
- Productivity development in combination with the value chain.	75	73	ı	1	1
		(97.3)		(1.3)	(1.3)
- The development of local collaborative clusters that facilitates business.	75	73	-	1	1
		(97.3)		(1.3)	(1.3)
Standard Statement	Numbers of respondents	Agree (%)	Disagree (%)	Not sure (%)	No opinion (%)
Standard Statement	Numbers of	Agree	Disagree	Not sure	No opir

Standard Statement	Numbers of respondents	Agree (%)	Disagree (%)	Not sure (%)	No opinion (%)
27. Effectiveness of organizational SD operations in all dimensions.	CV.				
Indicator:					
1. More securities holdings and increased share values	75	71	1	3	I
		(94.7)	(1.3)	(4.0)	
2. Effective adaptability of the organization in crises	75	71	1	3	ı
		(94.7)	(1.3)	(4.0)	
3. The accomplishment of or a response to SDGs.	75	71	1	3	ı
		(94.7)	(1.3)	(4.0)	
Criteria: Examining the statements from the sustainability operational performance report in					
the annual report, the Registration Statement Form (Form 56-1), SD report, and the annual					
survey of stakeholders' opinion, including the media that publicizes the statements to the					
public.:					
- More securities holdings and increased share values	75	72	-	3	I
		(0.96)		(4.0)	
- Effective adaptability of the organization in crises	75	72		3	I
		(0.96)		(4.0)	
- The accomplishment of SDGs.	75	72	-	3	I
		(0.96)		(4.0)	

Table 6.18 illustrates that most respondents (94.7%) agreed with the indicators of Standard Statements No. 27 about the equilibrium creation in all SD dimensions standard, 4.0% were unsure, and 1.3% disagreed respectively. For the criteria, most respondents (96.0%), and 4.0% were unsure. No respondent proposed any correction and recommendation for the standard statements, indicators, and scoring criteria.

From the above information, it indicates that most respondents accepted the standards and wanted to expand them to be applied for all companies. Besides, the scoring criteria and indicators cover all sustainability issues, and the scoring is reliable. Moreover, it is recommended that in the indicators, some concrete examples should be illustrated as guidelines for constructing a more effective tool or instrument. All recommendations and ideas were applied by the researcher for improving the standards to be more complete and be more applicable for all companies increasingly. Such application is presented in the next chapter.

6.3 The Application of Communication Standards for Sustainable Development

The researcher applied the communication standards for SD that had been tested and accepted by the listed companies with distinguished sustainability operations in 2019 to test again for their appropriateness for being used by Thai listed companies that followed the SD approach. In-depth interviews and focus group interviews were conducted with the samples who were personnel of the listed companies who worked directly in a communication process for SD and were selected as representatives of the eight industry groups, divided by the Stock Exchange of Thailand, in 2019, to cover different and diverse nature of business operations as much as possible.

The recruitment of the corporate representatives of each group was conducted by purposive sampling of eight companies. representing each industry group. Each selected company selected at least one key informant who was involved in a communication process for SD to represent its company. (See the name list in 3.2.2.2: key informants for testing the appropriateness of the developed standards for actual use). The total number of key informants was 13 key informants, as follows: 1) One key informant from GFPT Public Company Limited (as a representative of the Agro & Food Industry)

2) One key informant from Union Pioneer Public Company Limited (as a representative of the Consumer Products Industry)

 One key informant from Bank of Ayudya Public Company Limited (BAY) (as a representative of the Financials Industry).

4) One key informant from Indorama Vengers (IVL) Public Company Limited (as a representative of the Industrials Industry).

5) One key informant from L.P.N. Development Public Company Limited (as a representative of the Property & Construction Industry).

6) Six key informants from Bangkok Aviation Fuel Services Public Company Limited (As representatives of the Resources Industry)

7) One key informant from B.T.S Group Holdings Public Company Limited (as a representative of Services Industry).

8) One key informant from Interlink Communication Public Company Limited (as a representative of the Technology Industry).

All key informants of the eight companies were given an interview guide and the evaluation form of communication standards for SD of Thai listed companies (Appendix B) to read and assess its appropriateness in advance before the interview. The given interview guide involves the consideration of the standard statements, indicators, and scoring criteria, covering input, process, output, and outcome factors.

From the in-depth interviews and focus group interviews, it was found that all key informants perceived the functional and effective applicability of the developed standards for both large and small Thai listed companies, including other companies that need to use them for assessing their communication process for SD.

These standards can be applied greatly because nowadays, we are very serious about these. Every year, when we face any problem, we always make our planning, but it is not so effective. We have big goals and strategies, which are a very broad view. Typically, those responsible for planning will focus on figures, or the income, i.e., how many percent? How much profit? They think that what they are doing is called sustainability. However, they never get into details. They did not realize which plans they should have to lead to sustainability. They must have them. Therefore, people involved in this part should analyze what the chairperson or board said means. Therefore, these standards can be very applicable. They will be a frame for working on our standards, activities, or whatever that we have communicated. It needs direction with better methods than before. (Key informant No. 36).

These standards are very good. Communication is now mentioned, even aboard, that when we communicate, it is not just a report that a company can communicate to outsiders and stakeholders. What has been done should be very useful. For ESG, besides a report, there are other channels that we can use to communicate to stakeholders to know. (Key informant No. 12)

OK. It's a good job and I can get a lot of knowledge. I also agree with the standards. All through my work, there has not been a core theme of communication, either from theoretical concepts or from a process. When these criteria are introduced, communication is also attached. I think it can help us mobilized our company better and more explicitly. (Key informant No. 32)

This work can be considered as a guideline for newly-listed companies. They should gain benefits from it so much. (Key informant No. 34)

Besides, key informants also added some interesting issues for applying the constructed standard statements, indicators, and scoring criteria, as follows:

6.3.1 The review of vision, mission, and value.

Some key informants are not sure if the vision, mission, and value related to the annually established SD can be reviewed or not because it may affect organizational operations and plans that have been imposed in a long term. This might be possible the review is interpreted as the alteration and correction of the annual vision, mission, and value. I question about the review of the annual vision and mission. If we review it annually, especially frequently, it may affect the whole plans. (Key informant No. 34)

Therefore, the researcher clarified and made some key informants understand the ways of reviewing SD vision, mission, and value that it was just a test to see if the SD vision, mission, and value could be applied effectively and respond to the rapidly changing environment, which could be applied for determining operational and communication strategies in the next year. It is not a correction or revision. If so, it might affect the organizational strategies. Typically, a company can alter or correct it when SD vision, mission, and value are not accordant with the direction the company wants to go or with the business operations that have changed from the formerly established ones. The revision may be executed in 5 or 10 years, depending on the suitability of each organization.

6.3.2 The review of materiality

According to Standard Statement No. 7: thorough and well-rounded analysis and assessment of the organizational materiality, the indicator requires an organization to review its materiality and development performance report continuously. Some key informants perceive that under a normal situation, the review of materiality will be done regularly every year. However, under the emergent situation, some revisions may be added, depending on the suitability of the situation.

We have plans to be reviewed every year, but in some cases like Covid, it is a special case. In 2019, we had summarized our theme already before Covid came, but once Covid affected us, we had to either revise it more quickly or hold it. (Key informant No. 34).

The normal round of our regular review is yearly, which accords with the strategy or once every five years. However, in the case some external factors change, it makes many things change too. Thus, we have to restart, cancel, and revise them. Therefore, once a year is correct under the normal situation, but some revisions may be done by changing situations. (Key informant No. 32).

The researcher adopted the proposed opinions and suggestions to add in Indicator No. 4 and criterion of sub-indicator No. 4 in Standard Statement No. 7, as follows, "The organization reviews the materiality and SD development performance report continuously that accords with and is suitable for the organization's circumstance."

6.3.3 The determination of the good level of stakeholders' perception, understanding, satisfaction, confidence, engagement, and the good level of the response to stakeholder's expectation

According to the indicators and criteria for scoring standard statements No. 19, 22, 23, 24, and 25, some key informants gave some remarks that to assess the "good" level of stakeholders' perception, understanding, confidence, engagement, and the "good" level of responses to stakeholders' expectation is quite difficult and may not be comparable without explicit and concrete proportion of scoring.

For well-determined criteria, each company should define by itself what "good" means. To let it open may be good, but when all information is compiled and compared, it may make the summary confusing since "good" for each person is the same. (Key informant No. 36).

Normally, when we weigh, we often compare among companies of the same industry group, but will it be fair to assess in the form if we determine the level to be just good. (Key informant No. 29)

It may be used as practical references; however, clear criteria in scoring may be needed because the context of sustainability operations of each company is different. Therefore, it should be clear to know the genuine goal of each issue so that it can be improved better sustainably. (Key informant No. 39) However, contrarily, most key informants think that determining the criteria at the good level and higher is appropriate as it opens an opportunity for companies to adjust their scoring to reflect the stakeholders' level of perception, understanding, confidence, engagement, and the level of responses to stakeholders' expectation that accord with the nature of business, organizational objectives, and stakeholders all through the supply chain, which are all different in each company. Besides, the criteria and standards to which the organizations are also different. Moreover, organizations will face challenges that enhance their awareness towards better sustainability operations. Therefore, indicators and criteria should be framed broadly as they are.

The word 'good criteria' should be replaced by 'no less than the past year.' I prefer having definite figures, such as 'good' might be 70, but we have to clarify where 70 comes from. Thus, it's better to leave it open like this, but at least the main point is you must do it better. However, I also wonder if we keep doing it better than last year, up to a point how will it continue? Thus, to have open criteria like this should be ok. If we use this standard for assessment, it may be more suitable, i.e., this organization may have 30,000 employees, some 5,000, which will be difficult to weigh. Thus, to have open criteria may be better for each organization to apply them. (Key informant No. 29)

To specify the criteria at a good level, I think It's ok because each stakeholder group is different. For instance, our company specifies at no lower than 85 for the customer group, 80 for the community group, and 75 for the employee group, which we connect with the corporate KPI whereas the KPI also connects with ISO and several standards. (Key informant No. 34)

I think to classify as levels, it should not be ok. To illustrate this, BCMS will specify an acceptable and unacceptable period. These criteria are based on facts and figures. Therefore, standards should reflect where the figures come from, which should be fitted with each organization. Therefore, an organization can't use one same figure. Likewise, it is impossible to use one same figure for all stakeholders. (Key informant No. 32) I think that some companies may need more challenges, while some organizations may need to stay in the comfort zone, i.e., this figure is satisfactory. Often, the figures are tied with the organizational KPI. For a conservative organization, it may not adjust them. However, if any organization wants to adapt them or does not want to make them as the organizational KPI, the figures may be different. (Key informant No. 30)

From the above opinions, the researcher viewed that the determination of the standard statements, indicators, and standard criteria with the level of stakeholders' perception, understanding, satisfaction, confidence, and engagement, including the level of response to the stakeholders' expectation at a good level or higher is the most appropriate and accords with most key informants' opinions. However, some clarifying phrases should be added in "a good level" in the scoring criteria, such as "or having scores of higher than 75 scores" to open an opportunity for companies to apply the criteria quantitatively and qualitatively, by considering the suitability.

6.3.4 SD Information Disclosure and report

Some key informants suggested that a process of preparing a report and of reporting SD information should be added in the developed standards to cover all processes of communication for SD.

I'm not sure if the process focuses on a communication process only. Actually, I want to cover a process of preparing a report or a basic process for reporting information as well. (Key informant No. 40)

Primarily, the researcher adopted both Thai and international standards of reporting sustainability information to develop standards of SD information disclosure and report, which covers the dimension of transparent information disclosure in terms of communication and the dimension of sustainability report preparation. Thus, the content which an organization wants to convey and report can be transmitted through several methods. Therefore, "reporting" is not defined limitedly to a process of preparing sustainability report only, but it must cover the presentation of information that integrates economic, social, environmental, and corporate governance dimensions through appropriate media or channels and congruently with each stakeholder group's or each receiver group's media exposure behaviors and expectation.

Accordingly, the researcher analyzed and synthesized a communication process for SD by integrating sustainability communication and reporting to be standard statements, indicators, and scoring or standard criteria for assessing input, process, output, and outcome factors.

6.3.5 Characteristics of an evaluator or assessor

Some key informants expressed their idea that assessors are important people who assess the communication for SD operations based on their discretion and scoring. Therefore, they must be knowledgeable and have a good understanding of communication for SD of Thai listed companies. Besides, they must be fair in making decisions and execute transparent SD information disclosure, and will not disclose significant information of the organization that is confidential.

Therefore, assigned assessors or assessment agents must be authorized by the agencies, both internal and external. In the case of internal assessors, they should be an individual or a group of individuals who are assigned and independent enough to assess the operations based on the determined criteria. For external assessors, they should come from the regulating or supporting agencies to ensure their non-biased assessment and credibility. Thus, the researcher proposed the developed standards to the regulating and supporting agencies for further application.

6.4 Recommendations for applying communication standards for sustainable development

From in-depth interviews and a focus group interview with key informants on the application of communication standards for SD of Thai listed companies, some key informants suggested some ideas for applying communication standards for SD more properly. The suggested guidelines are as follows:

6.4.1 Knowledge transfer and promotion at all levels

The application of communication standards for SD of Thai listed companies requires good knowledge and understanding of those who will apply them. Therefore, some key informants recommended having knowledge transfer about communication for SD at all levels. On the other hand, organizational leaders must understand the standard criteria to induce explicit and correct knowledge and understanding of a communication process for SD, leading to the operations towards the concrete achievement of both organizations and the whole business sector.

For these standards, they can also be useful for small companies. However, the obstacle that challenges is 1) it requires a shift of people's mindset on sustainability first. Most people often perceive sustainability as something intangible or something that takes a long time before getting the results. All companies will face this challenge. Thus, we must adjust our mindset, starting from the top of an organization. If the top of the organization gives importance to sustainability, we can start from the top to let the whole organization know that it is a vital issue. (Key informant No. 36)

It's appropriate, but in terms of understanding, there might be some challenges. (Key informant No. 39)

When we will do an assessment form, we must understand the content and the context of business organizations clearly. However, each company has different bases, so its application may yield only half of the achievement or half of the half. Thus, the first stage, which I think, is important is to provide knowledge for companies. Generally, in the companies, executives are the ones who know; however, practitioners may have different bases or knowledge and cannot implement towards sustainability since they cannot be visualized. Thus, leaders cannot lead or mobilize the organization as wished. I want to leave this notion for your consideration. (Key informant No. 32).

Accordingly, after the completion of this study, the researcher will extend the results in a wider scope by proposing the developed communication standards for SD to the regulating and supporting agencies to acquire guidelines for developing and

empowering Thai listed companies and other interested agencies. Besides, they will help to develop collaboration with supporting agencies in applying such standards towards concrete achievement in the future.

6.4.2 Adapting to be a good handbook or practical guidelines

The main objective of the study is to construct communication standards for SD of Thai listed companies, used for assessing and validating the quality of communication for SD. Nevertheless, Thai listed companies operate their business under a variety of rules and regulations, including standards that determine the organizational operations strictly. Therefore, if there are more regulations or requirements for communication for SD, it will cause more anxiety and trouble and will obstruct the collaborations from other concerned agencies fully. Consequently, key informants recommended adjusting the studied standards to be a handbook or practical guidelines, without being a regulatory requirement or the enactment.

There's one thing. It's its incompleteness. Completeness means avoiding it to be too rigid. Don't make it too rigid. We can have a core and guidelines. Try not to use the term "frame" but turn them to be guidelines that can be adapted to be suitable for each organization with some remarks, i.e., practices or cases. For example, for this kind of organization, the guidelines should be about this. (Key informant No. 7).

I can be applied, but some standards may be difficult to practice. Still, they can be good guidelines, i.e., if you communicate this, or if you can do this, you should be able to respond to all groups. However, it needs time to collect information. (Key informant No. 29)

It will be better if these standards are used as a supporting manual instead of a regulatory requirement. If they are in the form of a manual, it means a company can adapt the standards to be compatible with its operations and context. Don't forget that there are over 700 listed companies with different sizes and contexts. Besides, in terms of communication, each company's stakeholder groups are also different. Thus, these standards can be adapted to be a self-discipline guideline for supporting organizational communication, it will be very useful without issuing them as regulations. (Key informant No. 12)

It may be in the form of good practice. If they are regulatory standards, it often leads to several questions, i.e., how to measure them? Are they required? Do all of them have to be conducted? Thus, the term may look too tough. I understand the good intention of developing these standards. At least, they are minimum standards every organization should practice. (Key informant No. 11)

From the above recommendations, the researcher knows well about practitioners' duties and responsibilities, so they are not determined to comply with these standards strictly, while the assessment will be voluntary. Primarily, an organization can apply these standards for self-assessment to measure its communication for SD effectiveness. On the other hand, the regulating and supporting agencies can apply them for their assessment in parallel to relevant rules and criteria properly in the future.

6.4.3 Application for the governmental and private SME

Sustainability can occur if every sector is required to operate and practice in the same way to create an ecosystem, as a unit for mobilizing economic systems of society and the nation. Some key informants view that to apply these standards, organizations have to transmit and drive every sector, both governmental and private, towards sustainability practices, i.e., large-sized agencies, listed companies, Company Limited, including government offices, state enterprises, and SMEs, which can affect the operations of the whole business sector systematically.

I want to support small- and medium-sized companies, including SMEs. If state enterprises can reach sustainability, I think, the supply chain will be even bigger than that of companies. The standards will help to expand sustainability networks to grow progressively. There has not been an agency to supervise SMEs specifically yet, while the number of SMEs is quite enormous. This includes local administrative organizations, i.e., sub-district, etc. If we can deploy them in the government sector, it will support the business sector increasingly too. (Key informant No 4)

Correspondingly, the researcher will present and publicize the research findings, after the completion of the study, as a body of knowledge and guidelines for communication for SD to the public to be applied in any kind of organization and agency. Moreover, the researcher expects that the findings can help to establish collaboration among supporting agencies and any agency interested in applying these standards for creating collaborative networks. Besides, Knowledge may be transferred through training or seminars and is formulated in the form of training programs or curriculum. Any interested company or agency can contact the researcher directly. The researcher is willing to provide information fully.

6.4.4 Support from regulating and supporting agencies

Some key informants view that to apply the developed standards of communication for SD widely and covering both government and private agencies, such standards must be supported by regulating and supporting agencies to enhance compliance. It might be in the form of an assessment session having an evaluator or assessor from a neutral agency to keep the neutrality and identical standards while reducing a company's self-assessment cost. If so, it will help to increase listed companies' perception and participation and motivate them to comply with the developed communication standards for SD more widely.

