AIRLINE'S ROLES FOR SUPPORTING SUSTAINABLE TOURISM DEVELOPMENT: A CASE STUDY OF THAILAND

Withep Watawuti

A Dissertation Submitted in Partial
Fulfillment of the Requirements for the Degree of
Doctor of Philosophy (Integrated Tourism Management)
The Graduate School of Tourism Management
National Institute of Development Administration
2017

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ABSTRACT

Title of Dissertation	AIRLINE'S ROLES FOR SUPPORTING SUSTAINABLE TOURISM DEVELOPMENT: A CASE STUDY OF THAILAND
Author	Withep Watawuti
Degree	Doctor of Philosophy (Integrated Tourism Management)
Year	2017

The main objective of this study aims to develop the role of Airline in supporting sustainable tourism development (STD). The specific objectives are: 1) to evaluate current performance of the airline in supporting STD 2) to analyze the factor of passenger's awareness to STD, passenger's willingness to supporting STD, passenger's expectation to STD performance of airline and passenger's perception to STD performance of airline 3) to compare the difference between passenger's expectation to STD performance of airline and passenger's perception to STD performance of airline and to assess the influence of passenger's awareness to STD, passenger's willingness to support STD, passenger's expectation to STD performance of airline, and passenger's perception to STD performance of airline on the passenger's performance in supporting STD. 4) to analyze awareness and willingness of airline administration in supporting STD.

The research is conducted in quantitative and qualitative approach. For the quantitative approach, data was collected through questionnaire with 400 samples from tourists who travelled to Thailand and tourists who travelled within domestic in eight designated airports of Thailand. The Statistical Package for Social Sciences (SPSS) is used to analyze variables with descriptive statistics such as frequency distribution, percentage and standard deviation of variables. Also, inferential statistics are also used to test the research hypotheses with Independent Sample t-test, and Multiple Regression Analysis. LISREL (Linear Structural Relations) program is used to examine the confirmatory factor analysis of latent variables. For qualitative approach, data was collected by in-depth interview of the Airline Administration and Tourism Expert. Content analysis was used to analyze the quantitative data.

The results of this research found that the current performance of passenger for supporting STD is in the high level, while the airline administration declared that they have performed well to support the tourism in all three aspects; economic, socio-cultural and environmental. The confirmatory factor analysis was used to examine the factor of four latent variables; passenger's awareness to STD, passenger's willingness to support STD, passenger's expectation to STD performance of airline and passenger's perception to STD performance of airline which have the result of model fit for all variables except passenger's awareness to STD. The multiple regression analysis was conducted to analyze the influence of all four variables on the passenger's performance to STD. The result showed that the passenger's perception to STD performance of airline has the most influence on passenger's performance to STD followed by passenger's willingness to support STD, while the passenger's expectation to STD performance of airline has opposite effect direction to the performance. The passenger's awareness to STD influence passenger's performance to STD statistical insignificant. This research also examined the difference between passenger's expectation to STD performance of airline and passenger's perception to STD performance of airline. The result found that the expectation was in the highest level, while the perception was in the moderate level with statistical significant. The content analysis also found that airline image, supporting activity option and airfare were the influent factor for passenger performance.

According to the mode of transport, business airline is the main transport which carry the great number of tourists to the destination. The contribution of this research provides the model for the business airline to adopt their policy to support the tourism. In this research, there are some recommendation for the airline administration to apply in their policy.

ACKNOWLEDGEMENTS

This research is the result of efforts and encouragement. I am deeply grateful to my advisor for his great insight, guidance, support, and persistent revision throughout the completion of this research. Without his supports, the completion of this dissertation would have been much more difficult. I am truly grateful for having Assistant Professor Dr. Rugphong Vongsaroj as my advisor. A special thank you extended to the dissertation committee chairperson, Assistant Professor Dr. Pimmada Wichasin for her valuable suggestion. I also would like to thank you all of the committees, Associate Professor Dr. Therdchai Choibamroong, Assistant Professor Dr. Kanokkarn Kaewnuch and Dr. Worarak Sucher for their constructive ideas and criticisms. I would also like to thank Dr. Nathsinee Chinthanapoompaisal, who provided information, assistance, and E-thesis organization.

Finally, the deepest appreciation goes to my family and friends for their constant encouragement, support, and love.

Withep Watawuti

June 2018

TABLE OF CONTENTS

Page

LIST OF TABLES

Page

LIST OF FIGURES

CHAPTER 1

INTRODUCTION

1.1 Statement of the Problem

1.1.1 World Tourism Situation

Currently, the world tourism has continued to grow every year, as shown in number of international tourist arrival around the world reported by the World Tourism Organization (UNWTO, 2016), Table 1.1.

Table 1.1 International Tourist Arrival by region of origin

	International Tourist Arrival by region of origin (million)								Change (%)	Average annual growth (%)
	2000	2005	2010	2011	2012	2013	2014	2015	15/14	05-15
World	674	809	950	994	1040	1088	1134	1186	4.6	3.9
Europe	386.6	453.2	489.4	520.6	541.1	567.1	580.2	607.6	4.7	3.0
Asia and Pacific	110.4	54.0	05.5	218.3	233.8	249.9	264.4	279.2	5.6	6.1
America	128.2	133.3	150.2	155.6	162.6	167.6	181.9	192.6	5.9	3.7
Middle East	22.4	33.7	54.7	49.5	50.6	49.1	52.4	53.3	1.7	4.7
Africa	26.2	34.8	50.4	50.1	52.4	54.6	55.2	53.3	-3.1	4.4

Source: UNWTO, 2016

According to the statistics, number of global travelers has increased by 4.6% comparing to the same period in 2014 and 2015, and it has been averagely increased from 2005 to 2013of 3.9% per year worldwide. The number of traveler worldwide increased from 809 million in 2005 to 1,186 million in 2015. This is considered as a continuous increase with an expectation of 3.5-4.5% increase worldwide and long-term growth of 3.3% per year from 2010 to 2030. It is found that America and Asia Pacific have the highest growth rate of 5.9% and 5.6%, respectively during 2014-2015 (UNWTO, 2016). Based on the data from The Pacific Asia Travel Association (PATA, 2014), South East Asia is expected to have 173 million travelers in 2018, as shown in Figure 1.1. In addition, there is a forecast for the top 5 fast growing tourism destinations in Asia Pacific. Most of the countries are South East Asian countries. Thailand is expected for the fastest growth of 27.5% during 2014-2018. Based on UNWTO and PATA data and statistics, the growth rate of global travel is increasing every year. Asia Pacific is the region with the highest growth rate, especially Thailand.

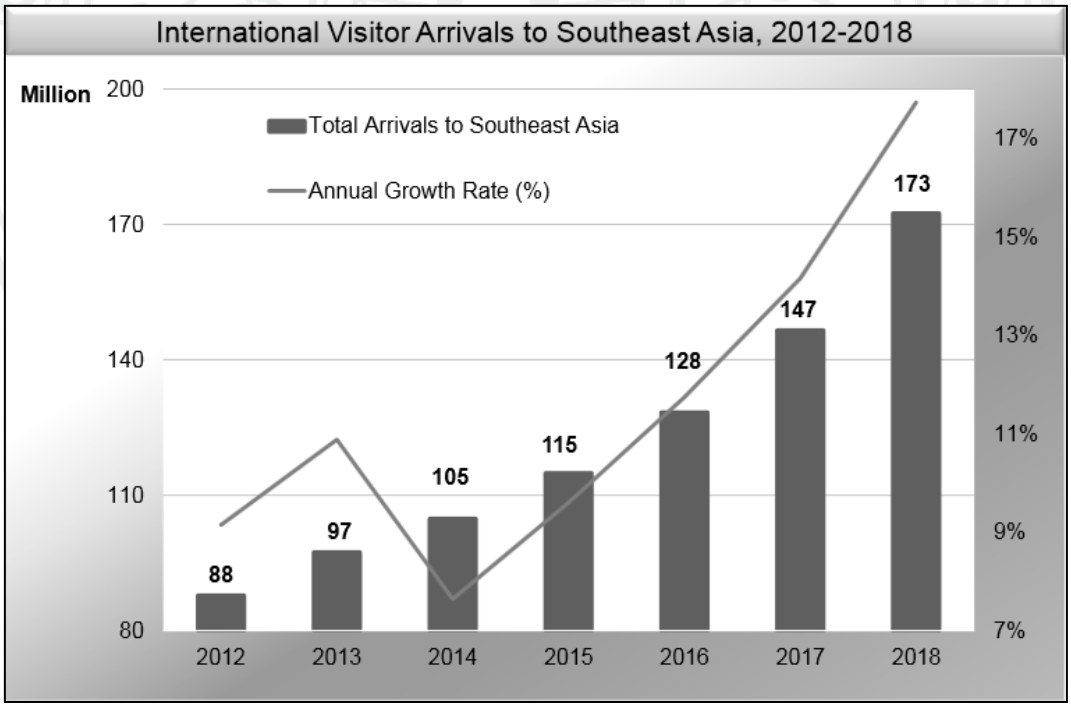


Figure 1.1 International Visitor Arrivals to Southeast Asia, 2012-2018

Source: PATA, 2014

1.1.2 Thailand Tourism Situation

Statistic of the arrival of travelers to Thailand from Department of Tourism (2016) shows the growth rate of 20.61% when comparing 2014-2015 and there were 29.9 million in 2015. This may be caused by factors that encourage more tourists, such as the economic expansion of Japan after the recovery from the flood, the absence of political opposition, or behavior of both Asian and European tourists, who prefer to travel to this region, including the opening of the ASEAN Economic Community that makes cross-border measures becomes more convenient, as shown in Table 1.2.

Table 1.2 International Tourist Arrivals to Thailand 2012-2015

Month	**2012**	**2013**	**2014**	**2015**	**2014/2015**	
					+ / -	%
January	1,992,158	2,318,447	2,282,568	2,613,699	+331,131	+14.51
February	1,853,736	2,367,257	2,075,304	2,664,216	+588,912	+28.38
March	1,895,560	2,322,200	2,018,008	2,555,362	+537,354	+26.63
April	1,686,268	2,057,855	1,934,841	2,406,727	+471,886	+24.39
May	1,546,888	1,943,968	1,670,860	2,301,625	+630,765	+37.75
June	1,644,733	2,061,782	1,491,300	2,269,523	+778,223	+52.18
July	1,815,714	2,149,173	1,896,098	2,641,514	+745,416	+39.31
August	1,926,929	2,355,660	2,084,839	2,589,652	+504,813	+24.21
September	1,611,754	1,995,343	1,869,491	2,044,658	+175,167	+9.37
October	1,801,147	2,054,548	2,207,775	2,245,841	+38,066	+1.72
November	2,143,550	2,378,112	2,425,123	2,566,077	+140,954	+5.81
December	2,435,466	2,542,380	2,853,476	3,024,291	+170,815	+5.99
Total	22,353,903	26,546,725	24,809,683	29,923,185	+5,113,502	+20.61

Source: Department of Tourism (2016)

Considering the statistics of tourists coming to Thailand, tourism is an important part of the country's economy (Department of Tourism, 2016) (see Table 1.3). It generates revenue to related businesses, such as hotels, restaurants, souvenir shops, and transportation, etc. It stimulates investment and employment helping to distribute income to local people and it can generate income to country in the form of foreign currencies with the value over hundred thousand million baht each year. It also generates cash flow within the country from Thai travelers having domestic tour, valued hundred million baht as well. In 2009, Thailand earned about 8.5% of total exports from foreign tourists (51.1% of service exports), or 5.8% of GDP. At the same time, tourism businesses generate more than 2 million jobs, or around 6-7 percent of the workforce (Thammasat University, 2009). The above data shows the economic condition resulting from tourism, which generates income for Thailand and generates revenue for many countries as well.

Table 1.3 Thailand Tourism Revenue 2007-2015

Year	Tourism Revenue	
	Million Baht	% △
2007	547,781,81	+13.57
2008	547,520.52	+4.88
2009	510,255.05	+11.19
2010	592,794.09	+16.18
2011	776,217.20	+30.94
2012	983,928.36	+26.76
2013	1,207,145.82	+22.69
2014	1,172,798.17	-2.85
2015	1,447,158.05	+23.39

Source: Department of Tourism, 2016

Although tourism will generate a lot of income and stimulate Thai economy, at the same time, tourism may also cause the degradation of tourist attractions. This may become a major problem due to the expansion of tourism with a focus on tourist arrivals or income number, but it is unable to accommodate the rapid growth with the lack of

preparedness to accommodate such growth of tourists. This finally makes many tourist attractions become degraded. Based on a survey of 2,154 tourist attractions classified by tourist attraction standards, there are 138 tourist attractions that are deteriorating, and most of them natural tourist attractions (50 places), followed by historical sites (38 places) and cultural attractions (21 places), respectively (Department of Tourism, 2009).

1.1.3 Impact of Tourism

The increase in tourist statistics every year affects both direct and indirect tourist destinations in both positive and negative ways. The United Nations Environment Program (UNEP, 2014) discusses the impact of tourism on three dimensions: 1) economic conditions, such as increased local employment during peak seasons or even income that created does not return to the populations living in the area. 2) social aspects, such as the loss of local identities or criminal offence when there is a conflict of interest; and 3) environmental benefits, such as pollution from waste, utilization of resources beyond necessity, including the destruction of natural attractions by tourists.

The World Tourism Forum (2012) has mentioned that what should be realized in terms of sustainable tourism. It is a role that encourages tourists and those involved in activities to prevent adversely affect or destruction of the nature by the tourist activities that occur from tourists traveling such as in 2012, the emission of carbon in the atmosphere was 390 unite per million metric tons. The higher number of tourists traveling by land transportation, aircraft or boat results in the change of global temperature. It also includes economic activities that still use natural resources such as oil, coal, water, raw material from trees, and marine resources without having awareness, as well as cultural changing such as people in the community or the area of tourist attraction change their life style or culture. For example, family leader stops working as usual and turns to be a tour guide. Women stop being a housewife but work as prostitute in the entertainment complex instead. Small children work to provide service to tourists. All these things happened without awareness of their own role.

Based on the information above, traveling trends are increasing every year as a source of revenue for the country. At the same time, the impact of tourism is an important thing to be considered for every country comparing with revenue to decide

whether the tourism within the country is sustainable or not. Its impacts on environment, society, and economic with negative and positive aspect relating to role of involved party affecting to the country in term of sustainable revenue and tourism shall be also considered.

1.1.4 Roles of Airlines and Sustainable Tourism Development

The aviation industry is a part of tourism. Most travelers travel by air rather than by land or by water. According to the World Tourism Organization (UNWTO, 2016), the statistics of the mode of transport and the purpose of visit are presented in the figure 1.2 and 1.3.

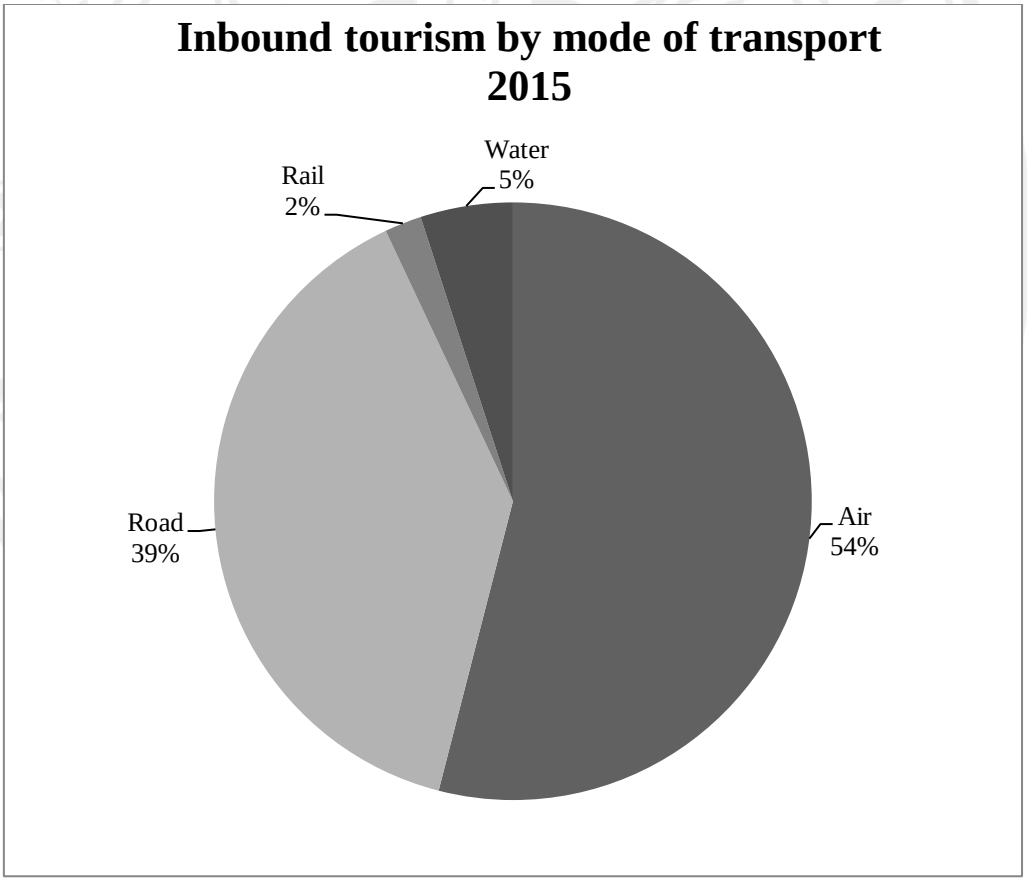


Figure 1.2 Inbound tourism by mode of transport 2015

Source: World Tourism Organization, 2016

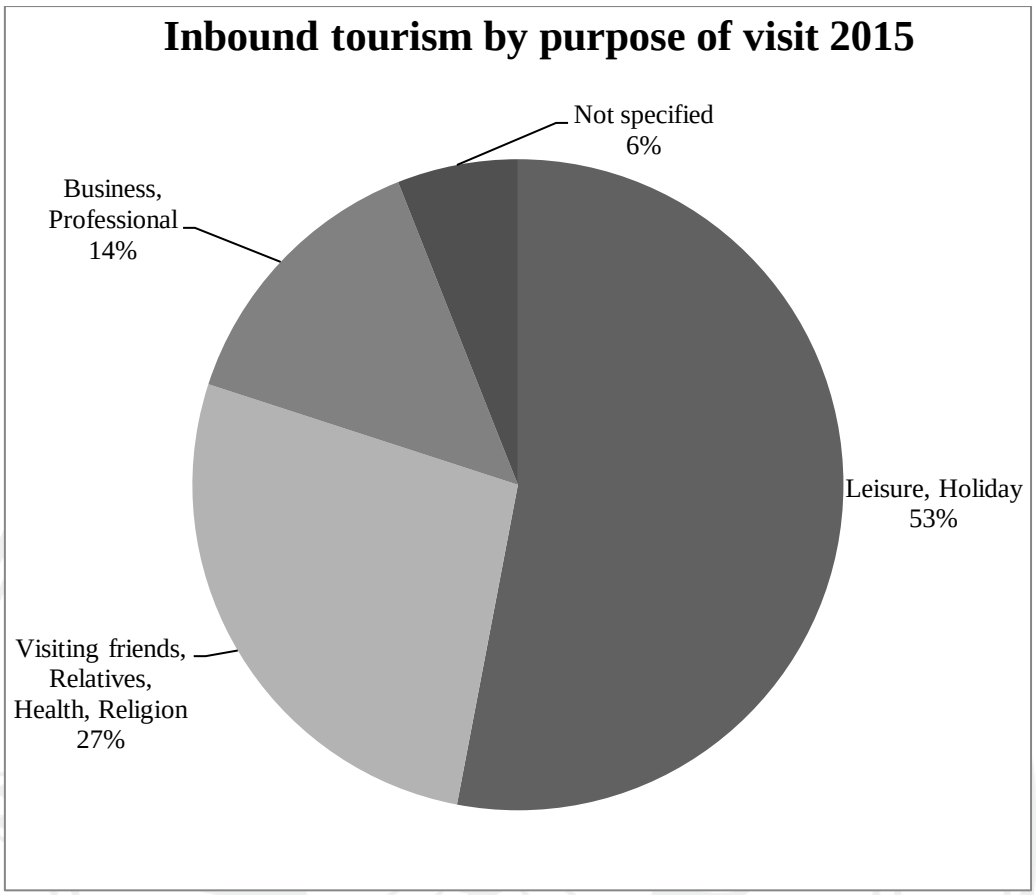


Figure 1.3 Inbound tourism by purpose of visit 2015

Source: World Tourism Organization, 2016

From the figure above, most travelers use air travel, 54% of travelers around the world whereas about 39% of travelers use land travel and less than 5% use sea travel. For leisure purposes, up to 53 percent, or more than half of all travel purposes associated with natural and cultural attractions in the community. This points out that air travel, which refers to the aviation industry has a direct role in tourism whether it will be a sustainable tourism or not, in term of economy, society and environment. It is in line with one of the topics of the (International Civil Aviation Organization (ICAO), 2012), "Sustainable Aviation for Generations to come" mentioning that aviation sector is involved in societies, economies and cultures of sustainable development around the world. This is because air travel is the main driver of the travel business and tourism. In order to develop sustainable tourism, the aviation industry should be developed and adapt its role to support sustainable tourism development. The success of sustainable

tourism at destination also depends on the airline role in influencing passengers to play the leading roles in supporting sustainable development at destination.

However, it is found that currently study or research on the aviation industry focuses on the excellent service to be provided to the passengers, which are increasingly intensified. While most of the people are focusing on the sustainability in term of economic, social and environment, but the researches on the airline's role to develop a sustainable tourism are very rare. This is opposite to the information showing that most of tourists travel by air. Therefore, there is a need about the development of airlines' role models for sustainable tourism development (STD) by conducting studies in the field of sustainable tourism awareness and willingness to drive sustainable tourism development. In term of airline passengers and airline administration, there is a gap of awareness and willingness to cooperate in practical ways to serve as a model for sustainable tourism.

1.2 Research Objective

Main Objective: To develop the role of the airline for supporting sustainable tourism based on awareness and willingness of airline passengers and airline administration.

Specific Objective:

1. To evaluate current performance of the airline passenger and airline administration in supporting sustainable tourism development
2. To analyze the factors of passenger's awareness to STD, the factors of passenger's willingness to supporting STD, the factors of passenger's expectation to STD performance of airline and the factors of perception to STD performance of airline.
3. To analyze the differences between passenger's expectations and perception to the performance of airlines in supporting STD and to assess the influence of passenger's awareness to STD, passenger's willingness to support STD, passenger's expectation to STD performance of airline, and passenger's perception to STD performance of airline on the passenger's performance in supporting STD.

4. To analyze awareness and willingness of airline administration in supporting sustainable tourism development.

5. To develop the roles of the airline business for supporting sustainable tourism development

1.3 Research Question

1. What is the current performance of the airline passenger and airline administration in supporting sustainable tourism development?

2. What are the factors of passenger's awareness to STD, the factors of passenger's willingness to supporting STD, the factors of passenger's expectation and the factors of passenger's perception to STD performance of airline?

3. What is the level of differences between passenger's expectations and perception to the performance of airlines in supporting STD and how much is the influence of passenger's awareness to STD, passenger's willingness to support STD, passenger's expectation to STD performance of airline, and passenger's perception to STD performance of airline on the passenger's performance in supporting STD?

4. How are awareness and willingness of airline administration in supporting sustainable tourism development?

5. What are the roles of the airline in supporting sustainable tourism development?

1.4 Scope of Study

Content Scope

To study role of airline in supporting sustainable tourism development by studying the content of passenger's awareness to STD, passenger's willingness to supporting STD, passenger's expectation to STD performance of airline and passenger's perception to STD performance of airline who are involved in the sustainable tourism development including airline passenger and airline administration.

Population Scope

Population in this study was divided into 2 groups according to type of analysis as below.

1. Quantitative research: The populations all nationality airline passengers who travel inbound and outbound flights from Thailand and domestic passengers.

2. Qualitative research: Key informants are the executives or administration staffs of full-service airlines and low-cost airlines in Thailand, who are responsible for consideration or determination of policies that affect the airline's role in supporting sustainable tourism development. The tourism expert who are the specialist in STD concept.

Timing Scope

The study period is from October 2015 to September 2017. The research period is approximately 24 months, with a 4-month field data collection period.

1.5 Research Contribution

1. Airline business and related organization can adapt the model of the airline’s role in supporting sustainable tourism development to the organization in order to drive sustainable tourism development.

2. Business operators in tourism and services business such as hotels, tours, restaurants, or those who are involved in tourism can adapt the model in this research to their context in order to drive sustainable tourism development.

3. Government sector involving in aviation, tourism and services can apply the model to initiate relevant policies, and to manage the agencies who involved in the tourism.

4. The developed model in this research can be further developed by other research which related to aviation management, tourism management, and sustainable tourism development.

1.6 Research Operational Framework

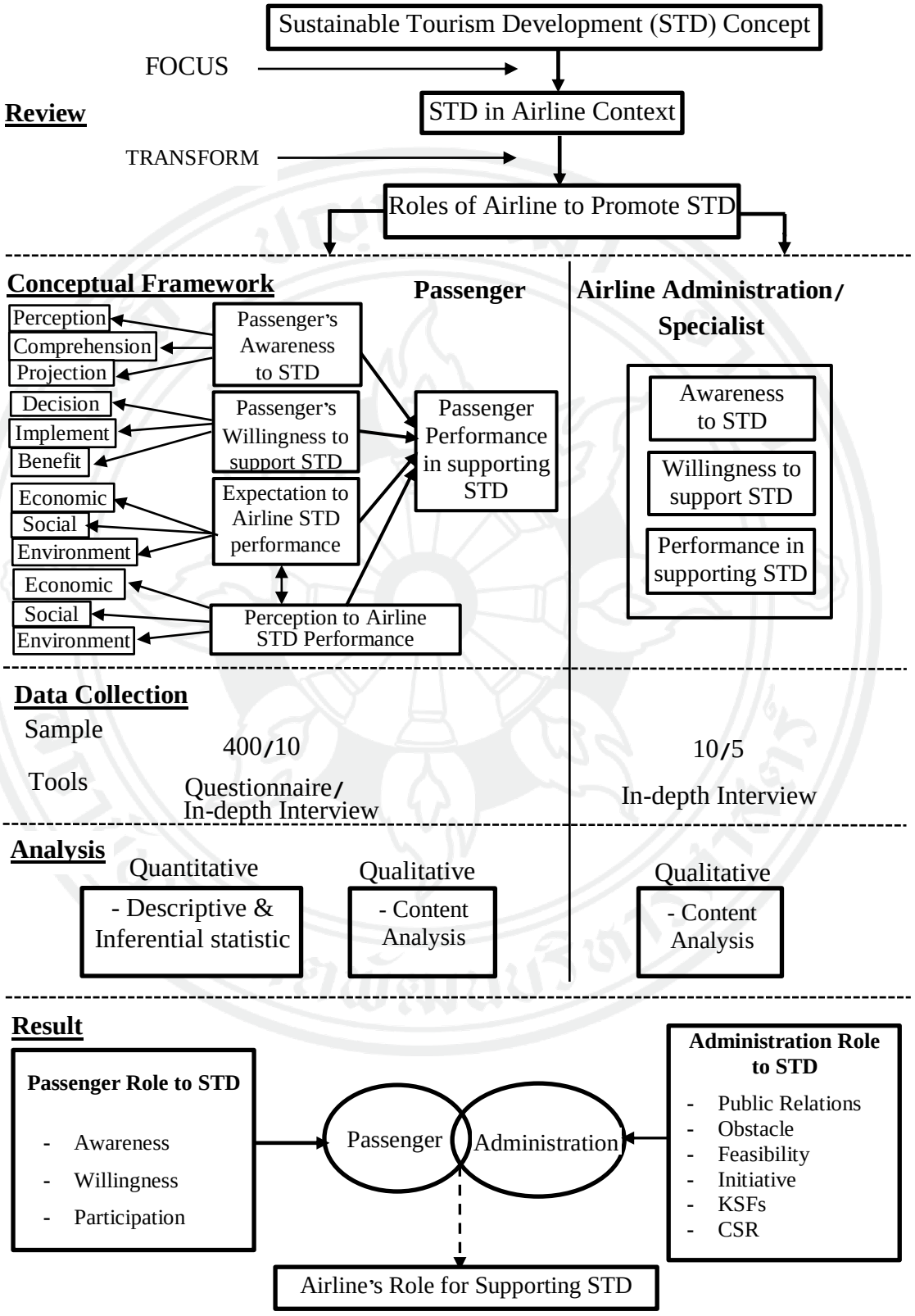


Figure 1.4 Research Operational Framework

Source: Author

1.7 Research Hypothesis

In this study, the researcher conducted a quantitative study in the sample of airline passengers, with the following hypothesis:

H1. Passenger's perception is an element of passenger's awareness to STD.

H2. Passenger's comprehension is an element of passenger's awareness to STD.

H3. Passenger's projection is an element of passenger's awareness to STD.

H4. Passenger's decision is an element of passenger's willingness to supporting STD.

H5. Passengers' implementation is an element of passenger's willingness to supporting STD.

H6. Passengers' sharing benefit is an element of passenger's willingness to supporting STD.

H7. Airline administration STD performance in economic aspect is an element of passenger's expectation to airline STD performance.

H8. Airline administration STD performance in socio-cultural aspect is an element of passenger's expectation to airline STD performance.

H9. Airline administration STD performance in environmental aspect is an element of passenger's expectation to airline STD performance.

H10. Airline administration STD performance in economic aspect is an element of passenger's perception to airline STD performance.

H11. Airline administration STD performance in socio-cultural aspect is an element of passenger's perception to airline STD performance.

H12. Airline administration STD performance in environmental aspect is an element of passenger's perception to airline STD performance.

H13. Passenger's awareness to STD influent passenger's performance in supporting STD

H14. Passenger's willingness to supporting STD influent passenger's performance in supporting STD

H15. Passenger's expectation to STD performance of airline influent passenger's performance in supporting STD

H16. Passenger's perception to STD performance of airline influent passenger's performance in supporting STD.

H17. There is significant difference between passenger's expectation to STD performance of airline and passenger's perception to STD performance of airline.

1.8 Definition

Awareness to STD refers to perception, understanding, value, and realization to develop sustainable tourism in the dimension of economy, society and environment.

Willingness to supporting STD refers to expressing the willingness of the passengers to cooperate with airlines and airline executives to engage in sustainable tourism development.

Expectation to STD performance of airline refers to the role that the passengers expect from the airline in developing sustainable tourism in the future in term of behavior and event.

Perception to STD performance of airline refers to acknowledgement of the performance of airlines on sustainable tourism development in the view of the passenger.

Performance refers to expression or conduct or of behavior of airline' s passengers and administration towards sustainable tourism development

Sustainable tourism development refers to the perspective of development for tourist destination in order to maintain in good condition for the next generation which can be consider in three aspects: economic, socio-cultural and environment.

Role refers to a prescribed or expected behavior associated with a particular position or status in a group or organization.

CHAPTER 2

LITERATURE REVIEW

2.1 Sustainable tourism development

2.1.1 Concepts and definition of sustainable tourism development

2.1.2 Role and expectation of stakeholders in the tourism industry

2.1.3 Factors that promote awareness of sustainable tourism development

2.1.4 Factors that promote willingness to participate in sustainable tourism development and implementation

2.2 Airline business in sustainable tourism development

2.2.1 Airline business and stakeholders

2.2.2 Airline business and sustainable tourism development

2.2.3 Impact of airlines on economic, socio-cultural and environment

2.3 Roles of airline business and sustainable tourism development

2.3.1. Role of airline passengers in supporting sustainable tourism development

2.3.2. Role of airline administration in supporting sustainable tourism development

2.4 Related researches

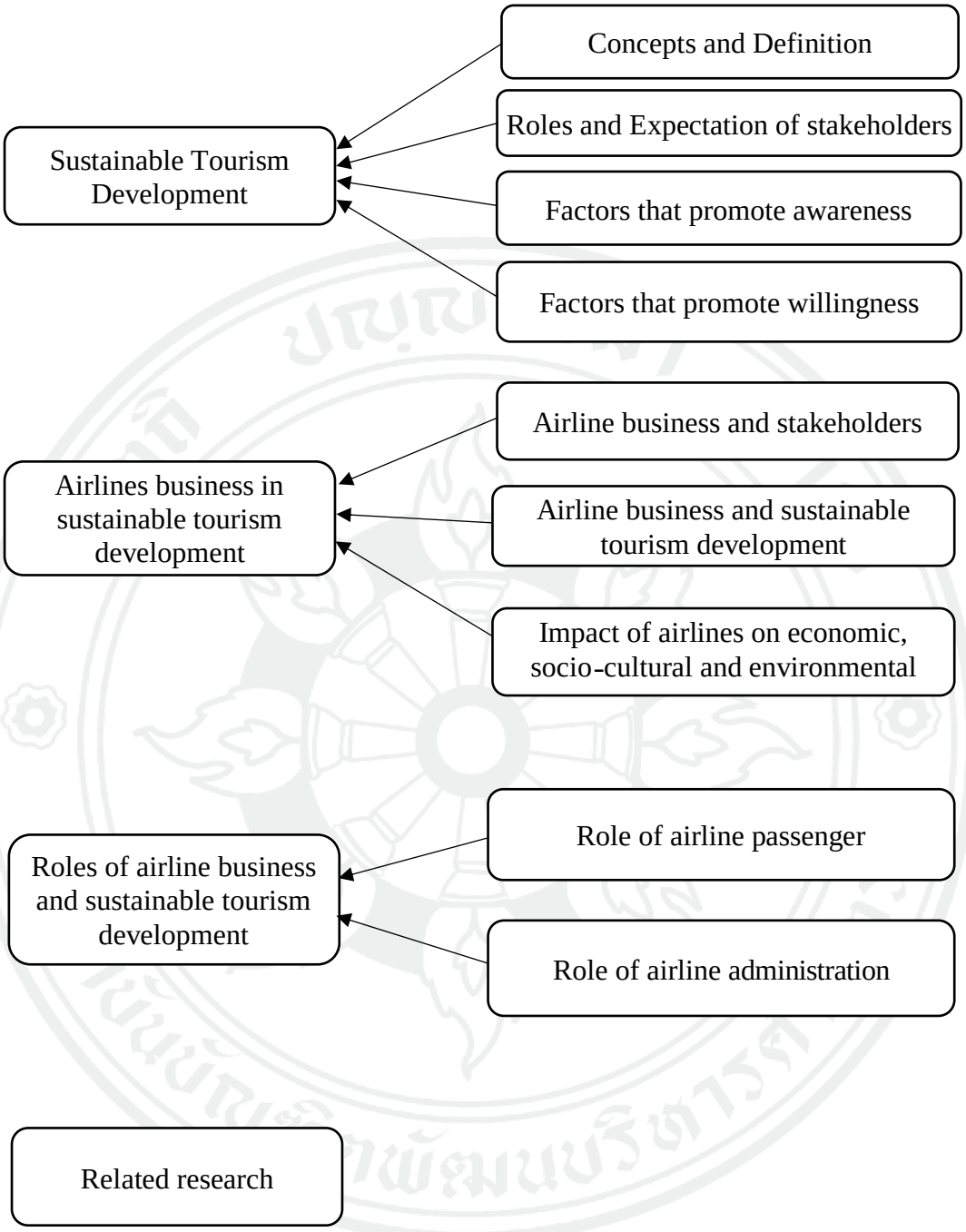


Figure 2.1 Related Researches for review framework analyzing by researcher

2.1 Sustainable Tourism Development

2.1.1 Concepts and definitions of sustainable tourism development

World Tourism Organization (UNWTO, 2005) has defined the concept of sustainable tourism as a tourism that has full awareness and responsibility both at the present and in the future for the economy, socio-cultural and environment in which the needs of tourists, industry, environment and local community are taken into accounted with the consideration on the balance of the economy, socio-cultural and the environment. The principles are as follows.

1. Tourism must aware and use natural resources and biodiversity properly with maximum profitability.

2. Respect for the culture and traditions of indigenous peoples including the adaptation and understanding of cultural differences in each community.

3. Prosperity of sustainable economic wealth and sustainable tourism will generate a fair and equitable distribution of income to tourism stakeholders. It also creates employment and income for local communities. Including contributing to reducing local poverty.

Wanee and Chidchanok (2000) and Center for Tourism Planning and Poverty Alleviation in Asia (2006) mentioned that there must be the balance of the three aspects.with an emphasis on economic stability, investment and distribution of income to socio-cultural and avoid the destruction of natural resources and the environment as well as taking into account the capacity of the community to be self-reliant (Damrong Rajanupab Institute, 1999). The community or tourist must be encouraged to have a better understanding of the nature and the environment. The community or tourist attraction should be involved in the management of tourism as a starting point for sustainability (Moral Promotion and Development Center, 2011) and the cooperation of tourism stakeholders in order to maintain the highest satisfaction of all parties (Viruj, 2007). In addition, quality of visitor experience should be emphasized (Jamieson, 2001).

Based on the concept above, it is concluded that sustainable tourism development is a comprehensive holistic development in all areas, such as the social which is emphasized on improving the quality of human life, the economy under the

capacity of supporting natural capital, and the environment that focused on the conservation and protection of biodiversity and natural resources. Sustainable tourism must be able to meet the needs of present and future generations. The development of tourism must use limited resources to maximize the benefits. This is due to the awareness and cooperation of all stakeholders involved in tourism in terms of resource management of the tourist attraction.

In this research, the researcher uses the definition of the World Tourism Organization, which means that tourism is responsible for the present and the future in order to meet the needs of tourists, industry, environment and community by balancing the economy, so-cultural and the environment with awareness and cooperation of tourism stakeholders as a conceptual framework.

2.1.2 Role and expectation of stakeholders in the Tourism Industry

The tourism industry is a multi-stakeholder industry. Freeman (1984) has defined stakeholders as an individual, a person or a group of people affected by the accomplishment of an objective. These individuals or groups have the power to express themselves, respond or make decision in various matters related to future policy actions (Eden & Ackermann, 1998) but in fact, there are other people involved and affected with no authority to make decisions or policy (Bryson, 2004).

Main individuals or groups involved in the tourism industry generally are the government, local business owners, and those affected by tourism, local people living in the community, and travelers traveling to the tourist attraction (Byrd, Bosley, & Dronberger, 2009; Conaghan & Hanrahan, 2009) while Sautter and Leisen (1999) further stated that there should be a tourism planner to provide a clearer picture of the stakeholders.

The role of stakeholders is important to the role of sustainable tourism development in terms of understanding, attitudes, interests and cooperation in tourism because it contributes to the future planning of tourism policy (Byrd et al., 2009). Quintano, Pagliuca, and Rosciano (2011) studied the insights and perspectives of tourism business with examples of hotel operations. It was found that most of the stakeholders were aware of sustainable tourism in moderate level. In addition, it was found that stakeholders still have gap and confusion between expectation and

performance because there may be too many activities which affect the role of stakeholders unclear and may not be manageable.

According to the role of tourism planner, the results of planning affected the expectation of stakeholders both directly and indirectly. Expectations arise from the level of work that a person determines as it is able to do and expectations is the level that individuals would like to reach (Clay, 1998; Murray, 1968). Expectation will happen only when such tourism stakeholders have experience about that before and the outcome may not always meet expectations (Sunee, 1981). While Vroom (1964) has discussed VIE Theory or valence, instrument and expectancy. In Conclusion, the expectations and outcomes are often different.

There are several people or groups involved in tourism and each group has different needs or expectations, depending on the impact of tourism on itself. For example, the government is aiming for local prosperity both in term of economic, socio-cultural and the environment of tourism, while tourism operators have expectations of an economy with a profitable return on earnings, local people have an expectation of a better life and socio-cultural. Similarly, passengers or travelers who visit tourist attraction expect to see the airline's role in promoting sustainable tourism. Stakeholders' expectation must be balanced in all three aspects: economy, socio-cultural and environment (Elkington, 1994).

2.1.3 Factors that promote awareness of sustainable tourism development

2.1.3.1 Concept of awareness

Concept of Awareness is a psychological approach mixed with behavior science. In term of psychology, it refers to feelings, opinions, attitudes, realizations, and perceptions related to events or behaviors arising from past experiences (Wolman, 1973) (Praphol, 1998) (Prapa, 1983) . The acknowledging of the problem with an idea to do something about the problem (Chusak, 1994). The awareness is about experiencing stimuli or the environment which use of mental reflection and consciousness (Prasat, 1990), resulting in the problem perception that people will be willing to participate in order to solve the problem (Good, 1973) (Nareekan, 2001) (Pinyaporn, 2001).

2.1.3.2 Components that cause awareness

Pinyaporn (2001) stated that awareness is caused by attitudes toward stimuli include individuals, situations, social groups, and things that are inclined or that respond positively or negatively. It is the result of learning and experience. There are three main components that cause awareness:

1. Cognitive Component starts from the easy level and will be more developed, respectively.
2. Affective Component is a sense of attitude, values, likes or dislikes, good or bad. It is a component used to evaluate various stimuli.
3. Behavioral Component is a verbal expression of gesture toward the stimulus or the tendency of the person to act.

This is consistent with Good's study (1973), the process of awareness is the result of cognitive process that occurs when a person is motivated by stimuli or exposure from the stimulus, to have a perception and then to understand the stimulus which leads to learning in order to obtain knowledgeable. Finally, it leads to awareness. Eventually knowledge and awareness will lead to action or the behavior of the person as a response to the stimulus as shown in Figure 2.2.

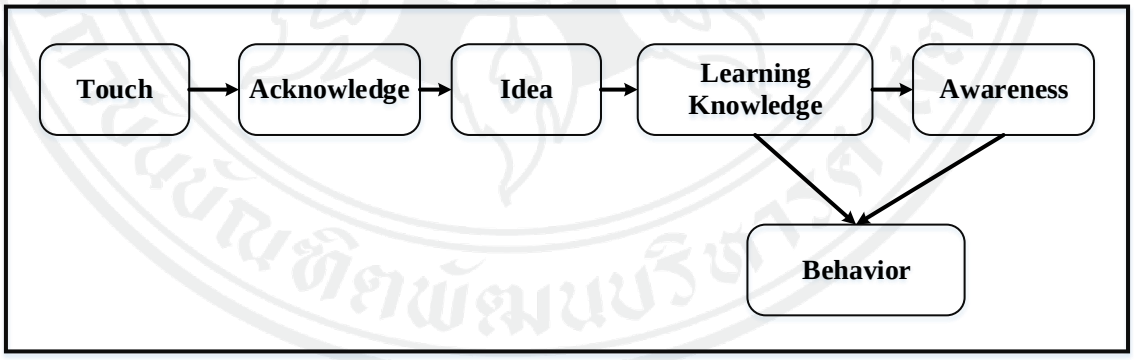


Figure 2.2 Process of Awareness
Source: Good, 1973

Based on Endsley (1995) which has been studied in situational awareness, it is a perception of the components in the environment over time and in a certain place, with meaningful understanding and predictability for the future.Endsley has categorized it into three levels of awareness as shown in Figure 2.3.

1. Perception is the exposure to relevant information around us, such as the global environment, ecosystem, weather, etc.

2. Comprehension is the manipulation of information or processing into one's own role to achieve the objective.

3. Projection is an anticipation of what is going to happen in the future from recognition and processing by understanding.