In terms of implementation, the obstacle is the motivating mechanism is not seen. For me, I think we can make these standards happen since we have the potential to do so. However, the challenging issue is how to implement them. These standards must be supported by concerned agencies through the mechanism of appreciation or making them attractive to be implemented. Eventually, they may become regulatory requirements with which every company has to comply. (Key informant No. 10)

If the market or regulator still requires a ranking system, it must rely on external assurance to provide a non-bias process. Thus, a third party is needed with extra costs. Therefore, it should be a relevant third party that is assigned to be responsible for it or assigned by SEC or any neutral agency for small listed companies as a service unit, similar to local lawyers. All processes are tied with costs. (Key informant No. 32)

If these standards will be applied by regulators, they must be the same standards, but for companies, they may be adaptable. (Key informant No 36)

From the above suggestions, the researcher was well aware and prepared to develop communication standards for SD with regulating and supporting agencies from the beginning up to the whole process to make the concerned agencies perceive their importance. All through the process, the researcher was supported by regulating agencies, namely SET and SEC, and supporting agencies, i.e., Sustainable Business Development Center, Thaipat Institute, Thai Institute of Directors, Global Compact Network Association, etc., which supported information and collaboratively developed the standards fully. After the completion, the researcher will bring the findings and all developed standards for the consideration of the regulating and supporting agencies in making use of them more widely in the future.

6.4.5 Tangible and comparable assessment results

Some key informants suggest assessing communication standards for SD empirical and comparable for all industry groups in the form of ranking and awards for those with excellent or distinguished communication for SD performance. They are expected to motivate companies to see the importance of communication standards and want to better their communication for SD.

...A challenge is how to make these standards tangible and important. To make them important, they must be tangible or their short-term benefits or usefulness must be presented. For instance, what SET or many people try to do is to motivate through tangible awards since they let the public be acknowledged that the awarded companies provide sustainable stocks or shares. Then, it will make other companies want to get awards too as an award is tangible and can see the result explicitly. In the past, there was nothing to tell that what they have done is good. (Key informant No. 36)

I want the assessment that can be compared among industry groups, not only knowing our performance. (Key informant No. 29)

The ranking and award announcement must be done by the main agencies that are accepted and trusted. Accordingly, the researcher plans to consult about applying the research findings or the developed communication standards with the regulating agencies after the completion of the study to ensure that they can be applied concretely and create empirical evidence for companies to encourage them to use them as a part for increasing their competitiveness and attracting more investors.

However, the application of communication standards for SD cannot be effective if organizational leaders or assessors have no sufficient knowledge nor understanding of a communication process for SD of Thai listed companies as each company has its specificity and different SD goals from general organizational communication.

Notably, the standards gained from this study were developed from the examination of experts and practitioners in the field of communication for SD. Besides, the standards were synthesized from the SD performance of outstanding listed companies, which were evaluated and tested for acceptance by Thai listed companies in the list of sustainable shares. The application of standards was also considered based on the nature of all eight industry groups. Moreover, from the study, it was found that the respondents or samples approved the application of standards for both listed companies and interested agencies of all sizes and types. Therefore, the challenge is how to adapt it suitably for each company's context, especially newly-listed companies that just start to work on the SD approach and business sector that is operating by sustainability guidelines.

CHAPTER 7

SUMMARY AND RECOMMENDATION

The study entitled, "Communication Standards for Sustainable Development of Thai Listed Companies," is mixed-method research, conducted by the analysis of documentary and media of the Thai listed companies, and in-depth interviews with executives and practitioners involving in communication for sustainable development of the Thai listed companies with excellent sustainability performance in 2019, and the regulating and supporting agencies related to sustainability, concerning the factors under the fundamental structure of the system, which comprises the input, process, output, and outcome factors.

Data were analyzed and synthesized from related concepts, theories, and studies as a framework for the study, and standard statements, indicators, and standard criteria covering a process of communication for sustainable development (SD) was developed. Besides, they were constructed to be a tool for assessing communication standards for SD through the acceptance test conducted by a quantitative survey with the samples, who were representatives of Thai listed companies and selected into the list of sustainable shares or stocks in 2020, organized by the Stock Exchange of Thailand. The acceptance test was validated until acquiring standard statements, indicators, and scoring criteria that were generally accepted.

Furthermore, the constructed assessment form was tested for its applicability by in-depth interviews and focus group interviews with the representatives of Thai listed companies in eight industry groups. Key informants and the samples provided their recommendations and advice for improving and correcting the constructed standards to be the most complete and applicable for operations efficiently.

The constructed standards are aimed to be standardized guidelines of communication for organizational SD so that the business sector can apply them as guidelines for planning, evaluating, and improving the effectiveness of communication for SD with both internal and external stakeholders towards the utmost efficiency and the effectiveness of organizational operations towards sustainability through communication as a major tool.

7.1 Research Summary

From reviewing the concepts and related studies related to communication for SD, it was found that communication for SD is more specific than other general communication processes. Based on the concept of Moonshot, the organizations or Thai listed companies are like space shuttles moving towards the ultimate goal or organizational survival and SDGs, which are compared to the moon. However, to move towards sustainability, the companies require a communication process that integrates all parts to create and apply organizational innovations, either products or services, or an organizational management process, effectively

Communication for SD thus is compared to fuel that helps to raise a space shuttle and interact with the external atmosphere, which requires complete combustion without causing any damage to the engine nor the shuttle. Likewise, an organization requires external communication for interacting with external stakeholders without damaging the organizational image and reputation, nor affecting its operations and business survival.

The external factors found to have influences on the organizational SD are related rules, regulations, and practices at the national and international level, covering all business sizes, nature of business, budgets for communication for SD, innovation and technology, risks, drives from stakeholders, etc. All of these factors can be the atmosphere that keeps supporting an organization towards the intended goals smoothly, continuously, and sustainably, or the barriers obstructing the journey to the moon as planned.

On the other hand, the internal factors are required to be equipped with a good structure and management process for strengthening the organizations towards growth without ceasing. However, the internal factors are relatively specific and vary by nature of business, but require the establishment of supporting management structure, i.e., clear goals, visions, and missions; the congruence between policies and practices,

materiality analysis and assessment, good strategies, and planning, etc. Such internal factors can enhance the relationships among parties, create unity, and drive the organization to the imposed goal. Therefore, organizational communication must be standardized and effective.

Still, to have fuel interact with the external atmosphere to mobilize the company to soar, such fuel must be an output of specific, quality, and standardized composition and contained in a good container. The fuel of the shuttle is like organizational communication that transmits well-selected and correct messages through a proper channel in the same direction to yield impacts on receivers. Information will flow from the top to the bottom (specifically, executives' command via policies and action plans), and from the bottom up to the top (reports of subordinates' or employees' feedback or performance to the superior. Therefore, organizational communication can be both horizontal (communication within the same level or working unit) and vertical (cross-functional communication or communication between different levels). A rocket head functions as a guide, which is comparable to top executives or organizational leaders who will lead the organization towards SDGs and enable Thai listed companies to lift off to SDGs successfully.

In short, an organization can respond to the SDGs if it has effective and standardized fuel, which are criteria or requirements for desirable and acceptable organizational communication characteristics, which cover the organizational SD as well.

Accordingly, the standard statements, criteria, and scoring criteria were developed in this study for constructing communication standards for SD for Thai listed companies used in their SD operations systematically. Besides, the communication for SD standards assessment form can be applied as a tool for their quality communication management towards organizational sustainability. Thus, any operation that cannot accomplish the stipulated standards needs to be improved or corrected to accord with such standards. The communication standards for SD of Thai listed companies that were constructed from this study, based on a system's basic structure, are as follows:

7.1.1 Input-Factor Standards

The standards of input factors comprise standards of management structure; organizational vision, mission, and value; SD policies and practices, materiality analysis and assessment, organizational strategy and planning, and stakeholders and their expectations.

These standards of the input factors are essential for communication for SD. Firstly, organizations must establish an SD management structure for supporting functions at all levels: policy, management, and operation. Therefore, a company should assign an SD committee at the policy level, an SD Chief Executive Officer or CEO at the management level, and an organizational sustainability division at the operational level, with clearly assigned roles, authorities, and responsibilities. Moreover, systematic and consistent SD operational governance should be conducted to mobilize the sustainability execution throughout the organization via the organizational vision, mission, and value concerning SD. Besides, it must be assured that policies and practices must cover all sustainability dimensions: economic, social, environmental, and corporate governance to make stakeholders confident and trust in organizational SD operations, and these dimensions can be guidelines for major organizational operations and communication.

Furthermore, organizations necessarily lay a framework of SD strategic and action plans that integrate communication guidelines, aimed to respond to stakeholders' needs and expectations explicitly, as a consequence of organizational materiality analysis and assessment, materiality prioritization, and continuously monitor and review. Notably, thorough stakeholders' expectations analysis covering all stakeholder groups throughout the supply chain can help organizations to plan their communication methods, message design, and channel selection that responds to stakeholders' needs efficiently.

7.1.2 Process-Factor Standards

The standards of process factors comprise the standards of message stipulation and design, communication channel planning and selection, and a communication process. Process-factor standards involve steps or procedures of SD information transmission from an organization to the stakeholders to create their perception, understanding, and confidence of the organizational SD operations. Thus, organizations have to design proper messages responding to the needs of each stakeholder group. The message must also focus on the past, present, and future SD operations and connect to economic, social, environmental, and corporate governance dimensions under the frame of the stipulated strategy, the annual theme, and the corporate identity and personality through the use of colors, images, symbols, and graphics, the design of mood and tone, etc., to create stakeholders' perception and recall of the organizational SD image.

Moreover, message design must be interesting and persuasive by using stimulating statements that can bring about inspiration, good recall, and positive attitudes. Besides, the message should be transmitted through diverse channels inclusively and congruently with each stakeholder group's media exposure. Any sustainability message conveying the sustainability meanings must be planned strategically through various channels, i.e., personal, printed, electronic, broadcasting, activity, mass and new media, and others such as service places and area, suggestion boxes, etc. Organizations thus have to consider the appropriateness and worthiness of each channel selection and the integration of diverse media towards utmost effectiveness. Furthermore, continuous surveillance and assessment of the communication process are needed.

A communication process of SD is relatively more specific than general communication since it integrates the content of all sustainability dimensions with all steps of SD operations harmoniously. Namely, it contains both Communication of Sustainability (CoS) and Communication about Sustainability (CaS) all through the process.

7.1.3 Output-Factor Standards

The standards of output factors comprise the standards of communication for SD efficiency, the perception and understanding of sustainability, and information disclosure and reports.

Output factors are crucial factors helping to reflect organizations' resource utilization through the determination of KPI value, which can be both verbal and nonverbal language. It is the information fed back to the input factors and affecting content design in the future (Ahlin, 2019). The feedback may be related to products or services from both measurable and unmeasurable communication, i.e., the level of perception and understanding. Accordingly, the measurement of communication for SD efficiency by the number of media appearing in the area may not be sufficient. Organizations should consider other consequences, i.e., the induction of product or service innovation that is friendly to the environment, more effective and worthwhile resource utilization, timely crisis management, information disclosure that is transparent, complete, correct, sufficient, and inclusive, including covering business chain value. All of these require both systematic quantitative and qualitative indicators so that receivers can evaluate the organizations' operations, and the organizational SD development direction, which helps them to make proper decisions.

7.1.4 Outcome-Factor Standards

The standards of outcome factors comprise the standards of the effectiveness of communication, the creation of the shared value with stakeholders, and the establishment of equilibrium of all sustainability dimensions.

Outcome factors reflect the impacts of communication. Typically, communication often leads to changes in cognition or knowledge, attitude, or behaviors of the target receivers, caused by their exposure to the organizations' information or media. A well-developed message can bring about apparent efficiency and increase their confidence in attracting their target stakeholders, accomplishing the desired outcomes, and managing risks effectively. (World Health Organization, 2017), including creating stakeholders' participation widely. Still, the outcome can be examined and assessed repeatedly so that a review and improvement of communication strategies for SD can be conducted consistently. Typically, the outcome can be assessed from stakeholders' satisfaction, confidence, and acceptance, including their perception of the organizational image and reputation, engagement and relationships, and participation. Moreover, the outcome is also a consequence of an

organization's ability to respond to its stakeholders' expectations, adaptability, and creation of shared values with stakeholders.

Since a communication process for SD has been operated under a system's environment, any organization that interacts with the environment regularly will have greater chances for survival amidst the rapidly changing environment, (Miller, 2012) due to advanced technology, globalization, global expansion, and popular changes. Accordingly, an organization needs to adjust its operational approach. (Jones, 2005). Therefore, Thai listed companies must keep surveying, monitoring, analyzing, and assessing the environment surrounding organizational communication, i.e., business size, nature of business, budgets, risk factors, stakeholders' drives, and global trends, to ensure the state of equilibrium of the communication for SD and organizational utmost effectiveness. Remarkably, key informants perceive that the key to maintaining such an equilibrium is to enhance organizational members to be aware and respond quickly to changes in social, environmental, economic, and corporate governance dimensions, including all rules and regulations cautiously.

The communication standards for SD of all four main factors were tested and accepted by the practitioners of the 75 listed companies with outstanding sustainability performance in 2019. From the test, it was found that 97.3% of the respondents agreed with and accepted all 27 developed standard statements. (See details in 6.2.2: the acceptance test of the standards).

The standard statement that was agreed and accepted the least was Standard Statement No. 14: the organization has communication channels for promoting stakeholders' participation and responding to their expectations, and No. 18: the organizational communication for SD is efficient (93.3%). On the other hand, 100% of the respondents agreed with six standard statements: No. 2 (the organization has a mechanism in regulating sustainability operations systematically, No. 5 (the organization stipulates SD policies and practices in writing), No. 6 (SD policies and practices are enforced throughout the organization), NO. 7 (the organizational analysis and assessment of the SD materiality are complete and well-rounded), No. 21 (the organizational SD information disclosure and report are complete and sufficient), and No. 26 (Shared values between the organization and society are created). The results

show that all respondents agreed with all standard statements with a very high proportion.

Besides, 95 indicators of communication standards for SD were developed. From the acceptance test, it was found 94.5% of the respondents agreed and accepted the constructed indicators. From analyzing the indicators of each standard statement of the input factors, comprising 10 standard statements and 26 indicators, it was found that the highest score is 100% with the indicators of Standard Statements No. 7, while Standard Statement No. 4 was agreed the least (90.7%). The average agreement of all input factors is 95.6%. The results reflect that the respondents highly accepted the indicators of the standard statements in the input factors.

From analyzing the indicators of each standard statement of the process factors, comprising 7 standard statements and 34 indicators, it was found that the highest score was 98.7% for the indicators of Standard Statements No. 11 and 12, while Standard Statement No. 14 was agreed the least (86.7%). The average agreement of all process factors is 94.0%. The results reflect that most respondents highly accepted the indicators of the standard statements in the process factors.

The indicators of each standard statement of the output factors comprise 4 standard statements and 19 indicators, it was found that the highest score was 98.7% for the indicators of Standard Statements No. 21, while Standard Statement No. 18 was agreed the least (92.0%). The average agreement of all process factors is 94.9%. The results reflect that most respondents highly accepted the indicators of the standard statements in the output factors.

From analyzing the indicators of each standard statement of the outcome factors, comprising 6 standard statements and 16 indicators, it was found that the highest score was 98.7% for the indicators of Standard Statements No. 26, while Standard Statement No. 22 was agreed the least (88.0%). The average agreement of all process factors is 93.3%. The results reflect that most respondents highly accepted the indicators of the standard statements in the outcome factors.

Regarding the scoring or assessment criteria for each indicator, 102 criteria were developed. The results show that 93.8% of the respondents agreed with and accepted the overall criteria, which is very close to the acceptance rate of the indicators. From analyzing 28 scoring criteria of the input factors, it was found that

the highest score was 97.3% for the criteria of Standard Statement No. 2 and 8, while the least agreed criterion was the criterion of Standard Statement No. 3 (89.3%). The average score of the acceptance of all criteria of the input factors was 94.4%. It indicates that the respondents highly agreed with the scoring criteria of the standard statements in the input factors.

From analyzing 38 scoring criteria of the process factors, the highest score was 96.0% for the criterion of Standard Statement No. 11, while the least agreed criteria were the criteria of Standard Statement No. 13 and 14 (90.7%). The average score of the acceptance of all criteria of the input factors was 93.4%. It indicates that the respondents highly agreed with the scoring criteria of the standard statements in the process factors.

The output factors comprise 19 criteria, and it was found that 100.0% was the highest score for Criterion No. 21, while the least agreed criterion was that of Criterion No. 19 (85.3%). The average score of the acceptance of all criteria of the outcome factors was 93.4%. It indicates that the respondents highly agreed with the scoring criteria of the standard statements in the output factors.

The outcome factors comprise 17 criteria, and it was found that 97.3% was the highest score for Criterion No. 26, while the lowest score was for Criterion No. 22 (88.0%). The average score of the acceptance of all criteria of the outcome factors was 94.3%. It indicates that the respondents highly agreed with the scoring criteria of the standard statements in the outcome factors. (See details in 6.2.2: The standard acceptance test)

From the test of the standard acceptance and the suitability for being applied, the scores of the standard statements, indicators, and scoring criteria for the communication standards for SD of Thai listed companies are summarized in Table 7.1.

Table 7.1 A summary of the scores of the standard statements, indicators, and scoringcriteria for the communication standards for SD of Thai listedcompanies, based on the system's basic structure.

Factor	Standard	Standard Texts		ber of cators		ber of teria	Scorin (100)
		Texts	Old	New	Old	New	(100)
Input	Management structure	1	3	3	3	3	2
		2	3	3	3	3	2
	Vision, mission, and value	3	3	3	3	3	2
		4	3	3	3	3	2
	SD policy and practice	5	2	2	4	4	2
		6	2	2	2	2	2
	Materiality analysis and assessment	7	4	4	4	4	2
	Strategy and planning	8	2	2	2	2	2
	Stakeholders and their expectations	9	2	2	2	2	2
		10	2	2	2	2	2
Process	Message stipulation and design	11	5	5	5	5	2.5
		12	5	5	5	5	2.5
	Communication channel planning and	13	2	2	6	6	2.5
	utilization	14	8	8	8	8	2.5
	A communication process	15	5	5	5	5	4
		16	6	6	6	6	3
		17	3	3	3	3	3
Output	The efficiency of communication for SD	18	9	8	8	8	4
	SD perception and understanding	19	2	2	2	2	2
	Information disclosure and report	20	4	4	4	4	4
		21	5	5	5	5	10
Outcome	Communication effectiveness	22	2	2	2	2	6
		23	2	2	2	3	6
		24	4	4	4	4	8
	Creation of shared values with	25	2	2	2	2	5
	stakeholders	26	3	3	3	3	7.5
	Establishment of an equilibrium of all	27	3	3	3	3	7.5
	sustainability dimensions						
		Total	96	95	101	102	100

From Table 7.1, it illustrates that after the acceptance test assessed by the experts and practitioners in the field of communication for SD, one indicator of Standard Statement No. 18, specifically "better business performance," was cut out so the number of indicators of the output factor No. 18 was reduced from 9 to 8 indicators. Most key informants pointed that better business performance may be caused by several factors, i.e., economic and political conditions, marketing mechanisms, competition, business operational capabilities, etc. Therefore, it may not reflect as a result of the efficiency of communication for SD. Moreover, one more scoring criterion was added in Standard Statement No. 23, so there were three criteria instead of two criteria. The added criterion was "the level of confidence in and acceptance of stakeholders' decisions to participate in the organizational operations," since some key informants viewed that stakeholders' participation is vital for the creation of transparency, shared values, and collaborative working, including establishing sustainability if the stakeholders' confidence and acceptance are at a good level.