Endsley's three-level elements will lead to decisions that affect performance. The researcher then used Endsley model for further analysis.

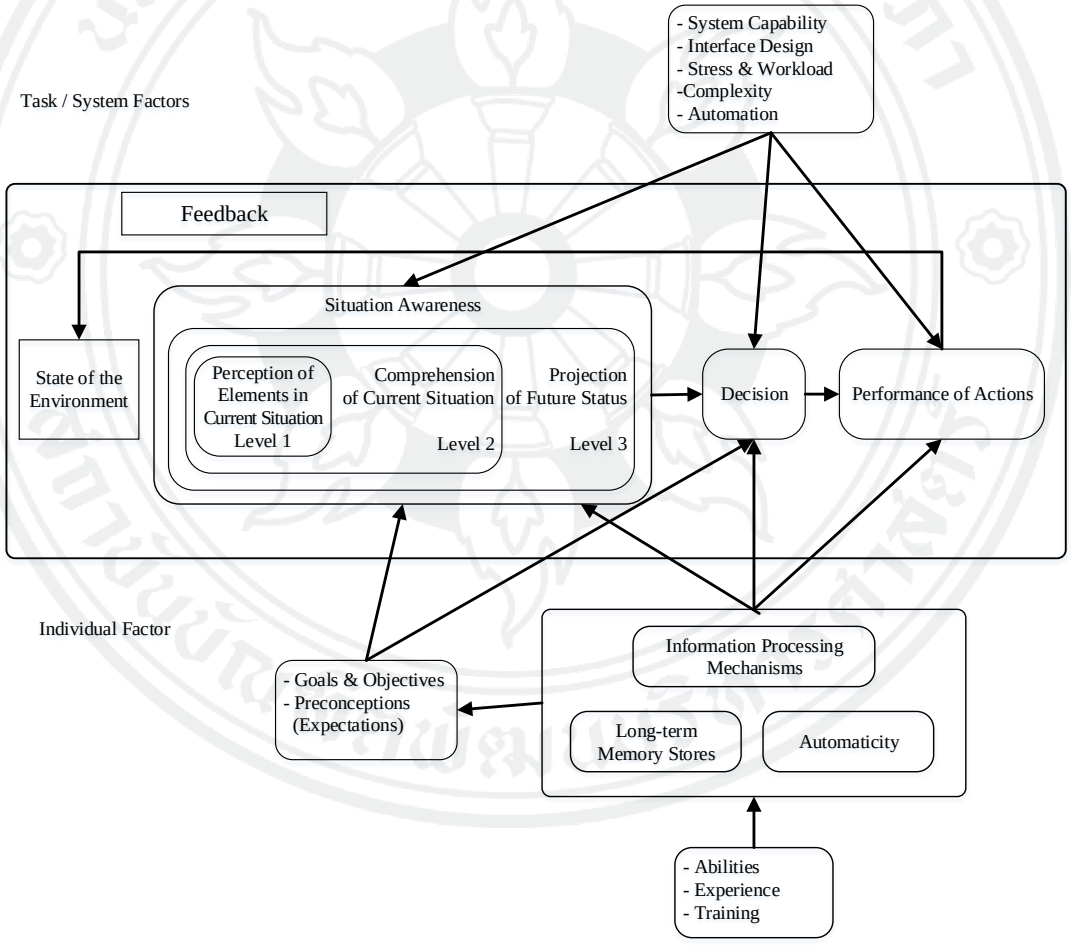


Figure 2.3 Situation Awareness

Source: Endsley, 1995

In conclusion, awareness is a sudden perception with the elements from environment and actions in the past. It affects emotions and feelings, as well as realization caused by the intellectual process due to the stimulus that encourages thought and leads to knowledge that results in behavior in order to show the responsibility of each individual who is ready to take part in activities for improving. Thus, to promote and educate people to have knowledge about environmental protection or sustainable tourism could create an intellectual process and being a factor to raise awareness for people.

2.1.4 Factors that promote willingness to participate in sustainable tourism development and implementation

2.1.4.1 Concept of willingness and behavior

There are many components involved in sustainable tourism development. One of them is the willingness to participate for the tourism sustainability. Regarding the individual's willingness, Swaim, Maloni, Napshin, and Henley (2013) has investigated the factors that encourage students' willingness and behavior toward environmental sustainability by applying Ajzen's Theory of Planned Behavior (Ajzen, 1991) which contains the components shown in Figure 2.3 to describe the components that contribute to the willingness of participation behavior of involved individuals.

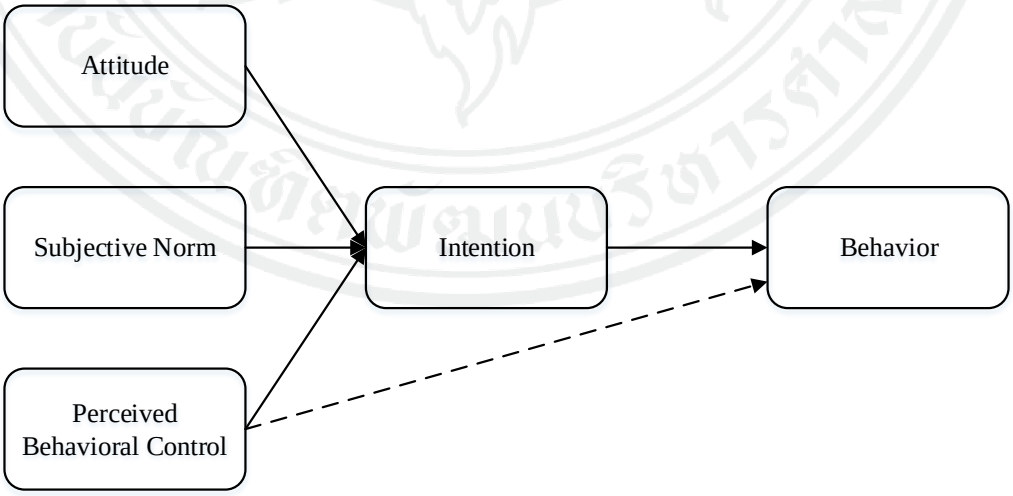


Figure 2.4 Theory of Planned Behavior: TPB

Source: Ajzen, 1991

1. Attitude toward the Behavior means a positive or negative evaluation of a person's actions. When a person believes that the behavior is positive, he/she tends to have a positive attitude toward the behavior. On the contrary, if a person believes that a behavior is negative, he/she tends to have a bad attitude toward the behavior. There will be intention when a person has a positive attitude.

2. Subjective Norm refers to the perception of a person that the other is influential or important to him or her and how the other wants him/her to behave. Behavior is more likely to follow the person who is important to oneself, which affects the willingness to express that behavior.

3. Perceived Behavioral is the perception of a person that it is difficult or easy to do that behavior. If a person believes that he or she has the ability to behave in that situation and can control it effectively, he or she is likely to do so.

2.1.4.2 Participation

The participation expresses the behavior of the mind and emotions of a person to achieve the aim with the responsibly willingness (Nirun, 1984). In effective engagement, the participants must truly have the power and control to get the effective result, not just participate (Arnstein, 1969). The leader should create the opportunity for all participants to participate and influence the development process (Berkley, 1975), (United Nation, 1981). There are four participatory processes as follows (Cohen & Uphoff, 1977).

1. Decision Making involves three steps: 1) an Initial Decision, a process of determining or finding a need, which is an important step because it is the direction and activity of cooperation, 2) ongoing Decision is a step after deciding what needs to be done and follow the guidelines that have been decided in the first place; and 3) Operational Decisions, which are decisions to operate.

2. The implementation consists of: 1) Resource Contribution, which has many forms, such as labor support, material support or data support; 2) Administration and Co-ordination Efforts, which can be members of various groups for work and co-ordination; and 3) Program Enlistment Activities, the simplest, which is to participate in activities according to what has been decided since the beginning

3. The benefit: To provide coordination in activities that has been decided according to the need will lead to benefits sharing. It can be divided to 1) Material Benefit which is a form of benefit that each individual obtains such as an increased income and better consumption, 2) Social Benefit which is in the form of benefits that the public receives such as better Socio-Cultural, better infrastructure and better public health, and 3) Personal Benefit which is the benefit that each individual obtains, and it is caused by the satisfaction of being a member of the group.

4. Evaluation: To participate in the evaluation, people should be allowed to provide feedback, satisfaction and expectations. This has the effect on changing the behavior of individuals in different groups.

To develop the sustainable tourism, it is necessary to rely on the factors of awareness and willingness to cooperate in implementation. There are many people involved in the travel industry. These stakeholders play an important role in sustaining sustainable tourism, such as those involved in airline policy. The airline administration should allow passengers and employees to participate in planning, information providing and activities participating including to share the benefits occurred from sustainable tourism development.

2.1.4.3 Performance

Performance is behavior that can be expressed physically in doing things. This can be observed and easily evaluated. Anyhow, the process that will cause this behavior is time-consuming and multi-steps are involved (Prapa, 1983); (Sermsak & Anekul, 1979) as well as Paisal (1983) have commented that the performance is an ability to apply knowledge and understanding to the real situation or to solve the problem in the real situation. Fabiyi (1985) has mentioned about knowledge and performance that the knowledge and performance are closely related to each other and it relies on one another. Schwartz (1975) believes that knowledge enhancement contributes to performance both directly and indirectly. In the indirectly way, attitude will be the media that will lead to the performance. On the contrary, Prasat (1980) explains that while working, the performer's knowledge is increased by directly learning which occurs from the performance. The performance makes the performer has more understanding and it can be further developed. To measure the performance, the

observation or instrument must be used together with the observation such as check list and rating scale (Sunan, 1982).

In conclusion, Performance is a physical expression in the form of behavior that is used in real life and it is closely related to one's knowledge and understanding or attitude. They can have an enhancement to each other once the performance is repeated. It can be observed and evaluated by using evaluation forms. The researcher used the evaluation form to measure the performance of the sample in this study.

Willingness to participate which will lead to the performance of stakeholders to be studied in this research as follow:

a) Airline Passengers

Chen (2013) who studied on the contribution of carbon offsets revealed that personal goals, satisfaction and feelings affected to the willingness to cooperate with this project. Satisfaction is the most effective factor, followed by the positive feelings of the passengers. Passengers turn their satisfaction into cooperation when they realize that environmental protection is the right thing to do and what they should do. Birgelen, Semejin, and Behrens (2011) found that personal awareness or perceptions directly affected the willingness of the passengers to cooperate. It is found that passengers believed environmental responsibility is more of a role of airlines than their own.

b) Airline Administration

The factor that drives the airline administration to consider is the encouragement of the participation in sustainable tourism development of themselves. The archive of commitment or loyalty of customers or passengers derived from the initiative in social responsibility, as well as tourist attraction development by using airline social responsibility. Currently, environmental trends are of great interest (Chen, Chang, & Lin, 2012). In addition, the administration are well aware that air transport is the key to tourism that can generate economic growth, local social change, or even the environmental impact of tourist attraction (UNWTO, 2013).

2.2 Airlines Business in Sustainable Tourism Development

2.2.1 Airline business and stakeholders

Boonlert (2008) stated that airline business is a business that is a component of the aviation industry. The aviation business can be either operated as personal flight or by the juristic person. The purpose is to operate the air transport business by aircraft or air-plane, both for passenger service or cargo service. The airline business must be operated in parallel with other businesses in order to be the aviation industry: 1) Airline business means a person or entity engaged in the business of passenger transport or air cargo; 2) Aircraft business means the operator who produces aircrafts or air plane to be sold to airline business operator or to be rent by the airline business operator; 3) Airport business, which refers to the operator of the airport to provide facilities to the airline business operators and passengers. 4) Aviation Industry Organization means both local and international agencies that coordinate, cooperate, support and control the aviation industry.

The type of airline business can be divided into three main categories:

1. Ownership characteristic such as state airline which is operated by the state or private airline which is operated by a private company
2. Service territory such as domestic air carrier which provides air transportation within the country or international air carrier which provides air transportation between the different countries in the world.
3. Type of service provided such as schedule airline which provide the air transportation both domestic and international with fix schedules or non-schedule Airline which depends on the objective of customer such as charter service airline, air taxi Service airline, as well as helicopter service airline

In addition, Air Transport and Airport Research (2008) has mentioned that Low Cost Carriers (LLCs) or Low Cost Airline emerged after the open skies policy has been implemented. The different between Low Cost Carriers or Low Cost Airline and Full Service Network Carriers (FSNC) are:

Full Service Network Carriers (FSNC) is an airline that focuses on offering full service from pre-travel, travel and after-travel, as well as offering a wide range of connecting routes as Hub-and-spoke with a variety of aircraft types, flight schedules with multiple flights per day or per week, and the price of tickets with good returns on the airline. LCCs focused on cost reduction as a strategy for price competition by reducing the variety of aircraft or air plane including the short life of the aircraft in order to reduce maintenance cost with additional charges beyond regular service, extra charge for meals and beverages on flights. They also apply cost reduction in the personnel of various departments such as booking a seat in advance, etc. International Air Transport Association (IATA) (2006) has described the LLCs as the airline providing Point to Point service with short to medium distance within the continental and to the secondary airport in each city, the air tickets are cheap for the location with high competition, target customers are travelers, there is only one class in the whole airplane, the use of air-plane is short and focuses on online ticket buying, etc. Air Transport Action Group (2011) has named stakeholders of airline business as 1) Airport 2) Aircraft Manufacturers 3) Airlines and Airline Operators 4) Airline Suppliers 5) Sale Channels 6) Aircraft Financing 7) Union 8) Education and Training 9) Media 10) Business communities 11) Non-Government Organization 12) Government 13) Passengers, and 14) Tourism. In addition, Freestone (2009) and Walker and Cook (2009) has mentioned that the stakeholders of airline business are airline, airport, and airline policy maker involving in balancing the growth of aviation industry by maintaining the variety of environment and quality of people live in the community. Hooper, Heath, and Maughan (2003) added that the aviation industry has been supported by stakeholders such as local communities, customers, partners, and investors.

2.2.2 Airline business and sustainable tourism development

Airline plays an important role in supporting sustainable tourism development. Each airline has different policy and strategy to promote the tourism which might be related to other stakeholders. Each airline has set the policy in support sustainable tourism development according to its context. For example,

1. Qantas Airways focuses on using 7.7-year average life span airplane for fuel efficiency and less gas emissions including reduction of water and electricity

in the office. It also focuses on the use of communication channels to create a tourist experience for passengers in order to have a social responsibility in various areas such as sponsorship of local products produced by Australian partners to create a career for local people, encourage the strength of local culture. It also pays special attention to the staff and customers of the airline (Qantas Airways, 2016).

2. Air Transat is an airline formed by the merger of Canadian travel agents both locally and internationally. It focuses on the environment, community, customers and partners. It plays a role in encourage customers to search for the information before traveling to tourist destinations in order to build a good relationship between tourists and host. It also encourages the traveler to travel with lightweight luggage to lower fuel consumption and less pollution, as well as supporting the local economy by encouraging the traveler to spend money buying products from local people in order to promote the local economy (Air Transat, 2014).

3. Virgin Atlantic is an English airline operating the business to support economy, socio-cultural, and environment by focusing on the consequent effect on environment such as carbon emission. Virgin Atlantic plays the role in setting a policy to develop the sustainable tourism such as awarding the employee who has good performance in environmental conservation activity, maintain the engine to be in standard in order to produce less carbon emission, as well as using bio-fuel, promoting buying products from the community, and participate in tourist attraction development (Virgin Atlantic, 2013)

4. Singapore Airline has policies focusing on the stakeholders by providing communication, funding to support the community, using fleet with average life span of 7.5 years which can reduce carbon emission and noise and replacing old engine with up-to-date and effective engine, using biofuels, including environmental preservation that pursues policies by various environmental organizations to achieve sustainable tourism development for tourism (Singapore Airlines, 2013).

From the example of the airline mentioned above, most airlines focus on environmental protection priority according to environmental issues. Anyhow, economic and social components are also key components of sustainable development. The role of the airline should be balanced by the three elements.

2.2.3 Impact of airlines on economic, socio-cultural and environmental

Elkington's Sustainable Development Concept Elkington (1994) discusses the concept of sustainability in three dimensions: 1) Profit, 2) People, and 3) Planet, also known as the “Triple Bottom Line (TBL)” or “3Ps” It can be used as a framework for sustainable tourism development, taking into account the impact of the airline's role on sustainable tourism, which has both positive and negative impacts.

2.2.3.1 Positive impact

The airline business creates large employment in the location of the airline office or airport. Income generated by employment creates a circulating flow of money in the local system, which can create a growing economy. Ozbay, Ozmen-Ertekin, and Berechman (2003) stated that the creation of a good transportation system into any locality is a key to economic welfare and economic success depends on the transportation sector or refers to the airline. Honey (1999) confirmed that transportation advances make travel more comfortable. This makes it easier for travelers to access tourist sites, which may be due to improved transportation and these results in lower transportation costs (Page & Lumsdon, 2004). In term of socio-cultural, it generates a wide variety of cultures by exchanging experiences with tourists and locals, or even airline’s corporate social responsibilities to make the socio-cultural in the tourist attractions becoming better. It also includes the airline policy that is trying to help maintain the environment of the whole source to stay perfectly in order to attract more travelers to visit, which will improve the business of the airline.

2.2.3.2 Negative impact

Negative impact of airline on the economic, socio-cultural, and environmental is higher than positive impacts. For example, the economy is better when the number of traveler increases, but all the income might go to the investor who is a foreign investor. The money was transferred to other places. In addition, the tourist attraction might be destroyed by the travelers (Buckley, 1996). Cheaper price of ticket causes more tourists to visit the site and it will affect the carrying capacity of the tourist site as Inskeep (1987) has mentioned about the carrying capacity of a small island. There should be a plan to respond to tourist’s need or to consider having the carrying capacity

that is matched to the local natural resource. In term of socio-cultural, Fennell (2003) and Honey (1999) mentioned an example of the Galapagos Islands in Ecuador. In 1970, there was only cargo ship going to the island once in three months. Later, the American airline started its operation to the islands and caused the number of traveler increasing dramatically. This caused many consequent problems such as lack of qualified tourists, lack of immigration officer, etc. In fact, the local population and visitors should have a reasonable ratio. Excessive tourist arrivals also resulted in shortages of residential, electricity and water supply, including traffic jams and increased pollution, respectively.

Another significant negative impact is on the environment. Road construction or airport infrastructure construction may have an impact on the habitat of animals. This caused the migration of animals, including air and noise pollution from aircraft engines (Buckley, 1996)The European Emissions Trading System (ETS) (European Commission, 2014) is a policy of the European Union to fight against climate change by regulating carbon emissions from the atmosphere in different industries. This gas generates greenhouse effect which leads to higher global temperature every year. This policy is used as a tool to set emission limits for various industrial sectors, including the aviation industry, called “Cap and Trade”. Cap or Limit is the level or ceiling of gas emissions for various industries in European Union. If any industry or factory has exceeded the defined emissions standards, it will be required to trade with less than standard which is called carbon credits, or it may pay the compensation for emission more than limit carbon which is called as Carbon offsets. These policies became effective in 2012 with EU countries including airlines flying into and out of EU countries.

In conclusion, impact of airlines on the sustainable tourism is concluded by using three dimensions: economic, socio-cultural and environmental or what is called as Triple Bottom Line which is related to each other closely. For example, there are land transportation, water transportation and air transportation. Air transportation is fast and convenient which refers to higher number of traveler and higher accessibility to the tourist attraction. This leads to better economy and better way of people live in the community. At the same time, increased number of tourists and more convenience in accessing the tourist attractions due to cheaper cost of travel may make the tourists have

less awareness to conserve the environment. The carrying capacity may not be able to support the higher number of tourists. This will create negative impacts to the socio-cultural and economy, if the management is not good enough. In addition, the vehicle used to travel in land transportation, water transportation and air transportation will also generate pollution, especially air transportation vehicle that release carbon and creates noise. Aforementioned impacts affect the sustainable tourism. The airline administration should adapt their role to support sustainable tourism development.

2.3 Roles of Airline Business and Sustainable Tourism Development

2.3.1 Role of airline passengers in supporting sustainable tourism development

Airline passengers play a key role in supporting sustainable tourism development in all three areas.

In term of economic, they purchase local products from the community and this is to create income to local people directly.

In term of socio-cultural, they pay respect and adapt themselves to culture and tradition, as well as abstaining from destruction or interfere local culture and tradition both directly and indirectly.

In term of environmental, the passengers can choose to fly with the airline with the policy to support sustainable tourism development even if they have to pay more fare to compensate for the environmental conservation.

According to Gossling, Haglund, Kallgren, Revahl, and Hultman (2009) only 2% of respondents are willing to pay to offset emissions. After explaining the principle of compensation, 70% expressed their willingness to pay compensation and 55% agreed that it was a good project of the airline. Hooper, Daley, Preston, and Thomas (2008) also found that less than 50% of passengers were aware that they could compensate for travel emissions, and less than 10% expressed their willingness to compensate for the emission offset. The role of this type of passenger may affect the airline's competitive policy including visiting places with rules of etiquette without destroying natural tourism resources strictly.

2.3.2 Role of airline administration in supporting sustainable tourism development

Role of airline administration directly affects the sustainable tourism development in determining the policy. The policy is then translated into actual operational plans which can be categorized into three areas as follow:

2.3.2.1 Economic

Local Economic Promotion Policy by promoting the value of products or allocating revenues from tourism for local circulation or preservation such as publicity, initiate local purchases, creation of jobs or hire local workers, encouraging staff and passengers to participate in travel reviews in order to implement a company policy that is beneficial to the tourist or local area.

2.3.2.2 Socio-cultural

The role of corporate culture and employee engagement in terms of awareness and willingness to cooperate on an environmental basis, promoting the role of social responsibility in the development of tourism, and using sustainable communication strategies with stakeholders. For example, Scandinavian Airlines launches SAS Sustainable Report (SAS Group, 2013). The airline executives have a clear and focused approach to environmental and corporate social responsibility (CSR), with the goal of running a climate-free airline business in 2050. The airline has set up an agency that is directly responsible for environmental and social responsibility, and it aligns itself with top management through a communication channel called “The Sustainability Network” to support the management.

This agency is responsible for overseeing sustainability reporting, control sustainable management, coordinate in the CSR work that is used by the executives to develop the sustainability.

2.3.2.3 Environment

Creation of cooperation with the partners regarding green tourism to raise awareness to the customer such as to propose a handbook or guideline to protect the environment to the hotels, policy to reduce car bon emission by complying with EU ETS regulations since 2012. The policy to use biofuels with the airplane in order to

reduce carbon emission or to focus on the preparation of airline's environmental report and disclose to the public to show the participation and commitment in tourism (Mak & Chan, 2007).

Harvey, Williams, and Probert (2013) has studied human resource management in term of environment by conducting the study on pilot. The study reveals that human resource management affects the pilot's behavior in term of environment directly and indirectly. Direct effect refers to training organization and recommendation providing to protect the environment. Indirect effect refers to other policies than affect the employee' attitude such as work satisfactory, or commitment to the organization which makes the employee or pilot to have awareness on the environment effect during working such as carbon emission.

2.4 Related Researches

Arjomandi and Seufert (2014) studied on "An evaluation of the world's major airlines' technical and environmental performance" which applied bootstrapped data envelopment analysis (DEA) models under variable returns to scale to examine both environmental and technical efficiencies of airlines. 48 of the world's major full service and low cost airline from six different regions were chosen according to the regional classification of the International Air Transport Association (IATA). The study found that most of the technically efficient airlines are from China and North Asia, while most of the best environmental performers are from Europe countries. The result also clarified that even though the environmentally oriented number of full service airline was increasing, but the low cost airline still had more environmentally oriented number which the technically operating under increasing returns to scale in all the studied year.

Chen (2013) studied on "The intention and determining factors for airline passengers' participation in carbon offset schemes" that the researcher applied the model of goal-directed behavior (MGB) to determine the understanding of intention and factors for airline passengers participating in carbon offset plans which many airlines are now offering carbon offset schemes for their passengers to reduce number of carbon footprint. The structural equation model was used to analyze the data which collected from 360 Taiwanese passengers. The result shown that personal norms and

positive anticipated emotions have a positive effect on desires. The study also found that desires have a positive and significant influence on intention to participate in carbon offset schemes.

Hagmann, Semeijn, and Vellenga (2015) studied on “Exploring the green image of airlines: Passenger perceptions and airline choice”. The researcher examined passenger’s general attitudes towards the green image of different airlines, perceived differences in eco-friendliness among these airlines, and effects on airline choice during booking. The study also investigates how passenger’s experiences with an airline affect perceived eco-friendliness of that airline. The finding of this research shown that green image of airline affects to passenger decision during choosing airline choice. The researcher found that airline passenger willing to pay for extra green image but not much when compare to the extra amenities such as additional leg room.

McKerchera, Prideauxb, Cheunga, and Lawa (2010) studied on “Achieving voluntary reductions in the carbon footprint of tourism and climate change” which the study examines attitudes among residents of Hong Kong to tourism and climate change. The study also evaluates their willingness to voluntarily modify travel behaviors to reduce environment impact. The related study shown the significant gap between awareness and action , with some studies suggested that the most aware individuals are unlikely to change their behaviors which similar finding had mention in this study. The regular international tourist group was most aware of global warming and climate change, at the same time they had least willing to change their travel behavior. Contrary, less travel active tourists seem most wiling to travel less. The government intervention may be need to create a meaningful of behavior change in travel patterns.

Eakkaruk (2011) conducted a study on the awareness and adoption of environmental management system (ISO 14001) in public organizations: a case study of the Office of Natural Resources and Environmental Policy and Planning. The study found that most of the samples are female with bachelor degree or higher. They are government officer and have been trained on the environmental management about the environmental problems characteristic. Most of the samples have knowledge about the environmental manage in moderate level. Their awareness on the environmental management is in high level. In addition, the acceptance on the implementation of environmental management is in rather high level.

Teeraporn (2005) studied on the form of sustainable tourism development and the participation of local people in Koh Lan, Pattaya, Chonburi Province. The study concluded that Koh Lan did not have a sustainability tourism development because the strategy and plan, as well as project were under process of the involved government agencies. Hence, the participation of people in the community in sustainable tourism management and information perception in Koh Lan was rather low. It was also found that the local environmental awareness of the current tourism was at a moderate level. Local knowledge and nature conservation were at a high level. The interest in participating in sustainable tourism management activities was moderate. The main factor that affects participation was the perception of news in local population.

Wimonpan and Chantana (2011) conducted a study on awareness, knowledge, attitude and behavior on global warming in Bangkok and its vicinities. The purpose of the study was to study the exposure, awareness, knowledge, attitudes and behavior of global warming and to study the relationship between exposure, awareness, knowledge and attitudes towards global warming. The sample was people living in Bangkok area and five surrounding provinces which are Pathum Thani, Samut Sakhon, Samut Prakan, Nakhon Pathom and Nonthaburi. The results of the research show that the exposure to global warming through media was moderate, and most people were of the opinion that the country is promoting global warming moderately. The levels of awareness, attitude and behavior towards global warming were at a high level. The relationship of exposure, awareness and attitude were positively correlated with global warming behavior at the statistically significance of .05, while knowledge was negatively correlated with behavior towards global warming at the statistically significance of .05.

Athit (2009) conducted a study on global warming reduction behavior in undergraduate students, Ramkhamhaeng University. The study found that the awareness about global warming was moderate. Cognition was at a high level. Social support for global warming was high, with a high level of attitudes towards global warming, while having a moderate level of behavior.

Weerachon (2008) studied on “Knowledge, Participation, and Awareness of Environmental Management Systems of Employees in Organization with Environmental Management System Certification (ISO 14001) Case Study of Chanthaburi Seafood Company Co., Ltd. and Chanthaburi Frozen Food Co., Ltd.” with

the objective to study the level of knowledge Participation and awareness of employees' environmental management systems, factors related to awareness of employees environmental management system, and to implement the results obtained as a guideline to promote employees' awareness of environmental management systems. It was found that the samples received information on the environmental management system at a moderate level. The training on environmental management was at high level and had a supervisor as a good role model in environmental conservation with moderate knowledge and understanding in environmental management. Awareness of environmental management was in high level. Hypothesis testing results showed that participation, news perception, level of education was positively correlated with awareness of the environmental management system at the significance level of 0.05. It was found that knowledge, understanding and training were positively correlated with awareness of environmental management system at the significance level of 0.01. Regarding gender, age, job position and affiliation, it was found that there was no relationship with awareness of environmental management systems.

Sirikhae (2002) conducted a study on "Employee's knowledge and practice of environmental conservation, National Airline Office, Case Study Thai Airways International Public Company Limited". The study aimed to study knowledge, practice, relationship of knowledge and practice, factors related to knowledge and the environmental performance of the employee of the National Airlines Office. The study was conducted in Thai Airways employees at the head office. The study indicated that most of the samples had knowledge about environmental protection at the high level. Educational and information perception were variables. There was relationship between environmental conservation and knowledge at the significance level of .05. Most of the samples were moderately active. The variables related to performance were age, position and information perception, at the significance level of .05. In term of, environmental conservation knowledge, there was a relationship between environmental conservation and practices at the significance level of .05.

Nareekan (2001) studied on "Information exposure, knowledge, and awareness of executives and participation in environmental conservation of hotels in Bangkok" with the objectives to study the environmental exposure of the executives, including the relationship between the executives' knowledge, awareness and participation in the

conservation of the hotel environment. The research found that most hotel executives were exposed to the information in low level. Their knowledge of environmental conservation was at a moderate level. There was high awareness of environmental conservation and participation in environmental conservation. 1) There was no correlation between information expose on the environmental conservation from mass media and personal media and the executive's knowledge on the environmental conservation. 2) There was no correlation information expose on the environmental conservation from mass media and personal media and the executive's awareness on the environmental conservation. 3) There was a relationship between information expose on the environmental conservation from mass media and personal media and the executive's participation on the environmental conservation. 4) There was a relationship between knowledge on the environmental conservation and the executive's awareness on the environmental conservation. 5) There was no correlation between knowledge on the environmental conservation and the executive's participation on the environmental conservation. 6) There was a relationship between awareness on the environmental conservation and the executive's participation on the environmental conservation.

Daraporn (2002) conducted a study on "Perception and behavior concerning to the environmental effect of tourists and tourism business operation, a case study of Koh Samed, Rayong Province". This study aimed to examine the perception and behavior of environmental effect and some factors affecting the perception and behavior of tourists and tourism business operators on Koh Samed. The sample of the study was tourists and operators of accommodation and restaurants. The results showed that most tourists were aware of the impact on the environment at a high level. While most travel operators had a perception on the environmental effect in moderate level. Both tourists and tourism business operators had behavior that helps to conserve the environment at a moderate level.

CHAPTER 3

METHODOLOGY

3.1 Research Framework

This research reviewed data and theories related to research problems including definitions and meanings. After that the researcher has set the framework for this study. There were 2 sample groups: airline passengers and airline administration. The study was conducted both in term of quantitative and qualitative. Questionnaire and interview form were used as a tool for collecting data and they were analyzed by descriptive statistic, inference statistics and content analysis. Then, the result was synthesized to create the role model of airlines towards sustainable tourism development.

3.2 Conceptual Framework

The research conceptual framework is divided into 2 parts, airline passenger and airline administration.

3.2.1 Airline Passenger

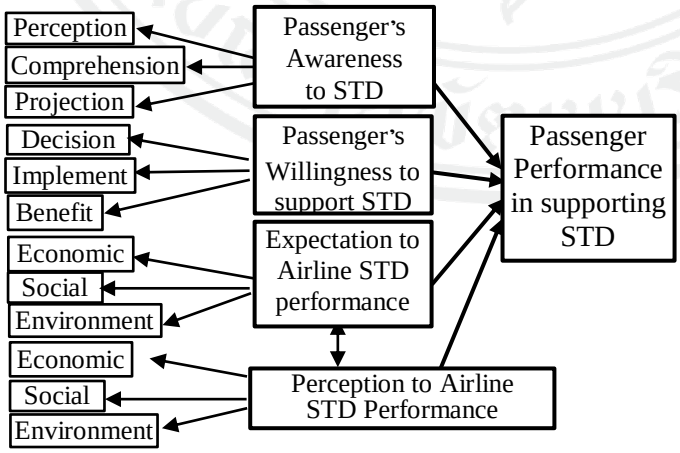


Figure 3.1 Research Conceptual Framework (Airline Passenger)

Source: Author

The key variables in passenger part include;

1) Passenger's awareness to STD: Concept of Endsley (1995) was used. Variables included Perception, Comprehension, and Projection.

2) Passenger's willingness to support STD: Participation Theory of Cohen and Uphoff (1977) was used. Variables included Decision, Implement, Benefit Sharing and Evaluation.

3) Passenger's expectation to STD performance of airline: The three factors of sustainability according to definition provided by UNWTO (2005) was used. Variables included Economic, Socio-Cultural, and Environment.

4) Passenger's performance in supporting STD is studied by measurement of Economic, Socio-Cultural, and Environment.

5) Passenger's Perception to STD performance of airline is studied by measurement of the performance acknowledgement of airline administration.

3.2.2 Airline administration

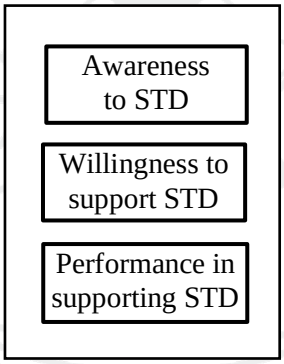


Figure 3.2 Research conceptual framework (airline administration)
Source: Author

Conceptual framework in the airline administration is a qualitative research by in-depth interview with semi-structure. Contextual questions were based on variable about awareness to STD, willingness to support STD and performance in supporting STD.

3.3 Data Collection

3.3.1 Secondary data

Related information aviation industry, sustainable tourism, factors of awareness, factors contributing the willingness to cooperate, expectation, and so on was collected from the library. In addition, researches, term papers, dissertation, theses in the library and library website of NIDA and other universities, including journal, electronic article related to the research, together with information from electronic media or website of organizations, government agencies, and other institutes. The statistics of the travelers who visit Thailand from the Tourism Department, statistic of work travelers from UNWTO, were collected as reference and support the research.

3.3.2 Primary Data

3.3.2.1 Airline passenger

a) Population

All nationality passengers who traveled both inbound to and outbound from Thailand as well as domestic passengers.

b) Sample

The studied population of 24 million passengers from Ministry of Tourism and Sports 2014 statistic (Department of Tourism, 2016). The researcher applied Yamane's theory (Yamane, 1973) to specify the samples as follow:

$$n = \frac{N}{1+ N(e)^2}$$

n = size of sample

N = number of population

e = Estimation Error 5%

Based on 24 million of tourists traveled to Thailand, the number of sample is 399.9. Therefore, the research has determined the number of sample to be studied as 400

$$n = \frac{24{,}000{,}000}{1+ 24000000(0.05)^2}$$

$$n = 399.9$$

c) Sampling Technique

Multi-stage Sampling Technique was applied by following process.

Stage 1: Apply Purposive Sampling Technique by selecting the airports that the passengers used to travel inbound and outbound from Thailand as well as domestic travel which the six major airports in Thailand under the supervision of the Airport of Thailand (AOT) as they are Thailand's main airports serving both Thai and foreign airlines that fly directly to the main six airports, namely, Suvarnabhumi Airport, Don Muang Airport, Chiang Mai Airport, Chiang Rai Airport, Hat Yai Airport and Phuket Airport, including the two airports, under the supervision of the Department of Civil Aviation, which the foreign airlines direct flights to, Krabi Airport and Samui Airport (private). There were eight airports in total.

Stage 2: Apply Proportional Stratified Random Sampling to determine population's sample according to the proportion of passengers in each of eight airports from the sample group of 400 persons by using below calculation.

$$\text{Number of sample in each group} = \frac{\text{total number of sample x number of population in each group}}{\text{Total number of population}}$$

Table 3.1 Number of Passengers who are population and sample based on the airport

Airport	Number (person)	
	Population (Million Persons)	Sample Group
Suvarnabhumi (BKK)*	45.4	194
Don Muang (DMK)*	21.5	92
Chiang Mai (CNX)*	6.6	28
Chiang Rai (CEI)*	1.3	6
Hat Yai (HDY)*	3.1	13
Phuket (HKT)*	11.3	48
Krabi (KBV)*	2.7	11
Samui (USM)*	1.8	8
Total	93.7	400

Source: The Airport of Thailand (2015), Department of Airports (2015)

*Remark: * International Air Transport Association (IATA) Three Letters Airport code*

Stage 3: Apply Convenience Sampling by distributing the questionnaire to the sample refer to the proportion of each airport as per researcher's convenience and the in-depth single interview by purposive sampling with one of the sample from each airport, except Suvarnabhumi airport and Don Muang Airport where 2 samples were interviewed from each airport. Total sample used in this stage were 10 persons.

d) Instrument

The researcher used the questionnaire to collect quantitative data. The questionnaire was divided into sections as follows:

Section 1: General information of the questionnaire respondents such as gender, age, education, and income. The questions herein were closed end question

Section 2: The questions were about the passenger's awareness to STD. The researcher applied Endleys' Theory (Endsley, 1995) to determine the variables in this study. Likert Scale was used to identify passengers' awareness.

Section 3: The questions were about the passenger's willingness to support STD and the passenger's current performance in supporting STD. Cohen and Uphoff (1977) was applied in order to determine the variables of this study. Likert Scale was used to identify passenger's willingness and passenger's current performance in supporting STD.

Section 4: Passenger's expectation to STD performance of airline and perception to STD performance of airline. The definition of sustainability by UNWTO (2005) was applied in order to determine the variables of this study. Likert Scale was used to identify the performance expectation of airline executives.

Section 5: The questions were open-end question concerning to comment and suggestion according to the role of airline passengers and airline in supporting sustainable tourism development. The researcher used semi-structured in-depth interview with the passengers of Thai airlines as an instrument to determine qualitative data.

e) Instrument Test

The instruments created for this research must be tested in its validity, and reliability. The researcher presented the instrument to the advisor to check the accuracy and content validity to ensure that the instrument covers the study. After the questionnaire was presented to the advisor and modified for its academic validity, it was used for try-out with the sample of similar characteristics in the study which were 20 passengers of Thai airlines. Then the questionnaire was test in term of reliability to measure the internal consistency of the questionnaire by alpha coefficient. Lastly, the questionnaire was improved to have the acceptable reliability.

3.3.2.2 Airline administration

a) Population

Populations in this study were airline administration who work in Thailand and have a responsibility for policy making, services, human resources, flight operation,

energy management, training, and policy implementation with the position of director or higher.

b) Key Informant

Administration staffs of full service carrier and administration staffs of low cost carrier.

c) Sampling

Purposive sampling was applied to obtain 10 samples approximately according to the market share proportion of airlines based in Thailand.

d) Instrument

Qualitative research was conducted by using semi-structured in-depth interview with an outline of the questions. The question was based on the variables of awareness to STD, willingness to support STD, and performance in supporting STD. The interview was done by recording data through a dictation machine and taking notes on paper.

e) Instrument Test

The researcher presented the outline of question to the advisor in order to examine the content validity and the question was modified accordingly.

3.3.2.3 Tourism experts

a) Population/Key Informant/Sampling

The study population was experts in sustainable tourism, such as executives of government tourism agencies, executives responsible for tourism policy, other airline executives, and academicians in tourism, aviation industry, and human resource. Purposive sampling technique was applied to obtain about 5 samples.

b) Instrument

Qualitative research was conducted by using semi-structured in-depth interview with an outline of the questions. The question was based on the variables of awareness to STD, willingness to support STD, and performance in supporting STD. The interview was done by recording data through a dictation machine and taking notes on paper. Data obtained was interpreted and used as supporting data for analysis.

3.4 Data Analysis

3.4.1 Objective 1

Quantitative data and variables of current passenger's performance to STD and passenger's perception to STD performance of airline were analyzed by descriptive statistics, frequency, percentage, mean and standard deviation. The statistics obtained was described.

Following Likert's rating scale was used for data analysis:

5 means highest
4 means high
3 means moderate
2 means low
1 means lowest

The score obtained will be analyzed and interpreted as a mean of significance. The criteria for each grade were as follows (Best, 1977)

$$\text{Class Interval} = \frac{\text{range}}{\text{number of class}}$$

$$= \frac{\text{maximum score - minimum score}}{\text{number of class}}$$

$$= \frac{5 - 1}{5} = 0.80$$

Average score of 4.21 - 5.00 means highest
Average score of 3.41 - 4.20 means high
Average score of 2.61 - 3.40 means moderate
Average score of 1.81 - 2.60 means low
Average score of 1.00 - 1.80 means lowest

Qualitative data and variables on the airline administration performance to STD result was analyzed by content analysis using semi-structured in-depth interview with 3 processes: 1) data arrangement; 2) results display and presentation; and 3) conclusion and discussion.

3.4.2 Objective 2

Quantitative analysis was conducted to analyze the factors of airline passenger's awareness to STD, passenger's willingness to support STD, passenger's expectation to STD performance of airline and passenger's perception to STD performance of airline as below.

1) Descriptive statistics, frequency, percentage, mean and standard deviation were used to analyze the obtained data, and then the results were described accordingly.

2) Inferential Statistic was applied. Factor analysis was used to analyze components and to determine the relationship between the latent variable and observed variable that the accepted factor loading should greater than 0.5 Hair, Black, Barbin, Anderson, and Tatham (2010) in order to test Hypothesis 1 – 12 as follows (Figure 3.1).

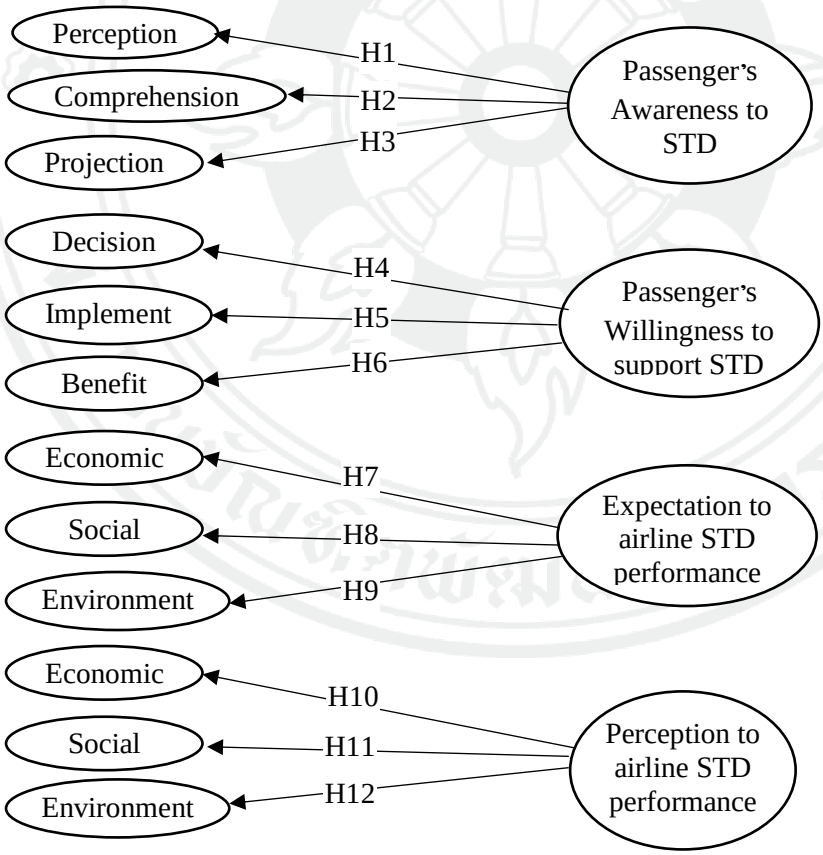


Figure 3.3 Hypotheses of the study analyzing by author (CFA)

Hypothesis:

H1. Passenger's perception is an element of passenger's awareness to STD.

H2. Passenger' s comprehension is an element of passenger' s awareness to STD.

H3. Passenger's projection is an element of passenger's awareness to STD.

H4. Passenger' s decision is an element of passenger' s willingness to supporting STD.

H5. Passengers' implementation is an element of passenger's willingness to supporting STD.

H6. Passengers' sharing benefit is an element of passenger' s willingness to supporting STD.

H7. Airline administration STD performance in economic aspect is an element of passenger's expectation.

H8. Airline administration STD performance in socio-cultural aspect is an element of passenger's expectation.

H9. Airline administration STD performance in environmental aspect is an element of passenger's expectation.

H10. Airline administration STD performance in economic aspect is an element of passenger's perception.

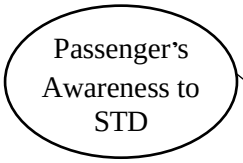
H11. Airline administration STD performance in socio-cultural aspect is an element of passenger's perception.

H12. Airline administration STD performance in environmental aspect is an element of passenger's perception.

3.4.3 Objective 3

The influence of passenger's awareness to STD, passenger's willingness to support STD, passenger's expectation to STD performance of airline, and passenger's perception to STD performance of airline on the passenger's performance in supporting STD which multiple regressions was used to test Hypothesis 13-16.

The differences between passenger's expectations and perception to the performance of airlines in supporting sustainable tourism development which dependent t-test was applied to test H17.



H13

H13. Passenger's awareness to STD influents passenger's performance in supporting STD

H14. Passenger's willingness to supporting STD influents passenger's performance in supporting STD.

H15. Passenger's expectation to STD performance of airline influents passenger's performance in supporting STD.

H16. Passenger's perception to STD performance of airline influents passenger's performance in supporting STD.

H17. There is a significant difference between passenger's expectation to STD performance of airline and passenger's perception to STD performance of airline.

3.4.4 Objective 4

Qualitative analysis was used to analyze airline awareness to STD, airline willingness to support STD, and airline performance in supporting STD. Content Analysis was applied to the semi-structured in-depth interview using 3 processes: 1) data arrangement; 2) results display and presentation; and 3) conclusion and discussion.

3.4.5 Objective 5

Study results were used to develop a role model for airline business in sustainable tourism development.

3.5 Evaluate of the measurement

The instruments created for this research must be tested in its validity, and reliability. The researcher presented the instrument to the advisor to check the accuracy and content validity to ensure that the instrument covers the study. After the questionnaire was presented to the advisor and modified to attain academic validity, it was used for try-out with the sample of similar characteristics in the study which were 20 passengers of Thai airlines. Then the questionnaire was test in term of reliability to measure the internal consistency of the questionnaire by alpha coefficient (shown in Table 4.2). Lastly, the questionnaire was improved to have the acceptable reliability. The validity of questionnaire for passenger or IOC is 0.95.

Table 3.2 Evaluate of the measurement

Variables	Observations	Cronbach's Alpha Coefficient (ά)
- **Passenger's Awareness to STD**		
- Perception	8	.725
- Comprehension	7	.814
- Projection	7	.810
- **Passenger's Willingness to support STD**		
- Decision	7	.866
- Implementation	7	.709

Variables	Observations	Cronbach's Alpha Coefficient (ά)
- Benefit	5	.860
- **Passenger's Expectation to airline STD** Performance		
- Economic	7	.810
- Socio-Cultural	7	.791
- Environmental	12	.896
- **Passenger's Perception to airline STD** Performance		
- Economic	7	.875
- Socio-Cultural	7	.885
- Environmental	12	.972
- **Passenger's Performance in supporting STD**		
- Decision	7	.818
- Implementation	7	.741
- Benefit	5	.856

CHAPTER 4

DATA ANALYSIS AND RESULT

The researcher presented the results of data analysis on the airlines' role in sustainable tourism development in following sequences.

4.1 General Information of Passenger, Airline Administration and Tourism Expert.

4.2 Descriptive Statistical Analysis from Passenger Perspective

4.3 Current Performance of the Airline Passenger and Airline Administration in Supporting Sustainable Tourism Development (Objective 1)

4.4 Factor Analysis of Passenger's Awareness to STD, Passenger's Willingness to Support STD, Passenger's Expectation to STD Performance of Airline and Passenger's Perception to STD Performance of Airline (Objective 2)

4.5 The Difference between Passenger's Expectation to STD Performance of Airline and Passenger's Perception to STD Performance of Airline (Objective 3).

4.6 The Influence of Passenger's Awareness to STD, Passenger's Willingness to Support STD, Passenger's Expectation to STD Performance of Airline, and Passenger's Perception to STD Performance of Airline on the Passenger's Performance in Supporting STD (Objective 3).

4.7 Airline Administration Awareness to STD and Willingness to Support STD (Objective 4).

4.8 The Airline's Roles for Supporting Sustainable Tourism Development (Objective 5)

In the presentation of data analysis result, the researcher has defined symbols that represent statistical values and variables including definitions of symbols, statistics, and variables to provide an analysis of the data with the same understanding on the symbols used in this research as shown in table 4.1

Table 4.1 Statistical Symbols and Meaning of Symbols, Statistics and Variables

Symbol	Meaning
$\overline{X}$	Arithmetic Mean
S.D.	Standard Deviation
MIN	Minimum
MAX	Maximum
t-value	t-test Distribution
SE	Standard Error
b	Factor Loading
B	Standardized Solution
SK	Skewness
df	Degree of Freedom
R2	Coefficient of Determination
p	Statistical Significance Level
n	Number of Sample
CFI	Comparative Fit Index
GFI	Goodness of Fit Index
AGFI	Adjusted Goodness of Fit Index
RMSEA	Root Mean Square Error of Approximation
SRMR	Standardized Root Mean Square Residual
Awareness	Awareness toward Sustainable Tourism
AWPER	Awareness in Perception of Situation
AWCOM	Awareness in Comprehension of Situation
AWPRO	Awareness in Projection of Situation
Willingness	Willingness to Support STD in future
WLDEC	Willingness in decision to perform in future
WLIMP	Willingness in Implementation of Performing in future
WLBEN	Willingness in Sharing Benefit in future
Expectation	Expectation of passenger toward Airline performance in supporting STD
EXECO	Expectation in Economic Performance

Symbol	Meaning
EXSOC	Expectation in Socio-cultural Performance
EXEVN	Expectation in Environment Performance
Performance	Current Performance
PEDEC	Performance of Decision in current
PEIMP	Performance of Implementation in current
PEBEN	Performance of Sharing Benefit in current
Perception	Perception of Passenger to Airline's Performance
PRECO	Perception of Airline's STD Performance in Economic aspect
PRSOC	Perception of Airline's STD Performance in Socio-cultural aspect
PREVN	Perception of Airline's STD Performance in Environmental aspect

4.1 General Information of Passenger, Airline Administration and Tourism Expert

4.1.1 Passenger information

The results of personal data analysis include gender, age, marital status, educational level, accommodation, average monthly income, occupation, frequency of traveling by plane, purpose of travel by plane, and the level of the airline. The number and percentage are displayed as shown in following table.

Table 4.2 Passenger gender

Gender	Number (n=400)	Percentage
Male	202	50.50
Female	198	49.50

Table 4.2 In term of gender, the results revealed that most of the passenger are male (202 persons or 50.50%), followed by female (198 persons of 49.50%)

Table 4.3 Passenger age

Age	Number (n=400)	Percentage
Under 21 years	37	9.25
21-30 years	134	33.50
31-40 years	122	30.50
41-50 years	89	22.25
Over 50 years	18	4.50

Table 4.3 In term of age, it was found that the passenger are 21-30 years old (134 persons or 33.50%), followed by 31-40 years old (122 persons or 30.50%), 41-50 years old (89 persons or 22.25%), under 21 years old (37 persons or 9.25%) and 50 years and over (18 persons or 4.50%)

Table 4.4 Marital status

Marital status	Number (n=400)	Percentage
Single	243	60.75
Married	145	36.25
Divorced/widow	12	3.00

Table 4.4 In term of marital status, it was found that most of the passenger are single (243 persons or 60.75%), followed by married (145 persons or 36.25%), and divorced/widow (12 persons or 3.00%).

Table 4.5 Educational level

Educational level	Number (n=400)	Percentage
Lower than bachelor's degree	81	20.25
Bachelor's degree	210	52.50
Master's degree	89	22.25
Doctorate's degree	20	5.00

Table 4.5 In term of educational level, it was found that most of the passenger graduated bachelor's degree (210 persons or 52.50%), followed by master's degree (89 persons or 22.25%), lower than bachelor's degree (81 persons or 20.25%) and doctorate's degree (20 person or 5.00%)

Table 4.6 Accommodation Zone

Accommodation Zone	Number (n=400)	Percentage
America	92	23.00
Oceania	72	18.00
Asia	180	45.00
Europe	54	13.50
Others	2	0.50

Table 4.6 In term of accommodation, it was found that most of the passenger reside in Asia (180 persons or 45.00%), followed by America (92 person or 23.00%), Oceania (72 persons or 18.00%), Europe (54 persons or 13.50%), and others (2 persons or 0.3%)

Table 4.7 Average monthly income

Average monthly income	Number (n=400)	Percentage
Less than 501 USD (17,500 Baht)	78	19.50
501-1,000 USD (17,500-35,000 Baht)	79	19.75
1001-1500 USD (35,001-25,500 Baht)	58	14.50
1501-2000 USD (52,501-70,000 Baht)	111	27.75
More than 2000 USD (70,000 Baht)	74	18.50

Table 4.7 In term of average monthly income, it was found that most of the passenger have average monthly income of 1501-2000 USD (52,501-70,000 Baht) (111 persons or 27.75%), followed by average monthly income of 501-1,000 USD (17,500-35,000 Baht) (79 persons or 19.75%), average monthly income lower than 501 USD

(17,500 Baht) (78 or 19.50%), average monthly income higher than 2000 USD (70,000 Baht) (74 or 18.50%), and average monthly income of 1001-1500 USD (35,001-25,500 Baht) (58 or 14.50%).

Table 4.8 Occupation

Occupation	Number (n=400)	Percentage
Government officer/State Enterprise Employee	58	14.50
Entrepreneur	115	28.75
Businessman	59	14.75
Employee	85	21.25
Student	60	15.00
Others	23	5.75

Table 4.8 In term of occupation, it was found that most of the passenger are entrepreneur (115 persons or 27.75%), followed by employee for private company (85 persons or 21.25%), student (60 persons or 15.00%), businessman (59 persons or 14.74%), government officer/ state enterprise employee (58 persons or 14.50%) and other occupation (23 persons or 5.75%)

Table 4.9 Frequency of traveling by air (Domestic)

Frequency of traveling by air (Domestic)	Number (n=400)	Percentage
None	10	2.50
Longer than once a month	214	53.50
1-2 times per month	136	34.00
3-4 times per month	28	7.00
More than 4 times per month	12	3.00

Table 4.9 In term of frequency of traveling by air, it was found that most of the passenger travel by domestic plane less than 1 time per month (214 persons or 53.50%), followed by travelling by domestic plane 1-2 time(s) per month (136 persons or

34.00%), traveling by domestic plane 3-4 times per month (28 persons or 7.00%), traveling by domestic plane more than 4 times per month (12 persons or 3.00%), and no traveling by domestic plane (10 persons or 2.50%)

Table 4.10 Frequency of traveling by air (international)

Frequency of traveling by air (international)	Number (n=400)	Percentage
None	28	7.00
Longer than once a month	153	38.25
1-2 times per month	116	29.00
3-4 times per month	58	14.50
More than 4 times per month	45	11.25

Table 4.10 In term of frequency of traveling by international plane, most of the passenger travel longer than 1 time per month (153 or 38.25%), followed by travelling by international plane 1-2 time(s) per month (116 persons or 29.00%), traveling by international plane 3-4 times per month (58 or 14.50%), traveling by international plane more than 4 times per month (45 or 11.25%) and no traveling by international plane (28 persons or 7.00%).

Table 4.11 Main purpose of Traveling by Air

Main purpose of Traveling by Air	Number (n=400)	Percentage
Leisure	287	71.75
Business	59	14.75
Visit Relative	38	9.50
Others	16	4.00

Table 4.11 In term of purpose of traveling by plane, it was found that most of the passenger travel for leisure purpose (287 persons or 71.75%), following by business purpose (59 or 14.75%), visiting relative/friend (38 persons or 9.50%) and other purpose (16 persons or 4.00%)

Table 4.12 Category of Airline

Category of the airline	Number (n=400)	Percentage
Full service airline (Five-star airline)	300	75.00
Low Cost airline	100	25.00

Table 4.12 In term of airline Category, it was found that most of the samples traveled by full service airline (5 stars) (300 persons or 75.00%) and followed by low cost airline (100 persons or 25.00%)

4.1.2 Airline administration and tourism expert information

In the content analysis, the researcher selected the key informants by purposive method based on the airline's role and volume of passengers traveled to and from Thailand, and within Thailand. The selected airlines were based on the summary report of Airports of Thailand Public Company Limited, including 1) Thai Airways 2) Bangkok Airways 3) Nok Air and 4) AirAsia with following details of list of airlines and key informants (Table 4.13 and 4.14). The tourism experts were selected by purposive method (Table 4.15)

Table 4.13 List of Airlines

Airlines	Requested	Accepted
Thai Airways	9	8
Bangkok Airways	3	1
Nok Air	3	0
Air Asia	3	0

Table 4.14 List of Key informants Airline administration and Name Codes

CODE	Name	
AD1	Sangjit	Srinilta
AD2	Nawarat	Wannatrong
AD3	Thongchai	Klaitabtim
AD4	Vithoon	Prasobaraya
AD5	Jittima	Udayachalerm
AD6	Theerasin	Sangrungsri
AD7	Sopon	Trakarnvichitr
AD8	Thitima	Maneepairoj
AD9	Alisara	Kidmai

Table 4.15 List of Tourism Experts and Name Codes

CODE	Name	
EX1	Plernpit	Muenpon
EX2	Numfhon	Boonyawat
EX3	Korakoj	Pobprasert
EX4	Chuwit	Mitrchop
EX5	Chitpong	Ayasanond

4.2 Descriptive Statistical Analysis from Passenger Perspective

The basic statistical analysis of variables will make the researcher know what the distribution of variables is. The research performed the analysis by descriptive statistics, i.e. mean, standard deviation, skewness, and kurtosis, to make it possible to conclude that each research variable had a normal distribution or not and how (Nonglak, 1999). The normal distribution of a single variable is usually examined by Skewness and Kurtosis consists of the basic statistics of observed variables (Supamas, 2011). The four indicators of latent variable are 1) awareness of sustainable tourism including perception, comprehension, and projection 2) willingness in decision, implementation and benefit sharing 3) passengers' expectations in economic, socio-cultural and

environmental aspects 4) perception of airline's administration performance including economic, socio-cultural and environmental aspects.

Table 4.16 Statistical Analysis of the Characteristics of Variables (n= 400)

Variable	$\overline{X}$	S.D.	MIN	MAX	Level	Skewness	Kurtosis
AWPER	3.78	0.80	1.63	5.00	high	-0.45	-0.54
AWCOM	4.36	0.51	2.29	5.00	highest	-0.70	0.19
AWPRO	4.09	0.58	2.29	5.00	high	-0.45	-0.33
WLDEC	4.44	0.64	1.86	5.00	highest	-1.52	2.20
WLIMP	4.44	0.58	1.86	5.00	highest	-1.39	2.09
WLBEN	4.41	0.66	1.80	5.00	highest	-1.38	1.90
EXECO	4.46	0.63	1.43	5.00	highest	-1.78	3.96
EXSOC	4.41	0.64	1.57	5.00	highest	-1.58	2.96
EXEVN	4.44	0.58	1.42	5.00	highest	-1.85	4.51
PRECO	3.40	0.58	1.42	5.00	moderate	-0.28	1.02
PRSOC	3.37	0.57	1.71	5.00	moderate	-0.14	0.52
PREVN	3.39	0.55	1.00	4.83	moderate	-0.39	1.10

Based on Table 4.16, Statistical analysis of the characteristics of observed variables shows that most of the observed variables in the highest level ($\overline{X}$ = 4.36 – 4.46), except observed variables in term of perception and projection with the mean in high level ($\overline{X}$ = 3.78 and $\overline{X}$ = 4.09). Observed variables in term of airline administration performance perception in socio-cultural, economic and environmental aspect have the mean in moderate level ($\overline{X}$ = 3.40, $\overline{X}$ = 3.37 and $\overline{X}$ = 3.3, respectively). Those means show that the respondents who were passengers believe that the awareness of sustainable tourism in term of perception and projection are in high level. The comprehension is in the highest level. In the term of willingness, the decision, implementation and benefit sharing are in the highest level. In the term of passengers' expectation, the economic, socio-cultural and environmental aspect are in the highest level. The perceived of airline's administration performance in term of economic, socio-cultural and environmental aspect are in moderate level with the S.D. between

0.51 - 0.80. This demonstrated that data is distributed close to mean due to standard deviation was not greater than 1.

Considering the Skewness or the asymmetry of the distribution, it was found that all variables contained in the model were left out (Negative Skewness). This shows that the data of all variables have a higher than the mean with the skewness between -0.14 and -1.85. Considering the Kurtosis or distribution heights, it was found that the variables that existed in most models which the kurtosis is higher than normal (Lepto Kurtic), while the calculated value is greater than zero or positive. This represents that such observed variables are distributed in a rather prominent or curved manner or there is less data distribution with Kurtosis between 0.19 and 4.51, except for perception and projection which the kurtosis is lower than normal (Platy Kurtic), while the calculated value is less than zero or negative. This represents that such observed variables are distributed in a somewhat blunt or slightly curved manner or there is high distribution of information with Kurtosis between -0.54 and -0.33, respectively. However, when considering the Skewness and Kurtosis, it was found that the Skewness and Kurtosis are slightly different from zero but that's close to zero. Therefore, it can be considered that the observed variables are normally distributed. It is appropriate to analyze the model of structural equation.

The results of the analysis can be divided into 3 parts: (1) passenger's awareness to STD; (2) passenger's willingness to support STD; and (3) passenger's expectation to STD performance of airline.

4.2.1 Passenger's awareness to sustainable tourism development

4.2.1.1 Quantitative analysis

Descriptive statistics were used to analyze the passengers' awareness to determine the mean in different aspects as shown in Table 4.17

Table 4.17 Passenger's awareness to STD in different aspects of perception

Variable	Mean	Level	S.D.
AWPER1	3.42	high	1.399
AWPER2	3.54	high	1.313
AWPER3	3.61	high	1.199
AWPER4	3.73	high	1.109
AWPER5	3.86	high	1.087
AWPER6	4.08	high	.863
AWPER7	3.90	high	1.063
AWPER8	4.13	high	.802

Table 4.17 represents the results of the analysis of the passenger's awareness to STD in different aspects of perception. The item: "You know that the traffic congestion is caused by the growing of tourism." has the maximum average in high level ($\overline{X}$ = 4.13). The item; "You know that most of tourist accommodation has drained a large quantity of wastewater to the environment" has the minimum average in high level ($\overline{X}$ = 3.42).

Table 4.18 Passengers' awareness to STD in different aspects of comprehension

Variable	Mean	Level	S.D.
AWCOM1	4.31	highest	.755
AWCOM2	4.49	highest	.625
AWCOM3	4.37	highest	.682
AWCOM4	4.37	highest	.738
AWCOM5	4.34	highest	.705
AWCOM6	4.33	highest	.704
AWCOM7	4.34	highest	.752

Table 4.18 presents the results of the analysis of the passenger's awareness to STD in different aspects of comprehension. The item; "Tourist destination should have a development which is focused on long term benefit rather than impermanent benefit.

has the maximum average in the highest level ($\overline{X} = 4.49$). Item; "Tourist destination should be developed by balancing between the profit of finances and the impact of social and environment." has the minimum average in the highest level ($\overline{X} = 4.31$).

Table 4.19 Passenger's awareness to STD in each aspect of projection

Variable	Mean	Level	S.D.
AWPRO1	3.72	high	1.191
AWPRO2	4.16	high	.826
AWPRO3	4.26	highest	.764
AWPRO4	4.25	highest	.778
AWPRO5	4.05	high	.937
AWPRO6	4.07	high	.897
AWPRO7	4.11	high	.927

Table 4.19 presents the results of the analysis of the passenger's awareness to STD in each aspect of projection. Item; "If the tourism has no conservation, there will be no resource for developing in the next generation" has the maximum average in the highest level ($\overline{X} = 4.26$). The item; "If the current tourist growth rate continues increase at a high level, various tourist destinations will be rapidly degraded" has the minimum average in high level ($\overline{X} = 3.72$).

4.2.2 Passenger's willingness to support sustainable tourism development

4.2.2.1 Quantitative Analysis

The analysis of the passengers' willingness to support STD using the descriptive statistics to determine the mean in each item is shown in Table 4.20

Table 4.20 Passengers' willingness to support STD in term of decision

Variable	Mean	Level	S.D.
WLDEC1	4.51	highest	.782
WLDEC2	4.48	highest	.752
WLDEC3	4.46	highest	.748
WLDEC4	4.40	highest	.820
WLDEC5	4.40	highest	.801
WLDEC6	4.41	highest	.827
WLDEC7	4.44	highest	.773

Table 4.20 presents the results of analysis of the passengers' willingness to support STD in term of decision in each item. It is found that Item; "Choose the airline, which employs the local people in the tourist destination" has maximum average in the highest level ($\overline{X} = 4.51$). Item; "Compare the performance of pollution reduction before choosing the airline" and "Choose the airline from the airline's performance of CSR (corporate social responsibility) activities have minimum average in the highest level ($\overline{X} = 4.40$).

Table 4.21 Passenger's willingness to support STD in term of implementation

Variable	Mean	Level	S.D.
WLIMP1	4.62	highest	.630
WLIMP2	4.65	highest	.577
WLIMP3	4.36	highest	.896
WLIMP4	4.41	highest	.773
WLIMP5	4.37	highest	.815
WLIMP6	4.36	highest	.817
WLIMP7	4.33	highest	.874

Table 4.21 presents the results of analysis of the passenger's willingness to support STD in term of implementation in each item. It was found that item; "Reducing the use of consumables (such as plastic glass, toilet paper) on the plane, to reduce

garbage" has maximum average in the highest level ($\overline{X}$ = 4.65). Item; Avoid using an airplane blanket in order to reduce waste water from laundry" has minimum average in the highest level ($\overline{X}$ = 4.33).

Table 4.22 Passenger's willingness in term of implementation

Variable	Mean	Level	S.D.
WLBEN1	4.34	highest	.825
WLBEN2	4.38	highest	.798
WLBEN3	4.40	highest	.819
WLBEN4	4.49	highest	.749
WLBEN5	4.44	highest	.789

Table 4.22 presents the results of analysis of the passenger's willingness to support STD in term of benefit sharing in each item. It was found that item; "Rating a high score to the airline, which has a responsibility for society and the environment" has maximum average in the highest level ($\overline{X}$ = 4.49). Item; "Participate in Airline's CSR (corporate social responsibility) program by donating the money or product to enhance the well-being of society" has minimum average in the highest level ($\overline{X}$ = 4.34).

4.2.3 Passenger's expectation to STD performance of airline

4.2.3.1 Quantitative analysis

Descriptive statistics were used to analyze passenger expectations to determine the mean of each item as shown in Table 4.23

Table 4.23 Passenger's expectation to STD performance of airline in economic aspect

Variable	Mean	Level	S.D.
EXECO1	4.44	highest	.830
EXECO2	4.46	highest	.775
EXECO3	4.43	highest	.752

Variable	Mean	Level	S.D.
EXECO4	4.50	highest	.743
EXECO5	4.51	highest	.746
EXECO6	4.49	highest	.749
EXECO7	4.38	highest	.816

Table 4.23 presents passenger's expectation to STD performance of airline in economic aspect in each item. It was found that item; "Publicize the value of the various tourist attractions in the destination area to the passengers" has maximum average in the highest level ($\overline{X} = 4.51$). The item "Allowing passengers to share their views on the distribution of benefits to the local area" has minimum average in the highest level ($\overline{X} = 4.38$).

Table 4.24 Passenger's expectation to STD performance of airline in socio-cultural aspect

Variable	Mean	Level	S.D.
EXSOC1	4.43	highest	.736
EXSOC2	4.34	highest	.844
EXSOC3	4.38	highest	.789
EXSOC4	4.43	highest	.772
EXSOC5	4.40	highest	.820
EXSOC6	4.47	highest	.775
EXSOC7	4.40	highest	.795

Based on Table 4.24 showing the analysis of passenger's expectation to STD performance of airline in socio-cultural aspectin each item. It was found that item; "Hiring the local workers on the fairness basis" has maximum average in the highest level ($\overline{X} = 4.47$). Item; "Being a sponsor for the activities which support the society in the tourist destination" has minimum average in the highest level ($\overline{X} = 4.34$).

Table 4.25 Passenger's expectation to STD performance of airline in environment aspect

Variable	Mean	Level	S.D.
EXENV1	4.48	highest	.794
EXEVN2	4.38	highest	.788
EXEVN3	4.43	highest	.749
EXEVN4	4.42	highest	.710
EXEVN5	4.38	highest	.817
EXEVN6	4.41	highest	.856
EXEVN7	4.35	highest	.826
EXEVN8	4.47	highest	.768
EXEVN9	4.48	highest	.756
EXEVN10	4.50	highest	.743
EXEVN11	4.51	highest	.697
EXEVN12	4.52	highest	.729

Based on Table 4.25 showing the analysis of passenger's expectation to STD performance of airline in environment aspect in each item. It was found that item; "Select the products which have a lightweight in order to reduce weight and carbon emission" has maximum average in the highest level ($\overline{X}$ = 4.52). Item; "Prepare and publish the environmental impact report to the public" has minimum average in the highest level ($\overline{X}$ = 4.35).

4.3 Current Performance of Passenger and Airline Administration in Supporting Sustainable Tourism Development (Objective 1)

4.3.1 Passenger performance to sustainable tourism development

Descriptive statistics were used in the analysis of passenger performance in all 3 aspects: 1) decision, 2) implementation, 3) benefit sharing to determine mean for each aspect and summary.

a) Quantitative analysis

Table 4.26 The average score and SD of current passenger's performance to STD in each aspect

Variable	Mean	S.D.
PEDEC	3.43	.580
PEIMP	3.45	.530
PEBEN	3.39	.591
SUMPE	3.42	.503

Based on table 4. 26, The average score and SD of current passenger' s performance to STD in each aspect, the passenger's performance in term of decision is in high level ($\overline{X} = 3.43$), implementation is in high level ($\overline{X} = 3.45$) and benefit sharing is in moderate level ($\overline{X} = 3.39$). Summary of mean for passenger performance is in high level ($\overline{X} = 3.42$). Standard deviation (S. D.) is between 0. 50 - 0. 59 demonstrated that data is distributed close to mean due to standard deviation was not greater than 1.

Table 4.27 The average score and S.D. of Passenger Performance to STD in term of Decision

Variable	Mean	Level	S.D.
PEDEC1	3.50	high	.756
PEDEC2	3.43	high	.704
PEDEC3	3.55	high	.803
PEDEC4	3.33	moderate	. 846
PEDEC5	3.39	moderate	.842
PEDEC6	3.41	high	.805
PEDEC7	3.44	high	.865

Based on Table 4.27 showing the analysis of passenger performance to STD in the present in each item, it was found that choose the airline, which has a good image of environmental conservation has the maximum average in high level ($\overline{X} = 3.55$). The

comparison of the performance of pollution reduction before choosing the airline has the minimum average in moderate level ($\overline{X}$ = 3.33).

Table 4.28 The average score and S.D. of Passenger Performance to STD in term of Implementation

Variable	Mean	Level	S.D.
PEIMP1	3.57	high	.798
PEIMP2	3.60	high	.808
PEIMP3	3.39	moderate	.796
PEIMP4	3.43	high	.736
PEIMP5	3.42	high	.762
PEIMP6	3.40	moderate	.775
PEIMP7	3.36	moderate	.826

Based on Table 4.28 showing the analysis of passenger performance to STD, in term of implementation in the present in each area, it was found that reducing the use of consumables (such as plastic glass, toilet paper) on the plane, to reduce garbage has the maximum average in high level ($\overline{X}$ = 3.60). Avoid using an airplane blanket to reduce waste water from laundry has the minimum average in moderate level ($\overline{X}$ = 3.36).

Table 4.29 The average score and S.D. of Passenger Performance to STD in term of Benefit Sharing

Variable	Mean	Level	S.D.
PEBEN1	3.31	moderate	.805
PEBEN2	3.40	moderate	.778
PEBEN3	3.42	high	.793
PEBEN4	3.42	high	.735
PEBEN5	3.41	high	.789

Based on Table 4.29 showing the analysis of passenger performance to STD, in term of benefit sharing in the present in each area, it was found that post your satisfied

comment through online social media when you found that they have a responsibility for society and the environment and rating a high score to the airline, which has a responsibility for society and the environment have the maximum average in high level ($\overline{X}$ = 3.42), while participate in Airline's CSR (corporate social responsibility) program by donating the money or product to enhance the well-being of society has the minimum average in moderate level ($\overline{X}$ = 3.31).

b) Qualitative analysis

4.3.1.1 Passenger's performance of Decision in Present

The factors of media used for public relations of the airline to show the role and image of the airline is a part of the decision to choose airlines to support tourism. Passengers would select to travel with the airline which has a good public relations image in support of tourism. While the price factor might be a barrier to travel with the high fares as passengers had limited travel budgets. In addition, the passengers also recommended that tourism supporting should be the responsibility of the airline which was not the passenger responsibility.

"Most of time, I watched from the media. If the airline plays this role well, I think I would support to travel with those airlines because I can support this indirectly." (PX2)

"I would have to travel with airlines that have cheap ticket price because I have a limited budget. Moreover, the airline itself should be responsible for the support of tourism, shouldn't they?" (PX5)

"I choose to travel or support airlines that preserve the tourist attractions because I want to go to the beautiful and safe tourist attractions, for a long time. I also want our offspring to admire these beautiful things too." (PX8)

4.3.1.2. Passenger's performance of implementation in present

It was found that factor of alternative supporting for passengers who participated in sustainable tourism such as promoting the use of electronic ticket to reduce paper consumption, trees cutting down and waste generation could make passengers more concerned. Promotional factors for advertising materials or products of tourist attractions, could make passengers become more interested in the goods and spending on those purchases. It was also found that the public relations is still lack of the inclusion or access to the passengers. This might result to less supporting activities such as to encourage the passengers using scarf or their jacket in the plane, in order to reduce waste water from laundry which may affect the world's ecology.

> *"Don't make it too cold. If the temperature is adjusted to decently warm temperature, I have my cardigan with me. In addition, it would be good if there is prior notice that the airline will reduce the distribution of blanket to reduce the washing"* (PX1)

> *"Now, I use electronic ticket. I try to reduce paper consumption."* (PX2)

> *"I used to give some recommendation, such as the letter sent to passenger's home should be changed to email. The ticket should be changed to electronic. Currently I see that the electronic tickets are used but not a hundred percent yet."* (PX3)

> *"Personally I could not help much. I may help to shop at the tourist attraction as advertised on the magazine available in the plane and creating waste while travelling. Oh! Now I reduce paper consumption by using electronic tickets."* (PX4)

4.3.1.3 Passenger's performance of benefit sharing in present

The factors of public relations on the information and access to airlines for sharing passenger information is ineffective. Most of the passengers were confused with the complicated data technology. As a result, sharing of information to support tourism with airlines was unable or the channel to participate in activities to share the benefit of airlines was lack of clarity and accessibility. Therefore, passengers were less likely to be involved in sharing benefits.

> *"I do not know who to share or transmit the information and through which channel. I don't information in this regard"* (PX3)

> *"I want to get involve with the airline in creating benefits to the society because I travel frequently as well. If I can share it while travel, it would be good. But I often have not received much news."* (PX4)

> *"I want to vote for airlines that support sustainable tourism. What do you do?"* (PX5)

In conclusion, on the passenger's performance in supporting sustainable tourism in the present, the results of quantitative analysis show that passengers have a role or performance to support tourism in moderate level. Implementation variable was highest average when comparing all the three aspects. The result of qualitative analysis shows that airline's public relations and airfares affect the decision to travel with the airline. In term of implementation, the effective factors were the public relations to provide information for passengers participating the activity and the advertisement of the products available in the tourist attractions in the airline's magazine. In term of benefit sharing, the perception and accessibility of airline's public relations to share the benefits with the passengers was unavailable and complicated.

4.3.2 Airline administration performance to sustainable tourism development (from airline perspective)

4.3.2.1 STD Performance in economic aspect of airline administration

Based on the interview analysis of airline administration, it was found that the factor of awareness in comprehension and willingness to share benefits effected to the attitudes and performance of the airline administration. Airline administration were well aware of the factors that support and develop to maintain the tourism area was the airline contributing to the economy of the tourism attraction which increased the income and could be self-reliant and develop local to thrive. In term of willingness to share benefit, the airline contributed to the promotion of career development, employment and purchase of raw materials in order to generate income to local people thoroughly. While tourism experts considered that the factor of awareness in comprehension of economic promotion, career development, and local material purchase also contributed to the development of tourist attractions as well. The roles are as follows.

1) Local products: The role of airline administration was to support the purchase of products, raw materials, and local workforce to be available in the plane. The airline had launched a project to promote the product which airline need to buy then local could sell them back to the airline. It also helps advertising local products.

"Now we have a project call "Community Power". If this project is formed, we may buy back the products we promote the local people to produce such as we promote to Samui people to plant the coconut trees. We are pleased to buy coconut from them." (AD2)

"We have a project to sell OTOP product on broad. I think this is to create career and income to them because the value of what we will purchase is not only few Baht. We buy them for the whole year. How many flights and how many customers we have? We will create income for them. I see this as community economy." (AD6)

2) Employment: The airline generated income for local workers by supporting them to work for the airline.

"We do this in the airports. In Trad, Samui and everywhere, we recruit local people to work in the airport, like in Trad Airport" (AD2)

"Yes. Yes. Yes. It can be seen obviously when we operated in Ubol. We hired many of local people. After we withdrawn, we left only few of them to work for other airlines. Of course, we hire local people everywhere we operate." (AD3)

3) Accommodation Business: Airlines played a role in helping accommodation businesses to increase their presence in tourist attraction, when they take more tourists to the place.

"Taking tourists into the area creates a demand in the area. In terms of economy, it helps in the employment of workers in the area. It creates jobs in the area." (EX2)

"Certainly, there must be an airport and more local people employment. When we take more people in the area more accommodation is needed. In terms of economy, we help a lot. No one can deny it. At present, they are doing well. Where the airlines are going, the prosperity will be there." (EX4)

4.3.2.2 STD performance in socio-cultural aspect of airline administration

The factor that affects the performance of airline administration was the willingness to share benefit. Airline administration have willingness to help or promote the better living in the society. To support the society of tourist attraction to have a better living, made a good image of airline in view of the passengers. The decision to travel with the airlines is one of the factors that affect the performance of airline administration. While the opinions of tourism experts show that the factor affecting the

performance of airline administration is the willingness in decision of passenger that the airline attempted to present the image rather than sincerely supporting.

> *"I see that every time when the natural disaster occurred, our airline also helps. May of our executives went there. We never ignored."* (AD1)

> *"In the field of society, we have done a lot.We help the underprivileged, whether it is children or to support tickets as it is what we already have."* (AD2)

> *"I did the project to redeem mileages to merit. The last 2 years, we have a campaign to donate mileage to have Mar Fah Luang Foundation. Each project will be different according to the company's policy. We have CSR committee and they will decide that each year we will help whom. Instead of using money, we use mileages."* (AD5)

> *"I think the airline still have capacity to increase the social contribution or they can do it better. They should make it bold and follow up. I think to follow up and report the result to everybody is crucial. They should process the result on what they did. What has been change and what is the impact? It should be an extension of result"* (EX2)

> *"When talking about social responsibility, they should have more. This is an image marketing. Every airline has to do it. If any one of them ignore it, they would be failed."* (EX4)

4.3.2.3 STD performance in environment aspect of airline administration

Factors of awareness in perception and comprehension affect the performance of airline administration. Airline administration were aware that environment is important to the tourism. The airline should contribute to conserve the environment. They also recognized that the airline's performance affects the environment in all phases. The researcher also found that the willingness in supporting environmental protection also influenced the performance of the airline administration which they implemented the activities to support environmental protection by cooperating with the

tourism agencies. The environmental protection policy to be implemented such as selecting the accommodation who have the environmental protection policy. However, some activities, such as biofuels are still expensive, and few biofuel producers are available in the market which may be a restriction on the activities of the airline administration. The opinion of tourism experts showed that the airline administration willingness in implementation is dissatisfactory. It is still implemented on the basis of luxury and lack of working with full capacity such as gas emissions and reduction of consumables.

1) Fuels Consumption and Carbon Dioxide Emissions

"In term of environment, we have a project every year. We have a budget for environment protection or even the plane itself which is the key factor of our business, we use the new model as a replacement for the old ones which will save energy and environmental friendly. We also apply this policy in our operation. We concern almost every phase." (AD1)

"In long time, we have to use them to protect the environment, but it is still not practical nowadays. It is very expensive. If I am not wrong, it only available in Netherland. We did a demonstrated flight many years ago. We had to order the fuel from Netherland. It was very expensive. In the future, ICAO will force use to do so. I believe that many things are from the enforcement. If there is a reasonable price biofuel, I think people will use it. But today, it's still not reasonable to use it." (AD3)

"Because we have to order bio fuel from one of our fuel supplier. It can be produced less with high investment. They have no bio fuel to supply to us. The supplies are quite rare." (AD6)

"Our airline does the practical practice in term of resources conservation called Carbon Footprint. We try to create the perception of the passengers about carbon reduction. We are doing the campaign to use the energy in our office to protect the environment." (AD7)

"In the dimension of environment, as I said, it is not clear yet because the airline is the one who release most of the carbon" (EX4)

2) Consumables Reduction

"If asking about the environment, we did it in the last 3-4 years such as we stopped using non- recycle paper. The printing material provided to customer are made from recycle paper. Last year or half year ago, we use paperless and E document. We have a clear policy that we will protect the environment. People must see that." (AD8)

"We do not help develop the environment much, but we do supporting in some part such as many year ago Tourism of Thailand or the government launched a "green concept", we also tried to apply these policy as well. "(AD9)

"It can be done in some part, but in the major impact such as using energy and product carbon are not clearly seen yet on what they are doing. " (EX1)

"In term of environment, the airline performance is still unclear on the carbon offset or consumables reduction" (EX2)

"When I am on broad in a full service flight of one airline, I feel they use many consumables such as plastic glass, paper glass, spoon and fork. It may concern the regulation about safety and cleanness." (EX3)

4.3.3 Passengeer's perception to STD performance of airline

The analysis of passenger's perception to STD performance of airline were used the descriptive statistics to determine the mean in each item which is shown in Table 4.30

Table 4.30 The average score and SD of Passenger's perception to STD performance of airline in each aspect

Variable	Mean	S.D.
PRECO	3.40	.580
PRSOC	3.37	.570
PREVN	3.39	.550
SUMPR	3.38	.560

Based on table 4.30, The average score and SD of Passenger's perception to STD performance of airline in each aspect, the passenger's perception in term of economic is in moderate level ($\overline{X} = 3.40$), socio-cultural is in moderate level ($\overline{X} = 3.37$) and environment is in moderate level ($\overline{X} = 3.39$). Summary of mean for passenger's perception to STD performance of airline is in moderate level ($\overline{X} = 3.38$). Standard deviation (S.D.) is between 0.55 - 0.58 demonstrated that data is distributed close to mean due to standard deviation was not greater than 1.

Table 4.31 Passenger's perception of STD performance of airline in economic aspect

Variable	Mean	Level	S.D.
PRECO1	3.43	high	.826
PRECO2	3.42	high	.778
PRECO3	3.46	high	.761
PRECO4	3.39	moderate	.837
PRECO5	3.46	high	.741
PRECO6	3.32	moderate	.765
PRECO7	3.34	moderate	.804

Table 4.31 showing the analysis results of passenger's perception of STD performance of airline in economic aspect in each item. Item; "Publicize a business enterprise, community service (e.g. Accommodation, restaurant and tourist activities) and publicize the value of the various tourist attractions in the destination area to the passengers" have maximum average in high level ($\overline{X} = 3.46$). Item; "Promote local

products in order to acknowledge by the passengers" has minimum average in the moderate level ($\overline{X}$ = 3.32)

Table 4.32 Passenger's perception of STD performance of airline in socio-cultural aspect

Variable	Mean	Level	S.D.
PRSOC1	3.36	moderate	.813
PRSOC2	3.36	moderate	.788
PRSOC3	3.33	moderate	.797
PRSOC4	3.37	moderate	.748
PRSOC5	3.41	high	.808
PRSOC6	3.40	moderate	.762
PRSOC7	3.37	moderate	.780

Base on Table 4.32 showing the analysis results of passenger's perception of STD performance of airline in socio-cultural aspect in each item. Item: "Arrange flight schedule according to tourist attraction capacity that does not cause social problems" has maximum average in high level ($\overline{X}$ = 3.41). Item; "Inform the passengers about the behavior which should do and should not do in the tourist destination area" has minimum average in moderate level ($\overline{X}$ = 3.33).

Table 4.33 Passenger's perception of STD performance of airline in environment aspect

Variable	Mean	Level	S.D.
PREVN1	3.39	moderate	.750
PREVN2	3.31	moderate	.753
PREVN3	3.38	moderate	.788
PREVN4	3.35	moderate	.783
PREVN5	3.33	moderate	.788
PREVN6	3.43	high	.841
PREVN7	3.39	moderate	.784
PREVN8	3.42	high	.778

Variable	Mean	Level	S.D.
PREVN9	3.41	high	.838
PREVN10	3.36	moderate	.807
PREVN11	3.43	high	.850
PREVN12	3.47	high	.861

Based on 4.33 showing the analysis results of passenger's perception of STD performance of airline in environment aspect in each item, Item; "Select the products which have a lightweight in order to reduce weight and carbon emission" has maximum average in high level ($\overline{X}$ = 3.47). Item; "Managing the fuel consumption effectively when perform flying duty such as flying at an altitude which is saving fuel" has minimum average in moderate level ($\overline{X}$ = 3.31).

4.4 Factor Analysis of Passengee's Awareness to STD, Passenger's Willingness to Support STD, Passenger's Expectation to STD Performance of Airline and Passenger's Perception to STD Performance of Airline. (Objective 2)

4.4.1 Analysis of data verification before Confirmatory Factor Analysis

The analysis of basic statistics of observed variables was aimed at examining the normal distribution of a single variable, a preliminary agreement for data validation before data analysis.