In short, the communication standards for SD, developed from this study, consist of 27 standard statements, 95 indicators, and 102 scoring criteria (See details in Appendix B). The total score of the standards is 100 scores. An assigned assessor must be knowledgeable and skillful in communication for SD, who will evaluate an organization's or a company's communication for SD by following the determined criteria and scoring criteria of each factor. If any company does not have nor comply with what is mentioned in each standard statement, the score will be 0. After combining all scores, a company having standard scores at the excellent level must earn 86 scores or higher, 75-85 scores at a good level, 60-74 scores at a moderate level, 50-59 scores at a passing level, and lower than 50 scores to pass the standard criteria.

7.2 **Recommendations from the research findings and for application**

To drive communication standards for SD of Thai listed companies towards the utmost efficiency and effectiveness, organizations must understand the major attributes and principal components of a communication process, and apply proper and congruent standards with their business nature and organizational management, including communication environment. The recommended guidelines are as follows:

1) A sender, either as an individual or organization, has to be aware of the importance of SD. He must possess sufficient knowledge and understanding of the sustainability concept, keep following and exposing to new movements and innovation, and be determined to operate an organization following the sustainability approach. Then, he will be able to communicate and convey the meanings of sustainability to every stakeholder group effectively.

2) An organizational vision, mission, and goals are a significant and principal message of communication for SD, which reflects the concept of sustainability as a long-term goal. Besides, they reflect an organization's strong determination in operating and communicating towards sustainability. All of these should contain the value for strengthening corporate culture, which can help to determine employees' desirable communication patterns and behaviors. However, an organization should review its vision, mission, and value consistently.

3) Communication standards for SD are not aimed at creating stakeholders' perceptions and understanding of the organizational sustainability operations for the short term only. On the contrary, the main goal is to induce changes in oneself, the organization, society, environment, and the nation. Furthermore, a balance or equilibrium between stakeholders' expectations and business operations must be created in parallel to the creation of inspiration towards concurrent developments. Thus, communication for SD cannot be achieved if the people involved do not change their attitude and behaviors towards sustainability, which requires continuous practices and long-term achievement.

4) The transmitted message must connect every sustainability dimension, which is complicated and difficult to understand. A communicator's responsibilities are to design and create attractive and easy-to-understand content, and to utilize information correctly, sufficiently, and promptly, but under an auditing process. The application of technology and innovation can also help to communicate diverse information to attract stakeholders more effectively. Consequently, stakeholders can use such information for comparison and make decisions properly.

5) Communication for SD is not purely transmission of information via reports, widely understood by most stakeholders since they are mainly required by the regulator or regulating agency to submit the SD report. Nowadays, there have been several channels, while the media exposure of each stakeholder group is different too. Accordingly, all available communication channels should be integrally applied as channels for stakeholders to access and interact with easily to increase communication for SD efficiency.

6) Most companies have tried to use KPI for measuring their communication process. However, just KPI may not be sufficient for measuring communication for SD since it involves several complicated dimensions with high dynamism, i.e., social, environmental, economic, and corporate governance. Therefore, organizations should integrate with other indicators, i.e., OKR (Objective and Key Results), etc., both quantitatively and qualitatively, which are suitable for and congruent with the measurement of communication effectiveness and efficiency.

7) Another key purpose of communication standards for SD is to enhance and provide an opportunity for stakeholders to participate in major organizational SD operations, i.e., planning, project preparation, and evaluation, problem-solving, etc. By doing so, it will not only help organizations to adopt their opinions for improving and developing new products, services, or innovations but also plan SD operations and communication to create a balance between their expectations and business operations, including promoting transparency.

8) One of the crucial components of communication is stakeholders as receivers, which are important in supporting organizational operations and survival. Correspondingly, organizations should have explicit guidelines for sustaining each stakeholder group, including communication guidelines for responding to each group's needs and expectations through a stakeholders' needs and expectations analysis. From the study, some key informants specified that despite an analysis process, some companies conducted it to complete the evaluation required by the regulating agencies only without an academically correct analysis process. Hence, the acquired information does not respond to genuine needs. Organizations thus have to explain how to determine and prioritize their stakeholders' expectations and benefits, including rationales of such determined practical guidelines (GRI, 2015) for proper communication with each stakeholder group.

9) Communication standards for SD can yield maximal benefits genuinely only if they are assessed and supported by the regulating or supporting agencies, which can be the assignment of either individuals or a committee as representatives of the capital market, regulator, and supporting agencies, to collaboratively examine and evaluate listed companies' annual operations and communication for SD as preliminary assurance. Such assurance, then, can lead to the development and upgrade of SD in every sector of both government and private.

7.3 Research Limitations

The study is an important challenge of the researcher since all through the research process, he faced numerous problems and obstacles, starting from the qualitative data collection by in-depth interviews with 8 distinguished listed companies during the Coronavirus or Covid-19 Outbreak in which the government had to declare a state of emergency throughout the Kingdom. Hence, the offices of all Thai listed companies were closed and the companies allowed their employees to work from home. Consequently, it was inconvenient for those companies to provide any information. Thus, data had to be collected from the media publicized by each company. The main or principal media used by listed companies are websites, in which corporate annual reports, SD reports, the Registration Statement Form (Form 56-1), policies, and other relevant information are publicized.

It took several months before the Covid epidemic was in control, the government allowed private sectors to open their offices again. Still, almost all listed companies keep watching and have had a strict and continuous social-distancing policy up to now. Therefore, the researcher had to wait for proper timing to collect data from the key informants as much as possible. Some companies allowed the researcher to have a face-to-face interview, but with strict preventive measures, i.e., wearing a mask and keeping distance all through an interview. Some companies did not allow to meet face-to-face but allowed an online video conference. However, each company is equipped with different programs, so the researcher had to install all kinds

of programs used by the key informants, i.e., Zoom Microsoft Team, Google Duo, etc., for their convenience. Besides, data were also collected from a telephone interview and through emails. Regarding a quantitative survey, questionnaires were sent to the respondents' emails in combination with an online survey through the Google Form system. Through all the channels, the researcher could collect data as wished.

Besides, the obstacle caused by the spread of Covid-19, another restriction was the information disclosure of Thai listed companies. Some companies were not convenient to reveal information. For example, the researcher had to wait for over six months to obtain information from a company, but eventually, no information could be obtained. Thus, the researcher had to analyze the data from its report publicized to the public through online channels and searched for additional information from the regulating agencies. As a result, the researcher could obtain only surface information without perspectives and insightful information from one company.

The obstacle caused by information disclosure is because the information involves inside information, covering companies' strategic and action plans, including communication strategies and new approaches of SD operations in the future. Therefore, the information is quite delicate and restricted since it may cause some impacts on market capitalization (share or stock price) as the information could be in the hand of its competitors. Therefore, it is quite a risk for key informants to violate the laws, rules, and regulations determined by the regulator.

Accordingly, the researcher was well-aware of such worries and thus proceeded to ask permission from the Center for Coordination of Human Research Ethics Committee, National Institute of Development Administration. The research project was approved on March 24, 2020. Therefore, the names of all key informants were not revealed but replaced by codes for any of their quotes. Furthermore, the referred information was sent back to the key informants who requested it for examining the correctness and appropriateness of the information, and the key informants' consent of being referred to in the study.

7.4 Recommendations for Future Studies

The following recommendations for further studies are proposed for any person who is interested in and wishes to extend the study on communication standards for SD:

1) The study developed a set of standard statements, indicators, and scoring criteria for communication standards for SD of Thai listed companies. Such standards were accepted by the representatives of Thai listed companies with outstanding performance in communication for SD in 2019 only. Thus, further studies can be conducted to develop more central standards that can be applied for all kinds of organizations, in combination with the study on foreign listed companies with outstanding performance in sustainability additionally.

2) Studies can be extended to cover other populations, i.e., government agencies or state enterprises that are not listed in the Stock Exchange of Thailand, a company limited, or SMEs. All of these organizations can also be a major driver towards national sustainability like the listed companies. Besides, they may be interested to obtain more knowledge about communication for SD too.

3) The study focused on the content found in the documentary analysis from the corporate principal media used to publicize to the public, i.e., the annual report, Form 56-1, SD report, and corporate websites. However, there are still plenty of issues to be further studied, such as communication tactics, message encoding or sign construction, sustainability discourses appearing in the corporate media, etc.

4) The study emphasizes the overall communication standards for SD of Thai listed companies, but not particularly the SD reports. However, very shortly, there is a tendency that regulating agencies, both Thai and foreign, are driving to push more new standards, regulations, and practices related to sustainability reports in various forms, i.e., 56-1 One Report of the Securities and Exchange Commission (SEC), the Integrated Report of the International Integrated Reporting Council (IIRC), etc. Thus, more focus on analyzing communication tactics, content analysis, or effectiveness evaluation of communication for SD through the study of the reports can be further studied.

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APPENDICES

Appendix A

Instruction: The tool was developed for assessing the acceptance of the standards by the practitioners related to communication for sustainable development (SD),	ble development (Sl
which is a part of the study entitled, "Communication Standards for Sustainable Development of Thai Listed Companies." The study was conducted by the literature	lucted by <u>the literat</u>
review of related concepts and theories, in combination with in-depth interviews with executives and practitioners involving in the communication process for SD.	cation process for S
The questionnaire or the assessment form is divided into two parts: general information of the respondents and the survey on the acceptance of the communication	of the communicati
standards. Please kindly express your opinions freely and precisely to assess the given standard statements, indicators, and scoring criteria. The researcher hopes to	he researcher hopes
receive your kind collaboration in answering the survey and thank you very much for your kind cooperation herewith.	
Remarks: 1) Communication standards for SD of Thai listed companies comprise input factors (20 scores), process factors (20 scores), output factors (20	s), output factors (
scores), and outcome scores (40 scores), so the total is 100 scores.	
2) Sustainable development means the reflection of the major roles of Thai listed companies in establishing economic growth in parallel to good	vth in parallel to go
corporate governance, social support ability, and environmental surveillance, concurrently with a good balance.	
3) Communication for sustainable development (SD) means a process of transmitting organizational message to internal and external	nternal and exter
stakeholders to have them perceive, understand, accept, and participate in the organizational operations, aimed towards long-term business growth	g-term business grov
in parallel to the development of people's quality of life and national development. It can also reflect an organization's ability in keeping the level of	in keeping the level
natural resource utilization without exceeding the production potential of the nature to achieve sustainable development goals (SDG). Thus, it aims to	SDG). Thus, it aims
create a balance among economic, social, environmental, and corporate governance dimensions, including the collaborative partnership integrally.	partnership integral
4) Your information will be used for the study entitled, "Communication Standards for Sustainable Development of Thai Listed Companies," as	sted Companies," a
partial fulfilment of the Requirements for the Degree of Doctor of Philosophy (Communication Arts and Innovation), National Institute of	, National Institute
Development Administration (NIDA) only. Provided information or any of your expressed opinions will not be disclosed for other benefits except	r other benefits exc
for academic purposes and benefits.	

in the column "please correct the following."

ar Name of the company/or your securities symbol ar Working experience in communication for SD chelor's degree a master's degree chelor's degree a master's degree chelor's degree a master's degree atement Agree Disagree atement Agree Imsure atement Agree Disagree (4 scores) Agree Imsure (4 scores) Agree Imsure for supporting SD operations. Agree Im	Nan	Name and last name (optional) Posi-	Position				
Mone Fax Email Male Female Age In master's degree Lighest education level □ lower than a bachelor's degree □ a master's degree Lot study at the highest-level graduation In master's degree □ a master's degree Lot study at the highest-level graduation Image No 2: A Survey on Standard Acceptance Agree Disagree Imaster's degree Latorics: SD management structure standards (4 scores) Agree Disagree No Clear organizational management structure for suporting SD operations. Agree Disagree No Indicators: Itaving at least one group of a board of directors or committee or sub-committee (at the board or policy level) with specific roles, duties, and responsibilities in stipulating and governing SD explicitly. Imagement level) with specific roles, duties, and responsibilities in stipulating and governing SD explicitly. Imagement level) with specific roles, duties, and responsibilities in stipulating and governing SD explicitly. Imagement level) with specific roles, duties, and responsibilities in stipulating and governing SD explicitly. 1. Having at least one division/section or department (at the operational level) with specific roles, duties, and responsibilities in stipulating and governing SD explicitly. Imagement level) with specific roles, duties, and responsibilities in stipulating and governing and governing SD explic	Divi		any/or you	r securities	symbol		
□Male Female Age a master's degree ighest education level □lower than a bachelor's degree a master's degree of study at the highest-level graduation	Tele						
In lower than a bachelor's degree a master's degree Ievel graduation	Sex	□ Male □ Female AgeYear	imunicatio	in for SD		year(s)	month(s)
latement Agree Disagree s (4 scores) Agree Disagree s (4 scores) Agree Disagree for supporting SD operations. Agree Disagree for supporting SD operations. Image: Construction of the state or sub-committee (at the state or sub-committee (at the state or sub-committee) or personnel with the sustainability expert or personnel with the sustainability expert or personnel with the sustainabilities in stipulating and the sustainabilities in stipulating and the sustainabilities in stipulating and the sub-committee or working group (at the stipulating and responsibilities in stipulating and the sustainabilities in stipulating and soverning SD explicitly.	The	□ lower than a bachelor's degree		□ a master'	s degree	□ a doct	□ a doctoral degree
latement Agree Disagree s (4 scores) Agree Disagree s (4 scores) for supporting SD operations. Agree Disagree for supporting SD operations. for supporting and for sub-committee (at the utes, and responsibilities in stipulating and e sustainability expert or personnel with or sub-committee, or working group (at the or sub-committee in stipulating and fies, and responsibilities in stipulating and e sub-committee in stipulating and e sub-committee in stipulating and fies, and responsibilities in stipulating and been sub-committee in stipulating and sub-committee in stipu	Fiel	d of study at the highest-level graduation					
Agree Disagree ting SD operations. Agree Disagree mittee or sub-committee (at the sponsibilities in stipulating and lifty expert or personnel with mittee, or working group (at the sponsibilities in stipulating and sponsibilities in stipulating and at the operational level) with Agree Disagree	Par	t 2: A Survey on Standard Acceptance					
Input Factors: SD management structure standards (4 scores) 1. Clear organizational management structure for supporting SD operations. (2 scores) [1.] Indicators: 1. Having at least one group of a board of directors or committee or sub-committee (at the board or policy level) with specific roles, duties, and responsibilities in stipulating and governing SD explicitly, and at least one sustainability expert or personnel with experience in sustainability. 2. Having at least one group of a committee, or working group (at the management level) with specific roles, duties, and responsibilities in stipulating and governing SD explicitly. 3. Having at least one division/section/ or department (at the operational level) with specific roles, duties in stipulating and governing SD explicitly.	No.		Agree	Disagree	unsure	No opinion	Please correct the following
I. Clear organizational management structure for supporting SD operations. (2 scores) (2 scores) (2 scores) (2 scores) (3 scores) (3 scores) (4 scores) (4 scores) (5 score	Inpu	it Factors: SD management structure standards (4 scores)			1		
(2 scores) 10 Indicators: 1 Indicators: 1. Having at least one group of a board of directors or committee or sub-committee (at the board or policy level) with specific roles, duties, and responsibilities in stipulating and governing SD explicitly. 1. Having at least one sustainability expert or personnel with experience in sustainability. 2. Having at least one group of a committee, or sub-committee, or working group (at the management level) with specific roles, duties, and responsibilities in stipulating and governing SD explicitly. 3. Having at least one division/section/ or department (at the operational level) with specific roles, duties in stipulating and governing SD explicitly.	1.	Clear organizational management structure for supporting SD operations.					
Indicators: 1. Having at least one group of a board of directors or committee or sub-committee (at the board or policy level) with specific roles, duties, and responsibilities in stipulating and governing SD explicitly, and at least one sustainability expert or personnel with experience in sustainability. 2. Having at least one group of a committee, or sub-committee, or working group (at the management level) with specific roles, duties, and responsibilities in stipulating and governing SD explicitly. 3. Having at least one division/section/ or department (at the operational level) with specific roles, duties in stipulating and governing SD explicitly.		(2 scores)			1		
 Having at least one group of a board of directors or committee or sub-committee (at the board or policy level) with specific roles, duties, and responsibilities in stipulating and governing SD explicitly, and at least one sustainability expert or personnel with experience in sustainability. Having at least one group of a committee, or sub-committee, or working group (at the management level) with specific roles, duties, and responsibilities in stipulating and governing SD explicitly. Having at least one division/section/ or department (at the operational level) with specific roles, duties in stipulating and governing SD explicitly. 		Indicators:					
 board or policy level) with specific roles, duties, and responsibilities in stipulating and governing SD explicitly, and at least one sustainability expert or personnel with experience in sustainability. 2. Having at least one group of a committee, or sub-committee, or working group (at the management level) with specific roles, duties, and responsibilities in stipulating and governing SD explicitly. 3. Having at least one division/section/ or department (at the operational level) with specific roles, duties in stipulating and governing SD explicitly. 		1. Having at least one group of a board of directors or committee or sub-committee (at the					
 governing SD explicitly, and at least one sustainability expert or personnel with experience in sustainability. 2. Having at least one group of a committee, or sub-committee, or working group (at the management level) with specific roles, duties, and responsibilities in stipulating and governing SD explicitly. 3. Having at least one division/section/ or department (at the operational level) with specific roles, duties in stipulating SD explicitly. 		board or policy level) with specific roles, duties, and responsibilities in stipulating and					
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management level) with specific roles, duties, and responsibilities in stipulating and governing SD explicitly. 3. Having at least one division/section/ or department (at the operational level) with specific roles, duties, and responsibilities in stipulating and governing SD explicitly.		2. Having at least one group of a committee, or sub-committee, or working group (at the					
governing SD explicitly. 3. Having at least one division/section/ or department (at the operational level) with specific roles, duties, and responsibilities in stipulating and governing SD explicitly.		management level) with specific roles, duties, and responsibilities in stipulating and					
3. Having at least one division/section/ or department (at the operational level) with specific roles, duties, and responsibilities in stipulating and governing SD explicitly.		governing SD explicitly.					
		3. Having at least one division/section/ or department (at the operational level) with					
		specific roles, duties, and responsibilities in stipulating and governing SD explicitly.					

No.	Standard Statement	Agree	Disagree		unsure No opinion	Please correct the following
	Criteria: Assessing organizational management structure, roles, and documents or a	5				
	handbook of Standard Operating Procedure (SOP).					
	- The organization has a supporting structure at the policy level					
	- The organization has a supporting structure at the management level 0.75 scores					
	- The organization has a supporting structure at the operational level 0.25 scores					
2.	The organization has a mechanism in governing sustainability operations					
	systematically (2 scores)					
	Indicators:					
	1. Having a report on sustainability operational performance to a committee responsible			U		
	for sustainability explicitly.			1		
	2 A concerned committee has a meeting agenda on the sustainability operational					
	performance at least every three months.					
	3. Having a report of sustainability operational performance certified by the Sustainability					
	Committee or Sub-committee regularly every year.					
	Criteria: Assessing sustainability operational performance certified by Sustainability					
	Committee, management structure, a report of Sustainability Committee's sustainability					
	operations.					
	- Having a direct line to report to Sustainability Committee 0.6 scores					
	- Having a sustainability meeting every three month 0.6 scores					
	- Having a report on the responsibility of the sustainability committee 0.8 scores					
Inpu	Input Factors: Vision, Mission, and Value Standards (4 scores)					

No.	Standard Statement	Agree	Disagree		unsure No opinion	Please correct the
3.	The organizational vision, and/or mission reflects sustainable development guidelines					STITMOTOT
	explicitly. (2 scores)					
	Indicators:					
	1. The organizational vision reflects SD operations explicitly					
	2. The organizational mission reflects SD operations explicitly		U			
	3. The organizational vision and mission are reviewed regularly every year.					
	Criteria: Examining the statements of organizational vision and mission from the annual			1		
	report, SD report, and websites.			T		
	- The explicit appearance of the SD concept in the organizational vision 0.6 scores			U		
	- The explicit appearance of the SD concept in the organizational mission 0.6 scores	Δ,		1		
	-Having a review and assessment of the organizational value at least	7				
	once a year 0.8 scores					
4.	Sustainable development approach is contained as a part of the organizational value.		$\sum_{i=1}^{n}$	2		
	(2 scores)					
	Indicators:					
	1. The SD approach is contained as a part of the organizational value eminently.		Ċ			
	2. The SD approach appears in the strategic plans for creating value eminently.					
	3. The efficiency of the organizational sustainability value is assessed and reviewed					
	regularly every year.					
	Criteria: Examining the statements of organizational value shown in the annual report, SD					
	report, and organizational websites, including in the strategic plans for creating					

Ž	No. Standard Statement	Agree	Disagree	unsure	unsure No opinion	Please correct the following
	organizational value.	5				
	- The concept of SD appears in the organizational value eminently 0.8	0.8 scores				
	-Strategic plans of value creation display SD concepts and cover plans to	/				
	communicate with organizational stakeholders 0.6	0.6 scores				
	-Sustainability value is reviewed and assessed at least once a year 0.6	0.6 scores	U			
In	Input Factors: SD Policy and Practice Standard (4 scores)					
5.	5. The organization stipulates SD policies and practices explicitly in writing. (2 scores)	ores)		1		
	Indicators:					
	1. The organization has explicit written policies and practices.			U		
	2. The organizational written policies and practices cover economic, social, environmental	iental		1		
	SD dimensions, and communicate to all stakeholders.	J				
	Criteria: Examining policies and practices (through statements that identify operations	ations				
	concretely).			1		
	- Having corporate governance policies 0.5	0.5 scores				
	- Having corporate governance practices 0.5	0.5 scores				
	- Having SD policies covering economic, social, and environmental		Ċ			
	dimension, including communication 0.5	0.5 scores				
	- Having SD practices covering economic, social, and environmental					
	dimension, including communication 0.5	0.5 scores				
.9	6. SD policies and practices are enforced throughout the organization. (2 scores)					
	Indicators:					

Z	Standard Statement	Agree	Disgoree	อนแรนแ		Please correct the	
1			20 ISucio	2 mem	nonndo ovi	following	
	1.SD policies and practices are certified by the committee or sub-committee responsible						1
	for sustainability distinctly.						
	2. A company has a mechanism in making all employees acknowledged and comply						
	with SD policies and practices strictly.						
	Criteria: Examining the statements of the policies and practices certified by the committee						1
	or sub-committee and signed by employees to acknowledge them.						
	-SD policies and practices are certified by the committee and sub-committee 1 score			1			
	-SD policies and practices are acknowledged by employees distinctly 1 score			T			
Inl	Input Factors: Standard of the materiality analysis and assessment (2 scores)			5			1
7.	. The analysis of the assessment of the organizational SD materiality is complete and			٦			1
	well-rounded. (2 scores)	7					
	Indicators:						1
	1. The organization analyzes and identifies the materiality			5			
	2. The organization prioritizes the materiality of organizational sustainability.						
	3. The organization examines the materiality and has a follow-up continuously						
	4. The organization reviews the materiality and reports development outcomes		Ċ				
	continuously.						
	Criteria: Examining the SD materiality from the report.						1
	-Sustainability issues that are influential for business operation are						
	identified thoroughly and entirely 0.5 scores						
	-Sustainability issues are prioritized through a credibly academic						
							٦

Ż	No. Standard Statement	Agree	Disagree	unsure	unsure No opinion	Please correct the following	
	0.5	scores					
	- The correctness of the assessment and prioritization of the materiality						
	is examined and followed up continuously 0.5 scores	ores					
	-The materiality is reviewed and the results of its development are						
	reported continuously 0.5 scores	ores	U				
Inj	Input Factors: Standard of communication for SD strategy and operational planning (2 scores)	scores)					
×.	8. The organization determines sustainability strategy and operational planning	ing		1			
	explicitly (2 scores)			T			
	<u>Indicators:</u>			U			
	1. The organization stipulates strategies and planning for sustainability operations	Ą		1			
	clearly	J					
	2. The organization stipulates strategies and planning for communication for	SD					
	operations clearly						
	Criteria Examining SD strategic and action plans, including the organizational	<u>nal</u>					
	communication plans.						
	-Having clear sustainability strategy/operational strategies 1 score		Ċ				
	-Having clear communication strategies and operational plans for						
	supporting SD 1 score						
In	Input Factors: Standards related to stakeholders and expectation (4 scores)						
6	9 The determination of every major group of the organizational stakeholders (2 scores)	res)					
	Indicator:						
		-					-

N0.	Standard Statement	Agree	Disagree	unsure	unsure No opinion	Please correct the following	
	1. The organization explores, analyzes, identifies, and prioritizes the significance	3					T
	of every major stakeholder group clearly.						
	2 The organization reveals the details of determination and prioritization						
	methods, including the relevance to each group of stakeholders clearly.						
	Criteria: Examining from the organizational stakeholder analysis report.						1
	- Having exploration, analysis, identification, and prioritization of						
	the importance of stakeholder groups						
	- Having the detailed revealing of the determination and prioritization						
	methods and the relevance to each stakeholder group						
10	Detailed analysis and assessment of the stakeholders' expectation (2 scores)			1			T
	Indicator:	7					T
	1. Having thorough, correct, and complete analysis and assessment of stakeholders'						
	expectations.						
	2. Having a review of stakeholders' expectation regularly every year						
	Criteria: Examining from the survey of stakeholders' expectations.						1
	- Having an analysis and assessment of stakeholders' expectations		Ċ				
	- Having a review of stakeholders' expectation regularly every year 1 score		>				
Pro	Process Factors: Standards of the SD message determination and design (5 scores)						r
11	The organization determines SD content inclusively. (2.5 scores)						1
	Indicator:						1
	1 The stipulation of general content that relates to the organization.						
							٦

N0.	0. Standard Statement	Agree	Disagree		unsure No opinion	Please correct the following
	2 The stipulation of economic content	5				
	3 The stipulation of social content					
	4 The stipulation of environmental content.					
	5 The stipulation of corporate governance content.					
	Criteria: Examining the statements disseminated by the corporate media to the public,					
	both online and offline.					
	- Having general content of the organization 0.5 scores			1		
	- Having economic content			T		
	- Having social content 0.5 scores			U		
	- Having environmental content 0.5 scores	Λ,		1		
	-Having corporate governance content 0.5 scores	4				
12	2 The organization has a proper SD message design (2.5 scores)					
	Indicator:					
	1. The content presents the past operational performance, the present operations, and the	1				
	future plans.					
	2. The content contains details that connect to every sustainability dimension clearly, with		Ċ			
	precise and well-organized content, that is easy to understand.					
	3. The content is designed with and presented by verbal and nonverbal language (i.e.,					
	illustrations, graphics, icons, etc.) via diverse and attractive techniques.					
	4. The content is designed and presented under the specified main theme and corporate					
	identity.					
	-					

Ζ	No. Standard Statement	Agree	Disagree	unsure	unsure No opinion	Please correct the following
	5. The content an organization communicates to stakeholders via main corporate channels	S				
	must be written in both Thai and English.					
	Criteria: Examining the content publicized through corporate media in the form of both	h				
	online and offline media to the public.					
	- The message presents the past operational performance, what is		U			
	doing at present, and what will do in the future 0.5 scores	S				
	- The message contains details that connect to every sustainability dimension					
	clearly and is precise and well-organized for easy understanding 0.5 scores	S		1		
	- The message is designed with and presented by verbal and nonverbal			U		
	through diverse techniques 0.5 scores	s		1		
	- The message is designed and presented under the corporate main theme	7				
	and corporate identity 0.5 scores	S		7		
	- The content that is communicated to stakeholders via corporate main					
	channels is publicized in both Thai and English 0.5 scores	S				
Ы	Process Factors: standards of communication channel planning and usage for SD (5 scores)	es)			-	
1	13 The organization plans the use of media and channels that are proper for stakeholder	i	Ċ			
	groups. (2.5 scores)					
	Indicator:					
	1. Having plans for using proper communication channels for each group of stakeholders	s				
	2. Having effective corporate media or communication channels that cover every	y				
	stakeholder group, i.e., personal, printed, electronic, new, and activity media.	ļ				

No.	Standard Statement	Agree	Disagree	unsure	unsure No opinion	Please correct the
						10110 W111g
	Criteria: Examining the statements from the media the companies use to publicize them to	5				
	the public, in the form of online and offline media					
	- Having plans for using communication channels suitable for each					
	stakeholder group. 1.5 scores					
	- Having media or communication channels cover all groups of major stakeholders, i.e.,		U			
	- Continuous contact/ meeting with stakeholders 0.2 scores			1		
	- Letters, posters, brochures, leaflets, and documents or reports 0.2 scores					
	- Having telephone numbers that can contact 24-hour 0.2 scores			T		
	- Having a website, emails, and social media			U		
	- Organizing meetings, seminars, training, company visit or field			1		
	trip, relationship-establishment activities, joint activities/projects,	7				
	and opinion surveys.			7		
14	The organization provides communication channels for promoting the stakeholders'					
	participation and responses (2.5 scores)					
	Indicator:					
	1. The organization has a communication channel for encouraging stakeholders to		Ċ			
	participate in organizational operations.		>			
	2. The organizational channels accord with the expectation of each major stakeholder					
	group (they can be the same channel or media, such as new media is used for					
	publicizing corporate websites, or they can be corporate Facebook or Line group, etc.).					
	The following communication channels are provided for each stakeholder group:					

No.	Standard Statement	Agree	Disagree	unsure	unsure No opinion	Please correct the following	e
	- Personal media, new media, and activity media suitable for the employee group.	5					
	- Printed media, electronic media, new media, and activity media suitable for the						
	shareholder or investor group.						
	- Personal media and activity media suitable for the government agency group						
	- Personal media, electronic media, new media, and activity media suitable for the		U				
	consumer or customer group.						
	- Personal media and activity media suitable for business partners						
	- Electronic and new media suitable for creditors			T			
	- Electronic media and activity media, suitable for the community or societal group.			U			
1	Criteria: Examining the statements from the media the companies use to	2		7			
	publicize them to the public, in the form of online and offline media						
	- The organization provides communication channels for promoting			2			
	interactive participation of every major group of stakeholders 1 score			5			
	- The provided communication channels can respond to the expectation						
	of each stakeholder group by covering the following groups (1.5 scores)						
	 Personal media, new media, and activity media suitable for 		Ċ				
	the employee groups. 0.3 scores		>				
	 Printed media, electronic media, new media, and activity media 						
	suitable for the shareholder or investor group. 0.2 scores						
	 Personal media and activity media suitable for the government 						
	agency group 0.2 scores						

No.	Standard Statement	Agree	Disagree		unsure No opinion	riease correct une following
	 Personal media, electronic media, new media, and activity media 	30				
	suitable for the consumer or customer group.					
	 Personal media and activity media suitable for business 					
	Partners 0.2 scores					
	 Electronic and new media for creditor group 0.2 scores 		U			
	 Personal media and activity media for the community 					
	or societal group.			1		
Proce	Process Factors: Standards of the Communication Process for SD (10 scores)					
15	The organizational leaders are determined to operate a business under the concept of			J		
	sustainable development (4 scores)			1		
	Indicator:	7				
	1. Organizational leaders attended meetings or training on SD in the past year.			2		
	2. Organizational leaders have a joint meeting for stipulating policies and organizational			1		
	sustainability operational guidelines.					
	3. Organizational leaders communicate concepts and guidelines of SD to their employees					
	regularly.		Ċ			
	4. Organizational leaders commit to operating business by SD concepts.					
	5. Organizational leaders perform themselves as role models concerning SD to both					
	internal and external stakeholders.					
•	Criteria: Examining the statements from the annual report, organizational communication					
	performance report, and opinion surveys of employees.					

	No.	Standard Statement	Agree	Disagree		unsure No opinion	riease correct une following
	- Orga	Organizational leaders attended meetings or training on SD in the past year 0.8 scores	50				
	- Orga	Organizational leaders have a joint meeting for stipulating policies and					
	orgâ	organizational sustainability operational guidelines. 0.8 scores					
	- Orga	Organizational leaders communicate concepts and guidelines of SD to					
	their	their employees regularly. 0.8 scores		U			
	- Orga	Organizational leaders commit to operating business by SD concepts. 0.8 scores			1		
	- Orga	Organizational leaders perform themselves as role models concerning			Í		
	SD t	SD to both internal and external stakeholders.			1		
16		Communication for SD is integrated and covers all groups of stakeholders (3 scores)			J		
	Indicator:						
	1. Havi	1. Having a mechanism for integrating the concept of communication for SD into					
	oper	operations of every working unit of the organization.			7		
	2. Exec	Executing communication for SD by the line of authority throughout the organization.					
	3. Havi	Having a mechanism for listening to subordinates' opinions and suggestions for SD					
	oper	operations transparently and equally.					
	4. Havi	Having a mechanism for promoting external stakeholders' participation in SD		Ċ			
	oper	operations.					
	5. Havi	Having an organizational SD information center and information management					
	6. Com	Communicating stories of SD operations and reporting SD operational performance to					
	stakı	stakeholders consistently and continuously (SD report)					
	Criteria:	ia: Examining the statements from the annual report, SD report, organizational					

No.	Standard Statement	Agree	Disagree	ansun	unsure No opinion	Please correct the following
	communication performance report, and surveys of stakeholders' opinions.	5				
	- Having a mechanism for integrating the concept of communication					
	for SD into operations of every working unit of the organization 0.5 scores					
	- Executing communication for SD by the line of authority					
	throughout the organization. 0.5 scores		U			
	- Having a mechanism for listening to subordinates' opinions					
	and suggestions for SD operations transparently and equally. 0.5 scores					
	- Having a mechanism for promoting external stakeholders'			T		
	participation in SD operations. 0.5 scores			U		
	- Having an organizational SD information center and information			1		
	management 0.5 scores	4				
	- Communicating stories of SD operations and reporting SD operational					
	performance to stakeholders consistently and continuously 0.5 scores					
17	The regulation and assessment of communication for SD effectiveness (3 scores)					
	Indicator:					
	1. Having a mechanism for continuous following, monitoring, and regulating		Ċ			
	communication for SD operations as specified in the strategies and plans.		>			
	2. Evaluating communication for SD performance continuously					
	3. Reviewing the effectiveness of communication for SD continuously.					
	Criteria: Examining the statements from the annual report, SD report, organizational					
	communication performance, and surveys of stakeholders' opinions.					

							-
N0.	Standard Statement	Agree	Disagree		unsure No opinion	Please correct the following	
	- Having a mechanism for continuous following, monitoring, and Regulating	30					
	communication for SD operations as specified in the strategies and plans. 1 score						
	- Evaluating communication for SD performance continuously 1 score						
	- Reviewing the effectiveness of communication for SD continuously 1 score						
Ou	Output Factors: Standards of communication for SD efficiency (4 scores)						
18	The organizational communication for SD is Efficient. (4 scores)						
	Indicator:			1			_
	1. Sustainability is one of the topics evaluated by the committee.						
	2. Sustainability is one of the topics evaluated by top executives			U			
	3. Better business performance	Λ,		1			
	4. More effective resource utilization	7					
	5. introduction of new product and service innovation						
	6. Timely crisis management						
	7. A decrease of complaints statistics						
	8. An increase of positive news and a decrease of negative and fake news						
	9. Stakeholders' adoption of SD behaviors.		Ċ				
	Criteria: Examining the statements from assessment policies and criteria of the committees						
	and top executives, the operational performance report and financial statements, the annual						
	report, the Registration Statement Form (Form 56-1), SD report, news analysis reports,						
	and surveys of stakeholders' opinions, including from the media that companies use to						
	present statements to the public.						
							-

No.	. Standard Statement	Agree	Disagree	unsure	unsure No opinion	Please correct the following
	- Sustainability is one of the topics in the evaluation of the committee	5				
	and top executives 0.5 scores					
	- Better business performance from last year 0.5 scores					
	- More effective resource utilization 0.5 scores					
	- Introduction of new product and service innovation that is		U //			
	friendly to society and the environment 0.5 scores			1		
	- Timely crisis management 0.5 scores					
	- A decrease in complaints statistics 0.5 scores			T		
	- An increase of positive news and a decrease of negative			U		
	and fake news 0.5 scores			1		
	- Stakeholders' adoption of SD behaviors. 0.5 scores	4				
Out	Output Factors: Standards of the perception and understanding of organizational SD (2 scores)	ores)				
19	Perception and understanding of the organizational SD approach (2 scores)		$\leq //$	1		
	Indicator:					
	1. Stakeholders perceive the organizational SD approach.					
	2. Stakeholders understand the organizational SD approach		Ċ			
	Criteria: Examining from the annual survey of stakeholders' perception and understanding.					
	- Stakeholders' perception of the overall organizational SD approach					
	at a high level					
	- Stakeholders' understanding of the overall organizational SD approach					
	at a high level					

N0.	Standard Statement	Agree	Disagree		unsure No opinion	Please correct the following
Out	Output Factors: Standards of SD information disclosure and the report (14 scores)	5				
20	The information disclosure and SD report are transparent. (4 scores)					
	Indicator:					
	1. Correct information disclosure and reporting following SD information disclosure					
	regulations of both Thai and universal.		U			
	2. Detailed information disclosure and reporting by connecting both quantitative and					
	qualitative information.					
	3. Timely information disclosure and report that is appropriate for the situation.			T		
	4. Information disclosure and report that is easy to understand, precise, and is not			U		
	complicated.			1		
	Criteria: Examining information from the annual report, the Registration Statement Form	7				
	(Form 56-1), SD report, and from the media that publicizes information to the public.					
	- Correct information disclosure and reporting following SD information					
	disclosure regulations of both Thai and universal.					
	- Detailed information disclosure and reporting by connecting both					
	quantitative and qualitative information.		Č			
	- Timely information disclosure and report that is appropriate					
	for the situation.					
	- Information disclosure and report that is easy to understand,					
	precise, and is not complicated.					
21	The organizational SD information disclosure and report are complete and sufficient.					