4.4.1.1 Correlation analysis between observed variables

The researcher conducted Pearson's Correlation Coefficient in order to obtain correlation matrix to examine the basic agreement of structural equation modeling analysis. An important agreement of element analysis is that the variables must be related for the main purpose of component analysis in the integration of related variables. To verify that the variables are relevant or not, the researcher used two test statistic values, the Kaiser-Mayer-Olkin Measure of Sampling Adequacy (KMO) and the Bartlett's test of sphericity to test whether the observed variables were an identity matrix or not (Supamas, 2011). Analysis results can be presented in Table 4.34.

Table 4.34 Pearson's Correlation Coefficient between Observed Variables

	AWPER	AWCOM	AWPRO	WLDEC	WLIMP	WLBEN	EXECO	EXSOC	EXEVN	PRECO	PRSOC	PREVN
AWPER	1											
AWCOM	0.111*	1										
AWPRO	0.483**	0.418**	1									
WLDEC	-0.143**	0.310**	0.130**	1								
WLIMP	-0.134**	0.275**	0.148**	0.790**	1							
WLBEN	-0.180**	0.242**	0.101*	0.744**	0.824**	1						
EXECO	-0.181**	0.259**	0.081	0.689**	0.749**	0.751**	1					
EXSOC	-0.194**	0.265**	0.116*	0.669**	0.702**	0.759**	0.833**	1				
EXEVN	-0.168**	0.293**	0.138**	0.648**	0.727**	0.699**	0.800**	0.812**	1			
PRECO	0.120**	-0.005	0.082*	0.011	0.013	0.044	0.081	0.055	0.037	1		
PRSOC	0.070	0.084*	0.133**	0.100*	0.068	0.143**	0.098*	0.116**	0.121**	0.729**	1	
PREVN	0.124**	0.115*	0.141**	0.034	0.045	0.111*	0.101*	0.117**	0.163**	0.690**	0.738**	1

Bartlett’s test of sphericity = 4313.937, df = 105, p = 0.000, KMO = 0.858, * p < .05 ** p < .01

Based on Table 4.34 showing Pearson's Correlation Coefficient between 12 observed variables, there are 66 pairs of observed variables which correlated to each other and 48 pairs with the same positive direction correlation. The strength of relationship or the correlation is between 0.082 to 0.833 with the statistical significance of 0.01 and 0.05. There are 6 pair of observed variables with negative relation where the strength of relationship or correlation is between -0.134 to - 0.194 with the statistical significance of 0.01. There are 12 pair of observed variables with no relation where the correlation is between -0.005 to 0.081.

Consideration of the correlation of observed variables shows 4 pairs with very high level of relation ($r > 0.8$), 14 pairs with high level of relation ($0.6 < r < 0.8$), 2 pairs with moderate level of relation ($0.4 < r < 0.6$), 6 pairs with low level of relation ($0.2 < r < 0.4$) and 28 pairs with very low level of relation ($r < 0.2$). The pair which have the highest level of relation is the passengers'expectation in economic performance (EXECO) and the passengers' expectation in socio-cultural performance (EXSOC) ($r = 0.833$). The pair which have the lowest level of relation is the awareness in projection (AWPRO) and the airline executives in economic performance (PRECO) ($r = 0.082$).

The Bartlett's test of sphericity was found to be 4313.937 df = 105 ($p = 0.000$). The correlation coefficient matrix was not an identity matrix at the statistical significance of .01. The variables are sufficiently correlated to analyze the components which is consistent with the results of the analysis Kaiser-Mayer-Olkin (KMO), which is closed to 1 (0.858). This show that the observed variables are very correlated. This is because the index value is 0.80 or higher, indicating that the appropriate data for the factor analysis is very good (Suppamas, et al., 2011)

Regarding the results of construct validity analysis has conducted Confirmatory Factor Analysis (CFA) to determine the suitability and correctness of the structural equation model by considering the factor loading of the factors and the R2 values to determine the variance of the indicator which the accepted factor loading between latent variable and observed variable should greater than 0.5 (Hair et al., 2010). The results of the analysis have divided into 4 parts: (1) passenger's awareness to STD; (2) passenger's willingness to support STD; (3) passenger's expectation to STD performance of airline and (4) perception to STD performance of airline.

4.4.2 Passenger's awareness to sustainable tourism development

4.4.2.1 Quantitative analysis

Table 4.35 Correlation Matrix, Mean and Standard Deviation of Observed Variables of Passenger's Awareness to STD Measurement Model.

	AWPER	AWCOM	AWPRO
AWPER	1.000		
AWCOM	0.111*	1.000	
AWPRO	0.483**	0.418**	1.000
MEAN	3.78	4.36	4.09
S.D.	0.80	0.51	0.58
Bartlett's test of sphericity Chi-Square = 187.314, df = 3, p = 0.000, KMO = 0.499			

Remark: * p < .05 ** p < .01

Refer to table 4.35, there are 3 variables in the awareness of sustainable tourism: perception (AWPER), comprehension (AWCOM), and projection (AWPRO). The researcher has examined the correlation between those 3 factors of awareness of sustainable tourism, 3 pairs in total. It is found that the correlation of observed variables is different than zero with statistical significance of 0.01 and 0.05. Those 3 pairs are related in very low to moderate level between 0.111- 0.483. Bartlett's test of sphericity represents Chi-Square = 187.314, df = 3, and p = 0.000 which is different from zero at the statistical significance of 0.01. This represents that the correlation matrix of the observed variables is not an identity matrix. The variables are related to each other and can be used to analyze the components but Kaiser-Mayer-Olkin (KMO) is 0.499, which shows that the variables are unsuitable for the confirmatory factor analysis. The researcher also tried to run the confirmatory factor analysis statistic under the raw data from survey which the result shows that the AWCOM is not the element of Awareness. This is to confirm that passenger's awareness to STD data was inappropriate to test by confirmatory factor analysis.

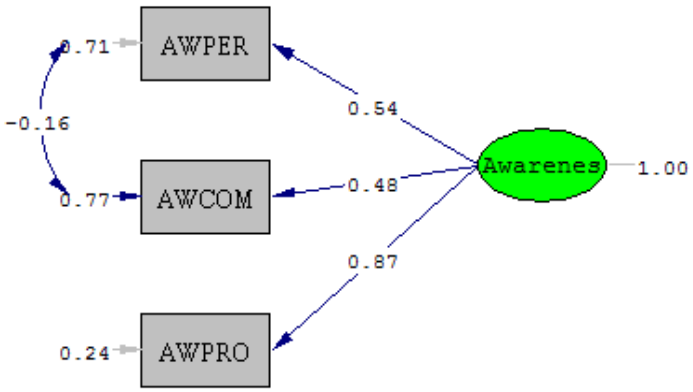


Figure 4.1 Awareness Measurement Model

Results of hypothesis test 1-3 by the comparison of the consistency between the models developed with the empirical data shows that the criteria for verifying is not fitted with empirical data. Therefore, it can be concluded that passenger's awareness to sustainable tourism development measurement model is inappropriate and not fitted with empirical data as follows.

H1. Passengers' perception is not an element of passenger's awareness to STD.

H2. Passengers' comprehension is not an element of passenger's awareness to STD.

H3. Passengers' projection is not an element of passenger's awareness to STD.

4.4.2.2 Qualitative analysis

a.) Awareness in Perception

It was found that passengers traveling to the tourist destination by plane have perception of tourist attractions in a variety of perspectives. Some of passenger commented that they are still in good condition and some notice that the condition began to deteriorate. This was the result of many tourist attractions are well taken care of, while many of them needs additional care. However, there was one issue that the passengers agreed in common point of view which was the increasing of waste in the tourist attractions or the emergence of many accommodation ruins the original scenery

of the tourist attractions. The natural resources of the tourist attraction were also deteriorating which caused by the tourists.

> *"Personally while I travel, I see that the tourist attraction is still beautiful. Some of them may look dirty. The waste is something to be concerned. I see that tourist throw away some waste without care. This create wastes to the tourist attraction."* (PX1)

> *"When I was young, the tourist attraction is far cleaner and more beautiful. They were very natural. Now there are a lot of building of condominiums and hotels which eclipse the scenery. In the past, there was not much stuffs being sold on the beach like this. There are a lot of wastes and the water is unclear."* (PX5)

> *"As far as I can see, the tourist attraction's environment is still abandon. The sea in some place may not be as beautiful as it used to be or the sandy beach started to get shabby. Coral starts to be disappeared."* (PX6)

b.) Awareness in Comprehension

It was found that most of the passengers realized that if tourism is to be developed sustainably, it should be managed well by promoting the better economy to the tourist destinations, resulting in better living conditions. It could also take care of the environment of the tourist attractions. In this regard, the airline was the one who contributes the economy to the area, whether it was transporting passengers to tourist attractions or supporting the purchase of raw materials or products from tourist attractions.

> *"Actually, the development may not be speeded development. Just do it seriously. We already have a beautiful tourist attraction. Only good management is needed, especially for the environment."* (PX1)

"If the tourist attraction is good, safe, and beautiful, people want to visit there and the money will come in. The people will have more income. Life will be good." "I think it's counted but may not have much effect. However, if the airline takes many tourists into the area, the economy might be improved. Let's see." (PX3)

"It's when buying raw material. I think the airline uses a lot of raw material, isn't it? Like, stuffs or foods provided in the plane. If they order a lot, it will help either directly or indirectly." (PX6)

c.) Awareness in Projection

In term of projection, it is found that the passengers' comment is quite consistent in term of focusing on the management of tourism to provide care and develop the tourism. It should also supervise the behavior of tourists while visiting tourist attractions. Any tourist attraction that was lacking care and management of places, it might be deteriorated. There are alternative of tourist attractions that tourist would redirect to if that places become useless.

"I can tell you that if the number of tourists increase in the future without a proper management, the tourist attractions will be deteriorated. I see that tourists pick some flower. I was shock. No one prohibits them to do so. Tour guide also said nothing. Our people cannot provide care thoroughly." (PX4)

"It should be accelerative improved. If we leave it like this, it will be worse. If the number of tourists increase, it will be even worse." (PX5)

"Of course, as I said, if you only use the attractions without supervision or development, it will be deteriorated fast. Next generation won't have a chance to enjoy it." (PX8)

"If not organized well, it will be gone soon. Tourists will go to another interesting place." (PX9)

In conclusion on the sustainable tourism awareness in term of quantity analysis, the research found that overall awareness of passengers was in high level. The awareness in comprehension was in the highest level when comparing to perception and projection. The passengers were well aware that tourism development should create long term benefits. It was followed by awareness in projection where the passengers are worry about the conservation of tourism resources for the next generations, and the awareness in perception, respectively. Among the three factors of awareness, the projection has the most factor loading. Base on qualitative analysis, it was found that the passenger perception factor according to tourist attraction is still in good condition and some of them are deteriorated. They also realized that the factor which contributed to tourism development is the economy, society and the environment which result in the sustainable tourism. The researcher also found that the perception and comprehension of the passenger lead to the projection of tourist attraction condition in the future.

4.4.3 Passenger's willingness to support sustainable tourism development

4.4.3.1 Quantitative analysis

Table 4.36 Correlation Matrix, Mean, and Standard Deviation of the Observed Variables of Passenger's Willingness to Support STD Measurement Model

	WLDEC	WLIMP	WLBEN
WLDEC	1.000		
WLIMP	0.790**	1.000	
WLBEN	0.744**	0.824**	1.000
MEAN	4.44	4.44	4.41
S.D.	0.64	0.58	0.66
Bartlett's test of sphericity Chi-Square = 870.033, df = 3, p = 0.000, KMO = 0.749			

Remark: * p < .05 ** p < .01

Refer to table 4.36, there are 3 variables of willingness including willingness in decision (WLDEC), willingness in implementation (WLIMP) and willingness in

benefit sharing (WLBEN). The research has examined the correlation between those 3 factors and found that the correlation of observed variables is different from zero at the statistical significance of 0.01. All 3 pairs have high to the highest level of correlation between 0.744- 0.824. The results of the correlation matrix analysis using Bartlett's test of sphericity shows Chi-Square = 870.033, df = 3, and p = 0.000 which is different from zero at the statistical significant of 0.01. This represent that the correlation matrix of the observed variables is not an identity matrix. The variables are related to each other and can be used to analyze the components. Kaiser-Mayer-Olkin (KMO) = 0.749, which shows that the variables are suitable for the component analysis

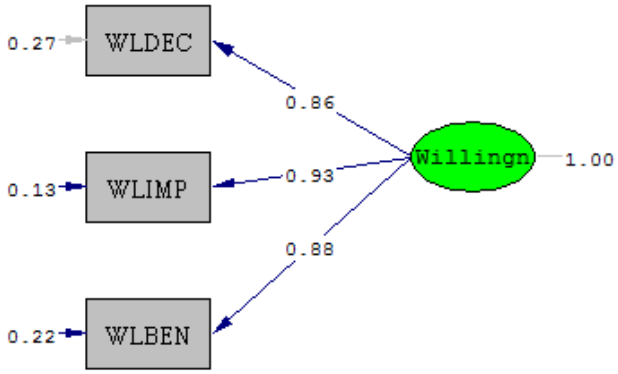


Figure 4.2 Willingness Measurement Model

Refer to figure 4.2, results of model analysis show Chi-Square = 0.74, df = 1, p = 0.38922, RMSEA = 0.000, CFI = 1.00, GFI =1.000, and AGFI = 0.99. This represent that the measurement model of willingness is fitted with empirical data. Considering the factors of willingness, it was found that the variables are important in identifying the three types of willingness. The variables were ranked in descending order as implementation (WLIMP), benefit sharing (WLBEN) and decision making (WLDEC) respectively with the factor loading of 0.93, 0.88 and 0.86 respectively. The variance of willingness indicator is 87, 78 and 73, respectively as shown in Figure 4.2 and Table 4.37.

Table 4.37 Validity Test of Passenger's Willingness to Support STD Measurement Model

Variable	Factor Loading	SE	t	Factor Score	R2
WLDEC	0.86	0.03	21.10	0.36	0.73
WLIMP	0.93	0.04	23.95	0.89	0.87
WLBEN	0.88	0.05	21.81	0.43	0.78
Chi-Square = 0.74, df = 1, p = 0.38922, RMSEA = 0.000, CFI = 1.00, GFI =1.00, AGFI = 0.99					

Results of hypothesis test 4-6 by the comparison of the consistency between the models developed with the empirical data shows that the criteria for verifying is fit with empirical data. The research considered statistical data including Chi-Square, df, CFI, GFI, AGFI and RMSEA. The results of the model analysis showed that the fit index is consistent with the empirical data or according to the defined criteria where Chi-Square = 0.74, df = 1, p = 0.38922, RMSEA = 0.000, CFI = 1.00, GFI =1.00, AGFI = 0.99. The index has passed the acceptance criteria. Therefore, it can be concluded that Willingness Measurement Model is appropriate and fit with empirical data as follows.

H4. Passengers' decision is an element of willingness with the loading of 0.86

H5. Passengers' implementation is an element of willingness with the loading of 0.93

H6. Passengers' benefit sharing is an element of willingness with the loading of 0.88

4.3.4.2 Qualitative analysis

a.) Willingness in Decision

The factor of airline image had contributed to the passengers' willingness. Most of the passengers were very keen on choosing a good image airline that supports tourism whether in term of economic, social and environmental support. The image of the airline was part of public relations which was a factor that made passengers choosing the airline as well.

"I already have the intention to travel with airline that supports tourism. It's like I have contributed the tourism too." (PX1)

"Mostly, Airlines with social activities always have a press release which affects my intention to travel with those airlines and I have strong intentions to choose them because I think it's really useful." (PX3)

"The image of the airline is very important to make the decision to fly with such airline. Think about it! Who wants to travel with airlines that do not care for the environment?" (PX6)

"I think the airline that helps local people to earn income is like helping the economy of the tourist attraction. I have the same intention to help, so I will choose to use that airline." (PX9)

b.) Willingness in Implementation

It was found that the factors of informing and providing alternatives to passengers have an impact on their willingness to participate in tourism supporting activities with airlines. Passengers were willing to cooperate, but the fare factor was also a barrier in the willingness to engage in implementation as these increases the burden on passengers in terms of increased expenses. If the implementation of any tourism supporting activities caused more expense for the travelling, the airline might be rejected.

"If the airline provides an alternative, I intent to use an electronic ticket. It is convenient and helps to reduce the global warming." (PX1)

"I think it's good idea, but should the airline informed to the passengers in advance to take their own blanket with them?" (PX2)

"I really want to be part to reduce the global warming, if there are other ways that can be done in addition to increase ticket fees. I see this as pushing the burden to the consumer." (PX7)

c.) Willingness in Benefit Sharing

It was found that the factor of supporting by funding affects to the willingness in benefit sharing. The passengers were pleased to provide the support that was not concerned with funding such as redeeming mileages to donation as same as sharing information in online society where no funding was used. To see the value of supporting also affected the willingness in benefit sharing.

> *"If it's a mileage deduction, I'm glad, because the mileage is really just a bonus. If it can benefit the society, it is welcome."* (PX1)

> *"If the airline asks to help donate money or something to the society, it is welcome. I'm willing to help as much as I can. It might not be too much."* (PX4)

> *"I have an intention to click like and share the airline's fan page when they have good activities such as foresting, social contribution, and so on. Sometimes I also donate."* (PX5)

> *"I'm happy if the donation can help. I teach my children and try to cultivate the consciousness to them so that we can have a place to visit for a long time."* (PX9)

In conclusion, the passengers' willingness on sustainable tourism in term of quantitative, the research found that overall willingness of the passengers is in the highest level. The willingness in decision and implementation in is the same high level, followed by benefit sharing. Among the 3 factors of the willingness, the implementation has the most factor loading. Base on the qualitative analysis, the image and public relations of the airline affected the willingness in decision and implementation. Funding affected to the implementation and benefit sharing of the passengers.

4.4.4 Passenger's expectation to STD performance of airline

4.4.4.1 Quantitative analysis

Table 4.38 Correlation Matrix, Mean and Standard Deviation of Observed Variables of Passengers' Expectation to STD Performance of Airline Measurement Model

	EXECO	EXSOC	EXEVN
EXECO	1.000		
EXSOC	0.833**	1.000	
EXEVN	0.800**	0.812**	1.000
MEAN	4.46	4.41	4.44
S.D.	0.63	0.64	0.58
Bartlett's test of sphericity Chi-Square = 961.522, df = 3, p = 0.000, KMO = 0.765			

Remark: * $p < .05$ ** $p < .01$

Refer to table 4.38, there are 3 variables of expectation including expectation in economic (EXECO, expectation in socio-cultural (EXSOC), and expectation in environmental (EXEVN). The research has examined the correlation between those 3 factors and found that the correlation of observed variables is different from zero at the statistical significance of 0.01. All 3 pairs have highest level between 0.800- 0.833. The results of the correlation matrix analysis using Bartlett's test of sphericity shows Chi-Square = 961.522, df = 3, and p = 0.000 which is different from zero at the statistical significance of 0.01. This represents that the correlation matrix of the observed variables is not an identity matrix. The variables are related to each other and can be used to analyze the components. Kaiser-Mayer-Olkin (KMO) = 0.765, which shows that the variables are suitable for the component analysis

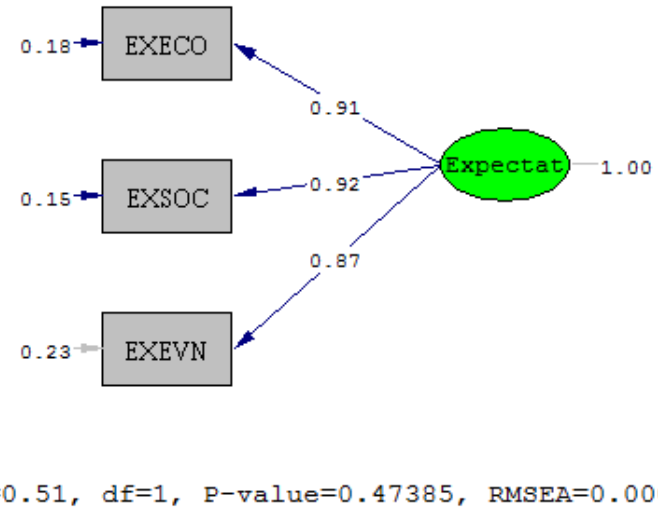


Figure 4.3 Expectation Measurement Model

Refer to figure 4.3, results of model analysis show Chi-Square = 0.51, df = 1, p = 0.47385, RMSEA = 0.000, CFI = 1.00, GFI =1.000, and AGFI = 0.99. This represent that the measurement model of expectation is fit with empirical data. Considering the factors of expectation, it was found that the variables are important in identifying the three types of expectation. The variables were ranked in descending order as socio-cultural (EXSOC), economic (EXECO) and environmental (EXEVN) respectively with the factor loading of 0.92, 0.91 and 0.87 respectively. The variance of expectation indicator is 85, 82 and 77, respectively as shown in Figure 4.3 and Table 4.33

Table 4.39 Validity Test of Passenger's Expectation to STD Performance of Airline Measurement Model

Variable	Factor loading	SE	t	Factor score	R^2
EXECO	0.91	0.02	22.98	0.56	0.82
EXSOC	0.92	0.02	23.60	0.66	0.85
EXEVN	0.87	0.02	21.95	0.44	0.77
Chi-Square = 0.51, df = 1, p = 0.47385, RMSEA = 0.000, CFI = 1.00, GFI =1.00, AGFI = 0.99					

Results of hypothesis test 7-9 by the comparison of the consistency between the models developed with the empirical data shows that the criteria for verifying is fitted with empirical data. The research considered statistical data including Chi-Square, df, CFI, GFI, AGFI and RMSEA. The results of the model analysis showed that the fit index is consistent with the empirical data or according to the defined criteria where Chi-Square = 0.51, df = 1, p = 0.47385, RMSEA = 0.000, CFI = 1.000, GFI =1.000, AGFI = 1.000. The index has passed the acceptance criteria. Therefore, it can be concluded that Expectation Measurement Model is appropriate and fit with empirical data as follows.

H7. Airline administration performance in economic aspect is an element of passengers' expectation with the loading of 0.91

H8. Airline administration performance in social aspect is an element of passengers' expectation with the loading of 0.92

H9. Airline administration performance in environmental aspect is an element of passengers' expectation with the loading of 0.87

4.4.4.2 Qualitative analysis

a.) Economic expectation

It was found that passengers expect the airline will help support the economy of the tourist attraction due to the airline is one of the stakeholder in the travel and tourism industry and tourist attractions. Role of supporting or promoting in economy according to the ability of the airline should be performed whether directly or indirectly.

"Actually, airlines can only do it with their limited roles. Anyway, it is expected that the role is limited would create a better life for local people in the tourist attractions and better economy" (PX1)

"I think it should be applied to all business, not only airlines. When they receive profits, they should return some to the society as a give and take. If only take, one day all will disappear" (PX8)

"I think the airline is likely to be involved in supporting tourism as well, whether directly or indirectly. If people still want to travel to the place, the

airline itself is likely to be more profitable by doing business. Is it win-win?" (PX10)

b.) Socio-Cultural Expectation

It was found that the passengers expect the airline to fulfill the tourist attraction's society as the airline is the main transport who carry the tourists to the destinations. The financial supporting should be provided to society, either directly or indirectly, and also the primary information for tourists before traveling the destination. However, some of the passengers commented that the purpose of airline's CSR project is to promote the airline commercial rather than the purpose of social living.

"There should be more CRS project and they must be performed seriously, not only as a promotion" (PX2)

"Well, I think it's also counted, if they can help the society. They really have money or can find a way to support the rural society." (PX3)

"I have rather high expectation. As the one who takes many tourists to the site, they should play the role to support the tourist attraction such as social assistance. Take the tourists there and provide care to the society as well. They should try to provide useful basic information and financial support either directly or indirectly." (PX7)

c.) Environmental Expectation

It was found that the environmental expectation is a significant issue for the airline due to passengers perceive that the airline's role has a directly impact on the environment from the perception of news. The airline generated carbon dioxide to the global atmosphere and caused a global warming effect. Therefore, the airline should have direct and indirect environmental responsibility.

"As far as I know, the airline is the main player who emits the carbon. That's why there are campaigns that the airline should do something as a compensation. If it can be done, I think the environment will be better." (PX4)

"I personally would like the airline to be fully operational on the subject of airlines involved like in the main issue people is talking about, emitting the gas to the atmosphere. I want them to be very responsible." (PX2)

In conclusion, the passengers' expectation on sustainable tourism in term of quantitative, the research found that overall expectation of the passengers is average in the highest level. The economic expectation is in the highest level among three variables, followed by environmental expectation and socio-cultural expectation. Among the 3 factors of the expectation, the socio-cultural expectation had the most factor loading. Base on the qualitative analysis, most passengers had an expectation that the airline will fully support the economy in the tourist attractions, either directly or indirectly due to the airline is one of a stakeholder in tourism. When they had a profitable on the business, they should sincerely support local community without airline promoting purposes. In additional the airline should be responsible for the environment seriously due to airline business generated the carbon emissions into the world's atmosphere.

4.4.5 Passenger's perception to STD performance of airline

4.4.5.1 Quantitative analysis

Table 4.40 Correlation Matrix, Mean and Standard Deviation of Observable Variables of Passenger's Perception to STD Performance of Airline Measurement

	PRECO	PRSOC	PREVN
PRECO	1.000		
PRSOC	0.729**	1.000	
PREVN	0.690**	0.738**	1.000
MEAN	3.40	3.37	3.39
S.D.	0.58	0.57	0.55
Bartlett's test of sphericity Chi-Square = 658.523, df = 3, p = 0.000, KMO = 0.743			

Remark: * p < .05 ** p < .01

Refer to table 4.40, there are 3 variables of perception including economic perception (PRECO), socio-cultural perception (PRSOC) and environmental perception (PREVN). The research has examined the correlation between those 3 factors and found that the correlation of observed variables is different from zero at the statistical significance of 0.01. All 3 pairs have high level of correlation between 0.690 - 0.738. The results of the correlation matrix analysis using Bartlett's test of sphericity shows Chi-Square = 658.523, df = 3, and p = 0.000 which is different from zero at the statistical significance of 0.01. This represents that the correlation matrix of the observed variables is not an identity matrix. The variables are related to each other and can be used to analyze the components. Kaiser-Mayer-Olkin (KMO) = 0.743, which shows that the variables are suitable for the component analysis.

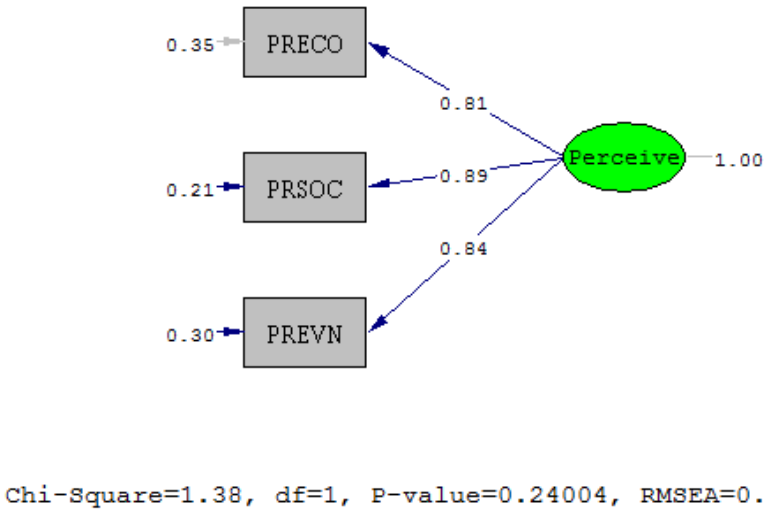


Figure 4.4 Passenger's perception to STD performance of airline measurement model

Refer to figure 4.4, results of model analysis show Chi-Square = 1.38, df = 1, p = 0.24004, RMSEA = 0.031, CFI = 1.00, GFI =1.00, and AGFI = 0.99. This represent that the measurement model of perception is fitted with empirical data. Considering the factors of perception, it was found that the variables are important in identifying the three types of perception. The variables were ranked in descending order as socio-cultural (PRSOC), environmental (PREVN) and economic (PRECO) respectively with the factor loading of 0.89, 0.84 and 0.81 respectively. The variance of perception indicator is 79, 70 and 65, respectively as shown in Figure 4.4 and Table 4.41.

Table 4.41 Validity Test of Passenger's Perception to STD Performance of Airline Measurement Model

Variable	Factor loading	SE	t	Factor score	R2
PRECO	0.81	0.02	18.97	0.44	0.65
PRSOC	0.89	0.02	21.25	0.83	0.79
PREVN	0.84	0.02	19.48	0.57	0.70
Chi-Square = 1.38, df = 1, p = 0.24004, RMSEA = 0.031, CFI = 1.00, GFI =1.00, AGFI = 0.99					

Results of hypothesis test 10-12 by the comparison of the consistency between the models developed with the empirical data shows that the criteria for verifying is fit with empirical data. The research considered statistical data including Chi-Square, df, CFI, GFI, AGFI and RMSEA. The results of the model analysis showed that the fit index is consistent with the empirical data or according to the defined criteria where Chi-Square = 1.38, df = 1, p = 0.24004, RMSEA = 0.031, CFI = 1.00, GFI =1.00, AGFI = 0.99. The index has passed the acceptance criteria. Therefore, it can be concluded that Perception Measurement Model is appropriate and fit with empirical data as follows.

H10. Airline administration STD performance in economic aspect is an element of passenger's perception to STD performance of airline with the loading of 0.81.

H11. Airline administration performance in social aspect is an element of passenger's perception to STD performance of airline with the loading of 0.89

H12. Airline administration performance in environment aspect is an element of passenger's perception to STD performance of airline with the loading of 0.84.

4.4.5.2 Qualitative analysis

a.) Passengers' perception of airline STD performance in economic aspect

It was found that the factor of perception of airlines performance in supporting the economy was unclear to the passengers on what the airline had contributed. The airline public relation should clarify the airline activities which supporting in tourism

economy. Passengers also perceived the airline's image by presumption that airlines run the business for benefit of their own, rather than supporting the economy of the tourist destination. Passengers were also aware that it is the duty of the government to take care of the economy of the tourist attractions.

> *"I think it is still not good enough. They may only do business or may get involved very little. Maybe this is the responsibility of the government. Sometime, when we hear about this kind of news, it might be possible that it's only a marketing strategy."* (PX3)

> *"I think that would be better than this. I am not sure if it is business reason or not. They may have to do the business around the world, so they may not just focus on a small spot in the country."* (PX6)

> *"I think I have not seen obviously that the airline plays a parting helping the tourism economy. There is still doing business of the airline's benefits. Of course, they aim to have high profit. As I said, there should be give and take but it seems to be that the 'give' is less or they give only to extend their business further."* (PX8)

b.) Passengers' perception of airline STD performance in socio cutural aspect

It was found that, the factor in term of perception, the airline was focusing on profitability or marketing strategy of the airline rather than the benefit of the society which was a barrier to passenger's socio-cultural perception. Passenger perceived social responsibility as a lack of continuity and follow-up of the activity.

> *"As far as I know, I think they can do it in the moderate level. Maybe it's about the cost? So, they cannot do it fully. Or maybe they do it to follow the trend only. I see a lot of advertising on the social activities, but I don't know that they just want to promote the airline or not. If they do it seriously, it would be good."* (PX1)

> *"Maybe they can do it better than this? It's like it's not done fully yet. I am not sure maybe it's about the cost or maybe about the airline's policy. Most*

of the time, there is no continuality. They do it once and then stop it. So, we don't know the result yet" (PX2)

"It think it is not done yet. I see the airline only do their own business and focus on their own benefit rather than the tourist sites. Sometimes they do it as marketing tool only such as social attribution because I think every company should do it. It's similar like a compulsory." (PX7)

c.) Passengers' perception of airline STD performance in environment aspect

It was found that there is consensus perception of passengers in which the airline has an undesirable performance. The average of performance was in moderate level. According to carbon emissions, passenger also mentioned that the airline has no satisfactory measures to reduce carbon emissions to the environment which was associated with the airline directly. Passenger agreed that airline performance on environmental still unsatisfied.

"I see some news about the environmental conservation but it's not really well known." (PX1)

"I think it is in moderate level. They could do it better, obviously about the environment. Especially about carbon emission, they still emit a lot of carbon" (PX4)

"I think it is not good enough. I think they focus on doing business rather than investing in environmental responsibility. They still emit the carbon as usual without any measure to reduce it. If we expect for the tourist attraction, I think it's still too far for them to think about." (PX9)

In conclusion, the passenger's perception to STD performance of airline in term of quantitative, the research found that overall perception is in moderate level. The economic perception is in the highest level among three variables, followed by environmental and socio-cultural perception. Among the 3 factors of perception, the socio-cultural perception had the most factor loading. Base on the qualitative analysis, perception of airline' performance was dissatisfaction. The airline still lacks of creating

perception of their role to support in all three areas: economy, society and environment. The passengers also mentioned that airlines run the business the benefit of themselves rather than to support the tourism.

4.5 Difference between Passenger's Expectation to STD Performance of Airline and Passenger's Perception to STD Performance of Airline. (Objective 3)

Table 4.42 Variance test scores of passenger's expectation to STD performance of airline and passenger's perception to STD performance of airline

Variable	**Levene's test for Equality of Variances**	
Scores of Passenger's Expectation and the Perception of Airline's STD Performance	F	P
	2.923	0.088

Based on Table 4.42 the results of variance test of each group using Levene's Test shows that Probability (p) of passenger's expectation to STD performance of airline and passenger's perception to STD performance of airline is 0.88 which was higher than 0.05. This means variance of passenger's expectation to STD performance of airline and passenger's perception to STD performance of airline was indifferent at the statistical significance level of 0.05.

Table 4.43 Comparison of score of passenger's expectation to STD performance of airline and passenger's perception to STD performance of airline in each aspect

Variable		t-test for Equality of Means (n=400)				
		$\overline{X}$	*S.D.*	t	df	P
Pair1	EXECO	4.46	0.63	25.680	399	.000**
	PRECO	3.40	0.58			
Pair2	EXSOC	4.40	0.64	26.750	399	.000**
	PRSOC	3.37	0.56			
Variable		t-test for Equality of Means (n=400)				
		$\overline{X}$	*S.D.*	t	df	P

	Variable	t-test for Equality of Means (n=400)				
Pair3	EXEVN	4.44	0.58	28.720	399	.000**
	PREVN	3.39	0.55			

** at the statistical significance level of 0.01

Based on Table 4.43, the comparison of expectations of passengers toward the airline STD performance, and their perception to airline's STD performance in economic, socio-cultural and environmental aspects using t-test statistics shows the probability (p) of 0.000 which was lower than 0.01. That means the null hypothesis was rejected and the alternative hypothesis was accepted. This is mean that the passengers' expectation and perception to airline STD performance are statistically different in all 3 aspects economic, socio-cultural and environment aspect at the statistical significance level of 0.01. Their perception to airline STD performance is below their expectations in all 3 aspects. It implies that the passengers are not satisfied with the current airline performance in supporting STD.

Table 4.44 Comparison score of passenger's expectation to STD performance of airline and perception to STD performance of airline

Variable	t-test for Equality of Means					
	n	$\overline{X}$	*S.D.*	t	df	P
Expectation	400	4.44	0.58	29.086	399	0.000**
Perception	400	3.39	0.51			

** at the statistical significance level of 0.01

Based on Table 4.44, the comparison of expectations of passengers toward the airline STD performance and their perception to airline's STD performance using t-test statistics shows the probability (p) of 0.000 which was lower than 0.01. That means the null hypothesis was rejected and alternative hypothesis was accepted. This is mean that the passenger's expectation and perception to airline STD performance are statistically different at the significant level of 0.01. Their perception to airline STD performance is below their expectations. It implies that the passengers are not satisfied with the current airline performance in supporting STD. (Hypothesis 13).

4.6 The Influence of Passenger's Awareness to STD, Passenger's Willingness to Support STD, Passenger's Expectation to STD Performance of Airline, and Passenger's Perception to STD Performance of Airline on the Passenger's Performance in Supporting STD. (Objective 3)

4.6.1 Examination of Variable Properties prior to analyzed by Multiple Regression Analysis

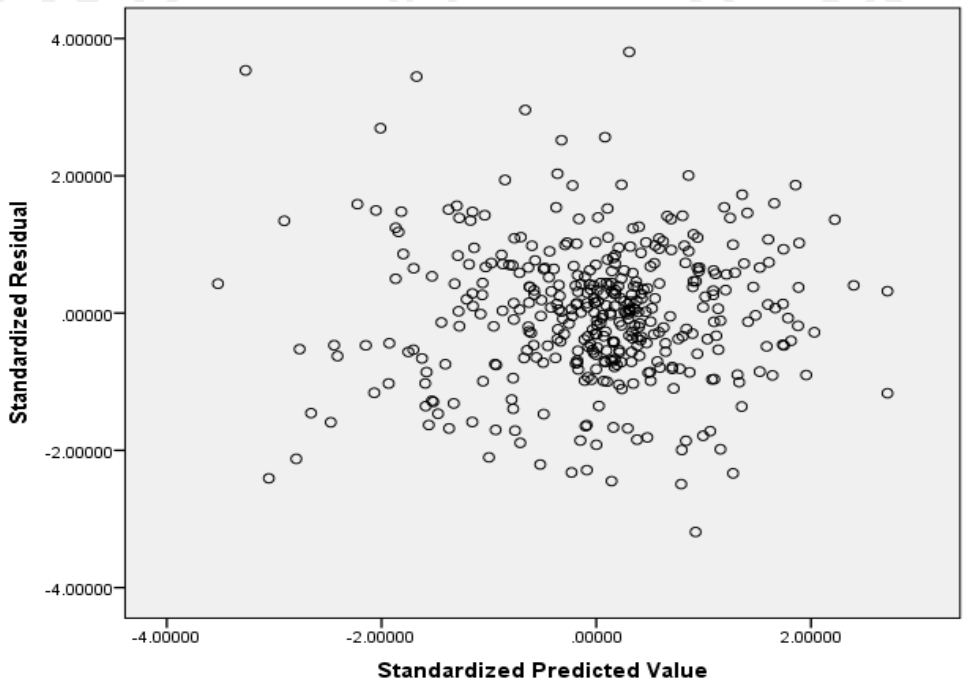


Figure 4.5 Relation between standardized residual and standardized predicted value having the present performance as dependent variable

Based on Figure 4.5, the variance of error is homoscedasticity considering from the scatter plot distribution. If the error changes to be closed to zero or changed narrowly, it means the error caused by such prediction is homoscedasticity. Consideration of scatter plot distribution shows that most of the errors were distributed over and below level 0, since the distribution was narrow, no matter what direction Y changes. Therefore, it was concluded that the variance of the error is homoscedasticity.

4.6.2 The results of linear relationship analysis between independent varaibles and dependent variable.

The results of linear relationship analysis between Independent variables (passenger's awareness to STD, passenger's willingness to support STD, passenger's expectation to STD performance of airline) and dependent variable (passenger's performance in supporting STD) using the multiple regression analysis is shown in Table 4.45

Table 4.45 Multiple Regression Analysis to predict relationship affecting passenger's performance in supporting STD

Variable	**Unstandardized Coefficients**		**Standardized Coefficients**			**Collinearity Statistics**	
	B	Std. Error	Beta	t-test	P	Tolerance	VIF
(Constant)	0.62	0.20		3.12	0.00**		
Awareness	0.14	0.34	0.13	0.41	0.68	0.974	1.026
Willingness	0.23	0.05	0.26	4.68	0.00**	0.326	3.066
Expectation	-0.18	0.05	-0.21	-3.70	0.00**	0.324	3.086
Perception	0.75	0.32	0.76	23.46	0.00**	0.963	1.038
$R^2 = 0.598$, adjusted $R^2 = 0.594$, Durbin-Watson = 1.722, F = 147.138, p = 0.000**							

** statistical significance level of 0.01

* statistical significance level of 0.05

Based on 4.39, multiple regression analysis reveals that passenger's awareness to STD (p = 0.68) affected the present passenger's performance in supporting STD insignificantly. Passenger's willingness to support STD in the future (p = 0.00) affected the present performance at the statistical significance level of 0.01. Passenger's expectation to STD performance of airline (p = 0.00) affected the present performance at the statistical significance level of 0.01. Passenger's perception to STD performance of airline (p = 0.00) affected the present performance at the statistical significance level of 0.01.

When considering the strength of the relationship of independent variables that affect the passenger present performance to STD by reading from the value of β which was the value that adjusts the coefficient of the raw score to the standard score for the suitability to compare all independent variables. It was found that passenger's perception to STD performance of airline result (β = 0.76) mostly affects the present performance, followed by passenger's willingness to support STD in the future (β = 0.26), and passenger's expectation to STD performance of airline (β = -0.21), respectively. While passenger's awareness to STD result insignificance.

Adjusted R2 = 0.594 means that all factors can determine the variance of present performance for 59.4% and the rest of 40.6% was caused by another factor.

Durbin-Watson = 1.722 which is between 1.5 –2.5, so it could be concluded that the independent variables used in the test were not related within themselves or the errors were independent with no problem of autocorrelation.

The Variance Inflation Factor (VIF) of all independent variables was less than 10 and the tolerance of all independent variables was greater than 0.1. Therefore, it could be concluded that all independent variables had no correlation or there is no problem of Multi collinearity

It could be summarized that:

Each one unit increase in passenger's willingness to support STD is associated with 0.26 unit increase in passenger's performance in present. The association between willingness to support STD and passenger's performance in present is also statistically significance, while other factors remain the same.

Each one unit increase in passenger's expectation to STD performance of airline is associated with 0.21 unit decrease in passenger's performance in present. The association between expectation and performance in present is also statistically significance, while other factors remain the same.

Each one unit increase in passenger's perception to STD performance of airline is associated with 0.76 unit increase in passenger's performance in present. The association between perception and performance in present is also statistically significance, while other factors remain the same.

Results of the test of hypothesis 13-16

H13. Passenger's awareness to STD is correlated with the present performance of passengers insignificantly.

H14. Passenger's willingness in supporting STD is correlated with the present performance of passengers significantly.

H15. Passenger's expectation to STD performance of airline is correlated with the present performance of passengers significantly.

H16. Passenger's perception to STD performance of airline is correlated with the present performance of passengers significantly.

4.7 Airline Administration Awareness to STD and Willingness to Support STD. (Objective 4)

4.7.1 Awareness in the Perception

1) Physical of Tourist Attraction: Most airline administration have well awareness of the physical of the tourist attractions that they are still beautiful but there is also a risk of damage or degradation attributed by the increasing number of tourists. It was consistent with the opinions of tourism experts that Thailand has no problem in terms of demand, but Thailand has problems in managing tourism resources. It still lack of an agency with a responsibility to take care this aspect in the overall. Thai people still lack the awareness in the maintenance of tourist attractions and this may affect tourist attractions in the future.

> *"If we have more tourists, the quality may be deteriorated. It will lead to the third crisis where that tourist attraction will not be sustainable. Many people visit the place with beautiful coral and make them look unpleasant anymore until no one go there. If ask me in this regard, I think we are at risk to have the crisis of sustainability."* (AD3)

> *"We are already good in maintain the tourism attractions, cleanness, and making people aware of the environmental impact. We are natural, we have good people, and we have good food. If you ask me, I think it's already good, but it can be done better."* (AD5)

"In the past I like to visits tourist attraction in Thailand. They were beautiful. I went to Samui 20-30 years ago, it was beautiful. Now it looks ok. The mission meet target already. They attract the tourist, but nature and environment are damage. How is this impact?" (AD8)

"We have no problem to increase demand. We have problem in managing the supply. We should have a host agency to integrate all the task to the center. Only one agency cannot be performed thorough the country." (EX4)

"For our country, I think it's not a crisis yet. It is a matter of awareness. We must see 5 year or 10 years in the future. Many tourist attractions are deteriorated because Thai people don't look forward. Many tourist attractions in our country are deteriorated. We don't find protection, but we only solve the problem at the end, not the cause." (EX5)

2) Safety of Tourist Attractions: Airline administration are well aware that many tourist attractions are not safe for tourists. The agency should manage the safety for the tourists. Tourism experts consider that it still lacks of agency that is directly responsible for the safety of the tourists.

"Lately I went to Phuket and saw that there is a cluster of those in the same nationality which causes social problem consequently. Criminal Group, or others. This is what I observe form news." (AD3)

"If we can eliminate problem of safety or threatening the tourist, it is one thing. I think it is the main issue people making decision whether they will visit the place or not." (AD4)

"it might be an adaptation, not a crisis. During the time we began to travel, it has been adapted. It's like the nature of the tourism industry. When there are new happenings in different countries, like insurgency, it is a factor affecting the tourism. It is considered as the nature of tourism, not a crisis." (EX1)

"When we seriously discuss about supply side, about the safety of tourist attraction, it appears that this is not a responsibility of Ministry of Tourism. The safety of tourist is a responsibility of police. Making the new road to access the place is a responsibility of Ministry of Transportation. To get support from local agency is a responsibility of local administration organization. You see? Tourism matter is not under the power of Ministry of Tourism." (EX4)

3) Tourist Behavior: Airline administration have the same awareness of the tourist behavior that most of the tourists are lack of conscious mind on environmental protection. Although government agencies may be supervised, but some area ware ignored. It may be necessarily to have a representative or tour guide to guide tourists. There should be a campaign to have awareness of environmental protection.

"The government may be willing to do things seriously, but I have to say that the consciousness of the tourist are not very much as far as I can see." (AD1)

"It began to deteriorate because I see tourist behavior in the media. They show breaking the coral and collecting shells. That mean the tourist behavior and quantity of tourists may affect to tourist attractions. They may have not knowledge enough or may not have much thought. They may be able to do this at home, but it affects us. In the future, it may lead to crisis. I see the risk. A major tourist attraction, which has been beautiful maybe be gradually deteriorated." (AD3)

"If we take a lot of tourists, but ask if we will keep the coral by limiting the number of tourists, of course, our income will be reduced. Tour guide or Travel Company should be responsible. The fine should be high, then they will monitor for government due to they don't want to take a risk." (AD4)

"When speaking in the CSR's point of view, I would like them being aware of environment destroy. It is already good that they take the tourists to

the place. It also good for the country's economy. Our airline will have more passengers as well." (AD8)

4.7.2 Awareness in Comprehension

The researcher found that airline administration have awareness in comprehension that the sustainability of tourism corresponds to the economic, socio-culture and environmental support. Mostly the airline provided the economic support first due to aviation business who takes the tourists or people to the tourism area. Therefore, there was expense in the area which stimulated the economy of such area. This may lead to society in term of better living and also environmental development. The airline also recognized that the awareness factor should be indoctrinate to tourists when they visit tourist attractions by coordinating with the tourism organization. However, the tourism experts mentioned that the airline is lack of awareness in comprehension they mainly focus on business operation rather than supporting sustainable tourism by considering number of tourist they transport to the place more than the carrying capacity of tourist attraction which is concern the business policy.

"If it is the matter of economic point of view in tourism, I think tourism is an important factor that drives the country's economy. The income is generated all the time. This is what drive Thailand's economic growth. Our airline is always aware that we are not only an airline, but we also help the tourism. We help in many ways. In agriculture, we bought vegetable and fruit to provide on broad. When we make giveaway gifts, we also use local product. This reflects that the circulation of money within the country. It will create the development as same as when we make advertisement about tourist attractions" (AD1)

"We, as a business operator, cannot only make business. The Stock Exchange of Thailand (SET) is inviting all organizations to be aware of the sustainability. As we are airline, we must look at how to make sustainable tourism. We should cooperate in this regard." (AD2)

"Therefore, the role of airline in tourism promotion is very effective, especially the tourist attraction which has an airport in that province itself. It

makes more tourism and will increase the volume. However, quality is another factor. Volume contributes to the growth of the local tourism industry. It will flow a lot of money." (AD3)

"We should play more role. We take the tourists from one place to another. We should help creating awareness due to there must be cooperation among agency. We are airline that transport both passenger and cargo. Part of them is tourists. We are a part of sustainability and awareness. We must coordinate with the tourism more. The traveler meets us first before they step on our country. They should know it. We have to educate them on broad, this is also awareness creation." (AD5)

"We have to be aware of the issue of how it relates to tourism. Let's say that the sustainability will come up. It must be economic, social and environmental. It's about creating a sustainable, global company, a nation, a world, something like this." (AD8)

"Airline have a clear role in the economy more than the social and environmental. The main function of airline is to transport people. It will make more tourists to visit the place which has direct economic effects. The social part comes after spending money in the area. It leads to a better live in the society. The role of airline related to socio-culture and the environment is also involved but what we expect of the airline is taking people into the area." (EX1)

"The airline takes people to the area. People have to scramble for eating and using services. If we look only on the economic point of view, it creates more demand. But what's about supplies. We look only one side. We do not manage the supplies at all. We try to stimulate demand but ignore supplies because we believe that we have many supplies. There is nothing indicates the quality of supply. Is the supply that have never been use ready for being used?" (EX2)

"The airline still promote mass tourism. We are talking about sustainable tourism, not mass tourism. They want to carry as many people as they can. Therefore, they focus on mass tourism. To take people to the

destination and inform them how the destination is, is good but it's still mass tourism. The airline still does not reach the point to promote sustainable tourism yet, even in the present. They are still focusing maximize profit minimize cost because of high competition and low cost airlines are existed. (EX4)

4.7.3 Awareness in projection

It is found that airline administration are well aware that the role of the airline has contributed to the development of tourism. The role of airlines for the future sustainability should be improved such as educating the tourist about how to maintain the tourist attractions or promoting the strength for business operator or community in the tourism area to enhance the capacity to serve the tourists in the future. All the experts agreed that airline should perform the role in future development due to airline is a factor who transport many tourists into the tourism area. This leads to the destruction of tourist attractions as well.

"I want to say that there is a lot of competition in the world today. The airline should play a role in strengthen the business operators or community or tourism in the area. We may have to educate them or be closed to them and tell them that we want to strengthen them to be competitive and able to provide service that serve variety needs of the tourist. Some tourists only want to see the nature. Some of them want to take adventure. Some of them may like to see the culture. The airline should also be involved." (AD1)

"In the future if our role is strong, we will invite whom we deal with to be the same policy with us like to anti the trade of wildlife or reserved animals products made from reserved animals. We need to make the stakeholder aware that if they travel with our airline, there must be no wildlife trafficking, or it is prohibited for the cargo as well." (AD2)

"If the number of visitors is high or we transport more tourist to destinations and the development is good, we anticipate that the tourist attraction will continue to exist in the future, but the development is rather slow. If the airline comes to help, it would be faster." (AD4)

"We are the main airline taking passengers to the area. If we do not support or help, there will certainly be a problem. Only transporting people without educating them, it's like we take people into the country, but people don't help making anything better. Like visiting Khoa Yai, it can be reserved, but it doesn't't help. It's not carry any message or control anything. Focusing solely on the quantity but lack of quality is bad. Every sector must coordinately support in this matter." (AD5)

"People may not yet feel like the airline must be responsible in these matters. Airline may get effects indirectly. Actually, it's direct effect that the airline emits pollution to the world. The result is that if there are no co-management, tourism resources will decline. Tourism will not be a leading industry anymore. It will be deteriorated the whole country or the whole province. People will not want to visit the tourist attractions anymore because they are declined. Then it is the end of the airline. Tourism is one product that could be served upon the demand. If there is no demand to travel in long term, there is no one to be served." (EX2)

"To do it as Business as usual, it will be like this. Nowadays people are interesting in traveling by plane (low cost airline) more. Therefore, the airline is directly and indirectly support the deterioration of tourist attractions. The greater number of flights, the more likely it is to correlate with the degradation of tourist attractions. However, if they do it as business unusual such as creating awareness by inflight magazine, to add this kind of article in the magazine. This is the only a chance to communicate to the passengers even only one hour or a few hours." (EX4)

4.7.4 Willingness in decision

Airline administration have strong intention to perform in decision of policy setting. They intend to compensate the carbon which applied with the airline regulation or cooperated in different project with other agency such as tourism organization. However, in carrying out some projects, it may be necessary to take into account the rules that the regulation requires. While, tourism experts mentioned that the airline has an unclear image of tourism policy decision making.

"Thai Airway has the policy already. It's the intention of Thai Airway. We do it continuously. I think the responsible function performs it every year or even more often. It is also in concrete. We have the honestly willingness in term of tourism." (AD1)

"As I said, there is a guideline, it is not only CSR. Every function must apply this guideline to their duty. All three aspects should be performed together simultaneously because they will be combined as a sustainability. For example. Carbon Footprint is something about carbon offset. If we cannot reduce the operation, we must offset. We have this guideline already." (AD2)

"I think we are ready within our potential. We are related to tourism, but it should be better. We may join each other to do things more. We have a policy to promote sustainable tourism. We are a unit in Thai Airways. We won't choose the customer's preference which against the principle. We must balance the needs and principle. Anyhow, we should not forget that we are national carrier. If there is any regulation existed, we must be aware of." (AD5)

"We have a strong willing to do so, it's fully. We think that is the tourism of Thailand. The government sector, Tourism Organization and Airline must have a close relationship." (AD6)

"Survey of the passengers behavior shows that almost 100% of passengers read inflight magazine because they had nothing to do during traveling even they took the newspaper on broad. This will give high impact for

the airline to communicate with passengers. Beside the sustainable reason, the image of the airline would be good in return without money concerned. Suppose when we are thinking about green image, we have no idea which airline has that image recently. (EX4)

"It is a policy that everyone have to follow. But in our country, the policy is only a paper, no one or very few follows." (EX5)

4.7.5 Willingness in implementation

It is found that the airline administration willing to perform the activities that support the tourism in 3 aspects such as: in term of economy, they promote local products or offering the campaign of accommodation together with air ticket. In term of social support or CSR, there are also high willingness such as: senior executives regularly participate the activities. In term of environment, they also willing to reduce pollution by fuel management of the flight operation department. However, tourism experts had a different perspective. The expert mentioned that the airline administration has less willing to perform the activities. The activities they are performing is only for creating airline's image or following the trend. They are forced implicitly.

"If you talk about the environment of tourism, as I said, we have many projects to instill consciousness for all people to protect the environment. Our economy is already running. We have a function ROH who selling tour package. Some part of profits is already sent the government. This is the income from tourism and then send it to the state. This is one of a concrete action. Regarding CSR, it's clear. Senior executives join many activities such as Reforestation. We are always aware about this. They join the activities personally all the time." (AD1)

"Flight operation department is the one that we can do it fully about the environment. It's what we have been trying to do all the time. Look at the company report to shareholders, there is a decrease of fuel consumption which derived from 2 - 3 factors. The first one which give the most impact to reduce fuel is the new engine that consume less fuel. This is what we have been doing,

to reduce the fuel consumption. We try to reduce 1.5% - 2% per year by using aviation technology and aviation techniques." (AD3)

"It helps a lot. We distribute many different versions of brochure or tourist attraction guide book in different languages on broad. People who want to come or to go can study the details about regulation, expenses, accommodation cost, entrance fee, etc. They will know information before reaching the area. The first way is to promote OTOP product or domestic products. This is to help the nation. Helping the nation is an indirect support as we are national carrier. If the country is strong, we will be strong as well." (AD4)

"When we choose the hotel, we choose the ones which are well known, chain hotel. These hotels mostly have the awareness in this area already. Now we add famous local brand like boutique hotel also. We want to see if they have awareness in protecting the environment or not." (AD5)

"We help the tourist attractions when the crisis occurs. We support them by taking the tourists who are good quality tourist there by offering special package with special price, communicating, and advertising, throughout our airline's route net. This is win-win for all who participate the project." (AD9)

"The CSR they do is only because it's their duty. I think airlines have to focus on business operation. What they return to the society is only what they have to do according to the trend. I don't think they focus on sustainable tourism. However, sustainable related- matter such as carbon offset or environmental protection, effect from fuel used in each flight, alternative energy, consideration to use proper plane for each route and using new plane affect this matter directly. They may be benefit to the airline directly. They may be helping reducing cost" (EX1)

"If they wants to prove what they are doing, they need to clarify more on the results. Are they committed to using clean fuels? How do they push this matter? We notice that they do it only because they want to reduce pressure.

They want to feel that they are participating. Some airline just like doing it trickily such as CSR. I have a question whether they do it seriously or only for promoting?" (EX2)

"I think their willingness is in moderate level. It is dissatisfactory as it should be." (EX3)

"They do only a little bit of CSR such as reforestation which I considered as image creating. I don't see the role of airline in supporting sustainable tourism clearly. I think it's still not fully done. There is no serious and fully willingness. Seriously and fully are different. Both these are not seriously and not fully together because there is a limitation on high competition in aviation business. They have to save cost as much as they can." (EX4)

4.7.6 Willingness in benefit sharing

It is found that airline administration has a willingness to share their economic benefit by purchasing local products to distribute income to local area. In term of environment, they have willingness in conserving the environment by airline's nature of business. However, in term of socio-culture, the benefit sharing activity was unclear. This conformed to tourist experts that airline administration sharing the benefit to society for the purpose of airline's image and follow the social trend of company practicing.

"To produce the on broad giveaway items, we use local product. It will reflect that money is circulating in the country. The development will happen. As we advertise various tourist attractions, we play a role to strengthen the entrepreneur or community or tourism. We must educate them or understand them to get that what the foreign tourists are interesting in the particular tourist attraction. What they want to see and what kind of tour they want. I want our business operator get in the money into the country." (AD1)

"When we fly in various destinations, it does not just bring income and prosperity. At the same time, tourists may cause environmental problems or

waste. Our project is not only promoting community income and community activities, we also do the environmental thing next year. There are also have many environmental projects." (AD2)

"We are helping the community in this country. This is one of the roles that airlines can perform. The 80% of food on broad is local products. The aviation operator department can do it fully in term of environment. In fact, ICAO determines that an airline must reduce carbon dioxide emissions by 1.5 - 2% a year, whether we want to do it or not. In the future, it will be a commitment. This is what we have been trying to do all the time. One of the report to the company's shareholder shows the reduction of fuel. It caused by 2-3 factors. Firstly, new engine, Secondly the weight of plane is lighter. New metal is very light." (AD3)

"Like CSR, it may be done as a duty. I think the airline also needs to focus on business. To return to society, they do it because they need to do to follow the trend in the society. I do not think they do it because of sustainable tourism..." (EX1)

"Like CSR, I want to ask if they do it seriously or only as advertising. Some company do it seriously until it becomes their image. It's like what you are paid off when you do good things. One company, people believe purely that they get paid off because they do it seriously. It's like their culture. It's their brand. Some unit don't do it seriously. CSR is not easy. The airline too. If they do it sincerely, there is no need to communicate. People will believe it from their hearts." (EX2)

"I think it's still not fully done. There is no serious and fully willingness. Seriously and fully are different. Both these are not seriously and not fully together because there is a limitation on high competition in aviation business. They must save cost as must as they can. They focus on being on time and safety rather than other matter because it is not their core business." (EX4)

4.8 The Airline's Roles for Supporting Sustainable Tourism Development. (Objective 5)

According to measure model fit, the researcher requires to compare with the acceptable criteria for each model fit index as in Table 4.46

Table 4.46 The Acceptable Criteria for Each Model Fit Index

Model Fit Index	Good fit Criteria	Acceptable Criteria
Chi-Square/degrees of freedom	$0 \leq \chi 2/df \leq 2$	$0 \leq \chi 2/df \leq 3$
CFI	$.97 \leq$ CFI ≤ 1.00	$.95 <$ CFI $\leq .97$
GFI	$.95 \leq$ GFI ≤ 1.00	$.90 <$ GFI $\leq .95$
RMSEA	$0 \leq$ RMSEA $\leq .05$	$0 <$ RMSEA $\leq .08$
AGFI	$.95 \leq$ AGFI ≤ 1.00	$.90 <$ AGFI $\leq$ 95

Source: Bollen (1989); Hair, Anderson, Tatham, and Black (1998); Hoyle (2012); Schumacker and Lomax (2010)

4.8.1 Airline passenger

The result of finding on passenger's awareness to STD as shown in table 4.47

Table 4.47 Summary of findings on passenger's awareness to STD

	Mean	Factor Loading (CFA)	Relationship strength on Performance (MRA)	Result of Model Fit	
AWPER	3.78	.54			
AWCOM	4.36	.48			
AWPRO	4.09	.87			
SUM AW	4.08		*0.13	$\chi 2 = 0.56/df = 1$	
				CFI	1.000
				GFI	1.000
				RMSEA	0.000
				AGFI	0.99

*Awareness has insignificance relationship on present performance.

The result of finding on passenger's willingness to support STD as shown in table 4.48

Table 4.48 Summary of findings on passenger's willingness to support STD

	Mean	Factor Loading (CFA)	Relationship strength on Performance (MRA)	Result of Model Fit	
WLDEC	4.44	.86			
WLIMP	4.44	.93			
WLBEN	4.41	.88			
SUM WL	4.43		0.26	$\chi 2 = 0.74/df = 1$	
				CFI	1.000
				GFI	1.000
				RMSEA	0.000
				AGFI	0.99

The result of finding on passenger's expectation to STD performance of airline as shown in table 4.49

Table 4.49 Summary of findings on passenger's expectation to STD performance of airline

	Mean	Factor Loading (CFA)	Relationship strength on Performance (MRA)	Result of Model Fit	
EXECO	4.46	.91			
EXSOC	4.41	.92			
EXEVN	4.44	.87			
SUM EX	4.43		-0.21	$\chi 2 = 0.51/df = 1$	
				CFI	1.000
				GFI	1.000
				RMSEA	0.000
				AGFI	0.99

The result of finding on passenger's perception to STD performance of airline as shown in table 4.50

Table 4.50 Summary of findings on passenger's perception to STD performance of airline.

	Mean	Factor Loading (CFA)	Relationship strength on Performance (MRA)	Result of Model Fit	
PRECO	3.40	.81			
PRSOC	3.37	.89			
PREVN	3.39	.84			
SUM PR	3.38		0.76	$\chi 2 = 1.38/df = 1$	
				CFI	1.000
				GFI	1.000
				RMSEA	0.031
				AGFI	0.99

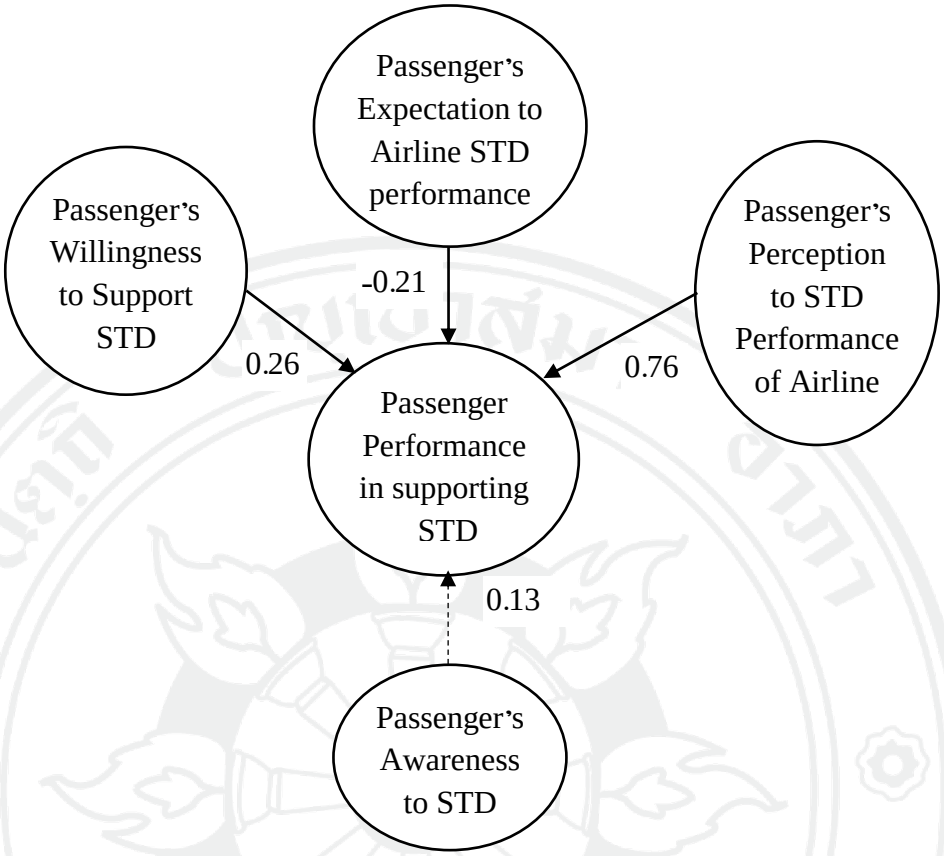


Figure 4.6 Summary of Performance of Passenger to STD

Summary of findings on factors affecting of passenger's current performance based on qualitative data analysis shows that the 1) Public Relations of the Airline 2) Image of the Airline 3) Ticket prices and 4) Channels and Alternatives to Support Activities, affect the passengers' present performance.

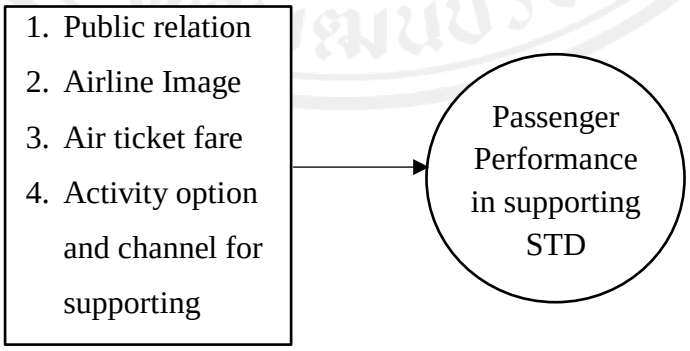


Figure 4.7 Summary of findings on factors affecting of passenger's current performance

4.8.2 Airline administration

Summary of findings on factors affecting airline administration performance based on qualitative data analysis shows that 1) Awareness in Perception, 2) Awareness in Comprehension, 3) Willingness in Performance, 4) Willingness in Benefit Sharing and 5) Image of the Airline, affect the performance of airline's executive.

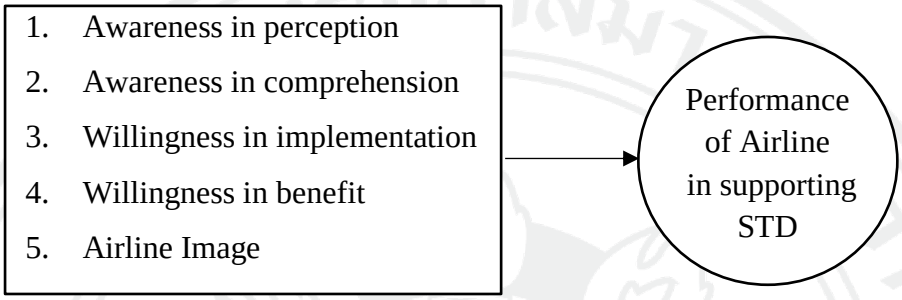


Figure 4.8 Summary of findings on factors affecting of airline administration in performance

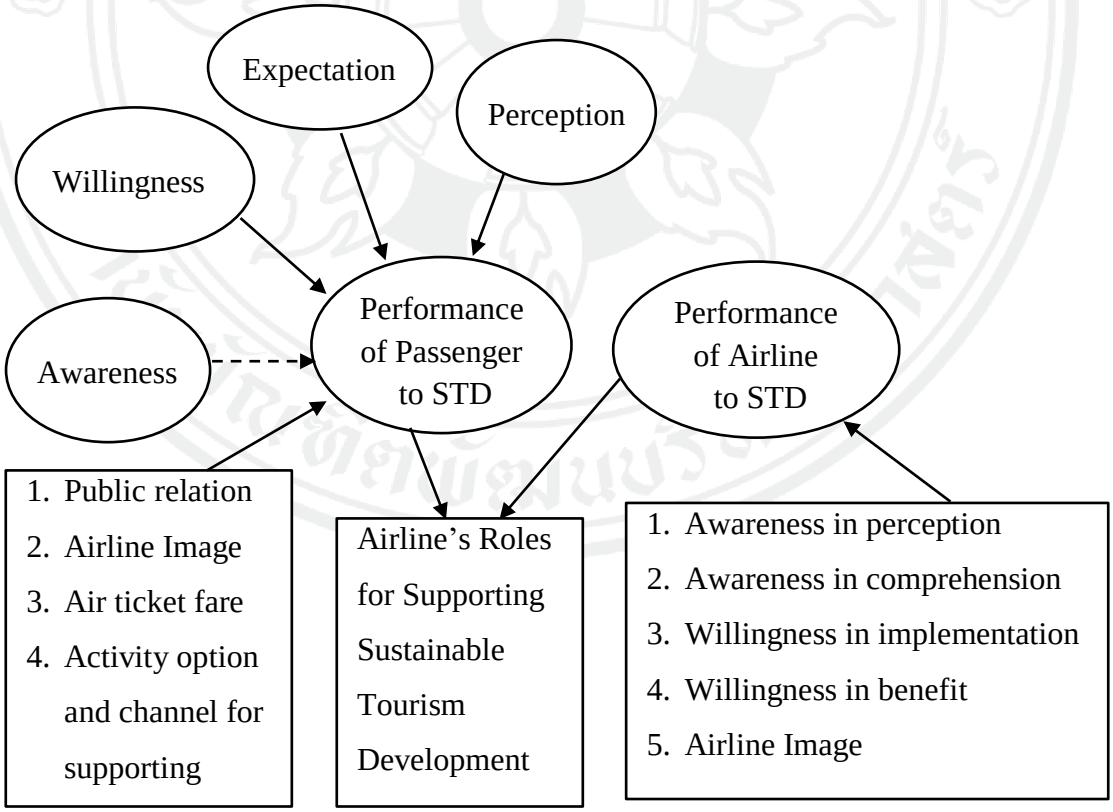


Figure 4.9 The Role of Airline for Supporting Sustainable Tourism Development

Table 4.51 Airline's Roles to Passenger

Role	Finding Reference
1. Prepare digital documents and publish them to customers or passengers online or via social media which can access to the passengers thoroughly and enable to check the perception of the passengers, as well as providing convenient and easy access to the information for passengers.	- The factor of using media of airline public relation function to represent a role and image which affected the passenger's decision to choose the airline. - Factor of airline data accessible which airline should provide the alternative to receive or deliver message to passenger.
2. The airline coordinates with various concerned travel agencies to obtain information on tourist attraction in order to promote tourism and increase the value of tourist attractions on the condition of fairness basis in the area.	- Promoted the value of tourist attractions in the destination area. - Promoted business services of community enterprises - Passengers also recognized the image of airline that they ran the business for the benefit of their own, rather than helping the economy of the tourist attractions.
3. Conduct an aviation policy that is consistent with the global environmental conservation of international standards or the standards of international aviation organizations and publish the environmental reports available to the public.	- Travelled with airlines that have a good image for environmental conservation. - Factor of perception that the airline emitted carbon into the atmosphere and caused global warming. - Passengers commented that the airline have an unpleasant measurement on reducing carbon emission or environmental conservation.

Role	Finding Reference
4. Implement on board service policy that focuses on reducing the use of consumables and notify passengers of such policy.	- Reduced consumption of supplies (e.g., plastic glass, tissue paper) on the plane to reduce waste.
5. Optimal use of in-flight supplies with minimum weights, as well as recommend passengers to have light weighted luggage.	- Used lightweight products to reduce weight and reduce carbon emissions.
6. Provide airline rating agency website link on the airline website for convenient accessible.	- Rating the airline with social and environmental responsibility in the high ranking. - Posted your satisfied comment through online social media when you found that they have a responsibility for society and the environment.
7. Implement an airline business policy that avoids increasing ticket fare to support tourism or provide alternative option that the passengers can support the tourism apart from the use of funds.	- Factor of fund supporting affected the willingness to share benefits. - Factor of air ticket fare was also a barrier in passenger's willingness to participate. - Factor of Provided alternative option to participate in supporting sustainable tourism.
8. Prepare various types of media to provide the information of tourist attractions to passengers or tourists, such as in-flight magazines, leaflets,	- Provided preliminary information to tourists who travel to the destination.

Role	Finding Reference
airline websites, including social media.	
9. Review the policy which concerned the image of the airline role in supporting sustainable tourism development.	- Refer to the result of MRA analysis; passenger's perception to STD performance of airline had the greatest influence on passenger performance. - Mean of passenger's expectation were significantly lower than mean of passenger's perception to STD performance of airline in all aspects. - The factor of airline image affects to willingness of the airline passengers.

Table 4.52 Roles of Airline administration

Role	Finding Reference
Economic **EC1**. Promote the policy of purchasing products, goods and raw materials from tourist destination area. **EC2**. Implement a local employment promotion policy at the destination of the airline with transparency and fairness. **EC3**. Promote the sale of air tickets with accommodation packages in which the owner is a local entrepreneur.	- Airline administration were well aware that the factor of airline contribution on economy was support the tourist attraction. The increasing of income in the area provided a good welfare and prosperity. - Airlines contribute to the promotion of their careers, employment and purchase of raw materials and products in order to generate income for local people thoroughly - Airlines generated income for local people by supporting the employment to work with the airline.

Role	Finding Reference
EC4. Promote redeeming mileage into hotels owned by local entrepreneur.	- Airlines transported the passenger or tourist to the area which caused the increasing number of accommodation. - Mostly agreed that the airline has support in the fields of economy priority. Because the airline industry is a business with an introduction. Many people travel to the area attractions makes spending money in the area. Stimulate the economy in the area. This may affect the social well-being depends. In addition, the development of environmental consequences. In term of economic, the airlines were supporting local products and selling air ticket with accommodation.
Socio-cultural **SO1**. Airline administration should be a role model in participating CSR activities to create image of the airline's willingness. **SO2**. Organizing activities to educate on conservation of tourist resources for local entrepreneur, local people and tourists, including all local stakeholders. **SO3**. Determine the marketing policies of the airlines, taking into account the carrying capacity of tourist attractions.	- The airline administration willing to support or promote for better welfare in the society. The airlines' contribution to tourism was to improve the image of the airline. - In terms of social support or CSR activities, there was a high level of willingness, even senior executives were actively involved in the activity. - To educate tourists about tourist attractions or to promote the strength of community or entrepreneurship to increase the capacity to accommodate tourists in the future.

Role	Finding Reference
	- Arranged the flight schedule according to the carrying capacity of tourist attraction in order to avoid social problem.
Environment **EN1**. Plan to minimize the average of aircraft age in order to meet the fuel efficiency. **EN2**. Operating flight by the effective fuel management. **EN3**. Joining the carbon offset program. **EN4**. Issue weight management policy of cargo and passenger baggage to reduce unnecessary fuel use. **EN5**. All the policies should consider the impact on the environment as the top priority.	- The airline administration were aware that the environment is important to tourism, where airlines should take part in environmental protection. They also recognized that airline performance affects the environment in every phase. - In term of environment, there was a willingness to reduce environmental pollution through the use of aviation fuel management. - There was a strong intention to make a policy of carbon offsetting for airlines. - The airline administration willing to perform environmental protection activities in partnership with the tourism organization that implements the environment protection policy. - In term of environment, airline should run the business without destruction of the environment.
Airline Image **IM1**. The policy on Corporate Social Responsibility activities should be clearly and consistently implemented in order to avoid following social trend.	- Airline had a willingness to share benefits in socio-culture aspect, but it was unclear activity. The willingness in performance was only for creating image and follow the social trend which every organization should do.

Role	Finding Reference
IM2. Improve the image of airlines to be consistent with global environmental conservation, which is an important issue. **IM3**. Create awareness of conservation of tourist attractions for passengers or tourists.	- Factors that affected the performance of airline administration were passenger's willingness in decision to select the airline. While the airlines were trying to create image rather than to support. - The airline recognized that the awareness should be promoted to tourists when they visit the tourist attraction by coordinating with tourism organization.

CHAPTER 5

CONCLUSION, DISCUSSION AND RECOMMENDATIONS

"The airline's role for supporting sustainable tourism development" has following objectives.

The main objective is to develop the role of the airline in supporting sustainable tourism based on awareness and willingness of airline passengers and airline administration. Specific objectives are:

1. To evaluate current performance of the airline passenger and airline administration in supporting sustainable tourism development
2. To analyze the factors of passenger's awareness to STD, the factors of passenger's willingness to supporting STD, the factors of passenger's expectation and the factors of perception to STD performance of airline.
3. To analyze the differences between passenger's expectations and perception to the performance of airlines in supporting sustainable tourism development and to assess the influence of passenger's awareness to STD, passenger's willingness to support STD, passenger's expectation to STD performance of airline, and passenger's perception to STD performance of airline on the passenger's performance in supporting STD.
4. To analyze awareness and willingness of airline administration in supporting sustainable tourism development.
5. To develop the roles of the airline business for supporting sustainable tourism development

The researcher has divided the samples into 2 main groups 1) Airline Passengers and 2) Airline administration. The first group is the airline passengers. The study was conducted with the population of passengers traveling to/from Thailand and domestic that both quantitative and qualitative researches were applied. In the quantitative

research, Multi-stage Sampling Technique was applied starting from Purposive Sampling Technique to select the airport the passengers used to travel to/from Thailand and domestic travel which were the 6 main airports of Thailand under the supervision of the Airport Authority of Thailand (AOT) and another 2 airports under the supervision of the Civil Aviation Department. After that, Proportional Stratified Random Sampling was applied in order to determine the number of sample populations in each of the 8 airports. The number of samples was 400. Questionnaire was used as a tool to collect data. Descriptive and static statistics were used to analyze quantitative data. Descriptive statistics and inferential statistics were used in quantitative data analysis. In the qualitative research in the group of passengers, the researcher used the purposive selection method to select one passenger from each airport, except Suvarnbhumi Airport and Don Muang Airport where 2 passengers were selected for each of them. There were 10 samples in total. The in-depth interview was used for each sample as a tool to collect data. Content analysis was applied to analyzed collected data. The second group of samples was airline administration. The research was conducted as a qualitative research. The main informants were 9 airlines administration selected by purposive selection from the airlines with the four highest proportion of market share in Thailand. In-depth Interview by using semi-structured interview form as a tool to collect the data. Content analysis was applied to analyzed collected data. In-depth interview was also applied with 5 tourism experts selected by purposive method. Interview form was used as a tool to collect the data. Content analysis was applied to analyzed collected data for result discussion. Conclusion, discussion and recommendations are as follows.

5.1 Conclusion and Discussion

The airline's role for supporting sustainable tourism development: a case study of Thailand, has concluded the findings consistent with objectives as the following.

5.1.1 Demographic characteristics of Respondents

This study investigated 400 samples of the passengers who traveled to/from Thailand and domestic. The respondents were male and female almost equally, with 202 males and 198 females. Most of them were between 21-30 years of age and single. Most of respondents graduated Bachelor Degree, living in Asia with average monthly income in the range of 1501-2000 USD (52,501-70,000 baht / 1USD = 35 baht). Their occupation was trade professionals / business owners. Most travel by domestic flight more than once per month and international flight longer than once a month for the purpose of leisure traveling. Most of them used full serviced (5 stars) airlines.

This is conformed to the research conducted by Paranchat, et al. (2011) on the decision of passenger to select the airline for international flight, revealing that the respondents graduated Bachelor Degree and has income higher than 50,000 Baht. However, it is contradicted in term of the samples were female for 52% with the age between 30-40 years, married, and worked as government officials or employees of state enterprises. This is also consistent with the researched conducted by Noppadol (2003) on the factors affecting the travelling by plane of the passenger of domestic airline, showing that most of the passengers were male, graduated Bachelor Degree with average income of 45,000 Baht and higher. However, it is contradicted in term of age because in the research, most of sample were 41-50 years old and worked as government officials or employees of state enterprises. This is consistent with the research conducted by Pichayapha (2012) revealing that most of the samples had a purpose to travel by plane as tourism and leisure because it is convenient and fast. It is consistent with information from UNWTO (2016) indicating that 53% of tourists had the purpose to travel as tourism and leisure.

5.1.2 Current performance of the airline passenger and airline administration in supporting sustainable tourism development. (Objective 1)

5.1.2.1 Passenger's performance to STD

The results of passenger's current performance in supporting sustainable tourism development in all three components consisting of 1) decision, 2) implementation, and 3) benefit sharing, showing that the implementation had the

average in high level of 3.45. The decision had the average in high level of 3.43 and the benefit sharing has the average in moderate level of 3.39. The overall average is in high level of 3.42. When considered by item, it is found that “Consumables reduction such as plastic glass on broad” had the maximum average of 3.60. Passenger’s performance in benefit sharing, “Participate social contribution program by donating money or items to the airline to raise the standard of living” had the minimum average in the moderate level of 3.31. In terms of quantity, the researchers found that passengers had a performance to support tourism at a moderate to high level. As well as the qualitative data where the researcher found that passengers had a role or performance in the criteria that should be increased because passengers thought their roles slightly concerned when traveling and also be requested by the airline to participate in the event. It was not self-initiation. Passengers have commented that the main role or supporting in tourism should be carried by the airline.

Passenger performance was at a high level in the implementation. It was found that passengers can carry out their own activities with no additional costs and it was supported by the airline such as reducing the use of consumables like plastic glass where the passengers can do without conditions. To issue electronic ticket to reduce the use of paper was also the field to be supported by the airline. Therefore, no expenses incurred to the passengers. While performance in the field of benefit sharing under “Participate social contribution program by donating money or items to the airline to raise the standard of living” had the lowest average that passengers must sacrifice their time and resources to participate in the project. This represents a contribution to sustainable tourism without any sacrifice fund and time will have a better result in performance. This consistent with the research by Hooper, Daley, Preston, & Thomas (2008), 487 passengers were surveyed at Manchester Airport. Less than 50 percent of passengers were aware of carbon offset from passenger travel. When mentioning about the impact of traveling on the weather, 75% of them agreed that travel affects climate change, while less than 10 percent were willing to pay for carbon emissions. The research conducted by Athit Thongnak (2009) revealing moderate level of behavior of undergraduate students in Ramkhamhaeng University in reducing global warming. Similarly, the research of Sirikhae (2002), the study of knowledge and practice of environmental conservation of personnel of one airline, conducted by the airline staff

at the head office, indicated that most of the samples had moderate environmental conservation practices.

5.1.2.2 Airline administration performance in supporting STD

The result of airline administration performance in supporting sustainable tourism in the present in 3 components: 1) economic, 2) socio-cultural, and 3) environmental, showed that in term of economic, the result of airline administration performance was in high level because the airline business transport the tourists to the tourist area and generated economy funding to the tourist attraction. It also promotes the economy of many tourist attractions in many ways. In term of socio-cultural, the airline had been providing social assistance in many aspects, but some project might have marketing or airline promotion policies issue attached. In term of environmental, the airline had made efforts to take care of the environment according to the international standards that are given to the airline practice which airline can perform well on the finer issues. While big issues such as carbon emissions were still not being addressed seriously. This may be a problem in the budget.

The results show that administration had good performance in economic aspect due to the airline business is related to the economic rather than social and environmental aspect. For example, to transport passenger to tourist attractions, the revenue of the airline depends on the number of passengers transported. To support for local products and increase the distribution channels, the airline also has revenue sharing from the sale of such goods. While to perform social assistance or environmental conservation, the airline needs more budgets. Therefore, airline has focus on performing in economy aspect rather than socio-cultural and environmental. It is consistent with ATAG (Air Transport Action Group, 2011) mentioned that the airline has contribute to the economy and society due to airline transported tourists to the area and helped to eliminate poverty in developing countries. While currently big companies in many industries focus on the issue of environmental image (Schreiber, 2009) (Meyers, 2008). As the matter of fact that the airline is directly involved in the environment, so it should focus on environmental friendliness. This is in line with (Hagmann et al., 2015) passengers choose to book and travel with airlines based on their personal attitudes towards airlines and their eco-friendly image. The research

conducted by Piset (1996) on the knowledge and behavior of flight attendants of Thai Airways and Japan Airline found that flight attendants of the two airlines were knowledgeable about environmental conservation in a moderate level. However, the performance on environmental conservation of more than half of employees was in high level. As same as Sirikhae (2002) studied on knowledge and practice in environmental conservation of staffs at the office of national airline, a case study of Thai Airways Public Company Limited. It was found that the office staff had a high level of conservation knowledge, while the performance was in moderate level. The researcher found that the performance of airline administration should focus on public relations and educating employees in addition to passengers.

5.1.2.3 Passenger's perception to STD performance of airline

The result of passenger's perception to STD performance of airline in all three components including 1) economic, 2) socio-cultural and 3) environmental show that the economic was in moderate level of 3.40, environmental was in moderate level of 3.39, and socio-cultural was in moderate level of 3.39. Average mean of all three aspects was in moderate level of 3.39. When each item was considered, "Using lightweight product to reduce load and emission" had maximum mean in high level of 3.47 and "Manage fuel efficiency while flying, such as flying at altitude that the fuel can be saved, etc." had minimum mean in moderate level of 3.31. The results of the content analysis show that perception of airline's performance were not satisfactory or were in moderate at all three aspects. Passengers believed that the airline played a more business role than supporting tourism economies. Even with social assistance, there may be reasons for marketing policies. It also lacks adequate environmental measures at acceptable levels in accordance with international standards.

This is consistent with a qualitative research of Disarin (2006) on strategies to adjust the image of the national airline. The results of the seminar of the experts indicated that when Thai airlines launches new route, it is like to promote the tourism in Thailand together, so the Tourism Authority of Thailand did not have to spend the budget for public relations that provided better welfare to people. The results of the interviews showed that customers comment that social activities of an airline are too less. Most of the activity was to create an image for the organization rather than

sincerely support. This is contrary to the airline staff's own opinion believing that the airline had a social contribution in almost all aspects. There were only some of the employees believed that the contribution was inadequate. The customers considered that the airline should create the image of the airline by implement the activities to lower class of people and also promote the activities continually. The researcher found that this may be caused by lack of good communication with outsiders on the activities. Airlines should focus on good corporate image by sincerely communicating.