°°	Standard Statement (10 scores)	Agree	CON DODI		unsure No opinion	
	10 scores)		DISAGree		ı	following
		50				
	Indicator:					
	1 Disclosure and report of organizational general information.					
	2 Disclosure and report of economic information.					
	3 Disclosure and report of social information		U			
	4 Disclosure and report of environmental information			1		
	5 Disclosure and report of the corporate governance information					
	Criteria: Examining the information from the annual report, the Registration Statement					
H	Form (Form 56-1), SD report, and media that publicizes information to the public.			U		
	- Disclosure and report of organizational general information.			1		
	(comprising 1) name of the organization, 2) nature of business operations, 3) a brief					
	history, 4) products and services, 5) contact channels, 6) business size, 7) supply chain,			7		
	8) objectives/goals, 9) organizational value, 10) numbers of employees, 11)			1		
	organizational structure, 12) location, 13) achievement and awards, and 15) related laws					
	and regulations.)					
I	Disclosure and report of economic information		Ċ			
	(comprising 1) analysis and explanations of the management, 2) inter-transactions or					
	connected transactions, 3) financial status/operational performance, 4) auditor report, 5)					
	financial statement, 6) market and competition/market shares, 7) significant changes, 8)					
	returns and welfare, 9) research and development, 10) technological and innovation					
	application and 11) dividend payment.)					

No. Standard Statement Agre Marrer No. Please currer the more point Marrer No. Please currer the more point Please currer the point Please currer the point 1 Disclosure and report of social information 2 socres Agre Jason Marrer No optimin Jalour								l
 Disclosure and report of social information Disclosure and report of social information Ccomprising 1) equal employment and labor treatment, 2) labor relations, 3) diversity, 4) occupational health and safety, 5) knowledge training, 6) community and social development, 7) labels and packaging, 8) quality and safe product and service presentation, 9) human rights respect. 10) supply chain management, 11) personal data confidential, 12) impacts on community and society, 13) participation and support of stakeholders.) Disclosure and report of environmental information Disclosure and report of environmental standards, 3) innovarive technology development that is friendly to the environment, 4) hiodiversity, 5) carbon emission, 6) the coping with climate change, 7) packaging management, 5) environment, 2) compliance with the environment, 4) hiodiversity, 5) carbon emission, 6) the coping with climate change, 7) packaging management, 5) environment and whistleholoring protection, 4) risk management, 5) environment and with environmenter, 7) internal and external andit, 8) conflict of interests, 9) use of inside information or insider trading, 10) cyber security, 11) anti-complicies and qualification of the committee and top executives, 14) roles and reports and qualification of the committee and top executives, 15) romination, 18) compensation, 19) scope diversity of the commitees, 10) beardership, 17) nomi	Ŋ	Standard Statement	Aoree	Disaoree		No oninion	Please correct th	e
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		technology development that is friendly to the environment, 4) biodiversity, 5) carbon	4					
		emission, 6) the coping with climate change, 7) packaging management, 8) waste						
		management, 9) environmental impacts, and 10) the accomplishment of SDGs)						
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		anti-corruption, 12) governance structure, 13) profiles and qualification of the committee and						
		top executives, 14) roles and responsibilities of a board committee and top executives, 15)						

Ž	No.	Standard Statement	Agree	Disagree	unsure	No opinion	Please correct the
			D	0			following
		and authority, 20) share-holding structure, 21) responsibility report of the board committee	0				
		and sub-committee, 22) anti-corruption, and 23) securities holding.					
Õ	utcol	Outcome Factors: Effectiveness of communication for SD standards (20 scores)					
22		Stakeholders' satisfaction with organizational SD operations and communication.					
		(6 scores)		U /			
	L	Indicator:					
		1 Satisfaction with the organizational SD operations			1		
		2 Satisfaction with the organizational communication for SD.					
	1	Criteria: Examining the statements from the annual survey of stakeholders' satisfaction.			5		
		- Satisfaction with the overall organizational SD operations averagely			1		
		at a high level 3 scores	4				
		- Satisfaction with the overall organizational SD communication					
		averagely at a high level 3 scores			1		
5	23	Stakeholders' confidence and acceptance of the organizational SD operations and					
	-	communication (6 scores)					
	L	Indicator:		Č			
		1. Stakeholders' confidence and acceptance of the organizational SD operations.					
		2. Stakeholders' confidence and acceptance of the organizational communication for					
		SD.					
	<u> </u>	Criteria: Examining them from the annual survey of stakeholders' confidence and					
	-	acceptance.					
	-						

No.	Standard Statement	Agree	Disagree	unsure	unsure No opinion	Please correct the following	
	- The level of stakeholders' confidence and acceptance of the organizational	3					-
	SD operations as a whole averagely at a high level.						
	- The level of stakeholders' confidence and acceptance of the organizational						
	communication for SD as a whole averagely at a high level.						
	- The level of stakeholders' confidence and acceptance in deciding about		U				
	the overall organizational operations at a high level or higher 2 scores						
24	The organizational image and reputation related to SD. (8 scores)						
	Indicator:						
	1. The organizational image and reputation related to SD			U			
	2. Awards granted by Thai and international regulating and supporting agencies			1			
	3. The organizational SD assessment by Thai and international regulating and supporting	4					
	agencies						
	4. Stakeholders' engagement with and loyalty to the organization and brand.			5			
	Criteria: Examining the statements from the annual survey of organizational image and						-
	reputation, organizational SD operational performance report, the annual report, and SD						
	report, including the admiration certificates from SD regulating and supporting agencies.		Ċ				
	- The organizational image and reputation related to SD are averagely						
	at a good level. 2 scores						
	- The receipt of SD awards from Thai and international regulating and						
	supporting agencies in the past year 2 scores						
	- The result of SD assessment by Thai and international regulating and						
							-

N0.	Standard Statement	Agree	Disagree		unsure No opinion	Please correct the following
	supporting agencies at a good level in the past year 2 scores	-5				0
	- The stakeholders' average engagement and loyalty to the organizational					
	brand at a high level 2 scores					
Ou	Outcome Factors: Standards of shared value creation with the stakeholders (12.5 scores)					
25	A response to stakeholders' expectation and the creation of their participation					
	(5 scores)					
	Indicator:			1		
	1. Stakeholders' participation in organizational operations for SD.					
	2. A response to stakeholders' expectation of organizational operations for SD.			U		
	Criteria: Examining the statements from the annual survey of stakeholders' expectations			1		
	and participation.	7				
	- Stakeholders' participation in organizational operations for SD. 2.5 scores					
	- A response to stakeholders' expectation of organizational operations for SD. 2.5 scores					
26	The creation of shared value between the organization and society (7.5 scores)					
	Indicator:					
	1. The development of products and services that respond to society's genuine needs.		Ċ			
	2. Productivity development in combination with the value chain.					
	3. The development of local collaborative clusters that facilitates business.					
	Criteria: Examining the statements from the operational performance on the shared value					
	with the society, the annual report, the Registration Statement Form (Form 56-1), SD					
	report, and the annual survey of stakeholders' opinions, including from the media that					

No.			_			please rorrect the
	Standard Statement	Agree	Disaoree		unsure No oninion	AID 100 100 ACDAT T
			22 ISpero		nonndo ou	following
	publicizes such statements to the public .:	5				
	- The development of products and services that respond to society's					
	genuine needs. 2.5 scores					
	- Productivity development in combination with the value chain.					
	- The development of local collaborative clusters that facilitates business. 2.5 scores		U			
Outc	Outcome Factors: Standard of the Creation of Sustainability Equilibrium in all dimensions (7.5 scores)	5 scores				
27	Effectiveness of organizational SD operations in all dimensions. (7.5 scores)					
	Indicator:					
	1. More securities holdings and increased share values			U		
	2. Effective adaptability of the organization in crises	Ń		1		
	3. The accomplishment of or a response to SDGs.					
	Criteria: Examining the statements from the sustainability operational performance report					
	in the annual report, the Registration Statement Form (Form 56-1), SD report, and the			1		
	annual survey of stakeholders' opinion, including the media that publicizes the statements					
	to the public.:					
	- More securities holdings and increased share values 2.5 scores		Ċ			
	- Effective adaptability of the organization in crises 2.5 scores					
	- The accomplishment of SDGs.					

			V	J	5				
	2								
Additional opinions				2					

Appendix B

An Assessment Form of Communication Standards for SD of Thai Listed Companies

Name of the organization		••••••	
Assessor/evaluator	•••••		
Telephone	Email		
Evaluation Date			

Instruction:

The assessment form of communication standards for sustainable development (SD) of Thai listed companies was organized as supplement information of the in-depth interviews with Thai listed companies, which are representatives of each industry group classified by the Stock Exchange of Thailand (2019), to inquire opinions on the determination and suitability of the communication standards and indicators to be applied. The study is a partial fulfillment of the requirements for the Degree of Doctor of Philosophy (Communication Arts and Innovation), National Institute of Development Administration (NIDA). The form was formulated by the literature review of theories and concepts, and the analysis of documents and reports, including from the in-depth interviews with the executives and practitioners of the leading companies listed in the name list of sustainable stock in 2019, with distinguished performance in communication for SD. Thus, all the obtained information was used to construct an assessment form of communication standards for SD of Thai listed companies. The objectives of the assessment are as follows:

- 1. To create awareness of the significance of communication quality and standards for SD.
- 2. To establish guidelines of communication for SD for organizations, offices, and institutions to be applied towards their organizational effectiveness.
- 3. To guarantee the consistency of the quality and assure the operations and communications for SD.
- 4. To create value and value-added for organizations, including raising and strengthening the standards of sustainable development of Thai business sectors.

A Survey on the Assessment of Communication Standards for Sustainable Development of Thai Listed Companies

Input Factors: SD management structure standards (4 scores)

Standard Statement No. 1: Clear organizational management structure for supporting SD operations. (2 scores)

	To Plantane	E-days	V/ NI-
	Indicators	Evidence	Yes No
Indicators:			

- 1 Having at least one group of a board of directors or committee or sub-committee (at the board or policy level) with specific roles, duties, and responsibilities in stipulating and governing SD explicitly, and at least one sustainability expert or personnel with experience in sustainability.
- 2 Having at least one group of a committee, or subcommittee, or working group (at the management level) with specific roles, duties, and responsibilities in stipulating and governing SD explicitly.
- 3 Having at least one division/section/ or department (at the operational level) with specific roles, duties, and responsibilities in stipulating and governing SD explicitly.

<u>Criteria</u>: Assessing organizational management structure, roles, and documents or a handbook of Standard Operating Procedure (SOP). None = 0 score. If yes, the scoring is as follows

- The organization has a supporting structure at the policy level 1 score
- The organization has a supporting structure at the management level 0.75 scores
- The organization has a supporting structure at the operational level 0.25 scores

Examiner: An assigned assessor

Total scores

Input Factors: SD management structure standards (4 scores)

Standard Statement No. 2: The organization has a mechanism in governing sustainability operations systematically (2 scores)

Indicators E	vidence	Yes	No
Indicators:			
1. Having a report on sustainability operational performance			
to a committee responsible for sustainability explicitly.			
2. A concerned committee has a meeting agenda on the			
sustainability operational performance at least every three			
months.			
3. Having a report of sustainability operational performance			
certified by the Sustainability Committee or Sub-			
committee regularly every year.			
<u>Criteria</u> : Assessing sustainability operational performance concerning committee, management structure, a report of Su sustainability operations. None = 0 score. If yes, the score	stainability	Com	
- Having a direct line to report to Sustainability Committee	0.6 s	cores	
- Having a sustainability meeting every three month	0.6 s	cores	
- Having a report on the responsibility of the sustainability committ	ee 0.8 s	cores	
Examiner: An assigned assessor			

Total	scores

Input Factors: Vision, Mission, and Value Standards (4 scores)

Standard Statement No. 3: The organizational vision, and/or mission reflects sustainable development guidelines explicitly. (2 scores)

	Indicators	Evidence	Yes	No
Inc	licators:			
1.	The organizational vision reflects SD operations			
	explicitly			
2.	The organizational mission reflects SD operations			
	explicitly			
3.	The organizational vision and mission are reviewed			
	regularly every year.			
	 teria: Examining the statements of organizational vision ort, SD report, and websites. None = 0 score. If yes, the score. The explicit appearance of the SD concept in the organization. The explicit appearance of the SD concept in the organization. Having a review and assessment of the organizational variable. 	oring is as follows ational vision ational mission	s 0.6 s	cores
	once a year		0.8 s	scores
<u>Exa</u>	aminer: An assigned assessor			
		Total	5	scores
		AJ		

Input Factors: Vision, Mission, and Value Standards (4 scores)

Standard Statement No. 4: Sustainable development approach is contained as a part of the organizational value. (2 scores)

Indicators	Evidence	Yes	No
Indicators:			
1. The SD approach is contained as a part of the organizational value eminently.			
2. The SD approach appears in the strategic plans for			
creating value eminently.			
3. The efficiency of the organizational sustainability value			
is assessed and reviewed regularly every year.			
Criteria: Examining the statements of organizational value s	hown in the an	nual rei	port, S
report, and organizational websites, including in the strategic r		-	
	fulls for creating	5 organ	124(10)
value. None = 0 score. If yes, the scoring is as follows			
- The concept of SD appears in the organizational value	eminently	0.8	score
- Strategic plans of value creation display SD concepts a	and cover		
plans to communicate with organizational stakeholders	3	0.6	score
- Sustainability value is reviewed and assessed at least o	nce a year	0.6	score

Examiner: An assigned assessor

	Total	scores
นักมัก เป็น เป็น เป็น เป็น เป็น เป็น เป็น เป็น	,01	

Input Factors: SD Policy and Practice Standard (4 scores)

Standard Statement No. 5: The organization stipulates SD policies and practices explicitly in writing. (2 scores)

Indicators	Evidence	Yes No
Indicators:		
1. The organization has explicit written policies and		
practices.		
2. The organizational written policies and practices cover		
economic, social, environmental SD dimensions, and		
communicate to all stakeholders.		

<u>Criteria</u>: Examining policies and practices (through statements that identify operations concretely). None = 0 score. If yes, the scoring is as follows

-	Having corporate governance policies	0.5	scores
-	Having corporate governance practices	0.5	scores
-	Having SD policies covering economic, social, and		
	environmental dimension, including communication	0.5	scores
- 1	Having SD practices covering economic, social, and		
	environmental dimension, including communication	0.5	scores

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Examiner: An assigned assessor

Input Factors: SD Policy and Practices Standard (4 scores)

Standard Statement No. 6: SD policies and practices are enforced throughout the organization. (2 scores)

	Indicators	Evidence	Yes	No
Inc	licators:			
1.	SD policies and practices are certified by the committee			
	or sub-committee responsible for sustainability			
	distinctly.			
2.	A company has a mechanism in making all employees			
	acknowledged and comply with SD policies and			
	practices strictly.			
Cr	iteria: Examining the statements of the policies and practices	s certified by th	e commi	ittee o
sul	b-committee and signed by employees to acknowledge then	n. None $= 0$ so	core. If y	es, th
sco	oring is as follows			
- 5	SD policies and practices are certified by the committee and			
s	sub-committee		1 scor	e
- 5	SD policies and practices are acknowledged by employees dia	stinctly	1 scor	re
Ex	aminer: An assigned assessor			
		Total	sc	ores

Input Factors: Standard of the materiality analysis and assessment (2 scores)

Standard Statement No. 7: The analysis of the assessment of the organizational SD materiality is complete and well-rounded. (2 scores)

	Indicators Evider	nce	Yes	No
Ind	licators:			
1.	The organization analyzes and identifies the materiality			
2.	The organization prioritizes the materiality of			
	organizational sustainability.			
3.	The organization examines the materiality and has a			
	follow-up continuously			
3.	The organization reviews the materiality and reports			
as f	development outcomes continuously. <u>teria</u> : Examining the SD materiality from the report. None = 0 score. follows	If yes	, the so	coring
as f	<u>teria</u> : Examining the SD materiality from the report. None = 0 score.	If yes	, the so	coring
as f - S	<u>teria</u> : Examining the SD materiality from the report. None $= 0$ score. follows	If yes		coring
as f - S i	<u>teria</u> : Examining the SD materiality from the report. None $= 0$ score. follows Sustainability issues that are influential for business operation are	If yes		
as f - S i - S	teria: Examining the SD materiality from the report. None = 0 score. follows Sustainability issues that are influential for business operation are identified thoroughly and entirely	If yes	0.5	
as f - S - S s	teria: Examining the SD materiality from the report. None = 0 score. follows Sustainability issues that are influential for business operation are dentified thoroughly and entirely Sustainability issues are prioritized through a credibly academic	If yes	0.5	score
as f - S - S - S - T	teria: Examining the SD materiality from the report. None = 0 score. follows Sustainability issues that are influential for business operation are dentified thoroughly and entirely Sustainability issues are prioritized through a credibly academic survey and analysis process	If yes	0.5 0.5	score
as f - S - S - S - T i	teria: Examining the SD materiality from the report. None = 0 score. follows Sustainability issues that are influential for business operation are identified thoroughly and entirely Sustainability issues are prioritized through a credibly academic survey and analysis process The correctness of the assessment and prioritization of the materiality	If yes	0.5 0.5	score

Total scores

Input Factors: Standard of communication for SD strategy and operational planning (2 scores)

Standard Statement No. 8: The organization determines sustainability strategy and operational planning explicitly (2 scores)

Indicators	Evidence	Yes No
Indicators:		
1. The organization stipulates strategies and planning for		
sustainability operations clearly		
2. The organization stipulates strategies and planning for		
communication for SD operations clearly		
Criteria Examining SD strategic and action plans,	including the	organizationa
communication plans. None = 0 score. If yes, the scoring is	as follows	
- Having clear sustainability strategy/operational strategies		1 score
- Having clear communication strategies and operational pl	ans for supporting	SD 1 score
Examiner: An assigned assessor		
	Total	scores
	Total	scores

Input Factors: Standards related to stakeholders and expectation (4 scores) Standard Statement No. 9: The determination of every major group of the organizational stakeholders (2 scores)

	Indicators	Evidence	Yes	No
Inc	licator:			
1.	The organization explores, analyzes, identifies, and			
	prioritizes the significance of every major stakeholder			
	group clearly.			
2.	The organization reveals the details of determination and			
	prioritization methods, including the relevance to each			
	group of stakeholders clearly.			
	Having exploration, analysis, identification, and prioritization	on of		
	the importance of stakeholder groups		1 score	
_	Having the detailed revealing of the determination and prior	ritization		
	methods and the relevance to each stakeholder group		1 score	
<u>Ex</u>	aminer: An assigned assessor			
		Total		scores

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Input Factors: Standards related to stakeholders and expectation (4 scores) Standard Statement No. 10: Detailed analysis and assessment of the stakeholders' expectation (2 scores)

 Indicators
 Evidence
 Yes
 No

 Indicator:
 1.
 Having thorough, correct, and complete analysis and assessment of stakeholders' expectations.
 2.
 Having a review of stakeholders' expectation regularly every year

 Criteria: Examining from the survey of stakeholders' expectations. None = 0 score. If yes, the scoring is as follows
 9 score
 1 score

 Having an analysis and assessment of stakeholders' expectations
 1 score
 1 score

 Examiner: An assigned assessor
 1 score
 1 score

Total	scores
	A.

<u>Process Factors:</u> Standards of the SD message determination and design (5 scores) Standard Statement No. 11 : The organization determines SD content inclusively. (2.5 scores)

Indicators	Evidence	Yes	No
Indicator:			
1. The stipulation of general content that relates to the organization.			
2. The stipulation of economic content			
3. The stipulation of social content			
4. The stipulation of environmental content.			
5. The stipulation of corporate governance content.			
<u>Criteria</u> : Examining the statements disseminated by the corp online and offline. None = 0 score. If yes, the scoring is as fol		the pub	lic, botl
- Having general content of the organization	0.5 s	scores	
- Having economic content	0.5 s	scores	
- Having social content	0.5 s	scores	
- Having environmental content	0.5 s	scores	
- Having corporate governance content	0.5	scores	

Examiner: An assigned assessor

	Total	scores
Some and		

<u>Process Factors:</u> Standards of the SD message determination and design (5 scores) Standard Statement No. 12: The organization has a proper SD message design (2.5 scores)

Ind	Indicators Evidence	Yes	No
mu	icator:		
1.	The content presents the past operational performance,		
	the present operations, and the future plans.		
2.	The content contains details that connect to every		
	sustainability dimension clearly, with precise and well-		
	organized content, that is easy to understand.		
3.	The content is designed with and presented by verbal		
	and nonverbal language (i.e., illustrations, graphics,		
	icons, etc.) via diverse and attractive techniques.		
4.	The content is designed and presented under the		
	specified main theme and corporate identity.		
5.	The content an organization communicates to		
	stakeholders via main corporate channels must be		
	witten in both Thei and English		
	written in both Thai and English.		
	written in both Thai and English.	/.,	
Cri	teria: Examining the content publicized through corporate media in the form	of bot	h onlir
			h onlir
	teria: Examining the content publicized through corporate media in the form		h onlir
	teria: Examining the content publicized through corporate media in the form offline media to the public. None = 0 score. If yes, the scoring is as follows	S C	h onlin score
	teria: Examining the content publicized through corporate media in the form offline media to the public. None = 0 score. If yes, the scoring is as follows - The message presents the past operational performance, what is	0.5	
	 teria: Examining the content publicized through corporate media in the form offline media to the public. None = 0 score. If yes, the scoring is as follows The message presents the past operational performance, what is doing at present, and what will do in the future 	0.5 ion	
	 teria: Examining the content publicized through corporate media in the form offline media to the public. None = 0 score. If yes, the scoring is as follows The message presents the past operational performance, what is doing at present, and what will do in the future The message contains details that connect to every sustainability dimension 	0.5 ion	score
	 teria: Examining the content publicized through corporate media in the form offline media to the public. None = 0 score. If yes, the scoring is as follows The message presents the past operational performance, what is doing at present, and what will do in the future The message contains details that connect to every sustainability dimens clearly and is precise and well-organized for easy understanding 	0.5 ion 0.5	score
	 teria: Examining the content publicized through corporate media in the form offline media to the public. None = 0 score. If yes, the scoring is as follows The message presents the past operational performance, what is doing at present, and what will do in the future The message contains details that connect to every sustainability dimens clearly and is precise and well-organized for easy understanding The message is designed with and presented by verbal and nonverbal 	0.5 ion 0.5	scores
	 teria: Examining the content publicized through corporate media in the form offline media to the public. None = 0 score. If yes, the scoring is as follows The message presents the past operational performance, what is doing at present, and what will do in the future The message contains details that connect to every sustainability dimension clearly and is precise and well-organized for easy understanding The message is designed with and presented by verbal and nonverbal through diverse techniques 	0.5 ion 0.5 0.5	scores scores
	 teria: Examining the content publicized through corporate media in the form offline media to the public. None = 0 score. If yes, the scoring is as follows The message presents the past operational performance, what is doing at present, and what will do in the future The message contains details that connect to every sustainability dimensiclearly and is precise and well-organized for easy understanding The message is designed with and presented by verbal and nonverbal through diverse techniques The message is designed and presented under the corporate main theme 	0.5 ion 0.5 0.5	scores

Examiner: An assigned assessor

Total scores

Process Factors: Standards of communication channel planning and usage for SD (5 scores)

Standard Statement No. 13: The organization plans the use of media and channels that are proper for stakeholder groups. (2.5 scores)

Indicators	Evidence	Yes	No
Indicator:			
1. Having plans for using proper communication channels			
for each group of stakeholders			
2. Having effective corporate media or communication			
channels that cover every stakeholder group, i.e.,			
personal, printed, electronic, new, and activity media.			
Criteria: Examining the statements from the media the company	nies use to publi	cize the	m to th
public, in the form of online and offline media. None = 0	score. If yes, th	ne scori	ng is a
follows			
- Having plans for using communication channels suitab	ole for each		
stakeholder group.		1.5	scores
- Having media or communication channels cover all	groups of maje	or stake	holders
i.e.,			
Continuous contact/ meeting with stakeholders		0.2	scores
- Letters, posters, brochures, leaflets, and documents or	reports	0.2	scores
- Having telephone numbers that can contact 24-hour		0.2	scores
- Having a website, emails, and social media		0.2	scores
- Organizing meetings, seminars, training, company visi	C 11		

trip, relationship-establishment activities, joint activities/projects, and opinion surveys. 0.2 scores

Examiner: An assigned assessor

Total scores

Process Factors: Standards of communication channel planning and usage for SD (5 scores)

Standard Statement No. 14: The organization provides communication channels for promoting the stakeholders' participation and responses (2.5 scores)

	Indicators	Evidence	Yes	No
Inc	licator:			
1.	The organization has a communication channel for			
	encouraging stakeholders to participate in organizational			
	operations.			
2.	The organizational channels accord with the expectation			
	of each major stakeholder group (they can be the same			
	channel or media, such as new media is used for			
	publicizing corporate websites, or they can be corporate			
	Facebook or Line group, etc.). The following			
	communication channels are provided for each			
	stakeholder group:			
	- Personal media, new media, and activity media			
	suitable for the employee group.			
	- Printed media, electronic media, new media, and			
	activity media suitable for the shareholder or investor			
	group.			
	- Personal media and activity media suitable for the			
	government agency group			
	- Personal media, electronic media, new media, and			
	activity media suitable for the consumer or customer			
	group.			
	- Personal media and activity media suitable for			
	business partners			
	- Electronic and new media suitable for creditors			
	- Electronic media and activity media, suitable for the			
	community or societal group.			

<u>Criteria</u>: Examining the statements from the media the companies use to publicize them to the public, in the form of online and offline media None = 0 score. If yes, the scoring is as follows

-	The organization provides communication channels for promoting interact	ive
	participation of every major group of stakeholders	1 score
-	The provided communication channels can respond to the expectation of	
	each stakeholder group by covering the following groups (1.5 scores)	
	 Personal media, new media, and activity media suitable for 	
	the employee group.	0.3 scores
	Printed media, electronic media, new media, and activity media	
	suitable for the shareholder or investor group.	0.2 scores
	 Personal media and activity media suitable for the government 	
	agency group	0.2 scores
	Personal media, electronic media, new media, and activity media	
	suitable for the consumer or customer group.	0.2 scores
	 Personal media and activity media suitable for business Partners 	0.2 scores
	Electronic and new media for creditor group	0.2 scores
	 Personal media and activity media for the community 	
	or societal group.	0.2 scores

Examiner: An assigned assessor

Total scores

<u>Process Factors: Standards of the Communication Process for SD (10 scores)</u> Standard Statement No. 15: The organizational leaders are determined to operate a business under the concept of sustainable development (4 scores)

Indicators	Evidence	Yes	No
Indicator:			
1. Organizational leaders attended meetings or training on			
SD in the past year.			
2. Organizational leaders have a joint meeting for			
stipulating policies and organizational sustainability			
operational guidelines.			
3. Organizational leaders communicate concepts and			
guidelines of SD to their employees regularly.			
4. Organizational leaders commit to operating business by			
SD concepts.			
5. Organizational leaders perform themselves as role			
models concerning SD to both internal and external			
stakeholders.			

<u>Criteria</u>: Examining the statements from the annual report, organizational communication performance report, and opinion surveys of employees. None = 0 score. If yes, the scoring is as follows

	Organizational leaders attended meetings or training on SD	
	in the past year	0.8 scores
-	Organizational leaders have a joint meeting for stipulating policies	
	and organizational sustainability operational guidelines.	0.8 scores
-	Organizational leaders communicate concepts and guidelines	
	of SD to their employees regularly.	0.8 scores
-	Organizational leaders commit to operating business by SD concepts.	0.8 scores
-	Organizational leaders perform themselves as role models	
	concerning SD to both internal and external stakeholders.	0.8 scores

Examiner: An assigned assessor

Total scores

<u>Process Factors: Standards of the Communication Process for SD (10 scores)</u> Standard Statement No. 16: Communication for SD is integrated and covers all groups of stakeholders (3 scores)

Indicators	Evidence	Yes	No
Indicator:			
1. Having a mechanism for integrating the concept o	of		
communication for SD into operations of every working	g		
unit of the organization.			
2. Executing communication for SD by the line o	of		
authority throughout the organization.			
3. Having a mechanism for listening to subordinates	3'		
opinions and suggestions for SD operation	S		
transparently and equally.			
4. Having a mechanism for promoting externa	ıl		
stakeholders' participation in SD operations.			
5. Having an organizational SD information center and	d		
information management			
6. Communicating stories of SD operations and reporting	g		
SD operational performance to stakeholders consistently	у		
and continuously (SD report)			

<u>Criteria</u>: Examining the statements from the annual report, SD report, organizational communication performance report, and surveys of stakeholders' opinions. None = 0 score. If yes, the scoring is as follows

-	Having a mechanism for integrating the concept of communication		
	for SD into operations of every working unit of the organization	0.5	scores
-	Executing communication for SD by the line of authority		
	throughout the organization.	0.5	scores
-	Having a mechanism for listening to subordinates' opinions		
	and suggestions for SD operations transparently and equally.	0.5	scores
-	Having a mechanism for promoting external stakeholders'		
	participation in SD operations.	0.5	scores
-	Having an organizational SD information center and		
	information management	0.5	scores

Communicating stories of SD operations and reporting
 SD operational performance to stakeholders consistently
 and continuously
 0.5 scores

Examiner: An assigned assessor



Process Factors: Standards of the Communication Process for SD (10 scores) Standard Statement No. 17: The regulation and assessment of communication for SD effectiveness (3 scores)

Indicators	Evidence	Yes	No
Indicator:			
1. Having a mechanism for continuous following,			
monitoring, and regulating communication for SD			
operations as specified in the strategies and plans.			
2. Evaluating communication for SD performance			
continuously			
3. Reviewing the effectiveness of communication for SD			
continuously.			
<u>Criteria</u> : Examining the statements from the annual report communication performance, and surveys of stakeholders' opi	•	Ū	
the scoring is as follows		0 20010	
- Having a mechanism for continuous following, monitoring,	and		
Regulating communication for SD operations as specified i	n the		
strategies and plans.		1 sc	ore
- Evaluating communication for SD performance continuous	ly	1 sc	ore
- Reviewing the effectiveness of communication for SD cont	inuously	1 sc	ore
Examiner: An assigned assessor			
งคณิตมนบร	Total	5	scores

Output Factors: Standards of communication for SD efficiency (4 scores)

Standard Statement No. 18: The organizational communication for SD is Efficient. (4 scores)

	Indicators	Evidence	Yes	No
In	dicator:			
1.	Sustainability is one of the topics evaluated by the committee.			
2.	Sustainability is one of the topics evaluated by top executives			
3.	Better business performance			
4.	More effective resource utilization introduction of new			
	product and service innovation			
5.	Timely crisis management			
6.	A decrease of complaints statistics			
7.	An increase of positive news and a decrease of negative			
	and fake news			
8.	Stakeholders' adoption of SD behaviors.			
<u>C</u> 1	riteria: Examining the statements from assessment policies an	d criteria of t	he cor	nmittees
an	nd top executives, the operational performance report and fina	ancial stateme	nts, th	e annual
re	port, the Registration Statement Form (Form 56-1), SD repor	t, news analys	sis repo	orts, and
su	rveys of stakeholders' opinions, including from the media th	at companies	use to	present
sta	atements to the public. None $= 0$ score. If yes, the scoring is as t	follows		
	- Sustainability is one of the topics in the evaluation of the	committee		
	and top executives		0.5	scores
	- Better business performance from last year		0.5	scores

-	Better business performance from last year	0.5 scores
-	More effective resource utilization	0.5 scores
-	Introduction of new product and service innovation that is	
	friendly to society and the environment	0.5 scores
-	Timely crisis management	0.5 scores
-	A decrease in complaints statistics	0.5 scores
-	An increase of positive news and a decrease of negative and fake news	0.5 scores
		o .

- Stakeholders' adoption of SD behaviors. 0.5 scores

Examiner: An assigned assessor

Output Factors: Standards of the perception and understanding of organizational SD (2 scores)

Standard Statement No. 19: Perception and understanding of the organizational SD approach (2 scores)

Indicators	Evidence	Yes No
Indicator:		
1. Stakeholders perceive the organizational SD approach.		
2. Stakeholders understand the organizational SD approach		
Criteria: Examining from the annual survey of stakeholders'	perception and	understanding
None = 0 score. If yes, the scoring is as follows		
- Stakeholders' perception of the overall organizational S	D	
approach at a high level		1 score
- Stakeholders' understanding of the overall organization	al	
SD approach at a high level		1 score
Examiner: An assigned assessor		
	Total	scores
	10(a)	scores

<u>Output Factors:</u> Standards of SD information disclosure and the report (14 scores) Standard Statement No. 20: The information disclosure and SD report are transparent. (4 scores)

	Indicators E v	vidence	Yes	No
Ind	icator:			
1.	Correct information disclosure and reporting following			
	SD information disclosure regulations of both Thai and			
	universal.			
2.	Detailed information disclosure and reporting by			
	connecting both quantitative and qualitative			
	information.			
3.	Timely information disclosure and report that is			
	appropriate for the situation.			
4.	Information disclosure and report that is easy to			
	understand, precise, and is not complicated.			
Cri	teria: Examining information from the annual report, the Reg	istration \$	Stateme	nt Fo
<u>Cri</u>	teria: Examining information from the annual report, the Reg (Form 56-1), SD report, and from the media that publicizes None = 0 score. If yes, the scoring is as follows			
Crit	(Form 56-1), SD report, and from the media that publicizes	informatio	on to the	
Crit	(Form 56-1), SD report, and from the media that publicizes None = 0 score. If yes, the scoring is as follows	informatio	on to the	e publ
Crit	 (Form 56-1), SD report, and from the media that publicizes None = 0 score. If yes, the scoring is as follows Correct information disclosure and reporting following SD is 	information nformatic	on to the	e publ
Crit	 (Form 56-1), SD report, and from the media that publicizes None = 0 score. If yes, the scoring is as follows Correct information disclosure and reporting following SD is disclosure regulations of both Thai and universal. 	information nformatic	on to the	e publ
Crit	 (Form 56-1), SD report, and from the media that publicizes None = 0 score. If yes, the scoring is as follows Correct information disclosure and reporting following SD is disclosure regulations of both Thai and universal. Detailed information disclosure and reporting by connecting 	information nformatic	on to the on 1 sc	e publ
Crit	 (Form 56-1), SD report, and from the media that publicizes None = 0 score. If yes, the scoring is as follows Correct information disclosure and reporting following SD is disclosure regulations of both Thai and universal. Detailed information disclosure and reporting by connecting quantitative and qualitative information. 	information nformatic	on to the on 1 sc	e publ ore ore
Crit	 (Form 56-1), SD report, and from the media that publicizes None = 0 score. If yes, the scoring is as follows Correct information disclosure and reporting following SD is disclosure regulations of both Thai and universal. Detailed information disclosure and reporting by connecting quantitative and qualitative information. Timely information disclosure and report that is appropriate 	information nformation both	on to the on 1 sc 1 sc	e publ ore ore

Examiner: An assigned assessor

scores

Output Factors: Standards of SD information disclosure and the report (14 scores) Standard Statement No. 21: The organizational SD information disclosure and report are complete and sufficient. (10 scores)

inf	tor: sclosure and report of organizational general formation.
inf	
	formation.
2 Dis	
2 Di	sclosure and report of economic information.
3 Dis	sclosure and report of social information
4 Dis	sclosure and report of environmental information
5 Dis	sclosure and report of the corporate governance
inf	ormation

<u>Criteria</u>: Examining the information from the annual report, the Registration Statement Form (Form 56-1), SD report, and media that publicizes information to the public. None = 0 score. If yes, the scoring is as follows

- Disclosure and report of organizational general information. 2 scores
 (comprising 1) name of the organization, 2) nature of business operations, 3) a brief
 history, 4) products and services, 5) contact channels, 6) business size, 7) supply chain,
 8) objectives/goals, 9) organizational value, 10) numbers of employees, 11)
 organizational structure, 12) location, 13) achievement and awards, and 15) related laws
 and regulations.)
- Disclosure and report of economic information 2 scores (comprising 1) analysis and explanations of the management, 2) inter-transactions or connected transactions, 3) financial status/operational performance, 4) auditor report, 5) financial statement, 6) market and competition/market shares, 7) significant changes, 8) returns and welfare, 9) research and development, 10) technological and innovation application and 11) dividend payment.)
- Disclosure and report of social information 2 scores
 (comprising 1) equal employment and labor treatment, 2) labor relations, 3) diversity,
 4) occupational health and safety, 5) knowledge training, 6) community and social

development, 7) labels and packaging, 8) quality and safe product and service presentation, 9) human rights respect, 10) supply chain management, 11) personal data confidential, 12) impacts on community and society, 13) participation and support of stakeholders.)

- Disclosure and report of environmental information 2 scores (Comprising 1) effective management and utilization of natural resources, energy, and the environment, 2) compliance with the environmental standards, 3) innovative technology development that is friendly to the environment, 4) biodiversity, 5) carbon emission, 6) the coping with climate change, 7) packaging management, 8) waste management, 9) environmental impacts, and 10) the accomplishment of SDGs)
 - Disclosure and report of corporate governance 2 scores (Comprising 1) fair and equal treatment of stakeholders, 2) no law and regulation violation, 3) appeals management and whistleblowing protection, 4) risk management, 5) ethics/business codes of ethics, 6) operational governance, 7) internal and external audit, 8) conflict of interest, 9) use of inside information or insider trading, 10) cyber security, 11) anti-corruption, 12) governance structure, 13) profiles and qualification of the committee and top executives, 14) roles and responsibilities of a board committee and top executives, 15) diversity of the committees, 16) leadership, 17) nomination, 18) compensation, 19) scope and authority, 20) share-holding structure, 21) responsibility report of the board committee and sub-committee, 22) anti-corruption, and 23) securities holding.