5.1.3 The factors of passenger's awareness to STD, the factors of passenger's willingness to supporting STD, the factors of passenger's expectation to STD performance of airline and the factors of perception to STD performance of airline. (Objective 2)

5.1.3.1 Passenger's awareness to STD

The study of passenger awareness in all three components including 1) perception, 2) comprehension, and 3) projection revealed that the comprehension had average in the highest level of 4.36. The projection was in high level of 4.09 and perception was in high level of 3.78. Overall average was 4.08. When each item was considered, tourism development should focus on long-term benefits rather than temporary development has the maximum mean in the highest level of 4.49 and "You are aware that most accommodation businesses have a large amount of waste water discharge into the environment", had the minimum mean in high level of 3.42. In quantitative terms, the researcher found that passengers had high to the highest level of awareness. Factor Analysis of passenger's awareness to STD, awareness measurement model was not fitted with empirical data due to the data was inappropriate to analyzed by confirmatory factor analysis. The result of factor analysis of passenger's awareness to STD may indicate that awareness may consist of some other factors. Contrary, the results of content analysis of airline passengers' awareness from the interview show that most of the passengers were well aware of the condition of the tourist attraction which was remain in a fair condition with some of the natural resources were destroyed such as marine resources or scenery of invasive attractions from the building or the pollution of the waste generated by tourists. Passengers are well aware that three factors: economic, socio-cultural and environmental should be focus in order to have

sustainable tourism of the attraction. The airline shall support these three factors, such as economic supported by taking tourists to destinations or purchasing local raw materials for on board services. The cooperation of the stakeholders should be coordinated for the good management of the tourist attraction. While passengers are very aware of the future If there is an increase of tourists but lack of good management. Tourist attractions may be deteriorated because of the using without improvement and continuous development. When tourist attractions are deteriorated, tourism resources will be discontinued to the next generation and tourists will move to other sources.

This is in accordance with the research by Teeraporn (2005) on the sustainable tourism management model and the participation of local people in Koh Lan, Chonburi Province. It was found that local people were aware of the impact on the local environment from the current tourism at a moderate level. Local wisdom and natural resources conservation were in high level. The participation in sustainable tourism management was in moderate level. It is also consistent with Wimonpan and Chantana (2011) who conducted a study on awareness, knowledge, attitude and behavior on global warming in people in Bangkok and its vicinities. The research found that the level of awareness, attitude and behavior towards global warming is in a high level. Becken and Hay (2007) found that people have relatively low awareness of the impact of air travel on the weather due to lack of awareness and knowledge.

5.1.3.2 Passenger's willingness to supporting STD

The study of passenger's willingness to perform in all three components including 1) decision, 2) implementation, and 3) benefit sharing shows that decision and implementation had the maximum mean in the highest level of 4.44 equally and the benefit sharing was at the highest level of 4.41. The average mean for all 3 aspects was in the highest level of 4.43. Considering each item, "Consumable reduction (i.e. plastic glass, toilet paper) on board to reduce the waste" had the maximum mean in the highest level of 4.65 and "avoid requesting for the blanket on broad to reduce the cleaning waste water" has the minimum mean in the highest level of 4.33. In terms of quantity, the researcher found that passengers are willing to perform at the highest level. Analysis of the components of the willingness to perform, willingness measurement model (Willingness) is fit with the empirical data. Considering the factors of

willingness to perform for sustainable tourism, it was found that the variables were indicated the factor of sustainable tourism willingness, which were ranked in descending order as implementation, benefits sharing, and decision respectively. The results of content analysis show that most of the passengers were willing to make the decision to travel with the airline that support sustainable tourism and were pleased to be involved in the project that is useful of the tourism. At the same time, passenger considered the sincerity performing of airline administration in their policies. Most of them had high willingness on sharing benefits and providing assistance to tourism.

It is in accordance with the research of Chatpong (1998), a study on knowledge and willingness to perform on environmental pollution problem of sub-district administration organizations in Phra Nakhon Si Ayutthaya Province. The results showed that the members of the sub-district administration organizations had a high level of knowledge and willingness to perform on environmental pollution problem. It is also consistent with research by Monchida (2003) who studied the attitude, subjective norm and willingness to perform on the use of environmental products of Huachiew Chalermprakiet University students. The results showed that the samples had a high level of willingness to use the products. The research by Nuttanitcha (1995) on the awareness and willingness to perform on the environment issues of police officers in the metropolis police stations indicated that the samples were willing to work on environmental issues in high level. Savitree (2009) conducted a study on the influence of environmental consciousness and the level of knowledge about green products towards the willingness to buy green products. The study indicated that consumers were willing to buy green products at a high level. The researcher also found that the study of Muganda Muganda, Sirima, and Ezra (2013), exploring the role of local communities in tourism development indicated that people in the community would like to be involved in making decisions about their tourism policies in order to provide policy makers with a policy tailored to the needs of the stakeholders. In addition, they also would like to take part in voting or giving advice for the benefit of protecting their rights and for transparency in the administration of staffs. It was also found that people in the community did not want the command or top-down policy. The researcher found that they were consistent with the willingness of the passengers. Passengers have a role to play in deciding whether to travel with airlines that are environmentally friendly and

there are ways to participate in the decision-making activities of the passengers themselves.

5.1.3.3. Passenger's expectation to STD performance of airline

Results of passenger's expectation in 3 components including 1) economic 2) socio-cultural and 3) environmental show that the economic was in the highest level of 4.46, environmental was in the highest level of 4.44 and socio-cultural was in the highest level of 4.44. When each item was considered, "Using lightweight product to reduce load and emission" had maximum mean in the highest level of 4.52 while "Publish and understand the concept of responsible travel to passengers through various media on an airplane or website" had minimum mean in the highest level of 4.34. Analysis of the components of expectations, expectation measurement model was fit with the empirical data. Considering the factors of expectation, it was found that the variables were indicated the factor of expectation, which were ranked in descending order as socio-cultural, economic, and environmental respectively. The content analysis revealed that most passengers had high expectations. Passengers expect the airline to fully support the economy of the tourist destination, either directly or indirectly. When the airline has profitable on business, there should be social assistance that is not intended solely for advertising purposes. They should also be responsible for the environment seriously in main issues of environmental conservation, such as the reduction of carbon emissions to the world atmosphere.

This is consistent with the research conducted by Saowanee (2002) on expectations and satisfaction of tourists on environmental management and tourism activities. The results show that most tourists had high expectations for the role of environmental management and tourism activities. It is also consistent with Chachaya and Tulaya (2011) who studied the role of university and the expectations of the tourism sector in the development of local tourism. The samples were who involved in local tourism. Most of them had a high expectation on the development of local tourism. Most respondents also demanded that the university play a role in promoting and developing local tourism by educating and organizing activities that can be participated by the community. The researcher recommend that the airline management should play a role in supporting the tourism development of the tourist attraction as well.

5.1.3.4. Passenger's perception to STD performance of airline

Components Analysis of passenger's perception to STD performance of airline, perception of airline's performance measurement model was fit with the empirical data. Considering the factors of perception of airline's performance, it was found that the variables were indicated the factor of expectation, which were ranked in descending order as socio-cultural, environmental and economic respectively.

5.1.4 The differences between passenger's expectations and perception to the performance of airlines in supporting sustainable tourism development. (Objective 3)

The difference between Airline passenger's expectations and perception to STD performance of airline were different in each factor: 1) economic, 2) socio-cultural and 3) environmental (Figure 5.1). Overall of expectation had maximum average in the highest level of 4.44, while overall of perception of airline's performance was in moderate level of 3.39, which is considered as significantly difference. This can be interpreted that passenger require the increasing performance level of airline to support the sustainable tourism development due to passenger thought that the airline is not fully support the tourist destination. Passenger had the expectation that airline transports the tourists to the destination. Therefore, airline should responsible for tourism development. This gap between passenger's expectation and perception to STD performance of airline may lead to the dissatisfaction of passenger due to the perception to STD performance of airline influent the passenger's performance according to the result of multiple regression analysis.

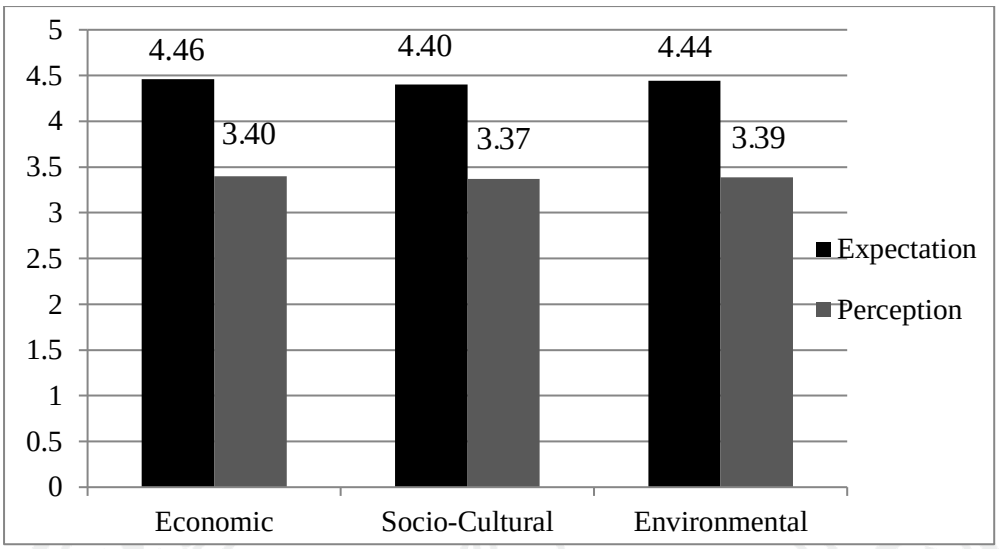


Figure 5.1 Comparison between the Expectation and Perception in each aspect

This is consistent with the study of Aurathai and Jirawat (2012) on the expectation and perception of tourists on managing environmental issues for green tourism consumption. It was found that expectation of tourists was higher than the actual perception and was different in every aspect. As with the research of Tadchapong (2007) on the expectation and perception of Thai tourists on tourism management of Amphawa water market, it was found that tourists had more expectations for tourism management than the perception.

5.1.5 Assess the influence of passenger's awareness to STD, passenger's willingness to support STD, passenger's expectation to STD performance of airline, and passenger's perception to STD performance of airline on the passenger's performance in supporting STD. (Objective 3)

The results of linear relationship analysis between awareness to STD, willingness to support STD, expectation to to STD performance of airline, perception to STD performance of airline and the passenger' s performance in supporting sustainable tourism development by using multiple regression analysis of the four independent variables show that passenger's perception to STD performance of airline has the most significantly influenced to present performance of the passengers with factor loading of 0. 76, followed by the passenger' s willingness to support STD with

factor loading of 0.26. The expectation significantly influenced the present performance in opposite direction with factor loading of -0.21. The passenger's awareness has insignificantly relationship toward present performance. All factors predicted variation in present performance for 59.8 percent, while the remaining 40.2 percent was a result of other variables.

This conforms to the research conducted by Siriwan (1998) on factors affecting the participation of members of community forest organizations in community forest conservation, a case study of Ban Tha Wang Sai. Factors that influenced participation were expectations of the benefits of being a member, support from external agencies and information on conservation from the media. Knowledge and awareness of environmental conservation had no influence on conservation participation. It also corresponds to the research conducted by Piradee (2011) which studied the factors affecting community participation in environmental management in pollution control areas: a case study of Mabchalud Community, Muang District, Rayong Province by using 6 independent variables including 1) personal factors, 2) information exposure, 3) expected benefits, 4) trust in agencies or personnel involved in management, 5) trust among people involved, and 6) problem recognition. The dependent variable was participation. It was found that the expected benefit was mostly associated with the participation, followed by information exposure, while the problem recognition was least associated. Sirikhae (2002) studied on knowledge and practice in environmental conservation of staffs at the Office of National Airline. It was found that the office staff had a high level of conservation knowledge. In practice, it was found to be moderate. The practice of office staff was significantly correlated with perceptions. This is in conflict with the research conducted by Piset (1996) on the knowledge and behavior of flight attendants of Thai Airways and Japan Airline. It was found that staffs of both airlines have awareness, knowledge and comprehension of environmental conservation in moderate level, but the environmental conservation performance was in high level. It was found that the employees of both airlines had a high probability of performing as a result of the current trend of environmental conservation but lack of knowledge. Both office staffs and flight attendants affected the perception of airline performance, which is the most influential factor in the performance of passengers.

5.1.6 Airline administration awareness to STD and willingness to support STD. (Objective 4)

5.1.6.1. Airline administration awareness to STD

The study indicated that airline administration were well aware because the perception of tourism situation still maintains in good condition. The increasing of the number of tourists generated revenue for the country. At the same time, tourist attractions may be deteriorated if lack of supervision and good publicity, including lack of awareness of tourists. The airline administration were also aware that airline contributed to the economy, society and the environment in tourism. The airline should play a role in strengthening the entrepreneurial or community. The continuous and well development will help to maintain the tourist attraction which can be performed through public relations or information providing in order to raise awareness. Tourism experts considered that the tourism has not yet reached a critical stage. It continues to grow, but it needs the awareness and role of all stakeholders.

However, Becken and Hay (2007) found that most people had relatively low awareness of the effects of air travel on climate change. This was due to the lack of knowledge and awareness. The researcher found that the administration were well aware, but there might be a lack of awareness rising for passengers. Gossling and Peeters (2007) also found that airlines were less transparent about the presentation of pollutants that had an impact on the environment and often presented a positive side on the airline, for example: presenting a new generation of fuel-efficient aircraft rather than mentioning on environmental performance regarding which level it can be done. The International Transport Association IATA (2009) had also addressed the issue of environmental as a significant issue same as the safety.

5.1.6.2. Willingness to support STD.

The study indicated that administration had a strong willingness to make a sustainable policy decision along with a business policy for the survival of the airline and the sustainability of tourism. The aviation sector and tourism have a very close relationship. The decision to adopt a sustainable tourism development approach is in line with airline business policy which must be balanced equally. The strong willingness to practice in public relations, raising awareness for passengers and sharing

the benefits back to tourism could support the economy, society and the environment with various channels that airline can do. While experts say that the airline should create a strong image of sustainable tourism and provide useful information to influence the behavior of tourists.

According to Rosskopf, Lehner, and Gollnick (2014) long-term planning of the use of aircraft for example, investing in a plane, arrange the size of the aircraft to suit the quantity of passengers, the airline may have to lose 3% of revenue in exchange for achieving 6% of environmental conservation goals. Airlines management must take into account the various policies to balance. This is because the rate of increase in flights is greater than the effort of reducing carbon emissions. Grote, Williams, and Preston (2014) found that modern fuel burning technology and fuel flight practices had a direct effect on reducing carbon emissions. The airlines were more in favor of these guidelines than others. King et al. (2010) found that the main things to do were: 1) reduce the weight of the aircraft 2) improve the aerodynamics to reduce the air resistance 3) develop the engine more efficiently to reduce the fuel burn rate.

5.1.7 Discussion on the Airline's Roles in Supporting Sustainable Tourism Development. (Objective 5)

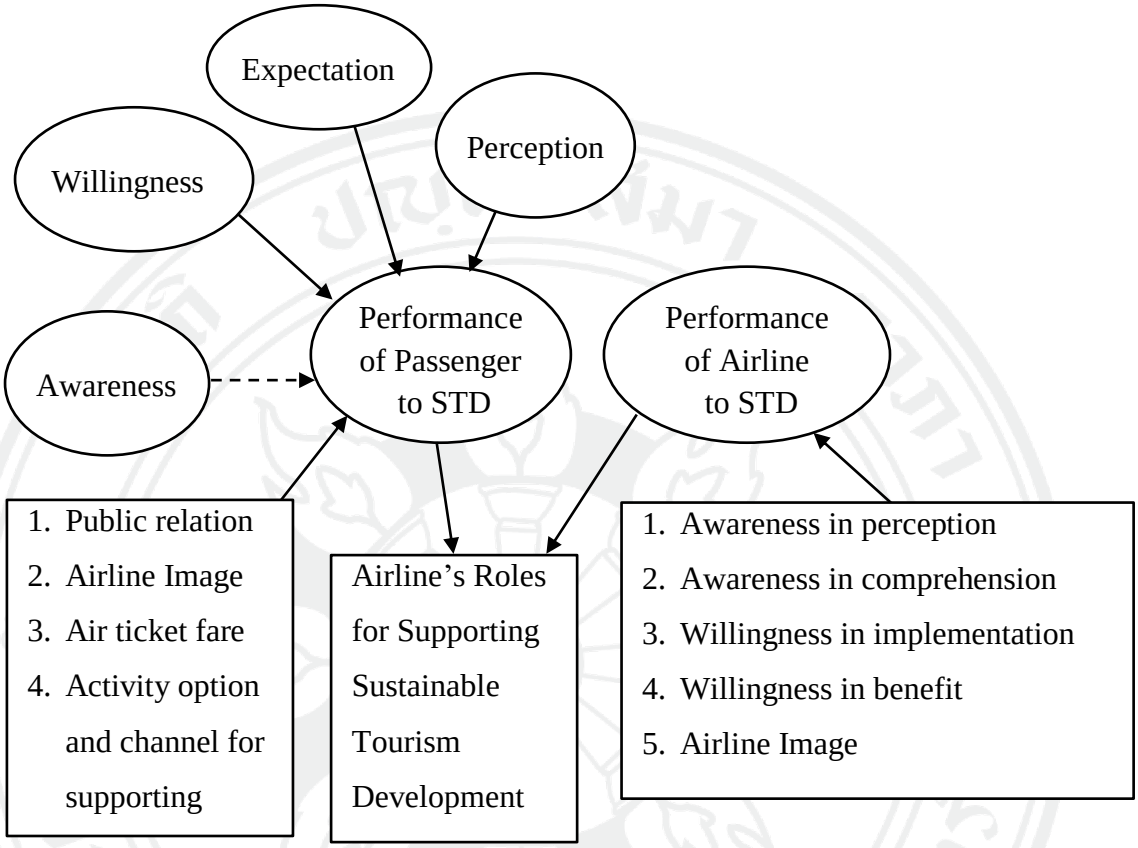


Figure 5.2 The Role of Airline for Supporting Sustainable Tourism Development

5.1.7.1 Airline's roles to passenger

In term of airline administration role to the passengers, consideration of linear relationship analysis of the four variables which consisted of 1) awareness, 2) willing to perform, 3) expectation, and 4) perception of airline's performance to the passenger's performance in the present, show that perception of airline performance influenced current practice of most passengers. Airline administration should pay attention seriously to the image of the airline by supporting tourism in all three aspects with the returning actual benefit to tourist attractions. The airline also has to increase the role of public relations and increase the alternative channel for passengers to participate in

activities for tourism, avoid increasing the cost to the passengers as they may be denied the cooperation, such as raising ticket prices to support global environmental protection.

This is conforming with Mayer, Ryley, and Gillingwater (2012), nearly half of respondents were able to distinguish the airline's environmentally friendly image, depending on the characteristics of each airline image rather than the business model of each airline, whether it is a low cost airline or a full service airline. The environmentally friendly image comes from the marketing policies of each airline. The research by Piset (1996) on the knowledge and behavior of flight attendants of Thai Airways and Japan Airline found that staffs of both airlines has awareness, knowledge and comprehension of environmental conservation in moderate level, but the environmental conservation performance was in high level. This represents the role of airline administration who are lacking in promoting or educating flight attendants on the environmental conservation. This may affect the passenger's awareness on the performance of the airline. It is also consistent with the research conducted by Kittiwat (2013) on social and environmental responsibility activities that affect the image awareness of the clients of Krung Thai Bank Public Company Limited in Nakhon Pathom Municipality. It was found that the implementation of social and environmental responsibility activities had a positive effect on Krung Thai Bank's image. The results of the interview show that the airline administration play a very significant role in the economy but still lack of adequate social and environmental support. Kitiwat's research indicated that social and environmental performance has a greater impact on image awareness. The recognition of airline performance greatly influences the passenger's performance.

5.1.7.2 Airline administration roles

The airline administration are aware of the tourism in high level. There is a perception of the current tourism situation and good understanding of the role of airlines in contributing to tourism in all three aspects: economic, social and environmental which could be predicted. The airline administration also have a strong commitment to support sustainable tourism which come from the balance of business and sustainable tourism development policy. However, from interviews of airline administration and tourism experts, the airline's performance in the economy is outstanding which might

be business reason. Therefore, the airline neglect in the aspect of society and the environment. The researcher suggests that the environmental support should be enhanced due to the issue of global environment has been focused. This is an urgent issue that needs to be solved. The airline industry is concerned the environmental issues with a direct impact on the airline's image and perception of passengers.

It is consistent with Lynes and Andrachuk (2008) research on environmental incentives in the airline industry, a case study of Scandinavian Airlines which found that there are five main factors driving the management of environmental friendly airlines: 1) Financial management in the field of environmental management such as saving energy in the office to reduce costs, 2) Establishment of monitoring measures to meet international environmental standards of the airline industry and promote it as a corporate value, 3) Positioning the company as a good corporate citizen company such as cultivating good values or corporate culture to employees, 4) Maintaining a good image of the airline, which is a continuation of a good company, affecting the market position, partners and credibility of others, and 5) Establishing relationships in the aviation industry brings together environmental information that is beneficial to the airline. This is also in line with Sombat (1994) mentioned that the sustainable tourism development guidelines should include: 1) Providing insights into the value and importance of tourism to get involvement in the public, 2) Developing personnel to support the tourism with quality, 3) Planning and development of physical structure, 4) Developing a tourism-based tourism system that the airline administration should have in place to educate, provide insight, and develop airline personnel to support sustainable tourism.

5.2 Recommendations

5.2.1 Recommendations from Research

Based on results from a study on the role of airline in supporting sustainable tourism development, the researcher has suggested as follows.

1) The airline should pay attention to raising awareness among passengers. Although the results of this study show that the awareness of passengers may affect the present performance of passengers insignificantly. This research is only

a research result in the context of the role of passengers traveling by plane, but the World Tourism Organization (UNWTO, 2005) defines sustainable tourism in a general context as a tourism that has full awareness and responsibility both in the present and in the future on economy, social, and environment, response for the needs of tourists, industry, environment and local community. Development must consider the balance of the economy, society and the environment.

2) The airline should provide accurate information or disclose information that passengers can recognize tangibly. The results of this research show that the expectations of passengers are the opposite of present performance. Passenger's perception on the performance of airline administration is different from expectation in every aspect. The results also show that passenger's perception has the greatest influence on passenger performance.

3) Passengers or tourists should have a role in sacrificing their resources to support sustainable tourism. The results of the research show high level of willingness to perform in the future, while the result of present performance in moderate level. When analyzing the content, it was found that funds factor affects the current cooperation or performance of the passengers.

4) Airline administration should improve their social and environmental roles. It is found that tourism experts have commented on the performance of airline administration that the practice was inadequate to support sustainable tourism in the social and environment, such as activities in the field of social assistance with unclear goals or carbon emissions into the atmosphere are not yet seriously regulated. This is consistent with the opinion of passengers who think the airline is not performing well enough.

5) To response for the willingness of passenger which the average in high level, airline administration should adjust the role to conform to the willingness due to the average of present performance of passenger is in moderate level.

6) Public sector or Private sector who involved in tourism and able to support the airline should play a role in supporting the airline. For example, increasing the environmental budget for airlines or sponsorship of social assistance projects with airlines. Content Analysis shows that the airline has made efforts to support sustainable

tourism with the resources that airlines could provide. Therefore, the airline should be supported by another stakeholder on the sustainable tourism issues.

5.2.2 Recommendations for further research

1) Further study of the stakeholder's role in the tourism area should be conducted because it is related to the supply or tourism resources, such as people in the community, local entrepreneurs, and local administration officials, etc.

2) There should be a focus group discussion of the stakeholders in the area to provide in-depth information concerning to the impact of tourism on air travel to tourist destinations.

3) A group and conditions of the major carriers of the airline should be set to be wider due to insufficient disclosure of airline policies. Some of them may be revealed, so there is lack of adequate and sufficient information for processing.

4) The assessment should be conducted after the results of this research have been applied to the role of the airline.

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APPENDICES

APPENDIX A
Questionnaire in English

QUESTIONNAIRE

AIRLINE'S ROLES FOR SUPPORTING SUSTAINABLE TOURISM DEVELOPMENT:
A CASE STUDY OF THAILAND

Dear Participant

I am a Ph.D. student in the School of Tourism Management at National Institute of Development Administration (NIDA). I am working on my dissertation on the subject of Airline's Roles for supporting sustainable tourism development: A case study of Thailand. The attached questionnaire is designed to assess your opinions about general issues related to the role of airline passenger which will be beneficial to the Airlines to develop their roles for supporting sustainable tourism development. The answers will only be used for academic research. All information that you provide will be highly confidential. I would be appreciated for your valuable time to complete this questionnaire carefully according to the fact.

Thank you for your good cooperation

Best regards,
Withep Watawuti

There are five parts to complete.

Part I: Personal Data

Direction: Please mark ✓ in ❍ area for your answers

1. Gender ❍ Male ❍ Female

2. Age ❍ Under 21 Years ❍ 21- 30 Years ❍ 31-40 Years
❍ 41-50 Years ❍ Over 50 Years

3. Marital Status ❍ Single ❍ Married ❍ Divorced/Widowed

4. Education ❍ Lower than Bachelor Degree ❍ Bachelor Degree
❍ Master Degre ❍ Ph.D.

5. Area of residence (specify country)
❍ America…… ❍ Europe…….……....
❍ Asia……. ❍ Australia (Oceania)...……..
❍ Others……..

6. Income per month (USD)
❍ Less than 501 USD ❍ 501-1000 USD
❍ 1001-1500 USD ❍ 1501-2000 USD
❍ More than 2000 USD

7. Occupation
❍ Government officer/State Enterprise Employee
❍ Entrepreneur ❍ Businessman
❍ Employee ❍ Student
❍ Others (specify) …….

8. Frequency of Traveling by Air

- Domestic
❍ Longer than once a month ❍ 1-2 times per month
❍ 3-4 times per month ❍ more than 4 times per month

- International
❍ Longer than once a year ❍ 1-2 times per year
❍ 3-4 times per year ❍ more than 4 times per year

9. The main purpose of Traveling by Air

❍ Leisure ❍ Business

❍ Visit Relatives/Friends ❍ Others (Specify).....

10. A category of the airline that you travel mostly

❍ Full service airline (Five-star airline)

❍ Low Cost airline

Part II: Awareness of airline passenger to sustainable tourism development.

Direction: please mark ✓ for your answer

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
5	4	3	2	1

Item	**Awareness of airline passenger**	**Comments**				
		5	4	3	2	1
1	**Perception** You know that most of tourist accommodation has drained a large quantity of wastewater to the environment.					
2	You know that tourism produces a lot of garbage in the tourist destination.					
3	You know that the growing of a tourist number in certain areas has changed the local people's way of life.					
4	You know that the local people income depends on the expense of tourist at the tourist destination.					
5	You know that the growing of tourism in certain areas will increase the cost of living in the area.					

Item	Awareness of airline passenger	Comments				
		5	4	3	2	1
6	You know that tourism provides the job opportunity and income for the local people.					
7	You know that the local crime tends to rise when the tourism grows in the area.					
8	You know that the traffic congestion is caused by the growing of tourism.					
9	**Comprehension** Tourist destination should be developed by balancing between the profit of finances and the impact of social and environment.					
10	Tourist destination should have a development which is focused on long term benefit rather than impermanent benefit.					
11	The Current of tourism development should not break the opportunity to develop for the next generation.					
12	The tourism development should aim to create a positive impact and prevent to create a negative impact.					
13	The tourism development must provide a fairness and equal benefit to all stakeholders.					
14	All stakeholders in tourism industry must take a responsibility for driving a sustainable tourism development.					
15	Source of tourism should be protected for beneficial to develop now and in the future.					

Item	Awareness of airline passenger	Comments				
		5	4	3	2	1
16	**<u>Projection</u>** If the current tourist growth rate continues increase at a high level, various tourist destinations will be rapidly degraded.					
17	Tourist destination will be rapidly degraded, if we lack of conservation.					
18	If the tourism has no conservation, there will be no resource for developing in the next generation.					
19	The earth might confront the earlier global warming if tourist destination lack of environment protection.					
20	The tourism without a good control might cause the local people opposed to tourists and tourism.					
21	The tourism without a good control might cause the inequality and conflict of benefit in the area.					
22	The tourism without a good control might cause the community scarceness and less opportunity of earning money.					

Part III: Willingness and Performance of airline passenger to sustainable tourism development.

Direction: Please mark ○ on the number according to your opinion.

On the left column is willingness that you intend to perform in the future.

On the right column is your current performance.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
5	4	3	2	1

Passenger's Performance (Current)					**Questions**	**Willingness (In future)**				
					Decision					
5	4	3	2	1	1. Choose the airline, which employs the local people in the tourist destination.	5	4	3	2	1
5	4	3	2	1	2. Choose the airline, which promotes the conservation of the local culture that the airline has operated to.	5	4	3	2	1
5	4	3	2	1	3. Choose the airline, which has a good image of environmental conservation.	5	4	3	2	1
5	4	3	2	1	4. Compare the performance of pollution reduction before choosing the airline.	5	4	3	2	1
5	4	3	2	1	5. Choose the airline from the airline's performance of CSR (corporate social responsibility) activities.	5	4	3	2	1
5	4	3	2	1	6. Choose the airline, which is awarded by taking care of society and the environment.	5	4	3	2	1
5	4	3	2	1	7. Not choosing the airline, which is harming a society and environment.	5	4	3	2	1
					Implementation					
5	4	3	2	1	1. Travel with E-ticket and E-boarding pass in order to reduce paper consumption and energy process.	5	4	3	2	1

Passenger's Performance (Current)					**Questions**	**Willingness (In future)**				
5	4	3	2	1	2. Reducing the use of consumables (such as plastic glass, toilet paper) on the plane, to reduce garbage.	5	4	3	2	1
5	4	3	2	1	3. Pay for compensation of the carbon emissions to the atmosphere when purchasing the ticket.	5	4	3	2	1
5	4	3	2	1	4. Study what should do and what should not do at the tourist destination from the airplane's media and a guidance document.	5	4	3	2	1
5	4	3	2	1	5. Travel with lightweight luggage in order to reduce carbon emission to the atmosphere.	5	4	3	2	1
5	4	3	2	1	6. Purchase the local product from tourist destination which sells on the plane to support the tourist destination economy.	5	4	3	2	1
5	4	3	2	1	7. Avoid using an airplane blanket in order to reduce waste water from laundry.	5	4	3	2	1
					Benefit					
5	4	3	2	1	1. Participate in Airline's CSR (corporate social responsibility) program by donating the money or product to enhance the well-being of society.	5	4	3	2	1
5	4	3	2	1	2. Advise or suggest your friend how to reduce the environmental impact from the use of airline service.	5	4	3	2	1
5	4	3	2	1	3. Post your satisfied comment through online social media when you found that they have a responsibility for society and the environment.	5	4	3	2	1
5	4	3	2	1	4. Rating a high score to the airline, which has a responsibility for society and the environment.	5	4	3	2	1

Passenger's Performance (Current)					Questions	Willingness (In future)				
5	4	3	2	1	5. Suggest the airline how to take a responsibility for society and the environment.	5	4	3	2	1

Part IV: Expectation of passenger toward airline and perception of airline performance for sustainable tourism development.

Direction: Please mark ○ on the number according to your opinion.

On the left column is your expectation.

On the right column is your perception of current airline performance.

Expectation toward Airline					Questions	Peception of Airline Performance				
					Economic					
5	4	3	2	1	1. Use of raw materials or products from the community or local entrepreneurs to provide service for passengers.	5	4	3	2	1
5	4	3	2	1	2. Publicize and introduce local food of tourist destination to the passengers.	5	4	3	2	1
5	4	3	2	1	3. Publicize a business enterprise, community service (e.g. Accommodation, restaurant and tourist activities).	5	4	3	2	1
5	4	3	2	1	4. Hiring local workers in order to generate income for the local people.	5	4	3	2	1
5	4	3	2	1	5. Publicize the value of the various tourist attractions in the destination area to the passengers.	5	4	3	2	1
5	4	3	2	1	6. Promote local products in order to acknowledge by the passengers.	5	4	3	2	1
5	4	3	2	1	7. Allowing passengers to share their views on the distribution of benefits to the local area.	5	4	3	2	1

Expectation toward Airline					Questions	Peception of Airline Performance				
					Socio-cultural					
5	4	3	2	1	1. Helping youth or disadvantaged in the tourist community.	5	4	3	2	1
5	4	3	2	1	2. Being a sponsor for the activities which support the society in the tourist destination.	5	4	3	2	1
5	4	3	2	1	3. Inform the passengers about the behavior which should do and should not do in the tourist destination area.	5	4	3	2	1
5	4	3	2	1	4. Publish and create an understanding of the concept of tourism responsibility to the passengers through the media on the plane or airline website.	5	4	3	2	1
5	4	3	2	1	5. Arrange flight schedule according to tourist attraction capacity that does not cause social problems.	5	4	3	2	1
5	4	3	2	1	6. Hiring the local workers on the fairness basis.	5	4	3	2	1
5	4	3	2	1	7. Performing activities or project for society as the airline continuously as an operator.	5	4	3	2	1
					Environment					
5	4	3	2	1	1. Lightweight control, to reduce fuel combustion and pollution emission.	5	4	3	2	1
5	4	3	2	1	2. Managing the fuel consumption effectively when perform flying duty such as flying at an altitude which is saving fuel.	5	4	3	2	1
5	4	3	2	1	3. Build up mind concept of the environmental protection to the employees.	5	4	3	2	1
5	4	3	2	1	4. Build up awareness of the environmental protection to the passengers and the tourists.	5	4	3	2	1

Expectation toward Airline					Questions	Peception of Airline Performance				
5	4	3	2	1	5. Avoid creating noise pollution to residential area when flying.	5	4	3	2	1
5	4	3	2	1	6. Use aircraft with newer engines to save fuel.	5	4	3	2	1
5	4	3	2	1	7. Prepare and publish the environmental impact report to the public.	5	4	3	2	1
5	4	3	2	1	8. Implement power saving measure in the office	5	4	3	2	1
5	4	3	2	1	9. Provide in-flight service menu with raw material of non-conservation animal.	5	4	3	2	1
5	4	3	2	1	10. Handle waste from the food or debris on the airplane by using environmental friendly ways.	5	4	3	2	1
5	4	3	2	1	11. Select the products which can be reused or recycled.	5	4	3	2	1
5	4	3	2	1	12. Select the products which have a lightweight in order to reduce weight and carbon emission.	5	4	3	2	1

Part V: Suggestion about further developing the role of passenger and airline for supporting sustainable tourism development.

Suggestion about Airline's role

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Suggestion about passenger's role

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APPENDIX B

Questionnaire in Thai

แบบสอบถามการวิจัย
เรื่อง
บทบาทสายการบินเพื่อสนับสนุนการพัฒนาการท่องเที่ยวอย่างยั่งยืน: กรณีศึกษาประเทศไทย

คำชี้แจง

1. แบบสอบถามฉบับนี้จัดทำขึ้นโดยมีวัตถุประสงค์เพื่อพัฒนาบทบาทของสายการบินเพื่อสนับสนุนการพัฒนาการท่องเที่ยวอย่างยั่งยืน

2. แบบสอบถามฉบับนี้เป็นแบบสอบถามความคิดเห็นด้านบทบาทของผู้โดยสารต่อการพัฒนาบทบาทของสายการบินเพื่อสนับสนุนการพัฒนาการท่องเที่ยวอย่างยั่งยืน

3. โปรดตอบแบบสอบถามตามความเป็นจริง และข้อมูลจากการตอบแบบสอบถามฉบับนี้ของท่านจะถูกจัดเก็บเป็นความลับ และปราศจากการส่งผลใดๆต่อท่านทั้งสิ้น ข้อมูลทั้งหมดเพื่อการศึกษาวิจัยชิ้นนี้เท่านั้น

4. แบบสอบถามฉบับนี้มีทั้งหมด 5 ส่วนคือ

ส่วนที่ 1 ข้อมูลส่วนบุคคลของผู้ตอบแบบสอบถาม

ส่วนที่ 2 ความตระหนักของผู้โดยสารต่อการพัฒนาการท่องเที่ยวอย่างยั่งยืน

ส่วนที่ 3 ความตั้งใจทำและการปฏิบัติตามบทบาทของผู้โดยสารเพื่อการพัฒนาการท่องเที่ยวอย่างยั่งยืน

ส่วนที่ 4 ความคาดหวังของผู้โดยสารและการรับรู้ผลการปฏิบัติงานของสายการบินต่อการพัฒนาการท่องเที่ยวอย่างยั่งยืน

ส่วนที่ 5 ข้อเสนอแนะเกี่ยวกับบทบาทของผู้โดยสารและบทบาทของสายการบินเพื่อสนับสนุนการพัฒนาการท่องเที่ยวอย่างยั่งยืน

ผู้วิจัยขอขอบคุณสำหรับความอนุเคราะห์ในความร่วมมือตอบแบบสอบถามครั้งนี้เป็นอย่างยิ่ง

นาย วิเทพ วาทะวุฒิ
นักศึกษาปริญญาดุษฎีบัณฑิต
สาขาการจัดการท่องเที่ยวแบบบูรณาการ
สถาบันบัณฑิตพัฒนบริหารศาสตร์

ส่วนที่ 1 ข้อมูลส่วนบุคคล

คำชี้แจง โปรดทำเครื่องหมาย ✓ลงในช่องคำตอบ ❍ ตามสภาพความเป็นจริงเกี่ยวกับตัวท่าน

1. เพศ ❍ ชาย ❍ หญิง

2. อายุ ❍ น้อยกว่า 21 ปี ❍ 21- 30 ปี ❍ 31-40 ปี
❍ 41-50 ปี ❍ มากกว่า 50 ปี

3. สถานภาพสมรส ❍ โสด ❍ แต่งงานแล้ว ❍ หย่าร้าง/หม้าย

4. วุฒิการศึกษาสูงสุด ❍ ต่ำกว่าปริญญาตรี ❍ ปริญญาตรี
❍ ปริญญาโท ❍ ปริญญาเอก

5. แหล่งที่พักอาศัย (โปรดระบุประเทศ)
❍ ทวีปอเมริกา..... ❍ ทวีปยุโรป.....
❍ ทวีปเอชีย..... ❍ ทวีปออสเตรเลีย (โอเชียเนีย).....
❍ อื่นๆ.....

6. รายได้เฉลี่ยต่อเดือน
❍ ต่ำกว่า 501 USD (17,500 บาท)
❍ 501-1000 USD (17,500-35,000 บาท)
❍ 1001-1500 USD (35,001-52,500 บาท)
❍ 1501-2000 USD (52,501-70,000 บาท)
❍ มากกว่า 2000 USD (70,000 บาท)

7. อาชีพ
❍ ข้าราชการ/รัฐวิสาหกิจ ❍ ค้าขาย/เจ้าของธุรกิจ
❍ นักธุรกิจ ❍ พนักงานเอกชน
❍ นักเรียน/นักศึกษา ❍ อื่นๆ (โปรดระบุ).....

8. จำนวนความถี่ในการเดินทางด้วยเครื่องบิน

- ภายในประเทศ
❍ นานกว่า 1 ครั้งต่อเดือน ❍ 1-2 ครั้งต่อเดือน
❍ 3-4 ครั้งต่อเดือน ❍ มากกว่า 4 ครั้งต่อเดือน

- ระหว่างประเทศ
❍ นานกว่า 1 ครั้งต่อปี ❍ 1-2 ครั้งต่อปี
❍ 3-4 ครั้งต่อปี ❍ มากกว่า 4 ครั้งต่อปี

9. วัตถุประสงค์ในการเดินทางโดยเครื่องบินส่วนใหญ่

❍ ท่องเที่ยว ❍ ติดต่อธุรกิจ

❍ เยี่ยมญาติ/เพื่อน ❍ อื่นๆ (โปรดระบุ).....

10. ระดับของสายการบินที่ท่านเลือกใช้เดินทางโดยส่วนใหญ่

❍ สายการบินบริการเต็มรูปแบบ (ห้าดาว)

❍ สายการบินต้นทุนต่ำ (โลว์คอร์ส)

ส่วนที่ 2 ความตระหนักต่อการท่องเที่ยวอย่างยั่งยืนของผู้โดยสาร

คำชี้แจง โปรดทำเครื่องหมาย ✓ ลงในช่องระดับความคิดเห็นที่ตรงกับความคิดเห็นของท่าน

เห็นด้วยมากที่สุด	เห็นด้วยมาก	เห็นด้วยปานกลาง	ไม่เห็นด้วย	ไม่เห็นด้วยมากที่สุด
5	4	3	2	1

ข้อที่	ความตระหนักต่อการท่องเที่ยวอย่างยั่งยืนของผู้โดยสาร	ระดับความคิดเห็น				
		5	4	3	2	1
1	**<u>ด้านการรับรู้</u>** ท่านทราบดีว่าธุรกิจที่พักสำหรับนักท่องเที่ยวส่วนใหญ่มีการปล่อยน้ำเสียเป็นจำนวนมากสู่สิ่งแวดล้อม					
2	ท่านทราบดีว่าการท่องเที่ยวทำให้เกิดขยะในแหล่งท่องเที่ยวเป็นจำนวนมาก					
3	ท่านทราบดีว่าการท่องเที่ยวเติบโตในพื้นที่ใด มีผลทำให้วิถีชีวิตของคนในท้องถิ่นต้องเปลี่ยนไป					
4	ท่านทราบดีว่ารายได้ที่ตกถึงมือคนในท้องถิ่นแหล่งท่องเที่ยวขึ้นอยู่กับค่าใช้จ่ายของนักท่องเที่ยว					
5	ท่านทราบดีว่าค่าครองชีพของคนในท้องถิ่นสูงขึ้น เมื่อการท่องเที่ยวเติบโตในพื้นที่นั้น					
6	ท่านทราบดีว่าการท่องเที่ยวช่วยสร้างโอกาสในการทำงานและหารายได้ให้กับคนในชุมชนแหล่งท่องเที่ยวนั้นๆ					

ข้อที่	ความตระหนักต่อการท่องเที่ยวอย่างยั่งยืนของผู้โดยสาร	ระดับความคิดเห็น				
		5	4	3	2	1
7	ท่านทราบดีว่าแนวโน้มการเกิดอาชญากรรมมีสูงขึ้น เมื่อการท่องเที่ยวเติบโตขึ้นในพื้นที่นั้น					
8	ท่านทราบดีว่าเมื่อการท่องเที่ยวเติบโตในพื้นที่ใด จะทำให้การจราจรในพื้นที่นั้นคับคั่งมากขึ้น					
9	**<u>ด้านความเข้าใจ</u>** แหล่งท่องเที่ยวควรพัฒนาอย่างสมดุลทั้งในด้านของผลประโยชน์ทางการเงิน และผลกระทบต่อสังคมสิ่งแวดล้อม					
10	แนวทางการพัฒนาแหล่งท่องเที่ยว ควรเน้นการสร้างประโยชน์ในระยะยาว มากกว่าการพัฒนาอย่างฉาบฉวย					
11	การพัฒนาการท่องเที่ยวของคนรุ่นปัจจุบันต้องไม่ทำลายโอกาสการพัฒนาของคนรุ่นอนาคต					
12	การพัฒนาการท่องเที่ยวควรมุ่งเน้นให้เกิดผลกระทบด้านบวกและป้องกันผลกระทบด้านลบให้ได้มากที่สุด					
13	การพัฒนาการท่องเที่ยวต้องสร้างประโยชน์ให้กับทุกภาคส่วนอย่างทั่วถึง สมดุล และเป็นธรรม					
14	ทุกภาคส่วนในอุตสาหกรรมการท่องเที่ยวต้องมีส่วนร่วมรับ ผิดชอบและขับเคลื่อนการท่องเที่ยวให้มีการพัฒนาอย่างยั่งยืน					
15	แหล่งท่องเที่ยวควรได้รับการดูแล รักษา ปกป้องอนุรักษ์เพื่อประโยชน์ของการพัฒนาทั้งในปัจจุบันและอนาคต					
16	**<u>ด้านการคาดการณ์ในอนาคต</u>** แหล่งท่องเที่ยวต่างๆจะเสื่อมโทรมหรือถูกทำลายอย่างรวดเร็วหากการท่องเที่ยวยังคงเติบโตในอัตราที่สูงดังเช่นปัจจุบัน					

ข้อที่	ความตระหนักต่อการท่องเที่ยวอย่างยั่งยืนของผู้โดยสาร	ระดับความคิดเห็น				
		5	4	3	2	1
17	แหล่งท่องเที่ยวต่างๆจะถูกทำลายอย่างรวดเร็ว หากขาดการป้องกัน/อนุรักษ์					
18	หากการท่องเที่ยวขาดการอนุรักษ์ทรัพยากรธรรมชาติ คนรุ่นหลังอาจไม่มีทรัพยากรใช้เพื่อการพัฒนา					
19	หากแหล่งท่องเที่ยวขาดการป้องกันการทำลายธรรมชาติ โลกอาจเผชิญภาวะโลกร้อนเร็วขึ้น					
20	การท่องเที่ยวที่ขาดการควบคุมที่ดี อาจทำให้คนท้องถิ่นต่อต้านนักท่องเที่ยวและการท่องเที่ยว					
21	การท่องเที่ยวที่ขาดการควบคุมที่ดี อาจทำให้เกิดความเลื่อมล้ำและความขัดแย้งเชิงผลประโยชน์ในพื้นที่					
22	การท่องเที่ยวที่ขาดการควบคุมที่ดี อาจทำให้ชุมชนเดือดร้อนขัดสน โอกาสในการหารายได้ลดลง					

ส่วนที่ 3 ความตั้งใจปฏิบัติของผู้โดยสารในอนาคตและการปฏิบัติในปัจจุบันต่อการพัฒนาการท่องเที่ยวอย่างยั่งยืน

คำชี้แจง โปรดทำเครื่องหมายวงกลม ○ ตามระดับความคิดเห็น
ช่องทางด้านซ้ายคือระดับความตั้งใจที่ท่านจะปฏิบัติในอนาคต
ส่วนช่องทางด้านขวาคือระดับการปฏิบัติที่ท่านได้กระทำในปัจจุบัน

เห็นด้วยมากที่สุด	เห็นด้วยมาก	เห็นด้วยปานกลาง	ไม่เห็นด้วย	ไม่เห็นด้วยมากที่สุด
5	4	3	2	1

การปฏิบัติในปัจจุบัน					หัวข้อ	ความตั้งใจปฏิบัติในอนาคต				
					ด้านการตัดสินใจ					
5	4	3	2	1	1. เลือกสายการบินที่มีส่วนส่งเสริมการจ้างงานคนในท้องถิ่น	5	4	3	2	1
5	4	3	2	1	2. เลือกสายการบินที่ส่งเสริม การอนุรักษ์ประเพณี วัฒนธรรมท้องถิ่นของจุดหมายที่ให้บริการเที่ยวบิน	5	4	3	2	1
5	4	3	2	1	3. เลือกเดินทางกับสายการบินที่มีภาพลักษณ์ดีต่อการอนุรักษ์สิ่งแวดล้อม	5	4	3	2	1
5	4	3	2	1	4. เปรียบเทียบการลดมลพิษของสายการบินก่อนตัดสินใจเลือกสายการบิน	5	4	3	2	1
5	4	3	2	1	5. เลือกสายการบินจากผลงานการจัดกิจกรรมสร้างประโยชน์ให้กับสังคม	5	4	3	2	1
5	4	3	2	1	6. เลือกสายการบินจากการได้รางวัลด้านการดูแลสังคมและสิ่งแวดล้อม	5	4	3	2	1
5	4	3	2	1	7. ปฏิเสธการใช้สายการบินที่มีข่าวว่าทำลายสิ่งแวดล้อมหรือสร้างความเดือดร้อนกับสังคม	5	4	3	2	1
					ด้านการดำเนินกิจกรรม					
5	4	3	2	1	1. เดินทางด้วยบัตรโดยสารอิเลคทรอนิคเพื่อลดการใช้กระดาษและพลังงาน	5	4	3	2	1
5	4	3	2	1	2. ลดการใช้วัสดุสิ้นเปลือง (เช่น แก้วน้ำพลาสติก กระดาษชำระ) บนเครื่องบินเพื่อลดขยะ	5	4	3	2	1
5	4	3	2	1	3. ยินยอมจ่ายค่าชดเชยการปล่อยก๊าซขึ้นสู่ชั้นบรรยากาศเมื่อทำการซื้อบัตรโดยสาร	5	4	3	2	1
5	4	3	2	1	4. ศึกษาสิ่งที่ควรทำและไม่ควรทำ ณ พื้นที่ปลายทางจากเอกสารและสื่อบนเครื่องบิน	5	4	3	2	1

การปฏิบัติในปัจจุบัน					หัวข้อ	ความตั้งใจปฏิบัติในอนาคต				
5	4	3	2	1	5. เดินทางด้วยสัมภาระที่มีน้ำหนักน้อย เพื่อลดการปลดปล่อยก๊าซสู่ชั้นบรรยากาศโลก	5	4	3	2	1
5	4	3	2	1	6. ซื้อสินค้าพื้นเมืองที่จำหน่ายบนเครื่องบินเพื่อส่งเสริมเศรษฐกิจท้องถิ่น	5	4	3	2	1
5	4	3	2	1	7. เลือกสายการบินที่มีส่วนส่งเสริมการจ้างงานคนในท้องถิ่น	5	4	3	2	1
					<u>ด้านแบ่งปันผลประโยชน์</u>					
5	4	3	2	1	1. เข้าร่วมโครงการช่วยเหลือสังคม โดยบริจาคเงินหรือสิ่งของกับสายการบิน เพื่อยกระดับความเป็นอยู่ของสังคม	5	4	3	2	1
5	4	3	2	1	2. ให้คำแนะนำเพื่อนหรือคนรู้จักถึงวิธีการลดผลกระทบต่อสิ่งแวดล้อมจากการใช้บริการสายการบิน เช่นการใช้บัตรโดยสารอิเลคทรอนิค	5	4	3	2	1
5	4	3	2	1	3. แสดงความชื่นชอบสายการบินที่มีความรับผิดชอบต่อสังคมและสิ่งแวดล้อมผ่านสื่อสังคมออนไลน์ต่างๆ	5	4	3	2	1
5	4	3	2	1	4. ให้คะแนนสายการบินที่มีความรับผิดชอบต่อสังคมและสิ่งแวดล้อมในการจัดอันดับดีเด่น	5	4	3	2	1
5	4	3	2	1	5. เสนอแนะวิธีการแสดงความรับผิดชอบต่อสังคมและสิ่งแวดล้อมกับสายการบิน	5	4	3	2	1

ส่วนที่ 4 ความคาดหวังของผู้โดยสารและการรับรู้ผลการปฏิบัติงานของสายการบินต่อการท่องเที่ยวอย่างยั่งยืน

คำชี้แจง โปรดทำเครื่องหมายวงกลม ○ ตามระดับความคิดเห็น

ช่องทางด้านซ้ายคือความคาดหวังที่ท่านต้องการให้เป็น

ส่วนช่องทางด้านขวาคือสิ่งที่ท่านรับรู้ต่อผลการปฏิบัติจริง

ความคาดหวังของผู้โดยสารต่อสายการบิน					**หัวข้อ**	**การรับรู้ผลการปฏิบัติของสายการบิน**				
					<u>ด้านเศรษฐกิจ</u>					
5	4	3	2	1	1. สายการบินใช้วัตถุดิบหรือผลิตภัณฑ์ท้องถิ่นให้บริการแก่ผู้โดยสาร	5	4	3	2	1
5	4	3	2	1	2. ประชาสัมพันธ์และเผยแพร่อาหารท้องถิ่นของแหล่งท่องเที่ยวแก่ผู้โดยสาร	5	4	3	2	1
5	4	3	2	1	3. เผยแพร่ประชาสัมพันธ์ธุรกิจบริการของวิสาหกิจชุมชน (เช่น ที่พัก ร้านอาหาร และกิจกรรมการท่องเที่ยว)	5	4	3	2	1
5	4	3	2	1	4. จ้างแรงงานท้องถิ่นเพื่อสร้างรายได้ให้กับคนในท้องถิ่น	5	4	3	2	1
5	4	3	2	1	5. ประชาสัมพันธ์คุณค่าของแหล่งท่องเที่ยวต่างๆ ในพื้นที่ปลายทางให้กับผู้โดยสาร	5	4	3	2	1
5	4	3	2	1	6. เผยแพร่ส่งเสริมสินค้าพื้นเมืองให้เป็นที่รู้จักแก่ผู้โดยสาร	5	4	3	2	1
5	4	3	2	1	7. เปิดโอกาสให้ผู้โดยสารร่วมแสดงความเห็นเกี่ยวกับแนวทางการกระจายผลประโยชน์สู่ท้องถิ่น	5	4	3	2	1
					<u>ด้านสังคม</u>					
5	4	3	2	1	1. ช่วยเหลือเยาวชนหรือผู้ด้อยโอกาสในชุมชนแหล่งท่องเที่ยว	5	4	3	2	1

ความคาดหวังของผู้โดยสารต่อสายการบิน					หัวข้อ	การรับรู้ผลการปฏิบัติของสายการบิน				
5	4	3	2	1	2. เป็นสปอนเซอร์สนับสนุนการจัดกิจกรรมเพื่อสังคมในท้องถิ่น	5	4	3	2	1
5	4	3	2	1	3. เผยแพร่พฤติกรรมที่ควรทำและไม่ควรทำสำหรับผู้โดยสารที่เป็นนักท่องเที่ยวต่างถิ่น	5	4	3	2	1
5	4	3	2	1	4. เผยแพร่และสร้างความเข้าใจเกี่ยวกับแนวคิดการท่องเที่ยวอย่างรับผิดชอบให้กับผู้โดยสารผ่านสื่อต่างๆบนเครื่องบินหรือเว็บไซต์	5	4	3	2	1
5	4	3	2	1	5. กำหนดตารางการบินโดยคำนึงถึงขีดความสามารถการรองรับนักท่องเที่ยวของแหล่งท่องเที่ยวที่ไม่ทำให้เกิดปัญหาทางสังคม	5	4	3	2	1
5	4	3	2	1	6. จ้างบุคลากรที่เป็นคนท้องถิ่นอย่างเป็นธรรม	5	4	3	2	1
5	4	3	2	1	7. จัดกิจกรรมหรือโครงการเพื่อสังคมที่สายการบินเป็นเจ้าภาพดำเนินการอย่างต่อเนื่อง	5	4	3	2	1
					<u>ด้านสิ่งแวดล้อม</u>					
5	4	3	2	1	1. ควบคุมน้ำหนักบรรทุกให้เบาเพื่อลดการเผาผลาญน้ำมันและปล่อยมลพิษ	5	4	3	2	1
5	4	3	2	1	2. บริหารการใช้เชื้อเพลิงขณะทำการบินอย่างมีประสิทธิภาพ เช่น การบินในระดับความสูงที่ประหยัดเชื้อเพลิง เป็นต้น	5	4	3	2	1
5	4	3	2	1	3. ปลูกฝังจิตสำนึกแก่บุคลากรหรือพนักงานให้อนุรักษ์สิ่งแวดล้อม	5	4	3	2	1
5	4	3	2	1	4. สร้างความตระหนักแก่ผู้โดยสาร/นักท่องเที่ยวให้อนุรักษ์สิ่งแวดล้อม	5	4	3	2	1

ความคาดหวังของผู้โดยสารต่อสายการบิน					หัวข้อ	การรับรู้ผลการปฏิบัติของสายการบิน				
5	4	3	2	1	5. เลือกใช้เส้นทางการบินที่ไม่ส่งผลกระทบทางเสียงต่อชุมชน	5	4	3	2	1
5	4	3	2	1	6. ใช้เครื่องบินที่มีเครื่องยนต์ใหม่เพื่อการประหยัดเชื้อเพลิง	5	4	3	2	1
5	4	3	2	1	7. จัดทำและเผยแพร่รายงานผลกระทบต่อสิ่งแวดล้อมตามมาตรฐานองค์การการบินสากลสู่สาธารณะ	5	4	3	2	1
5	4	3	2	1	8. นำมาตรการประหยัดพลังงานมาใช้ในสำนักงาน	5	4	3	2	1
5	4	3	2	1	9. จัดเลือกเมนูอาหารที่ไม่มีรายการวัตถุดิบ เป็นสัตว์ที่หายากและควรอนุรักษ์	5	4	3	2	1
5	4	3	2	1	10. จัดการคัดแยกประเภทขยะจากการบริการบนเครื่องบินอย่างเป็นมิตรกับสิ่งแวดล้อม	5	4	3	2	1
5	4	3	2	1	11. เลือกใช้ผลิตภัณฑ์ที่สามารถนำกลับมาใช้ใหม่ (รีไซเคิล) ได้	5	4	3	2	1
5	4	3	2	1	12. ใช้ผลิตภัณฑ์ที่มีน้ำหนักเบาเพื่อลดน้ำหนักบรรทุกและลดการปล่อยไอเสีย	5	4	3	2	1

ส่วนที่ 5 ข้อเสนอแนะเกี่ยวกับบทบาทของผู้โดยสารต่อการพัฒนาบทบาทของสายการบินเพื่อสนับสนุนการพัฒนาการท่องเที่ยวอย่างยั่งยืน

ข้อเสนอแนะต่อบทบาทของสายการบิน

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ข้อเสนอแนะต่อบทบาทของผู้โดยสาร

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APPENDIX C

INDEX OF ITEM OBJECTIVE CONGRUENCE: IOC

Index of Item Objective Congruence: IOC

	Reviewer					
	1st	**2nd**	**3rd**	**∑r**	IOC	Results
Personal Data						
1. Gender	**1**	**1**	**1**	**3**	**1.00**	**Pass**
2. Age	**1**	**1**	**1**	**3**	**1.00**	**Pass**
3. Marital Status	**1**	**1**	**1**	**3**	**1.00**	**Pass**
4. Education	**1**	**1**	**1**	**3**	**1.00**	**Pass**
5. Area of residence	**1**	**1**	**1**	**3**	**1.00**	**Pass**
6. Income per month	**1**	**1**	**0**	**2**	**0.67**	**Pass**
7. Occupation	**1**	**1**	**1**	**3**	**1.00**	**Pass**
8. Frequency of Traveling by Air	**1**	**1**	**1**	**3**	**1.00**	**Pass**
9. The main purpose of Traveling by Air	**1**	**1**	**1**	**3**	**1.00**	**Pass**
10. A category of the airline that you travel mostly	**1**	**1**	**0**	**2**	**0.67**	**Pass**
Perception						
11. You know that most of tourist accommodation has drained a large quantity of wastewater to the environment.	**1**	**1**	**1**	**3**	**1.00**	**Pass**
12. You know that tourism produces a lot of garbage in the tourist destination.	**1**	**1**	**1**	**3**	**1.00**	**Pass**
13. You know that the growing of a tourist number in certain areas has changed the local people's way of life.	**1**	**1**	**1**	**3**	**1.00**	**Pass**

	Reviewer					
	1st	**2nd**	**3rd**	**∑r**	IOC	Results
14. You know that the local people income depends on the expense of tourist at the tourist destination.	**1**	**1**	**1**	**3**	**1.00**	**Pass**
15. You know that the growing of tourism in certain areas will increase the cost of living in the area.	**1**	**1**	**1**	**3**	**1.00**	**Pass**
16. You know that tourism provides the job opportunity and income for the local people.	**1**	**1**	**1**	**3**	**1.00**	**Pass**
17. You know that the local crime tends to rise when the tourism grows in the area.	**1**	**1**	**1**	**3**	**1.00**	**Pass**
18. You know that the traffic congestion is caused by the growing of tourism.	**1**	**1**	**1**	**3**	**1.00**	**Pass**
Comprehension						
19. Tourist destination should be developed by balancing between the profit of finances and the impact of social and environment.	**1**	**1**	**1**	**3**	**1.00**	**Pass**
20. Tourist destination should have a development which is focused on long term benefit rather than impermanent benefit.	**1**	**0**	**1**	**2**	**0.67**	**Pass**
21. The Current of tourism development should not break the	**1**	**1**	**1**	**3**	**1.00**	**Pass**

	Reviewer					
	1st	**2nd**	**3rd**	**∑r**	IOC	Results
opportunity to develop for the next generation.						
22. The tourism development should aim to create a positive impact and prevent to create a negative impact.	**1**	**1**	**1**	**3**	**1.00**	**Pass**
23. The tourism development must provide a fairness and equal benefit to all stakeholders.	**1**	**1**	**1**	**3**	**1.00**	**Pass**
24. All stakeholders in tourism industry must take a responsibility for driving a sustainable tourism development.	**1**	**1**	**1**	**3**	**1.00**	**Pass**
25. Source of tourism should be protected for beneficial to develop now and in the future.	**1**	**1**	**1**	**3**	**1.00**	**Pass**
Projection						
26. If the current tourist growth rate continues increase at a high level, various tourist destinations will be rapidly degraded.	**1**	**1**	**1**	**3**	**1.00**	**Pass**
27. Tourist destination will be rapidly degraded, if we lack of conservation.	**1**	**0**	**1**	**2**	**0.67**	**Pass**
28. If the tourism has no conservation, there will be no resource for developing in the next generation.	**1**	**1**	**1**	**3**	**1.00**	**Pass**

	Reviewer					
	1st	**2nd**	**3rd**	**∑r**	IOC	Results
29. The earth might confront the earlier global warming if tourist destination lack of environment protection.	**1**	**1**	**1**	**3**	**1.00**	**Pass**
30. The tourism without a good control might cause the local people opposed to tourists and tourism.	**1**	**1**	**1**	**3**	**1.00**	**Pass**
31. The tourism without a good control might cause the inequality and conflict of benefit in the area.	**1**	**1**	**1**	**3**	**1.00**	**Pass**
32. The tourism without a good control might cause the community scarceness and less opportunity of earning money.	**1**	**1**	**0**	**2**	**0.67**	**Pass**

Willingness (In future) & Passenger's Performance (Current)	Reviewer					
	1st	**2nd**	**3rd**	**∑r**	IOC	Results
Decision						
33. Choose the airline, which employs the local people in the tourist destination.	**1**	**1**	**1**	**3**	**1.00**	**Pass**
34. Choose the airline, which promotes the conservation of the local culture that the airline has operated to.	**1**	**1**	**1**	**3**	**1.00**	**Pass**

Willingness (In future) & Passenger's Performance (Current)	**Reviewer**					
	1st	**2nd**	**3rd**	**∑r**	IOC	Results
35. Choose the airline, which has a good image of environmental conservation.	**1**	**1**	**1**	**3**	**1.00**	**Pass**
36. Compare the performance of pollution reduction before choosing the airline.	**0**	**1**	**1**	**2**	**0.67**	**Pass**
37. Choose the airline from the airline's performance of CSR (corporate social responsibility) activities.	**1**	**1**	**1**	**3**	**1.00**	**Pass**
38. Choose the airline, which is awarded by taking care of society and the environment.	**1**	**1**	**1**	**3**	**1.00**	**Pass**
38. Not choosing the airline, which is harming a society and environment.	**1**	**1**	**1**	**3**	**1.00**	**Pass**
Implementation						
39. Travel with E-ticket and E-boarding pass in order to reduce paper consumption and energy process.	**1**	**1**	**1**	**3**	**1.00**	**Pass**
40. Reducing the use of consumables (such as plastic glass, toilet paper) on the plane, to reduce garbage.	**1**	**1**	**1**	**3**	**1.00**	**Pass**
41. Pay for compensation of the carbon emissions to the atmosphere when purchasing the ticket.	**1**	**1**	**1**	**3**	**1.00**	**Pass**
42. Study what should do and what should not do at the tourist	**1**	**1**	**1**	**3**	**1.00**	**Pass**

Willingness (In future) & Passenger's Performance (Current)	**Reviewer**					
	1st	**2nd**	**3rd**	**∑r**	IOC	Results
destination from the airplane's media and a guidance document.						
43. Travel with lightweight luggage in order to reduce carbon emission to the atmosphere.	**1**	**1**	**1**	**3**	**1.00**	**Pass**
44. Purchase the local product from tourist destination which sells on the plane to support the tourist destination economy.	**1**	**1**	**1**	**3**	**1.00**	**Pass**
45. Avoid using an airplane blanket in order to reduce waste water from laundry.	**1**	**1**	**1**	**3**	**1.00**	**Pass**
Benefit						
46. Participate in Airline's CSR (corporate social responsibility) program by donating the money or product to enhance the well-being of society.	**1**	**1**	**1**	**3**	**1.00**	**Pass**
47. Advise or suggest your friend how to reduce the environmental impact from the use of airline service.	**1**	**1**	**1**	**3**	**1.00**	**Pass**
48. Post your satisfied comment through online social media when you found that they have a responsibility for society and the environment	**1**	**1**	**1**	**3**	**1.00**	**Pass**

Willingness (In future) & Passenger's Performance (Current)	**Reviewer**					
	1st	**2nd**	**3rd**	**∑r**	IOC	Results
49. Rating a high score to the airline, which has a responsibility for society and the environment.	**1**	**1**	**1**	**3**	**1.00**	**Pass**
50. Suggest the airline how to take a responsibility for society and the environment.	**1**	**1**	**1**	**3**	**1.00**	**Pass**

Expectation Toward Airline & Perception of airline's performance	**Reviewer**					
	1st	**2nd**	**3rd**	**∑r**	IOC	Results
Economy						
1. Use of raw materials or products from the community or local entrepreneurs to provide service for passengers.	**1**	**1**	**1**	**3**	**1.00**	**Pass**
2. Publicize and introduce local food of tourist destination to the passengers.	**1**	**1**	**1**	**3**	**1.00**	**Pass**
3. Publicize a business enterprise, community service (e.g. Accommodation, restaurant and tourist activities).	**1**	**0**	**1**	**2**	**0.67**	**Pass**
4. Hiring local workers in order to generate income for the local people.	**0**	**1**	**1**	**2**	**0.67**	**Pass**
5. Publicize the value of the various tourist attractions in the destination area to the passengers.	**1**	**1**	**1**	**3**	**1.00**	**Pass**
6. Promote local products in order to acknowledge by the passengers.	**1**	**1**	**1**	**3**	**1.00**	**Pass**
7. Allowing passengers to share their views on the distribution of benefits to the local area.	**1**	**1**	**1**	**3**	**1.00**	**Pass**
Socio-cultural						
8. Helping youth or disadvantaged in the tourist community.	**1**	**1**	**1**	**3**	**1.00**	**Pass**

Expectation Toward Airline & Perception of airline's performance	**Reviewer**					
	1st	**2nd**	**3rd**	**∑r**	IOC	Results
9. Being a sponsor for the activities which support the society in the tourist destination.	**1**	**1**	**1**	**3**	**1.00**	**Pass**
10. Inform the passengers about the behavior which should do and should not do in the tourist destination area.	**1**	**1**	**1**	**3**	**1.00**	**Pass**
11. Publish and create an understanding of the concept of tourism responsibility to the passengers through the media on the plane or airline website.	**1**	**1**	**1**	**3**	**1.00**	**Pass**
12. Arrange flight schedule according to tourist attraction capacity that does not cause social problems.	**1**	**1**	**1**	**3**	**1.00**	**Pass**
13. Hiring the local workers on the fairness basis.	**0**	**1**	**1**	**2**	**0.67**	**Pass**
14. Performing activities or project for society as the airline continuously as an operator.	**1**	**1**	**1**	**3**	**1.00**	**Pass**
Environment						
15. Lightweight control, to reduce fuel combustion and pollution emission.	**1**	**1**	**1**	**3**	**1.00**	**Pass**
16. Managing the fuel consumption effectively when perform flying duty such as flying at an altitude which is saving fuel.	**1**	**1**	**1**	**3**	**1.00**	**Pass**

Expectation Toward Airline & Perception of airline's performance	**Reviewer**					
	1st	**2nd**	**3rd**	**∑r**	IOC	Results
17. Build up mind concept of the environmental protection to the employees.	**1**	**1**	**1**	**3**	**1.00**	**Pass**
18. Build up awareness of the environmental protection to the passengers and the tourists.	**1**	**1**	**1**	**3**	**1.00**	**Pass**
19. Avoid creating noise pollution to residential area when flying.	**0**	**1**	**1**	**2**	**0.67**	**Pass**
20. Use aircraft with newer engines to save fuel.	**0**	**1**	**1**	**2**	**0.67**	**Pass**
21. Prepare and publish the environmental impact report to the public.	**1**	**1**	**1**	**3**	**1.00**	**Pass**
22. Implement power saving measure in the office	**1**	**1**	**1**	**3**	**1.00**	**Pass**
23. Provide in-flight service menu with raw material of non-conservation animal.	**1**	**1**	**1**	**3**	**1.00**	**Pass**
24. Handle waste from the food or debris on the airplane by using environmental friendly ways.	**1**	**1**	**1**	**3**	**1.00**	**Pass**
25. Select the products which can be reused or recycled.	**1**	**1**	**1**	**3**	**1.00**	**Pass**
26. Select the products which have a lightweight in order to reduce weight and carbon emission.	**1**	**1**	**1**	**3**	**1.00**	**Pass**

APPENDIX D

Questions for interview

แบบสัมภาษณ์

(ผู้บริหารสายการบิน)

ข้อมูลเกี่ยวกับการสัมภาษณ์

นาย/นาง/นางสาว/ยศ.....นามสกุล.....

ตำแหน่ง.....

สังกัด.....

วัน เดือน ปี ที่สัมภาษณ์.....

ข้อคำถามสัมภาษณ์

1. ความตระหนักของผู้บริหารสายการบินต่อการท่องเที่ยวอย่างยั่งยืน ในด้านของ เศรษฐกิจ สังคม และสิ่งแวดล้อม

1.1 การรับรู้

1) ท่านคิดว่าปัจจุบันการท่องเที่ยวอยู่ในภาวะวิกฤติหรือไม่ อย่างไร

2) ท่านคิดว่าสายการบินมีบทบาทที่สำคัญต่อการพัฒนาการท่องเที่ยวให้พ้นภาวะวิกฤติหรือไม่ อย่างไร

3) ท่านคิดว่าผู้โดยสารที่เดินทางกับสายการบินของท่าน มีบทบาทที่สามารถช่วยให้การท่องเที่ยวพ้นภาวะวิกฤติหรือหรือไม่ อย่างไร

1.2 ความเข้าใจ

1) ท่านคิดว่าแนวทางการพัฒนาการท่องเที่ยวอย่างยั่งยืนมีส่วนช่วยพัฒนาแหล่งท่องเที่ยวหรือไม่ หากท่านคิดว่ามีส่วนช่วยพัฒนาการท่องเที่ยวแล้ว ท่านจะนำแนวทางมาใช้ในการพัฒนาหรือไม่ อย่างไร

2) ท่านคิดว่าผู้มีส่วนเกี่ยวข้องใดบ้าง ที่ควรมีบทบาทในการแก้ไขภาวะวิกฤติของการท่องเที่ยวในปัจจุบัน

1.3 การคาดการณ์

1) การท่องเที่ยวที่เติบโตอย่างรวดเร็ว หากท่านคิดว่าสายการบินของท่านไม่ได้ปรับบทบาทเพื่อพัฒนาแหล่งท่องเที่ยว จะส่งผลอย่างไรต่อแหล่งท่องเที่ยวที่ท่านขนส่งผู้โดยสารไปยังจุดหมายนั้น เพราะเหตุใด

2) ท่านมีนโยบายการพัฒนาการท่องเที่ยวอย่างไรในทั้งสามมิติ คือ เศรษฐกิจ สังคม และสิ่งแวดล้อม

2. ความตั้งใจทำของผู้บริหารสายการบินต่อการท่องเที่ยวอย่างยั่งยืน

2.1 ท่านคิดว่าแนวคิดเรื่องการพัฒนาการท่องเที่ยวอย่างยั่งยืนควรนำมาใช้ปรับบทบาทสายการบินของท่าน เพื่อการท่องเที่ยวที่ยั่งยืนหรือไม่ อย่างไร

2.2 หากท่านคิดว่าแนวคิดด้านการพัฒนาการท่องเที่ยวที่ยั่งยืนควรนำมาใช้ ท่านจะนำมาปรับบทบาทด้านใดบ้าง อย่างไร

2.3 สายการบินของท่านมีความพร้อมหรือไม่อย่างไร อยู่ในระดับใด หากนำแนวทางการพัฒนาการท่องเที่ยวอย่างยั่งยืนมาปฏิบัติ

2.4 หากแนวทางการพัฒนาการท่องเที่ยวอย่างยั่งยืนขัดกับนโยบายการบริหารหรือนโยบายการตลาดของท่าน ท่านยังคงมีความตั้งใจที่จะนำแนวคิดเรื่องการพัฒนาการท่องเที่ยวอย่างยั่งยืนมาใช้หรือไม่ อย่างไร

2.5 หากผู้โดยสารปฏิเสธแนวทางการพัฒนาการท่องเที่ยวอย่างยั่งยืน ท่านจะมีนโยบายหรือแนวทางอย่างไรต่อไป ท่านจะยังคงยึดแนวทางการพัฒนาการท่องเที่ยวอย่างยั่งยืน เพื่อแหล่งท่องเที่ยวต่างๆหรือไม่ อย่างไร

3. การปฏิบัติของผู้บริหารสายการบินต่อการท่องเที่ยวอย่างยั่งยืน ในด้านเศรษฐกิจ สังคม และสิ่งแวดล้อม

3.1 เศรษฐกิจ

- บทบาทของสายการบินเพื่อสนับสนุนการท่องเที่ยวอย่างยั่งยืน ในด้านของเศรษฐกิจเป็นอย่างไร และปัจจุบันสายการบินของท่านดำเนินการอย่างไร

3.2 สังคม

- บทบาทของสายการบินเพื่อสนับสนุนการท่องเที่ยวอย่างยั่งยืน ในด้านของสังคมเป็นอย่างไร และปัจจุบันสายการบินของท่านดำเนินการอย่างไร

3.3 สิ่งแวดล้อม

- บทบาทของสายการบินเพื่อสนับสนุนการท่องเที่ยวอย่างยั่งยืน ในด้านของสิ่งแวดล้อมเป็นอย่างไร และปัจจุบันสายการบินของท่านดำเนินการอย่างไร

แบบสัมภาษณ์
(ผู้เชี่ยวชาญ)

ข้อมูลเกี่ยวกับการสัมภาษณ์

นาย/นาง/นางสาว/ยศ.....นามสกุล.....

ตำแหน่ง.....

สังกัด.....

วัน เดือน ปี ที่สัมภาษณ์.....

ข้อคำถามสัมภาษณ์

1. ความตระหนักของผู้บริหารสายการบินต่อการท่องเที่ยวอย่างยั่งยืน ในด้านของ เศรษฐกิจ สังคม และสิ่งแวดล้อม

1.1 การรับรู้

1) ท่านคิดว่าปัจจุบันการท่องเที่ยวอยู่ในภาวะวิกฤติหรือไม่ อย่างไร

2) ท่านคิดว่าสายการบินมีบทบาทที่สำคัญต่อการพัฒนาการท่องเที่ยวให้พ้นภาวะวิกฤติหรือไม่ อย่างไร

3) ท่านคิดว่าผู้โดยสารที่เดินทางกับสายการบิน มีบทบาทที่สามารถช่วยให้การท่องเที่ยวพ้นภาวะวิกฤติหรือหรือไม่ อย่างไร

1.2 ความเข้าใจ

1) ท่านคิดว่าแนวทางการพัฒนาการท่องเที่ยวอย่างยั่งยืนมีส่วนช่วยพัฒนาแหล่งท่องเที่ยวหรือไม่ หากท่านคิดว่ามีส่วนช่วยพัฒนาการท่องเที่ยวแล้ว ท่านคิดว่าสายการบินควรจะนำแนวทางมาปรับบทบาทเพื่อการพัฒนาหรือไม่ อย่างไร

2) ท่านคิดว่าผู้มีส่วนเกี่ยวข้องใดบ้าง ที่ควรมีบทบาทในการแก้ไขภาวะวิกฤติของการท่องเที่ยวในปัจจุบัน

1.3 การคาดการณ์

1) สถานการณ์การท่องเที่ยวที่เติบโตอย่างรวดเร็ว หากมีสายการบินที่ยังมิได้ปรับบทบาทเพื่อพัฒนาแหล่งท่องเที่ยว จะส่งผลอย่างไรต่อแหล่งท่องเที่ยวที่สายการบินขนส่งผู้โดยสารไปยังจุดหมายนั้น เพราะเหตุใด

2) นโยบายการพัฒนาการท่องเที่ยวในทั้งสามมิติ คือ เศรษฐกิจ สังคมและสิ่งแวดล้อมของสายการบินควรมีรูปแบบเกี่ยวข้องกับเนื้อหาอะไรบ้าง เพราะเหตุใด และมีใครที่เป็นผู้เกี่ยวข้องบ้าง

2. ความตั้งใจทำของผู้บริหารสายการบินต่อการท่องเที่ยวอย่างยั่งยืน

2.1 ท่านคิดว่าแนวคิดเรื่องการพัฒนาการท่องเที่ยวอย่างยั่งยืนควรนำมาใช้ปรับบทบาทสายการบิน เพื่อการท่องเที่ยวที่ยั่งยืนหรือไม่ อย่างไร

2.2 หากท่านคิดว่าแนวคิดด้านการพัฒนาการท่องเที่ยวที่ยั่งยืนควรนำมาใช้กับการปรับบทบาทของสายการบินแล้ว สายการบินควรจะนำมาปรับบทบาทด้านใดบ้าง อย่างไร

2.3 สายการบินควรมีความพร้อมอยู่ในระดับใด อย่างไร หากนำแนวทางการพัฒนาการท่องเที่ยวอย่างยั่งยืนมาปฏิบัติ

2.4 หากแนวทางการพัฒนาการท่องเที่ยวอย่างยั่งยืนขัดกับนโยบายการบริหารหรือนโยบายการตลาดของสายการบิน ท่านคิดว่าสายการบินควรที่จะยังคงมีความตั้งใจที่จะนำแนวคิดเรื่องการพัฒนาการท่องเที่ยวอย่างยั่งยืนมาใช้หรือไม่ อย่างไร

2.5 หากผู้โดยสารปฏิเสธแนวทางการพัฒนาการท่องเที่ยวอย่างยั่งยืน สายการบินควรมีนโยบายหรือแนวทางอย่างไรต่อไป ควรจะยังคงยึดแนวทางการพัฒนาการท่องเที่ยวอย่างยั่งยืน เพื่อแหล่งท่องเที่ยวต่างๆหรือไม่ อย่างไร

3. การปฏิบัติของผู้บริหารสายการบินต่อการท่องเที่ยวอย่างยั่งยืน ในด้านเศรษฐกิจ สังคม และสิ่งแวดล้อม

3.1 เศรษฐกิจ

- บทบาทของสายการบินเพื่อสนับสนุนการท่องเที่ยวอย่างยั่งยืน ในด้านของเศรษฐกิจควรเป็นอย่างไร และปัจจุบันสายการบินมีการดำเนินการอย่างไร

3.2 สังคม

- บทบาทของสายการบินเพื่อสนับสนุนการท่องเที่ยวอย่างยั่งยืน ในด้านของสังคมควรเป็นอย่างไร และปัจจุบันสายการบินมีการดำเนินการอย่างไร

3.3 สิ่งแวดล้อม

- บทบาทของสายการบินเพื่อสนับสนุนการท่องเที่ยวอย่างยั่งยืน ในด้านของสิ่งแวดล้อมควรเป็นอย่างไร และปัจจุบันสายการบินมีการดำเนินการอย่างไร

แบบสัมภาษณ์

(ผู้โดยสาร)

ข้อมูลเกี่ยวกับการสัมภาษณ์

นาย/นาง/นางสาว/ยศ.....นามสกุล.....

ตำแหน่ง.....

สังกัด.....

วัน เดือน ปี ที่สัมภาษณ์.....

ข้อคำถามสัมภาษณ์

1. ความตระหนักของผู้โดยสารต่อการท่องเที่ยวอย่างยั่งยืน

1.1 การรับรู้

1) ท่านคิดว่าการท่องเที่ยวเป็นสาเหตุที่ทำให้แหล่งท่องเที่ยวเสื่อมโทรมลงอย่างรวดเร็วหรือไม่ อย่างไร

2) ท่านคิดว่าการท่องเที่ยวที่ขาดการควบคุม สามารถทำลาย เศรษฐกิจ สังคมและสิ่งแวดล้อมของแหล่งท่องเที่ยวได้หรือไม่ อย่างไร

3) สถานการณ์การท่องเที่ยวปัจจุบันต้องได้รับการพัฒนาอย่างเร่งด่วนและจริงจัง ใช่หรือไม่ อย่างไร

1.2 ความเข้าใจ

1) ท่านมีความเข้าใจว่าแนวทางการพัฒนาการท่องเที่ยวอย่างยั่งยืนมีแนวคิดอย่างไร

2) หากท่านคิดว่าแนวทางการพัฒนาการท่องเที่ยวอย่างยั่งยืนมีส่วนช่วยพัฒนาแหล่งท่องเที่ยวแล้ว ท่านจะปรับบทบาทของท่านหรือไม่ อย่างไร

3) ท่านคิดว่าสายการบินมีบทบาทที่สำคัญหรือไม่ ต่อการพัฒนาแหล่งท่องเที่ยวให้มีความยั่งยืน ทั้งทางด้านเศรษฐกิจ สังคมและสิ่งแวดล้อม

1.3 การคาดการณ์

1) แหล่งท่องเที่ยวจะเป็นอย่างไร หากผู้โดยสารหรือนักท่องเที่ยวไม่ได้ปรับบทบาทตามแนวทางการพัฒนาการท่องเที่ยวอย่างยั่งยืน

2) ปริมาณขยะและของเสียตามแหล่งท่องเที่ยวที่เพิ่มขึ้นทุกวัน ควรได้รับการแก้ไขหรือไม่อย่างไร

3) ปริมาณนักท่องเที่ยวที่เพิ่มขึ้นทุกปี ทำให้เกิดการแลกเปลี่ยนวัฒนธรรมที่หลากหลาย จนอาจสูญเสียความเป็นเอกลักษณ์ของท้องถิ่น ท่านคิดว่าควรมีแนวทางแก้ไขอย่างไร

2. ความตั้งใจทำของผู้โดยสารต่อการท่องเที่ยวอย่างยั่งยืน

2.1 หากท่านทราบว่าการเดินทางด้วยสัมภาระที่มีน้ำหนักเบา สามารถช่วยลดการปล่อยก๊าซสู่บรรยากาศได้ ท่านยินดีที่ปฏิบัติตามหรือไม่ อย่างไร

2.2 โครงการช่วยเหลือสังคมของสายการบินเป็นโครงการที่ควรสนับสนุนหรือไม่อย่างไร หากท่านได้รับการร้องขอให้เข้าร่วมโครงการ ท่านยินดีที่จะเข้าร่วมหรือไม่ เพราะเหตุใด

2.3 หากท่านทราบว่าการเดินทางของท่าน อาจจะต้องมีค่าใช้จ่ายเพิ่มขึ้น เพื่อการรักษาสิ่งแวดล้อม ท่านมีความยินดีที่จะยอมจ่ายเพิ่มขึ้นหรือไม่ เพราะเหตุใด

2.4 หากท่านต้องได้รับการปรับลดการบริการจากสายการบิน เช่นการงดแจกผ้าห่มเป็นต้น เพื่อรักษาสิ่งแวดล้อม ท่านยินดีที่จะปฏิบัติตามหรือไม่ เพราะเหตุใด

2.5 ท่านคิดว่าท่านควรมีส่วนช่วยในการกำหนดนโยบาย หรือชี้แนะด้านการพัฒนาการท่องเที่ยวอย่างยั่งยืนแก่สายการบินหรือไม่ อย่างไร

2.6 หากท่านคิดว่า การมีส่วนร่วมกับสายการบิน เพื่อพัฒนาการท่องเที่ยวอย่างยั่งยืนมิได้มีผลประโยชน์มาถึงตัวท่าน ท่านยังคงที่จะให้ความร่วมมือต่อไปหรือไม่ เพราะเหตุใด

3. ความคาดหวังของผู้โดยสารต่อการปฏิบัติของสายการบิน

3.1 ด้านเศรษฐกิจ

1) ท่านมีความคาดหวังอย่างไรในบทบาทของสายการบิน ต่อการพัฒนาด้านเศรษฐกิจของ แหล่งท่องเที่ยว

3.2 ด้านสังคม

1) ท่านมีความคาดหวังอย่างไรในบทบาทของสายการบิน ต่อการพัฒนาด้านสังคมของแหล่งท่องเที่ยว

3.3 ด้านสิ่งแวดล้อม

1) ท่านมีความคาดหวังอย่างไรในบทบาทของสายการบิน ต่อการพัฒนาด้านสิ่งแวดล้อมของแหล่งท่องเที่ยว

4. การปฏิบัติของผู้โดยสารต่อการท่องเที่ยวอย่างยั่งยืน

1) ปัจจุบันท่านได้มีการเข้าร่วมแสดงบทบาทหรือกำหนดแนวทางการพัฒนาการท่องเที่ยวอย่างยั่งยืนกับสายการบินหรือไม่ อย่างไร

2) ปัจจุบันท่านได้ดำเนินกิจกรรมร่วมกับสายการบินเพื่อพัฒนาการท่องเที่ยวหรือไม่อย่างไรบ้าง

3) ปัจจุบันท่านได้รับผลประโยชน์จากการพัฒนาการท่องเที่ยวหรือไม่ อย่างไร

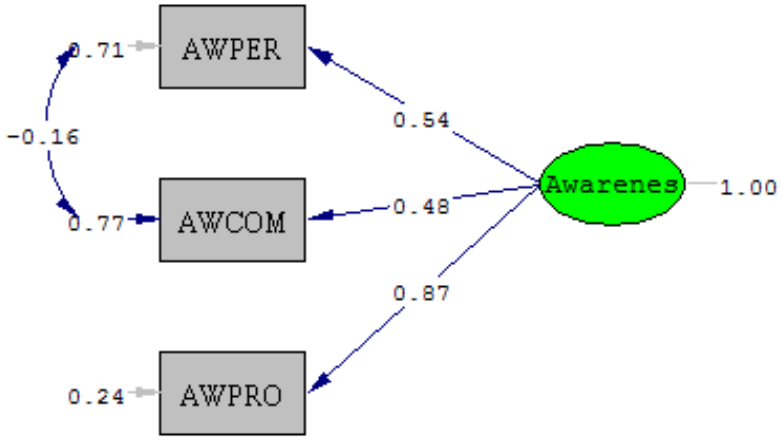
4) ปัจจุบันท่านได้มีการประเมินผลการปฏิบัติงานของสายการบินต่อการพัฒนาการท่องเที่ยวอย่างยั่งยืนหรือไม่ อย่างไร

5. การรับรู้การปฏิบัติของสายการบินต่อการท่องเที่ยวอย่างยั่งยืน

1) ปัจจุบันท่านคิดว่าสายการบินมีส่วนช่วยพัฒนา เศรษฐกิจ สังคม และสิ่งแวดล้อมอยู่ในระดับใด เพราะเหตุใด