Examiner: An assigned assessor

Total scores

Outcome Factors: Effectiveness of communication for SD standards (20 scores) Standard Statement No. 22: Stakeholders' satisfaction with organizational SD operations and communication. (6 scores)

Indicators	Evidence	Yes No
Indicator:		
1. Satisfaction with the organizational SD operations		
2. Satisfaction with the organizational communicati	on for	
SD.		
Criteria: Examining the statements from the annual sur	rvey of stakeholders' sa	tisfaction. No
= 0 score. If yes, the scoring is as follows		
- Satisfaction with the overall organizational SD oper	ations averagely	
at a high level		3 scores
- Satisfaction with the overall organizational SD com	munication	
averagely at a high level		3 scores
Examiner: An assigned assessor		
	Total	scores

Outcome Factors: Effectiveness of communication for SD standards (20 scores) Standard Statement No. 23: Stakeholders' confidence and acceptance of the organizational SD operations and communication (6 scores)

	Indicators Evidence Ye	s No
Indi	cator:	
1.	Stakeholders' confidence and acceptance of the	
	organizational SD operations.	
2.	Stakeholders' confidence and acceptance of the	
	organizational communication for SD.	
Crite	ria: Examining them from the annual survey of stakeholders' confidence and a	cceptance.
	e = 0 score. If yes, the scoring is as follows	
-	The level of stakeholders' confidence and acceptance of the organizational	
	SD operations as a whole averagely at a high level.	2 scores
-	The level of stakeholders' confidence and acceptance of the organizational	
	communication for SD as a whole averagely at a high level.	2 scores
-	The level of stakeholders' confidence and acceptance in deciding about	
-	the overall organizational operations at a high level or higher	2 scores
Evor	niner. An assigned assessor	

Total scores

Outcome Factors: Effectiveness of communication for SD standards (20 scores) Standard Statement No. 24: The organizational image and reputation related to SD. (8 scores)

	Indicators Evidenc	e Yes	No
In	dicator:		
1.	The organizational image and reputation related to SD		
2.	Awards granted by Thai and international regulating and supporting agencies		
3.	The organizational SD assessment by Thai and		
	international regulating and supporting agencies		
4.	Stakeholders' engagement with and loyalty to the		
	organization and brand.		
reț reț	iteria: Examining the statements from the annual survey of organiz outation, organizational SD operational performance report, the annu- port, including the admiration certificates from SD regulating and su one = 0 score. If yes, the scoring is as follows	al report,	and SI
	- The organizational image and reputation related to SD		
	are averagely at a good level.	2 s	cores
	- The receipt of SD awards from Thai and international		
	regulating and supporting agencies in the past year	2 s	cores
	- The result of SD assessment by Thai and international		
	regulating and supporting agencies at a good level in the past year	2 s	cores
	- The stakeholders' average engagement and loyalty		
	to the organizational brand at a high level	2 s	cores

Examiner: An assigned assessor

Total scores

Outcome Factors: Standards of shared value creation with the stakeholders (12.5 scores)

Standard Statement No. 25: A response to stakeholders' expectation and the creation of their participation (5 scores)

Indicators	Evidence	Yes	No
Indicator:			
1. Stakeholders' participation in organizational operations			
for SD.			
2. A response to stakeholders' expectation of			
organizational operations for SD.			
Criteria: Examining the statements from the annual survey of	stakeholders' e	expectati	ions and
participation. None = 0 score. If yes, the scoring is as follows			
- Stakeholders' participation in organizational operations for	SD. 2.5 s	scores	
- A response to stakeholders' expectation of organizational			
operations for SD	2.5	scores	
Examiner: An assigned assessor			
	Total	5	scores

Outcome Factors: Standards of shared value creation with the stakeholders (12.5 scores)

Standard Statement No. 26: The creation of shared value between the organization and society (7.5 scores)

	Indicators	Evidence	Yes	No
Inc	licator:			
1.	The development of products and services that respond			
	to society's genuine needs.			
2.	Productivity development in combination with the value			
	chain.			
3.	The development of local collaborative clusters that			
	facilitates business.			
		4		
Cr	teria: Examining the statements from the operational performed	mance on the sl	nared va	lue wit
the	society, the annual report, the Registration Statement For	rm (Form 56-1),	SD rep	oort, an
the	annual survey of stakeholders' opinions, including from	the media that	publici	zes suc
sta	tements to the public.: None $= 0$ score. If yes, the scoring is	s as follows		
-	The development of products and services that respond to			
	society's genuine needs.	2.5	scores	
-	Productivity development in combination with			
	the value chain.	2.5	scores	
-	The development of local collaborative clusters			
	that facilitates business.	2.5	scores	
Ex	aminer: An assigned assessor			

Total

scores

Outcome Factors: Standard of the Creation of Sustainability Equilibrium in all dimensions (7.5 scores)

Standard Statement No. 27: Effectiveness of organizational SD operations in all dimensions. (7.5 scores)

	Indicators	Evidence	Yes No
Indicator:			

- 1. More securities holdings and increased share values
- 2. Effective adaptability of the organization in crises
- 3. The accomplishment of or a response to SDGs.

<u>Criteria</u>: Examining the statements from the sustainability operational performance report in the annual report, the Registration Statement Form (Form 56-1), SD report, and the annual survey of stakeholders' opinion, including the media that publicizes the statements to the public.: None = 0 score. If yes, the scoring is as follows

•	More securities holdings and increased share values	2.5	scores
	Effective adaptability of the organization in crises	2.5	scores
-	The accomplishment of SDGs.	2.5	scores

Examiner: An assigned assessor

Total	scores
1	

Appendix C

Brief Introduction of Thai Listed Companies that Were Samples of the Research "Communication Standards for Sustainable Development of Thai Listed Companies"

CPALL		
Full Name	CP All Public Company Limited	PALL
Type of Business	Services/Commerce	
Market Capital	565,935.38 million baht	
Nature of business	The Company operates the convenience store	business under
	the 7-Eleven trademark and franchises to othe	r retailers in the
	territory of Thailand and has invested in support	orting businesses
	such as manufacturing facility of food & bake	ry products, bill
	payment services and so on. In addition, the	e Company has
	invested in the operations of membership-base	d Cash & Carry
	trade centers under the name "Makro".	
Address	313 C.P. Tower, Floor 24, Silom Road, Ban	g Rak Bangkok
	10500	
Telephone	0-2071-9000	
Fax	0-2071-8617	
Website	www.cpall.co.th	
Establish Date	1988	
Registration date wit	th SET 14/10/2003	
CPF	ติยากัดกางรัง	

CPF

Full name	Charoen Pokphand Foods Public Company
	Limited,
Type of business	Agro & Food Industry/Food & Beverage
Market Capital	249,726.03 million baht
Nature of business	The Company engages in agro-industrial and food
	conglomerate with 3 product categories : 1) Feed business
	involving in production and sale of animal feed, 2) Farm-

Processing business involving in breeding, farming and basic meat processing, 3) Food business involving in production of semi-cooked and cooked meet as well as ready-meal products including food retail and food outlets.

Address	C.P. TOWER, FLOOR 15, 313 SILOM ROAD, BANG RAK
	Bangkok 10500
Telephone	0-2766-8000
Fax	0-2638-2942
Website	www.cpfworldwide.com
Establish Date	17/1/1978
Registration date with	n SET 21/12/1987

CPN

O III	
Full name	Central Pattana Plc.
Type of business	Property & Construction/Property Development
Market Capital	241,230.00 million baht
Nature of business	Develop and invest in retail property for rent comprising large-
	scale shopping complexes and other related and supportive
	businesses, such as office buildings, hotels, residential
	development and food court. In addition, the Company invests
	in CPN Commercial Growth Leasehold Property Fund
	(CPNCG) and CPN Retail Growth Leasehold REIT
	(CPNREIT), and is the property manager and REIT manager.
Address	CENTRALWORLD, FLOOR 31-33, 999/9 RAMA 1 ROAD,
	PATHUM WAN Bangkok 10330
Telephone	0-2667-5555
Fax	0-2264-5593
Website	www.centralpattana.co.th
Establish Date	17/6/1980
Registration date wit	th SET 01/03/1995



HMPRO

Nature of business

Full nameHome Products Center Plc.Type of businessServices/CommerceMarket Capital205,158.69 million baht

The Company is the retail business in home improvement segment by selling goods and providing complete range of services relating to construction, refurbishment, addition, renovation, improvement of buildings, houses, and residential places through One Stop Shopping Home Center under the trade name of HomePro which is the Company's trademark.

31 Prachachuennonthaburi Rd., Bangkhen, Amphoe Muang

Address

Nonthaburi 11000 Telephone 0-2832-1000Fax0-2832-1400Websitewww.homepro.co.thEstablish Date27/6/1995Registration date with SET.30/10/2001

KBANK

Full name Type of business Market Capital Nature of business KASIKORNBANK Plc. Financials/Banking 249,964.06 million baht



KASIKORNBANK PCL. (KBank) conducts commercial banking, securities and other related businesses per the Financial Institutions Business Act, Securities and Exchange Act and other regulations. KBank primarily provides financial services via an extensive branch network nationwide. As of 31 December 2019, KBank service coverage remains available in all locales and is adequate to meet our customers? requirements. Currently, KBank has 886 branches and 10,973 self-service channels to help customers conduct transactions on their own. In addition, the Banks international network now

includes 16 establishments in 8 countries, with operations and services centralized at the Head Office. 1 Soi Ratburana 27/1 Ratburana Road, Bangkok 10140 Telephone 0-2222-0000, 0-2888-8888 0-2470-1144 www.kasikornbank.com 08/06/1945 Establish Date

Registration date with SET. 09/02/1976

MINT

Address

Website

Fax

MINT	Minor International Public Pla								
Full name	Minor International Public Plc.								
Type of business	Agro & Food Industry/Food & Beverage								
Market Capital	125,411.61 million baht								
Nature of business	Food and Beverages, Hotel and Mixed-use including								
	Residential Development, Point-Based Vacation Club and								
	Plaza and Entertainment Business, together with Retail								
	Trading.								
Address	88 The Parq Building 12th Fl., Ratchadaphisek Road, Klongtoey								
	Subdistrict, Klongtoey District Bangkok 10110								
Telephone	0-2365-7500								
Fax	0-2365-7798-9								
Website	www.minor.com								
Establish Date	1/9/1978								
Registration Date w	ith SET. 14/10/1988								

PTT

РТТ	
Full name	PTT Plc.
Type of business	Resources/Energy & Utilities
Market Capital	1,142,519.85 million baht
Nature of business	The Company operates its petroleum and petrochemical
	complex through its subsidiaries and affiliated companies
	covering the full spectrum of natural gas businesses i.e.

exploration and production from both domestic and oversea sources, transportation of natural gas via pipeline system, gas separation as well as marketing of natural gas, international business operations for the oil and petrochemical products, and investment in refining and petrochemical industries and other related businesses both domestic and aboard.

Address	555 VIBHAVADI	RANGSIT	ROAD,	CHATUCHAK				
	Bangkok 10900							
Telephone	0-2537-2000							
Fax	0-2537-3498-9							
Website	http://www.pttplc.com							
Establish Date	1/10/2001							
Registration Date with	th SET 06/12/2001							

SCC	The Size Compart Die
Full name	The Siam Cement Plc.
Type of Business	Property & Construction/Construction Materials
Market Capital	441,600.00 million baht
Nature of business	The Company operates as holding company engaging in the
	industrial supplies and construction industries. The Company
	operates 3 core businesses consists of investments in the
	Cement-Building Materials business, Chemicals business and
	Packaging business.
Address	1 SIAM CEMENT ROAD, BANG SU Bangkok 10800
Telephone	0-2586-3333, 0-2586-4444
Fax	0-2587-2199, 0-2587-2201
Website	www.scg.com
Establish Date	8/12/1913
Registration Date wi	ith SET. 25/04/1975

Appendix D

Examined items			kper essm			Total	IOC	Terderum de d'
Examined items	1	2	3	4	5	TUtal	value	Interpretation
Standard statement 1: Management	1		1	1	1	5	1	applicable
Structure		Ľ.			Ċ.	3		upplicuble
Indicator 1.1 Having a board-level structure	1	1	1	1	1	5	1	applicable
Indicator 1.2 Having a management- level structure	1	1	1	1	1	5	1	applicable
Indicator 1.3 Having an operational- level structure	1	1	1	1	1	5	1	applicable
Criterion 1.1 Having a supporting structure at a board level	1	1	1	1	1	5	1	applicable
Criterion 1.2 Having a supporting structure at a management level	1	1	1	1	1	5	1	applicable
Criterion 1.3 Having a supporting structure at an operational level	1	1	1	0	1	4	0.8	applicable
Standard Statement 2: A governance	1	1	1	1	1	5	- 1	applicable
mechanism	1	-	-	1	-	5		applicable
Indicator 2.1 Having a direct	1	1	1	1	1	5	1	applicable
Indicator 2.2 Meeting every three months	1	1	1	1	1	5	1	applicable
Indicator 2.3 A report certified by the board	1	1	1	1	1	5	1	applicable
Criterion 2.1 Having a direct command line	0	1	1	1	1	4	0.8	applicable
Criterion 2.2 Meeting every three months	0	1	1	1	1	4	0.8	applicable
Criterion 2.3 Having the board's responsibility report	0	1	1	1	1	4	0.8	applicable
Standard Statement 3: The	1	1	1	1	1	5	1	applicable
organizational vision and mission								_
Indicator 3.1 Vision reflects sustainability	1	1	1	1	1	5	1	applicable
Indicator 3.2 Mission reflects sustainability	1	1	1	1	1	5	1	applicable
Indicator 3.3 Regular review of	1	1	1	1	1	5	1	applicable

A Summary of Content Validity by Item-Objective Congruence (IOC) of the questionnaire, examined by five experts

Examined items			xper essn			Total	ЮС	Interpretation
	1	2	3	4	5		value	
Criterion 3.1 The appearance of	0	0	1	1	1	3	0.6	applicable
sustainability concepts in the vision								
Criterion 3.2 The appearance of	0	0	1	1	1	3	0.6	applicable
sustainability concepts in the mission								
Criterion 3.3 Having a review and	0	0	1	1	1	3	0.6	applicable
assessment once a year								
Standard Statement 4: The	1	0	1	1	1	4	0.8	applicable
organizational value								
Indicator 4.1 Sustainability is	1	0	1	1	1	4	0.8	applicable
contained in the organizational value								
Indicator 4.2 Having strategic plans	1	0	1	1	1	4	0.8	applicable
for creating the organizational value								
Indicator 4.3 Regular review of the	1	0	1	1	1	4	0.8	applicable
organizational value every year								
Criterion 4.1 Appearance of	0	0	1	1	1	3	0.6	applicable
sustainability concepts in the								
organizational value								
Criterion 4.2 having strategic plans	0	0	1	-1	1	3	0.6	applicable
for creating the organizational value								
and communication								
Criterion 4.3 Having a review and	0	0	1	1	1	3	0.6	applicable
assessment once a year								
Standard Statement 5: The	1	_1	1	1	1	5	1	applicable
sustainability policies and								
practices								
Indicator 5.1 Having CG	1	1	1	1	1	5	1	applicable
policies/practices								
Indicator 5.2 Having sustainability	1	1	1	1	1	5	1	applicable
policies / practices								
Criterion 5.1 Having CG policies	0	1	1	1	1	4	0.8	applicable
Criterion 5.2 Having CG practices	0	-1	1	1	1	4	0.8	applicable
Criterion 5.3 Having sustainability	0	1	1	1	1	4	0.8	applicable
policies								
Criterion 5.4 Having sustainability	0	1	1	1	1	4	0.8	applicable
practices								
Standard Statement 6: Policy and	1	1	1	1	1	5	1	applicable
practices enforcement								
Indicator 6.1 Certified by the board	1	1	1	1	1	5	1	applicable
committee								
Indicator 6.2 Having a mechanism to	1	1	1	1	1	5	1	applicable

Examined items			xper			Total	IOC	Interpretation
-	1	2	3	4	5	-	value	-
let every employee be informed								
Criterion 6.1 Certified by the board committee	0	1	1	1	1	4	0.8	applicable
Criterion 6.2 Having a mechanism to let every employee be informed.	0	1	1	1	1	4	0.8	applicable
Standard Statement 7: Materiality	1	1	1	1	1	5	1	applicable
assessment								upplicable
Indicator 7.1 The analysis and assessment of materiality	1	1	1	1	1	5	1	applicable
Indicator 7.2 The prioritization of materiality	1	1	1	1	1	5	1	applicable
Indicator 7.3 The examination of materiality	1	1	1	1	1	5	1	applicable
Indicator 7.4 The review of materiality	1	1	1	1	17	5	1	applicable
Criterion 7.1 The analysis and assessment of sustainability	0	1	1	1	1	4	0.8	applicable
Criterion 7.2 The prioritization of materiality	0	1	1	1	1	4	0.8	applicable
Criterion 7.3 The examination of materiality	0	1	1	1	1	4	0.8	applicable
Criterion 7.3 The review of materiality	0	1	1	1	1	4	0.8	applicable
Standard Statement 8: The	/1	1	1	1	1	5	1	applicable
determination of strategy and planning	44)		1				
Indicator 8.1 The determination of strategy/ operational strategy	1	1	1	1	1	5	1	applicable
Indicator 8.2 The determination of strategy/ communication plans	1	1	1	1	1	5	1	applicable
Criterion 8.1 Having strategy and operational strategy	0	1	1	1	1	4	0.8	applicable
Criterion 8.2 Having communication strategy/ communication plans	0	1	1	1	1	4	0.8	applicable
Standard Statement 9: The	1	1	1	1	1	5	1	applicable
determination of stakeholders								
Indicator 9.1 The analysis, identification, and prioritization of	1	1	1	1	1	5	1	applicable
stakeholders Indicator 9.2The determination of	0	1	1	1	1	4	0.8	applicable

 Examined items			xper essn			Total	юс	Interpretation
	1	2	3	4	5		value	-
 details disclosure and methods Criterion 9.1 Having the analysis, identification, and prioritization of	0	1	1	1	1	4	0.8	applicable
stakeholders. Criterion 9.2 Having details disclosure and determined methods	0	1	1	1	1	4	0.8	applicable
Standard Statement 10:	1	1	1	1	1	5	1	applicable
Expectation analysis and assessment								
Indicator 10.1 Expectation analysis and assessment	1	1	1	1	1	5	1	applicable
Indicator 10.2 the regular review of expectation every year.	1)1	1		1	5	1	applicable
Criterion 10.1 Having expectation analysis and assessment	0	1	1	1	17	4	0.8	applicable
Criterion 10.2 Having a regular review of expectation every year	0	1	1	1	1	4	0.8	applicable
Standard Statement 11: The determination of sustainability	1	1	1	1	1	5	1	applicable
<u>content</u> Indicator 11.1 The determination of general content of the organization	1	1	1	1	1	5	1	applicable
Indicator 11.2 The determination of economic-dimension content	1	1	1	1	1	5	1	applicable
Indicator 11.3 The determination of social-dimension content	1	1	1	1	1	5	1	applicable
Indicator 11.4 The determination of environmental-dimension content	1	1	1	1	1	5	1	applicable
Indicator 11.5 The determination of CG-dimension content	1	1	1	1	1	5	1	applicable
Criterion 11.1 Having general content of the organization	0	1	1	1	1	4	0.8	applicable
Criterion 11.2 Having the economic- dimension content	0	1	1	1	1	4	0.8	applicable
Criterion 11.3 Having the social- dimension content	0	1	1	1	1	4	0.8	applicable
Criterion 11.4 Having the environmental-dimension content	0	1	1	1	1	4	0.8	applicable
Creation11.5 Having the CG- dimension content	0	1	1	1	1	4	0.8	applicable

Examined items			xper			Total	IOC value	Interpretation
	1	2	3	4	5	10141		
Standard Statement 12:	1	1	1	1	1	5	1	applicable
Sustainability message design								
Indicator 12.1 The presentation of a	0	1	1	1	1	4	0.8	applicable
short, medium, and long term								
operations		1	1		1	5	1	annliashla
Indicator 12.2 The connection of all SD dimensions	I	1	1			3	1	applicable
Indicator 12.3 The message	0	1	1	-	1	4	0.8	applicable
presentation by verbal and nonverbal	0	1	1	1	1	4	0.0	applicable
language								
Indicator 12.4 The conveyance of	0	1	1	1	1	4	0.8	applicable
main concepts/ corporate identity	V	1	1	1	1	T	0.0	uppliedble
Indicator 12.5 The content is	1	7	1	1	1	5	1	applicable
published in Thai and language		-	-	1	M		-	approvere
Criterion 12.1 The presentation of a	0	=1	1	1	4	\$4	0.8	applicable
short, medium, and long term								11
operations								
Criterion 12.2 The connection of all	0	1	1	1	1	4	0.8	applicable
SD dimensions								
Criterion 12.3 The message	0	1	1	1	1	4	0.8	applicable
presentation by verbal and nonverbal								
language								
Criterion 12.4 The conveyance of	0	1	1	1	1	4	0.8	applicable
main concepts/ corporate identity								
Criterion 12.5 The content is	0	1	1	1	1	4	0.8	applicable
published in Thai and language								
Standard Statement 13: Proper	1	1	1	1	1	5	1	applicable
media utilization planning								
Indicator 13.1 Appropriate channels	1	1	1	1	1	5	1	applicable
for stakeholder groups					17			
Indicator 13.2 Channels covering all	1	1	1	1	1	5	1	applicable
stakeholder groups							0.0	
Criterion 13.1 Having media	0	1	1	1	1	4	0.8	applicable
utilization plans for stakeholder								
groups Criterion 13.2 Meeting and	Δ	1	1	1	1	Λ	00	oppliashis
Criterion 13.2 Meeting and	0	1	1	1	1	4	0.8	applicable
interacting with major stakeholders. Criterion 13.3 Organizing letters and	0	1	1	1	1	4	0.8	applicable
reports	U	1	1	1	1	4	0.0	applicable
Criterion 13.4 Having a 24-hour	0	1	1	1	1	4	0.8	applicable
Cincilon 13.4 Having a 24-noul	U	1	1	1	1	+	0.0	appricable

Examined items			xper			Total	IOC	Interpretation
	1	2	3	4	5		value	
contact telephone numbers								
Criterion 13.5 Having a website,	0	1	1	1	1	4	0.8	applicable
emails, and social media.								
Criterion 13.6 Having meetings,	0	1	1	1	1	4	0.8	applicable
seminars, and training for knowledg	e							
development								
Standard Statement 14: Channels	1	1	1	1	1	5	1	applicable
for supporting participation								
Indicator 14.1 Having channels for	1	1	1	1	1	5	1	applicable
stakeholders to participate								
Indicator 14.2 The congruence of	1	1	1	1	1	5	1	applicable
channels and the expectation of each	1							
major stakeholder group								
- Having channels for employees	1	1	1	1	1	5	1	applicable
- Having channels for	1	-1	1	1	-	5	1	applicable
investors/shareholders								
- Having channels for government-	1	-1	0	1	1	4	0.8	applicable
sector agencies								
- Having channels for	1	1	1	1	1	5	_ 1	applicable
customers/consumers								1.
- Having channels for business	1	1	$\backslash 1$	1	1	5	1	applicable
partners								
- Having channels for creditors	1	1	0	1	1	4	0.8	applicable
- Having channels for community	1	1	1	1	1	5	1	applicable
and societal groups								
Criterion 14.1 Having channels for	0	1	1	1	1	4	0.8	applicable
supporting participation								
Criterion 14.2 Having channels for	0	1	1	1	1	4	0.8	applicable
employees								
Criterion 14.3 Having channels for	0	1	1	1	1	4	0.8	applicable
investors/ shareholders								11
Criterion 14.4 Having channels for	0	1	1	1	1	4	0.8	applicable
government-sector agencies								
Criterion 14.5 Having channels for	0	1	1	1	1	4	0.8	applicable
customers/consumers								
Criterion 14.6 Having channels for	0	1	1	1	1	4	0.8	applicable
business partners								**
Criterion 14.7 Having channels for	0	1	1	1	1	4	0.8	applicable
creditors	-							11
Criterion 14.8 Having channels for	0	1	1	1	1	4	0.8	applicable

Expo Examined items assess						Total	юс	Interpretation
	1	2	3	4	5		value	
the community and society groups								
Standard Statement 15: The leaders'	1	1	1	1	1	5	1	applicable
determination of operating business								
with sustainability concept								
Indicator 15.1 Leaders attend	1	-1	1	1	1	5	1	applicable
sustainability meetings								
Indicator 15.2 Leaders jointly	1	1	1	1	1	5	1	applicable
determine policies								
Indicator 15.3 Leaders communicate	1	1	1	1	1	5	- 1	applicable
sustainability concepts to employees						_		
Indicator 15.4 Leaders give	1	1	1	1	1	5	1	applicable
commitment	K	5	1	1		E	1	
Indicator 15.5 Leaders perform as role models	1	1	1	1	1	5	1	applicable
Criterion 15.1 Leaders attended	0	-1	1	1	C3	4	0.8	applicable
sustainability meetings last year	0	1	1	1	1	4	0.0	applicable
Criterion 15.2 Having joint meeting	0	1	1	\sum_{1}	1	4	0.8	applicable
for determining policies and	0	-	1	1	1		0.0	applicable
operations								
Criterion 15.3 Leaders communicate	0	1	1	1	1	4	0.8	applicable
with employees regularly								11
Criterion 15.4 Leaders give	0	1	1	1	1	4	0.8	applicable
commitment to do sustainable								
business.								
Criterion 15.5 Leaders perform as	0	1	1	1	1	4	0.8	applicable
roles models in sustainability								
Standard Statement 16: Integrated	1	1	1	1	1	5	1	applicable
<u>communication</u>								
Indicator 16.1 Having a mechanism	0	1	1	1	1	4	0.8	applicable
for integrating every agency								
Indicator 16.2 Having	1	1	1	1	1	5	1	applicable
communication by the line of								
authority throughout the organization	0							
Indicator 16.3 Having a mechanism	0	1	1	1	1	4	0.8	applicable
for listening to opinions/suggestions	Δ	1	1	1	1	А	0.0	opplicable
Indicator 16.4 Promoting	0	1	1	1	1	4	0.8	applicable
stakeholders' participation	1	1	1	1	1	5	1	appliable
Indicator 16.5 Having an information center	1	1	1	1	1	3	1	applicable
Indicator 16.6 Communicating	1	1	1	1	1	5	1	applicable
multator 10.0 Communicating	1	1	1	1	1	5	1	applicable

			xper essn			Total	ЮС	Interpretation
	1	2	3	4	5		value	
organizational stories and reporting organizational performance								
Criterion 16.1 Having a mechanism	0	1	1	1	1	4	0.8	applicable
for integrating every agency								
Criterion 16.2 Having communication by the line of authority throughout the organization.	0	1	1	1	1	4	0.8	applicable
Criterion 16.3 Having a mechanism for listening to opinions and	0	1	1	1	1	4	0.8	applicable
suggestions Criterion 16.4 Promoting stakeholders' participation	0	1	1	1	1	4	0.8	applicable
Criterion 16.5 Having an information center/ information management	0	1	1	1	17	4	0.8	applicable
Criterion 16.6 Communicating organizational stories and reporting	0	1	1	1	1	4	0.8	applicable
organizational performance regularly	-		1	1		-65	-	1. 1.1
Standard Statement 17: Effective	1	1	1	1	1	5	1	applicable
governance/ assessment Indicator 17.1 A follow-up, monitor, and governance	1	1	1	1	1	5	1	applicable
Indicator 17.2 Communication performance assessment	1	1	1	1	1	5	1	applicable
Indicator 17.3 A review of effective communication	1	1	1	1	1	5	1	applicable
Criterion 17.1 Having a follow-up, monitor, and governance	0	1	1	1	1	4	0.8	applicable
Criterion 17.2 Having regular communication performance	0	1	1	1	1	4	0.8	applicable
assessment Criterion 17.3 Having a review of communication effectiveness	0	1	1	1	1	4	0.8	applicable
Standard Statement 18: Efficient	0	1	1	1	1	4	0.8	applicable
communication for SD								* *
Indicator 18.1 The organizational communication for SD is congruent	0	1	1	1	1	4	0.8	applicable
with strategic plans - Sustainability is one of the topics for assessing the board committee.	0	1	1	1	1	4	0.8	applicable

Examined items	Experts' s assessment				Total	IOC	Interpretation	
	1	2	3	4	5		value	L.
- Sustainability is one of the topics	0	1	1	1	1	4	0.8	applicable
for assessing top executives								
- Better business performance	0	0	1	0	1	2	0.4	inapplicable
- More effective resource utilization	0	1	1	1	1	4	0.8	applicable
- Induction of new product and	0	1	1	1	1	4	0.8	applicable
service innovations								
- Prompt crisis management	0	1	1	1	1	4	0.8	applicable
- A decrease in the statistics of the	0	1	1	1	1	4	0.8	applicable
complaints related to sustainability.								
- Increased positive news, and	0	1	1	1	1	4	0.8	applicable
decreased negative and fake news								
- Induction of stakeholders' SD	0	0	1	1	1	3	0.6	applicable
behaviors								
Criterion 18.1 Having sustainability	0	1	1	1	17	4	0.8	applicable
in the topics for assessing the board								
committee and top executives								
Criterion 18.2 Better business	0	0	1	0	1	2	0.4	inapplicable
performance than last year								
Criterion 18.3 More effective	0	1	1	1	1	-4	0.8	applicable
resource utilization								
Criterion 18.4 The induction of new	0	1	1	\geq_{1}	1	4	0.8	applicable
product and service innovations								
Criterion 18.5 prompt crisis	0	1	1	1	1	4	0.8	applicable
management								
Criterion 18.6 A decrease in the	0	1	1	1	1	4	0.8	applicable
complaints statistics related to								
sustainability								
Criterion 18.7 Increased positive	0	1	1	1	1	4	0.8	applicable
news and decreased negative and								
fake news								
Criterion 18.8 Stakeholders'	0	0	1	1	1	3	0.6	applicable
sustainability behaviors occur.								
Standard Statement 19: Perception	-1	1	1	1	1	5	1	applicable
and understanding								TT T
Indicator 19.1 Stakeholders perceive	0	1	1	1	1	4	0.8	applicable
the sustainability approach.								
Indicator 19.2 Stakeholders	0	1	1	1	1	4	0.8	applicable
understand the sustainability							-	
approach.								
Criterion 19.1 The overall level of	0	1	1	1	1	4	0.8	applicable

Examined items			xper essm			Total	IOC	Interpretation
	1	2	3	4	5		value	
stakeholders' perception is averagely at a high level. Criterion 19.2 The overall level of	0	1	1	1	1	4	0.8	applicable
stakeholders' understanding is averagely at a high level								
Standard Statement 20:	1	1	1	1	1	5	1	applicable
Transparent information disclosure and report		1			V			uppredote
Indicator 20.1 Correct information disclosure and report	0	1	1	1	1	4	0.8	applicable
Indicator 20.2 Detailed information disclosure and report	1	0	1	1	1	4	0.8	applicable
Indicator 20.3 Timely information disclosure and report	0	1	1	1	1	4	0.8	applicable
Indicator 20.4 Easy-to-understand and uncomplicated information disclosure and report.	1=	1	1	1	1	5	1	applicable
Criterion 20.1 Correct organizational information disclosure and report	0	1	1	1	1	4	0.8	applicable
Criterion 20.2 Detailed organizational information disclosure and report	0	0	1	1	1	3	0.6	applicable
Criterion 20.3 Timely organizational information disclosure and report	0	1	1	1	1	4	0.8	applicable
Criterion 20.4 Easy-to-understand and uncomplicated organizational	0	4	1	1	1	4	0.8	applicable
information disclosure and report.	1	1	1	1	1	F	1	
Standard Statement 21: Sufficient	1	1	1	1	1	5	4	applicable
information disclosure and report Indicator 21.1 The disclosure and report of general information of the	0	1	1	1	1	4	0.8	applicable
organization Indicator 21.2 The disclosure and report of economic-dimension	0	1	1	1	1	4	0.8	applicable
information Indicator 21.3 The disclosure and report of social-dimension	0	1	1	1	1	4	0.8	applicable
information Indicator 21.4 The disclosure and report of environmental-dimension	0	1	1	1	1	4	0.8	applicable

Examined items			xper essm			Total	IOC value	Interpretation
	1	2	3	4	5	•		Ĩ
information								
Indicator 21.5 The disclosure and	0	1	1	1	1	4	0.8	applicable
report of CG-dimension information								
Criterion 21.1 The disclosure and	0	1	1	1	1	4	0.8	applicable
report of general information of the								
organization								
Criterion 21.2 The disclosure and	0	1	1	1	1	4	0.8	applicable
report of economic-dimension								
information								
Criterion 21.3 The disclosure and	0	1	1	1	1	4	0.8	applicable
report of social-dimension								
information								
Criterion 21.4 The disclosure and	0	1	1	1	1	4	0.8	applicable
report of environmental-dimension								
information								
Criterion 21.5 The disclosure and	0	1	1	1	1	4	0.8	applicable
report of CG-dimension information				/				
Standard Statement 22:	0	0	1	1	1	3	0.6	applicable
Stakeholders' satisfaction								
Indicator 22.1 Satisfaction with the	0	0	1	1	1	3	0.6	applicable
operations								
Indicator 22.2 Satisfaction with	0	0	1	1	1	3	0.6	applicable
communication								
Criterion 22.1 Satisfaction with the	0	0	1	1	1	3	0.6	applicable
operations at a higher level or higher								
Criterion 22.2 Satisfaction with	0	0	1	1	1	3	0.6	applicable
communication at a higher level or								
higher							4	
Standard Statement 23: Confidence	0	0	1	1	1	3	0.6	applicable
and acceptance								
Indicator 23.1 Confidence and	0	0	1	1	1	3	0.6	applicable
acceptance of business operations								
Indicator 23.2 Confidence and	0	0	1	1	1	3	0.6	applicable
acceptance of communication							_	
Criterion 23.1 The overall business	0	0	1	1	1	3	0.6	applicable
operations at a high level or higher	_	_				_	_	
Criterion 23.2 The overall	0	0	1	1	1	3	0.6	applicable
communication is at a high level or								
higher								
Standard Statement 24:	1	0	1	1	1	4	0.8	applicable

Experts' Examined items assessment					Total	юс	Interpretation	
	1	2	3	4	5		value	-
Organizational image and								
reputation								
Indicator 24.1 Organizational image	0	0	1	1	1	3	0.6	applicable
and reputation								
Indicator 24.2 Awards and	1	0	1	1	1	4	0.8	applicable
sustainability assessment								
performance								
Indicator 24.3 The receipt of	1	0	1	1	1	4	0.8	applicable
sustainability performance								
Indicator 24.4 Stakeholders'	0	0	1	1	1	3	0.6	applicable
engagement and loyalty								
Criterion 24.1 Organizational image	0	0	1	1	1	3	0.6	applicable
and reputation at a good level or								
higher								
Criterion 24.2 the receipt of an award	0	0	1	1	$1^{>}$	3	0.6	applicable
last year								
Criterion 24.3 The performance	0	0	1	1	1	3	0.6	applicable
assessment of last year was at a good								
level or higher.								
Criterion 24.4 Stakeholders'	0	0	1	1	1	3	0.6	applicable
increased engagement and loyalty at								
a high level or higher								
Standard Statement 25: A response	1	1	1	1	1	5	1	applicable
to stakeholders' expectation								
Indicator 25.1 Stakeholders'	0	1	1	1	1	4	0.8	applicable
participation in SD operations								
Indicator 25.2 A response to	0	1	1	1	1	4	0.8	applicable
stakeholders' expectation								
Criterion 25.1 Stakeholders'	0	1	1	1	1	4	0.8	applicable
participation in SD operations								
Criterion 25.2 A response to	0	1	1	1	1	4	0.8	applicable
stakeholders' expectation								
Standard Statement 26: The	1	0	1	1	1	4	0.8	applicable
creation of shared value								
Indicator 26.1 Product and service	0	0	1	1	1	3	0.6	applicable
development								
Indicator 26.2 Productivity	0	0	1	1	1	3	0.6	applicable
development with the value chain								
Indicator 26.3 Collaborative groups	0	0	1	1	1	3	0.6	applicable
development								

Examined items			xper sessn			Total	IOC	Interpretation
	1	2	3	4	5		value	-
Criterion 26.1 Product and service	0	0	1	1	1	3	0.6	applicable
development								
Criterion 26.2 Productivity	0	0	1	1	1	3	0.6	applicable
development with the value chain								
Criterion 26.3 Collaborative groups	0	0	1	1	1	3	0.6	applicable
development			- 7	N B				
Standard Statement 27:	1	0	1	1	1	4	0.8	applicable
Effectiveness of sustainability in all								
dimensions								
Indicator 27.1 Higher securities	0	0	0	1	1	2	0.4	inapplicable
holdings/ higher share value								
Indicator 27.2 Organizational	0	0	1	1	1	3	0.6	applicable
adaptability in crises.								
Indicator 27.3 A response to SDGs	0	0	1	1	1	3	0.6	applicable
Criterion 27.1 Having higher	0	0	-1	1	1	>1	0.2	inapplicable
securities holdings/higher share								
value in average at a higher level								
than last year								
Criterion 27.2 Organizational	0	0	1	1	1	3	0.6	applicable
adaptability in crises								
Criterion 27.3 The accomplishment	0	0	1	1	1	3	0.6	applicable
of SDGs								
The total IOC scores					$(\boldsymbol{\beta})$		0.82	applicable

BIOGRAPHY

Name-Surname	Kantaphat Thanakunjiraphat
Academic Background	Master of Arts, Mass Communication, Faculty of Communication Arts, Chulalongkorn University. 2006, Year of Graduation. Bachelor of Arts, Major in Thai, Minor in Performing Art, Faculty of Humanities, Srinakharinwirot University (2nd Class Honors). 2004, Year of Graduation.
Experience	 2021-present General Manager Corporate Governance, Sustainability, Good Governance, and Corporate Communication Office, Charoen Pokphand Group Co., Ltd. 2017- 2020 Consultant, Market Metrics Asia Co., Ltd. 2017-2019 Instructor, Faculty of Humanities and Social Sciences, Digital Media, St. Theresa International College 2016-2017 Senior Corporate Governance Analyst, Listing and Corporate Governance Division, Corporate Social Responsibilities and Corporate Governance Department, Airports of Thailand Plc., (AOT) 2011-2016 Corporate Governance Specialist, the Research & Policy Department, Thai Institute of Directors Association (IOD) 2010-2011 Corporate Communication Manager, Corporate Communication Department, Globlex Securities Co., Ltd. 2008-2010 Research Assistant, the Faculty of Communication Arts, Chulalongkorn University 2007-2015 Instructor, Faculty of Communication Arts, Siam University and Kerk University 2006-2007 Client Service Executive, Neo Target Co., Ltd.