APPENDIX E

CFA1



Chi-Square=0.56, df=1, P-value=0.45591, RMSEA=0.000

```
TI
 DA NI=3 NO=400 MA=CM
 RA FI='C:\Users\Admin\Desktop\CFA1\data1.psf'
 MO NX=3 NK=1 TD=SY
 LK
 Awarenes
 FI TD(1,1) TD(3,3)
 FR LX(1,1) LX(2,1) LX(3,1) TD(2,1)
 VA 0.47 TD(1,1)
 VA 0.08 TD(3,3)
 PD
 OU AM RS EF FS SS SC


TI

Number of Input Variables  3
Number of Y - Variables    0
Number of X - Variables    3
Number of ETA - Variables  0
Number of KSI - Variables  1
Number of Observations   400
```

TI

Covariance Matrix

	AWPER	AWCOM	AWPRO
AWPER	0.64		
AWCOM	0.04	0.26	
AWPRO	0.22	0.12	0.34

TI

Parameter Specifications

LAMBDA-X

	Awarenes
AWPER	1
AWCOM	2
AWPRO	3

THETA-DELTA

	AWPER	AWCOM	AWPRO
AWPER	0		
AWCOM	4	5	
AWPRO	0	0	0

TI

Number of Iterations = 8

LISREL Estimates (Maximum Likelihood)

LAMBDA-X

	Awarenes
AWPER	0.43
	(0.04)
	10.48
AWCOM	0.24
	(0.03)

9.01

AWPRO 0.51
(0.02)
21.57

PHI

Awarenes

1.00

THETA-DELTA

	AWPER	AWCOM	AWPRO
AWPER	0.47		
AWCOM	-0.06	0.20	
	(0.02)	(0.02)	
	-3.80	12.93	
AWPRO	- -	- -	0.08

Squared Multiple Correlations for X - Variables

AWPER	AWCOM	AWPRO
0.29	0.23	0.76

Goodness of Fit Statistics

Degrees of Freedom = 1
Minimum Fit Function Chi-Square = 0.58 (P = 0.45)
Normal Theory Weighted Least Squares Chi-Square = 0.56 (P = 0.46)
Estimated Non-centrality Parameter (NCP) = 0.0
90 Percent Confidence Interval for NCP = (0.0 ; 5.67)

Minimum Fit Function Value = 0.0014
Population Discrepancy Function Value (F0) = 0.0
90 Percent Confidence Interval for F0 = (0.0 ; 0.014)
Root Mean Square Error of Approximation (RMSEA) = 0.0
90 Percent Confidence Interval for RMSEA = (0.0 ; 0.12)
P-Value for Test of Close Fit (RMSEA < 0.05) = 0.64

Expected Cross-Validation Index (ECVI) = 0.028

90 Percent Confidence Interval for ECVI = (0.028 ; 0.042)
ECVI for Saturated Model = 0.030
ECVI for Independence Model = 0.44

Chi-Square for Independence Model with 3 Degrees of Freedom = 167.91
Independence AIC = 173.91
Model AIC = 10.56
Saturated AIC = 12.00
Independence CAIC = 188.89
Model CAIC = 35.51
Saturated CAIC = 41.95
Normed Fit Index (NFI) = 1.00
Non-Normed Fit Index (NNFI) = 1.01
Parsimony Normed Fit Index (PNFI) = 0.33
Comparative Fit Index (CFI) = 1.00
Incremental Fit Index (IFI) = 1.00
Relative Fit Index (RFI) = 0.99

Critical N (CN) = 4594.73

Root Mean Square Residual (RMR) = 0.0092
Standardized RMR = 0.014
Goodness of Fit Index (GFI) = 1.00
Adjusted Goodness of Fit Index (AGFI) = 0.99
Parsimony Goodness of Fit Index (PGFI) = 0.17

TI

Fitted Covariance Matrix

	AWPER	AWCOM	AWPRO
AWPER	0.66		
AWCOM	0.04	0.26	
AWPRO	0.22	0.12	0.34

Fitted Residuals

	AWPER	AWCOM	AWPRO
AWPER	-0.02		
AWCOM	0.00	0.00	
AWPRO	0.00	0.00	0.00

Summary Statistics for Fitted Residuals

Smallest Fitted Residual = -0.02

```
  Median Fitted Residual =    0.00
 Largest Fitted Residual =    0.00

Stemleaf Plot

- 2|2
- 1|
- 0|000
  0|33
```

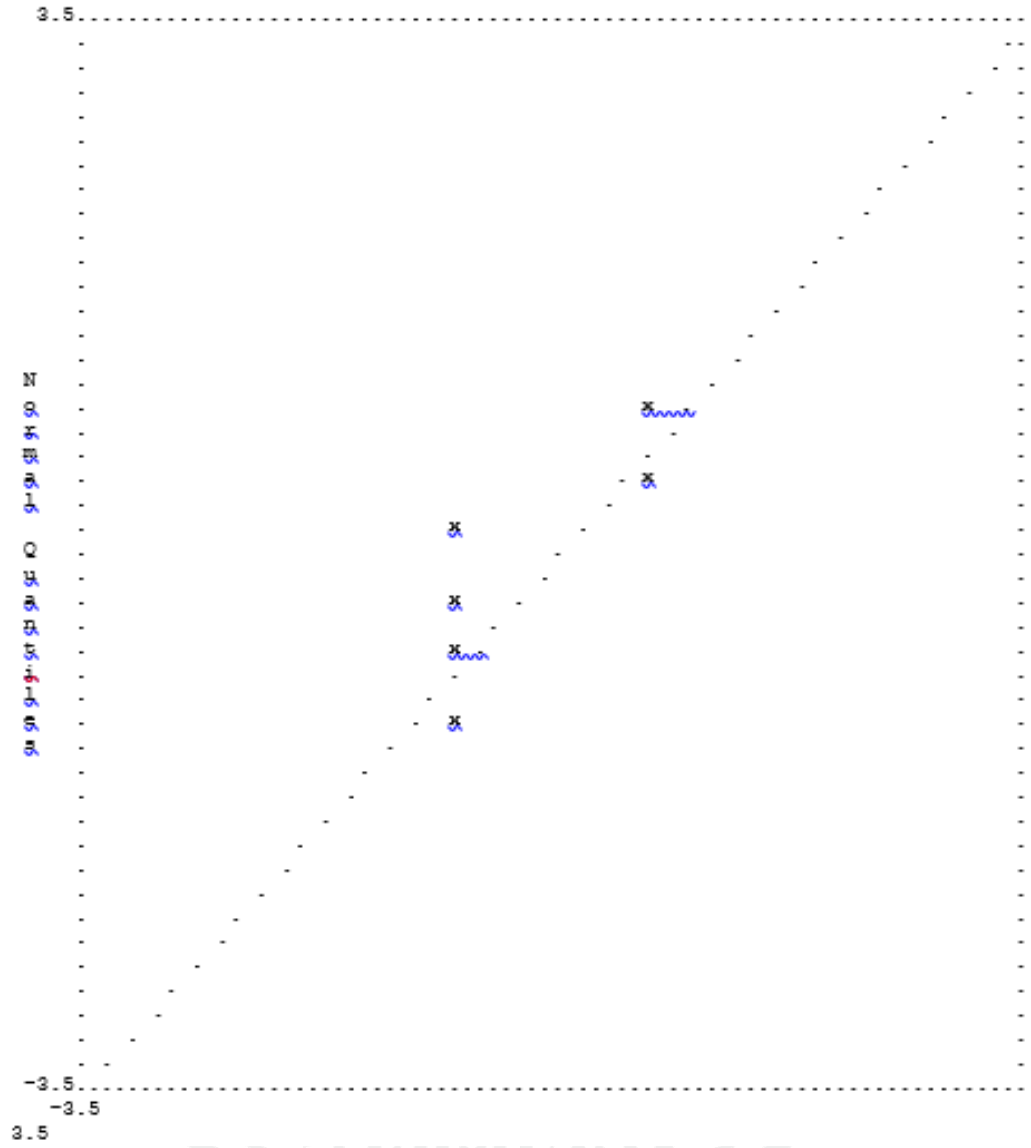
Standardized Residuals

	AWPER	AWCOM	AWPRO
AWPER	-0.75		
AWCOM	0.75	-0.75	
AWPRO	0.75	-0.75	-0.75

```
Summary Statistics for Standardized Residuals

Smallest Standardized Residual =   -0.75
  Median Standardized Residual =   -0.75
 Largest Standardized Residual =    0.75

Stemleaf Plot

- 0|7777
- 0|
  0|
  0|77
```

TI

Qplot of Standardized Residuals



Standardized Residuals

TI

Modification Indices and Expected Change

No Non-Zero Modification Indices for LAMBDA-X

No Non-Zero Modification Indices for PHI

Modification Indices for THETA-DELTA

	AWPER	AWCOM	AWPRO
AWPER	0.56		
AWCOM	- -	- -	
AWPRO	0.56	- -	0.56

Expected Change for THETA-DELTA

	AWPER	AWCOM	AWPRO
AWPER	-0.03		
AWCOM	- -	- -	
AWPRO	0.02	- -	-0.04

Completely Standardized Expected Change for THETA-DELTA

	AWPER	AWCOM	AWPRO
AWPER	-0.04		
AWCOM	- -	- -	
AWPRO	0.03	- -	-0.11

Maximum Modification Index is 0.56 for Element (3, 1) of THETA-DELTA

TI

Factor Scores Regressions

KSI

	AWPER	AWCOM	AWPRO
Awarenes	0.22	0.31	1.24

TI

Standardized Solution

LAMBDA-X

	Awarenes
AWPER	0.43
AWCOM	0.24

AWPRO 0.51

PHI

	Awarenes
	1.00

TI

Completely Standardized Solution

LAMBDA-X

	Awarenes
AWPER	0.54
AWCOM	0.48
AWPRO	0.87

PHI

	Awarenes
	1.00

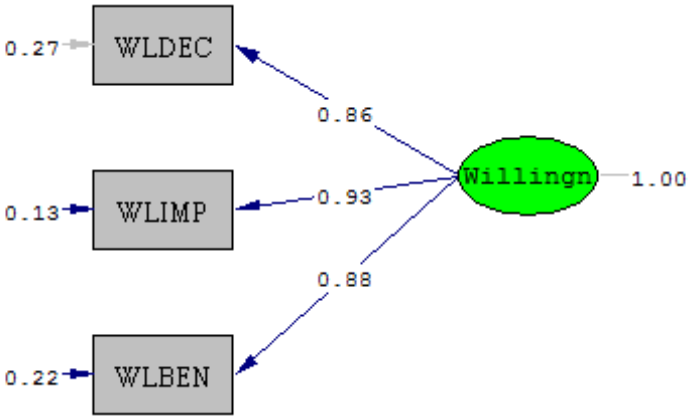
THETA-DELTA

	AWPER	AWCOM	AWPRO
AWPER	0.71		
AWCOM	-0.16	0.77	
AWPRO	- -	- -	0.24

Time used: 0.047 Seconds

APPENDIX F

Questionnaire in CFA2



Chi-Square=0.74, df=1, P-value=0.38922, RMSEA=0.000

```
TI
 !DA NI=3 NO=400 MA=CM
 SY='C:\Users\Admin\Desktop\CFA2\CFA2.DSF'
 MO NX=3 NK=1 TD=SY
 LK
 Willingn
 FI TD(1,1)
 FR LX(1,1) LX(2,1) LX(3,1)
 VA 0.11 TD(1,1)
 PD
 OU AM RS EF FS SS SC


TI

Number of Input Variables  3
Number of Y - Variables    0
Number of X - Variables    3
Number of ETA - Variables  0
Number of KSI - Variables  1
Number of Observations   400
```

TI

Covariance Matrix

	WLDEC	WLIMP	WLBEN
WLDEC	0.41		
WLIMP	0.30	0.34	
WLBEN	0.32	0.32	0.44

TI

Parameter Specifications

LAMBDA-X

	Willingn
WLDEC	1
WLIMP	2
WLBEN	3

THETA-DELTA

WLDEC	WLIMP	WLBEN
0	4	5

TI

Number of Iterations = 4

LISREL Estimates (Maximum Likelihood)

LAMBDA-X

	Willingn
WLDEC	0.55
	(0.03)
	21.10
WLIMP	0.54
	(0.02)
	23.95

WLBEN	0.58
	(0.03)
	21.81

PHI

Willingn
1.00

THETA-DELTA

WLDEC	WLIMP	WLBEN
0.11	0.04	0.10
	(0.01)	(0.01)
	6.22	9.46

Squared Multiple Correlations for X - Variables

WLDEC	WLIMP	WLBEN
0.73	0.87	0.78

Goodness of Fit Statistics
Degrees of Freedom = 1
Minimum Fit Function Chi-Square = 0.71 (P = 0.40)
Normal Theory Weighted Least Squares Chi-Square = 0.74 (P = 0.39)
Estimated Non-centrality Parameter (NCP) = 0.0
90 Percent Confidence Interval for NCP = (0.0 ; 6.26)

Minimum Fit Function Value = 0.0018
Population Discrepancy Function Value (F0) = 0.0
90 Percent Confidence Interval for F0 = (0.0 ; 0.016)
Root Mean Square Error of Approximation (RMSEA) = 0.0
90 Percent Confidence Interval for RMSEA = (0.0 ; 0.13)
P-Value for Test of Close Fit (RMSEA < 0.05) = 0.59

Expected Cross-Validation Index (ECVI) = 0.028
90 Percent Confidence Interval for ECVI = (0.028 ; 0.043)
ECVI for Saturated Model = 0.030
ECVI for Independence Model = 1.87

Chi-Square for Independence Model with 3 Degrees of Freedom = 741.05
Independence AIC = 747.05
Model AIC = 10.74
Saturated AIC = 12.00
Independence CAIC = 762.02
Model CAIC = 35.70
Saturated CAIC = 41.95

Normed Fit Index (NFI) = 1.00
Non-Normed Fit Index (NNFI) = 1.00
Parsimony Normed Fit Index (PNFI) = 0.33
Comparative Fit Index (CFI) = 1.00
Incremental Fit Index (IFI) = 1.00
Relative Fit Index (RFI) = 1.00

Critical N (CN) = 3703.94

Root Mean Square Residual (RMR) = 0.0023
Standardized RMR = 0.0056
Goodness of Fit Index (GFI) = 1.00
Adjusted Goodness of Fit Index (AGFI) = 0.99
Parsimony Goodness of Fit Index (PGFI) = 0.17

TI

Fitted Covariance Matrix

	WLDEC	WLIMP	WLBEN
WLDEC	0.41		
WLIMP	0.30	0.34	
WLBEN	0.32	0.32	0.44

Fitted Residuals

	WLDEC	WLIMP	WLBEN
WLDEC	0.01		
WLIMP	0.00	0.00	
WLBEN	0.00	0.00	0.00

Summary Statistics for Fitted Residuals

Smallest Fitted Residual = 0.00
Median Fitted Residual = 0.00
Largest Fitted Residual = 0.01

Stemleaf Plot

```
- 2|1
- 0|000
  0|9
  2|
  4|1
```

Standardized Residuals

	WLDEC	WLIMP	WLBEN
WLDEC	0.86		
WLIMP	-0.86	- -	
WLBEN	-0.86	0.86	- -

Summary Statistics for Standardized Residuals

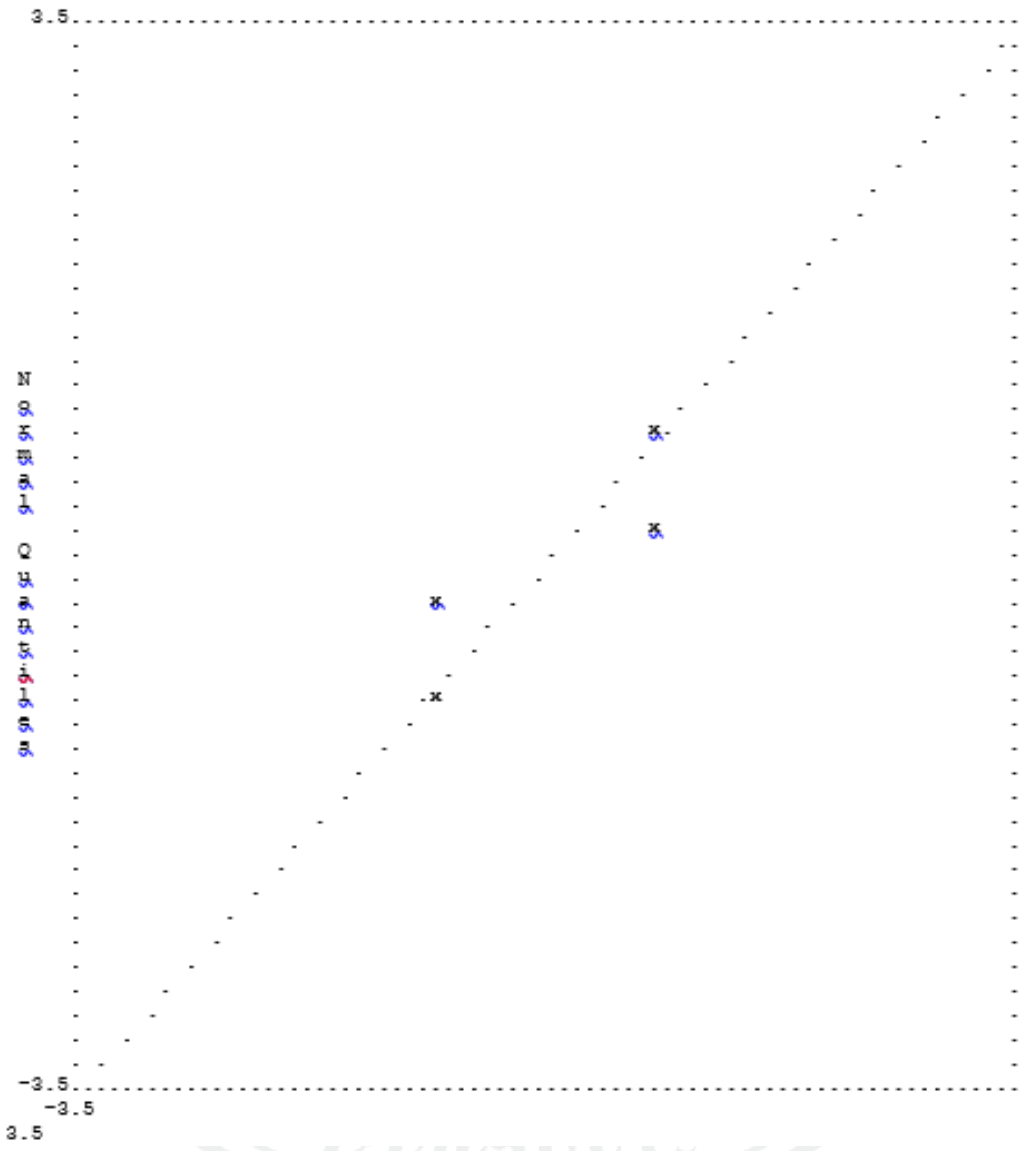
```
Smallest Standardized Residual =   -0.86
  Median Standardized Residual =    0.00
 Largest Standardized Residual =    0.86
```

Stemleaf Plot

```
- 0|99
- 0|00
  0|
  0|99
```

TI

Qplot of Standardized Residuals



TI

Modification Indices and Expected Change

No Non-Zero Modification Indices for LAMBDA-X

No Non-Zero Modification Indices for PHI

Modification Indices for THETA-DELTA

	WLDEC	WLIMP	WLBEN
WLDEC	0.74		
WLIMP	0.74	- -	
WLBEN	0.74	0.74	- -

Expected Change for THETA-DELTA

	WLDEC	WLIMP	WLBEN
WLDEC	0.01		
WLIMP	-0.01	- -	
WLBEN	-0.01	0.01	- -

Completely Standardized Expected Change for THETA-DELTA

	WLDEC	WLIMP	WLBEN
WLDEC	0.02		
WLIMP	-0.02	- -	
WLBEN	-0.02	0.02	- -

Maximum Modification Index is 0.74 for Element (2, 1) of THETA-DELTA

TI

Factor Scores Regressions

KSI

	WLDEC	WLIMP	WLBEN
Willingn	0.36	0.89	0.43

TI

Standardized Solution

LAMBDA-X

	Willingn

WLDEC	0.55
WLIMP	0.54
WLBEN	0.58

PHI

	Willingn
	1.00

TI

Completely Standardized Solution

LAMBDA-X

	Willingn
WLDEC	0.86
WLIMP	0.93
WLBEN	0.88

PHI

	Willingn
	1.00

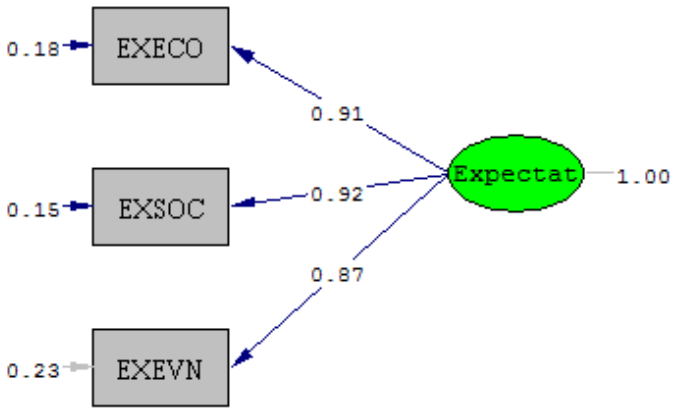
THETA-DELTA

WLDEC	WLIMP	WLBEN
0.27	0.13	0.22

Time used: 0.016 Seconds

APPENDIX G

Questionnaire in CFA3



Chi-Square=0.51, df=1, P-value=0.47385, RMSEA=0.000

```
TI
 DA NI=3 NO=400 MA=CM
 RA FI='C:\Users\Admin\Desktop\CFA3\DATA3.psf'
 MO NX=3 NK=1 TD=SY
 LK
 Expectat
 FI TD(3,3)
 FR LX(1,1) LX(2,1) LX(3,1)
 VA 0.08 TD(3,3)
 PD
 OU AM RS EF FS SS SC


TI

Number of Input Variables  3
Number of Y - Variables    0
Number of X - Variables    3
Number of ETA - Variables  0
Number of KSI - Variables  1
Number of Observations   400


TI

          Covariance Matrix

                EXECO      EXSOC      EXEVN
              --------   --------   --------
    EXECO       0.40
    EXSOC       0.33       0.40
```

EXEVN 0.29 0.30 0.34

TI

Parameter Specifications

LAMBDA-X

	Expectat
EXECO	1
EXSOC	2
EXEVN	3

THETA-DELTA

EXECO	EXSOC	EXEVN
4	5	0

TI

Number of Iterations = 3

LISREL Estimates (Maximum Likelihood)

LAMBDA-X

	Expectat
EXECO	0.57
	(0.02)
	22.98
EXSOC	0.59
	(0.02)
	23.60
EXEVN	0.51
	(0.02)
	21.95

PHI

	Expectat

1.00

THETA-DELTA

EXECO	EXSOC	EXEVN
0.07	0.06	0.08
(0.01)	(0.01)	
8.62	7.66	

Squared Multiple Correlations for X - Variables

EXECO	EXSOC	EXEVN
0.82	0.85	0.77

Goodness of Fit Statistics
Degrees of Freedom = 1
Minimum Fit Function Chi-Square = 0.53 (P = 0.47)
Normal Theory Weighted Least Squares Chi-Square = 0.51 (P = 0.47)
Estimated Non-centrality Parameter (NCP) = 0.0
90 Percent Confidence Interval for NCP = (0.0 ; 5.53)

Minimum Fit Function Value = 0.0013
Population Discrepancy Function Value (F0) = 0.0
90 Percent Confidence Interval for F0 = (0.0 ; 0.014)
Root Mean Square Error of Approximation (RMSEA) = 0.0
90 Percent Confidence Interval for RMSEA = (0.0 ; 0.12)
P-Value for Test of Close Fit (RMSEA < 0.05) = 0.65

Expected Cross-Validation Index (ECVI) = 0.028
90 Percent Confidence Interval for ECVI = (0.028 ; 0.041)
ECVI for Saturated Model = 0.030
ECVI for Independence Model = 2.01

Chi-Square for Independence Model with 3 Degrees of Freedom = 795.59
Independence AIC = 801.59
Model AIC = 10.51
Independence CAIC = 816.56
Model CAIC = 35.47
Saturated CAIC = 41.95

Normed Fit Index (NFI) = 1.00

Non-Normed Fit Index (NNFI) = 1.00
Parsimony Normed Fit Index (PNFI) = 0.33
Comparative Fit Index (CFI) = 1.00
Incremental Fit Index (IFI) = 1.00
Relative Fit Index (RFI) = 1.00

Critical N (CN) = 5002.74

Root Mean Square Residual (RMR) = 0.0014
Standardized RMR = 0.0040
Goodness of Fit Index (GFI) = 1.00
Adjusted Goodness of Fit Index (AGFI) = 0.99
Parsimony Goodness of Fit Index (PGFI) = 0.17

TI

Fitted Covariance Matrix

	EXECO	EXSOC	EXEVN
EXECO	0.40		
EXSOC	0.34	0.40	
EXEVN	0.29	0.30	0.34

Fitted Residuals

	EXECO	EXSOC	EXEVN
EXECO	0.00		
EXSOC	0.00	0.00	
EXEVN	0.00	0.00	0.00

Summary Statistics for Fitted Residuals

Smallest Fitted Residual = 0.00
Median Fitted Residual = 0.00
Largest Fitted Residual = 0.00

Stemleaf Plot

```
- 3|0
- 2|
- 1|
- 0|800
  0|
  1|02
```

Standardized Residuals

	EXECO	EXSOC	EXEVN
EXECO	- -		
EXSOC	-0.72	- -	
EXEVN	0.72	0.72	-0.72

Summary Statistics for Standardized Residuals

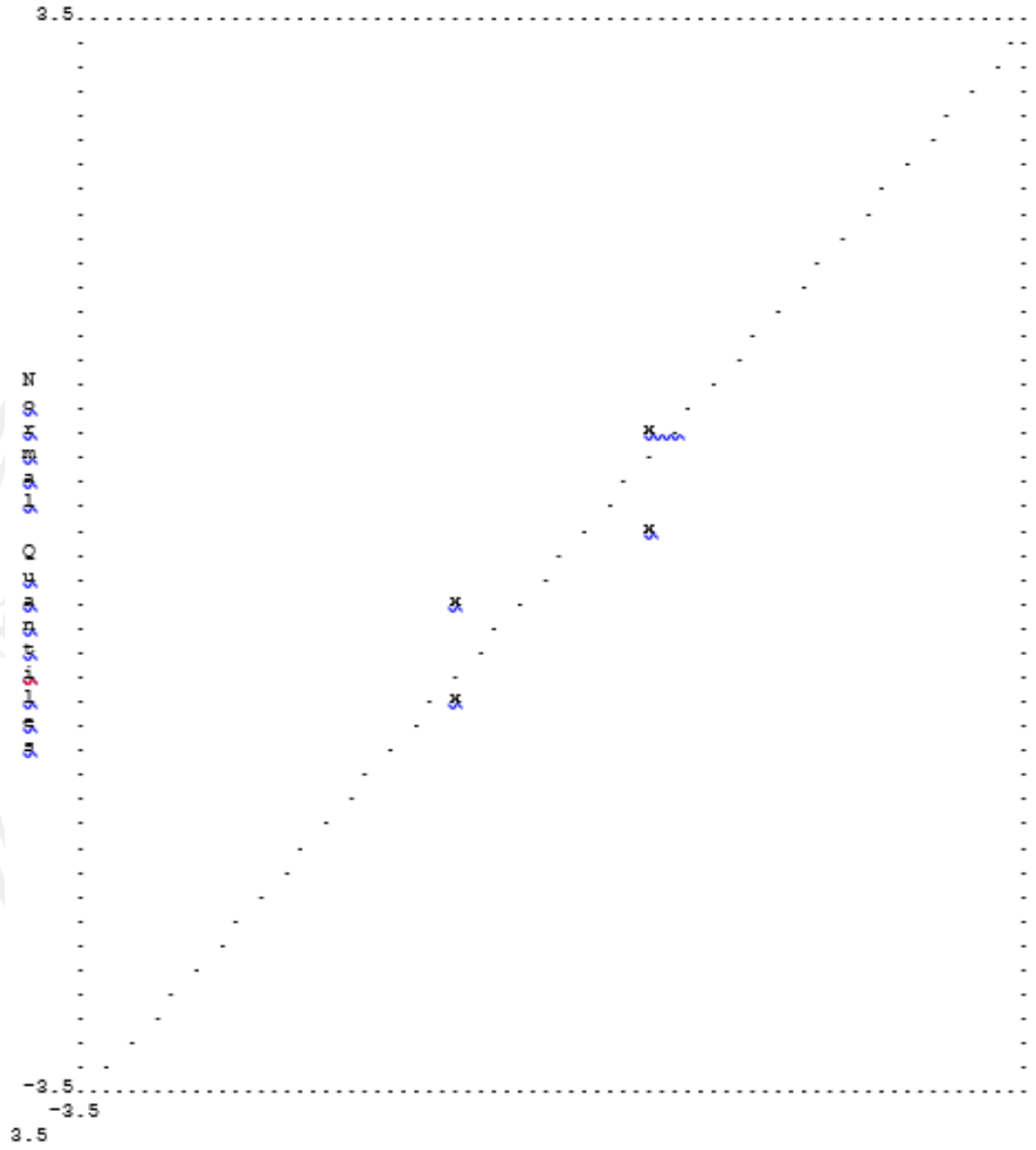
Smallest Standardized Residual = -0.72
Median Standardized Residual = 0.00
Largest Standardized Residual = 0.72

Stemleaf Plot

```
- 0|77
- 0|00
  0|
  0|77
```

TI

Qplot of Standardized Residuals



TI

Modification Indices and Expected Change

No Non-Zero Modification Indices for LAMBDA-X

No Non-Zero Modification Indices for PHI

Modification Indices for THETA-DELTA

	EXECO	EXSOC	EXEVN
EXECO	- -		
EXSOC	0.51	- -	
EXEVN	0.51	0.51	0.51

Expected Change for THETA-DELTA

	EXECO	EXSOC	EXEVN
EXECO	- -		
EXSOC	-0.01	- -	
EXEVN	0.01	0.01	-0.01

Completely Standardized Expected Change for THETA-DELTA

	EXECO	EXSOC	EXEVN
EXECO	- -		
EXSOC	-0.02	- -	
EXEVN	0.02	0.02	-0.02

Maximum Modification Index is 0.51 for Element (2, 1) of THETA-DELTA

TI

Factor Scores Regressions

KSI

	EXECO	EXSOC	EXEVN
Expectat	0.56	0.66	0.44

TI

Standardized Solution

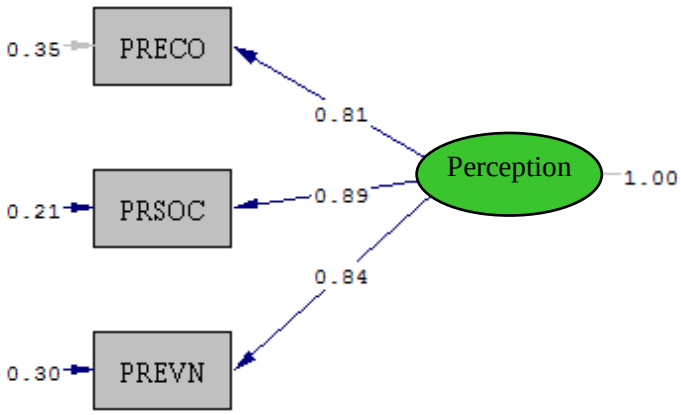
LAMBDA-X

Expectat

```
            --------
    EXECO       0.57
    EXSOC       0.59
    EXEVN       0.51

         PHI

            Expectat
            --------
                1.00


TI

 Completely Standardized Solution

         LAMBDA-X

            Expectat
            --------
    EXECO       0.91
    EXSOC       0.92
    EXEVN       0.87

         PHI

            Expectat
            --------
                1.00

         THETA-DELTA

              EXECO      EXSOC      EXEVN
            --------   --------   --------
                0.18       0.15       0.23

                          Time used:    0.031 Seconds
```

APPENDIX H

CFA4




```
 Chi-Square=1.38, df=1, P-value=0.24004, RMSEA=0.031

TI
 DA NI=3 NO=400 MA=CM
 RA FI='C:\Users\Admin\Desktop\CFA4\DATA4.psf'
 MO NX=3 NK=1 TD=SY
 LK
 Perceive
 FI TD(1,1)
 FR LX(1,1) LX(2,1) LX(3,1)
 VA 0.12 TD(1,1)
 PD
 OU AM RS EF FS SS SC


TI

Number of Input Variables  3
Number of Y - Variables    0
Number of X - Variables    3
Number of ETA - Variables  0
Number of KSI - Variables  1
Number of Observations   400
```

TI

Covariance Matrix

	PRECO	PRSOC	PREVN
PRECO	0.33		
PRSOC	0.24	0.32	
PREVN	0.22	0.23	0.31

TI

Parameter Specifications

LAMBDA-X

	Perception
PRECO	1
PRSOC	2
PREVN	3

THETA-DELTA

PRECO	PRSOC	PREVN
0	4	5

TI

Number of Iterations = 4

LISREL Estimates (Maximum Likelihood)

LAMBDA-X

	Perception
PRECO	0.47
	(0.02)
	18.97
PRSOC	0.50
	(0.02)
	21.25
PREVN	0.46

(0.02)
19.48

PHI

Perception
1.00

THETA-DELTA

PRECO	PRSOC	PREVN
0.12	0.07	0.09
	(0.01)	(0.01)
	6.95	9.23

Squared Multiple Correlations for X - Variables

PRECO	PRSOC	PREVN
0.65	0.79	0.70

Goodness of Fit Statistics

Degrees of Freedom = 1
Minimum Fit Function Chi-Square = 1.45 (P = 0.23)
Normal Theory Weighted Least Squares Chi-Square = 1.38 (P = 0.24)
Estimated Non-centrality Parameter (NCP) = 0.38
90 Percent Confidence Interval for NCP = (0.0 ; 7.95)

Minimum Fit Function Value = 0.0036
Population Discrepancy Function Value (F0) = 0.00095
90 Percent Confidence Interval for F0 = (0.0 ; 0.020)
Root Mean Square Error of Approximation (RMSEA) = 0.031
90 Percent Confidence Interval for RMSEA = (0.0 ; 0.14)
P-Value for Test of Close Fit (RMSEA < 0.05) = 0.44

Expected Cross-Validation Index (ECVI) = 0.029
90 Percent Confidence Interval for ECVI = (0.028 ; 0.047)
ECVI for Saturated Model = 0.030
ECVI for Independence Model = 1.57

Chi-Square for Independence Model with 3 Degrees of Freedom = 619.04
Independence AIC = 625.04
Model AIC = 11.38
Saturated AIC = 12.00
Independence CAIC = 640.01
Model CAIC = 36.34
Saturated CAIC = 41.95

Normed Fit Index (NFI) = 1.00
Non-Normed Fit Index (NNFI) = 1.00
Parsimony Normed Fit Index (PNFI) = 0.33
Comparative Fit Index (CFI) = 1.00
Incremental Fit Index (IFI) = 1.00
Relative Fit Index (RFI) = 0.99

Critical N (CN) = 1821.45

Root Mean Square Residual (RMR) = 0.0034
Standardized RMR = 0.010
Goodness of Fit Index (GFI) = 1.00
Adjusted Goodness of Fit Index (AGFI) = 0.99
Parsimony Goodness of Fit Index (PGFI) = 0.17

TI

Fitted Covariance Matrix

	PRECO	PRSOC	PREVN
PRECO	0.34		
PRSOC	0.24	0.32	
PREVN	0.22	0.23	0.31

Fitted Residuals

	PRECO	PRSOC	PREVN
PRECO	-0.01		
PRSOC	0.00	0.00	
PREVN	0.00	0.00	0.00

Summary Statistics for Fitted Residuals

Smallest Fitted Residual = -0.01
Median Fitted Residual = 0.00

```
 Largest Fitted Residual =    0.00

Stemleaf Plot

- 0|7
- 0|200
  0|23
```

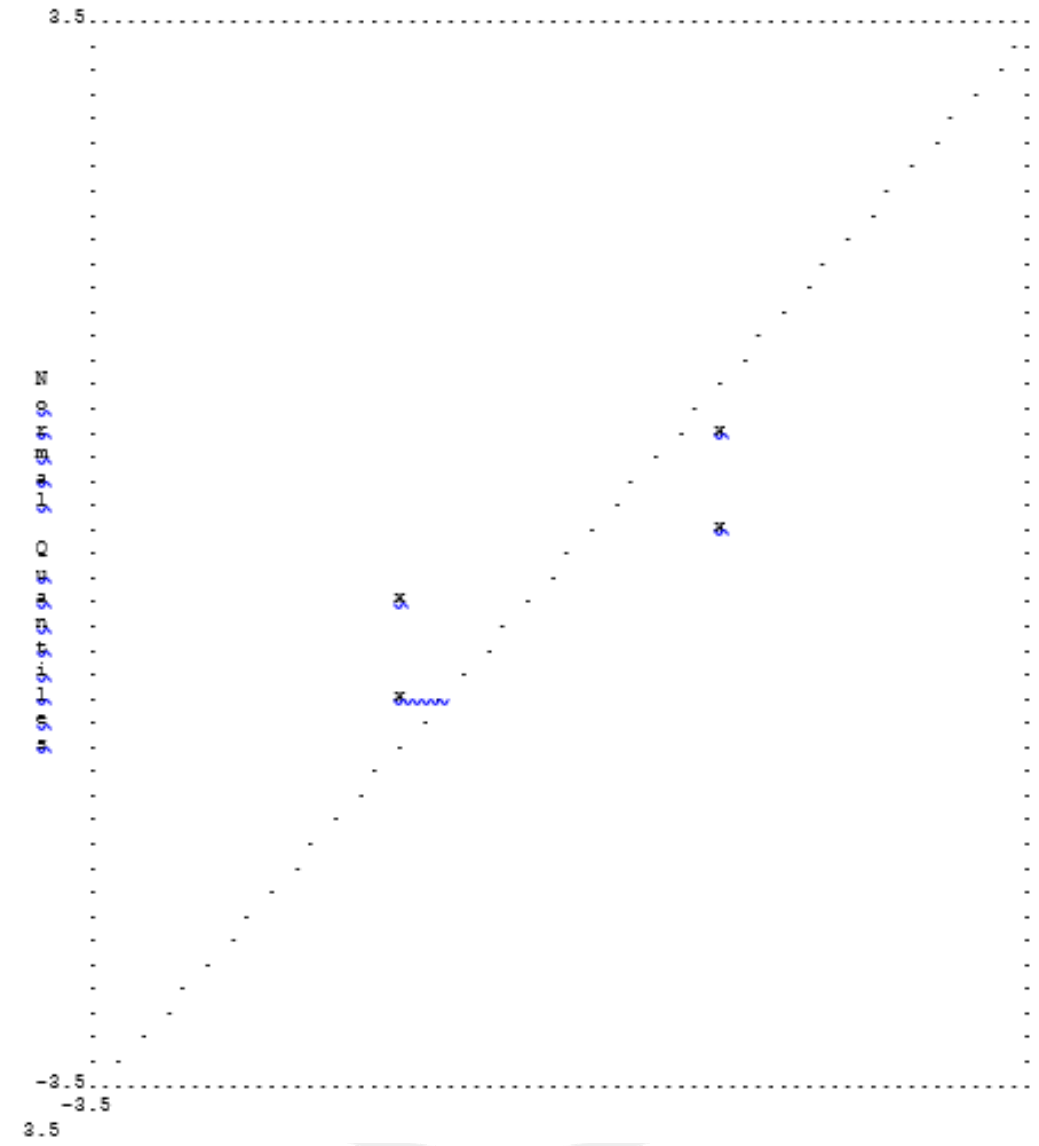
Standardized Residuals

	PRECO	PRSOC	PREVN
PRECO	-1.17		
PRSOC	1.17	- -	
PREVN	1.17	-1.17	- -

```
Summary Statistics for Standardized Residuals

Smallest Standardized Residual =   -1.17
  Median Standardized Residual =    0.00
 Largest Standardized Residual =    1.17

Stemleaf Plot

- 1|22
- 0|
- 0|00
  0|
  0|
  1|22
```

TI

Qplot of Standardized Residuals



TI

Modification Indices and Expected Change

No Non-Zero Modification Indices for LAMBDA-X

No Non-Zero Modification Indices for PHI

Modification Indices for THETA-DELTA

	PRECO	PRSOC	PREVN
PRECO	1.38		
PRSOC	1.38	- -	
PREVN	1.38	1.38	- -

Expected Change for THETA-DELTA

	PRECO	PRSOC	PREVN
PRECO	-0.01		
PRSOC	0.01	- -	
PREVN	0.01	-0.01	- -

Completely Standardized Expected Change for THETA-DELTA

	PRECO	PRSOC	PREVN
PRECO	-0.04		
PRSOC	0.04	- -	
PREVN	0.04	-0.05	- -

Maximum Modification Index is 1.38 for Element (2, 1) of THETA-DELTA

TI

Factor Scores Regressions

KSI

	PRECO	PRSOC	PREVN
Perception	0.44	0.83	0.57

TI

Standardized Solution

LAMBDA-X

	Perception
PRECO	0.47
PRSOC	0.50
PREVN	0.46

PHI

	Perception
	1.00

TI

Completely Standardized Solution

LAMBDA-X

	Perception
PRECO	0.81
PRSOC	0.89
PREVN	0.84

PHI

	Perception
	1.00

THETA-DELTA

PRECO	PRSOC	PREVN
0.35	0.21	0.30

Time used: 0.016 Seconds

APPENDIX I

CRONBACH COEFFICIENT ALPHA

Reliability

Scale: Perception

Case Processing Summary

		N	%
Cases	Valid	30	100.0
	Excluded[a]	0	.0
	Total	30	100.0

a. Listwise deletion based on all variables in the procedure.

Cronbach's Alpha	N of Items
.725	7

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Perception1	29.9667	10.102	.386	.717
Perception2	29.1667	11.385	.373	.707
Perception3	28.9667	11.826	.517	.687
Perception4	29.0667	11.720	.489	.689
Perception5	29.0333	12.102	.307	.718
Perception6	28.9333	12.064	.453	.696
Perception7	29.8333	10.420	.485	.682
Perception8	29.3000	10.700	.476	.684

Scale: Comprehension

Case Processing Summary

		N	%
Cases	Valid	30	100.0
	Excluded[a]	0	.0
	Total	30	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.814	7

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Comprehension9	27.1333	9.292	.416	.818
Comprehension10	27.0333	9.137	.435	.815
Comprehension11	27.0000	9.103	.565	.788
Comprehension12	26.8333	8.971	.666	.772
Comprehension13	27.0333	8.723	.671	.769
Comprehension14	26.9000	8.921	.671	.770
Comprehension15	26.6667	10.092	.553	.795

Scale: Projection

Case Processing Summary

		N	%
Cases	Valid	30	100.0
	Excluded[a]	0	.0
	Total	30	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.810	7

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Projection16	25.5000	11.707	.430	.810
Projection17	24.8000	11.890	.649	.771
Projection18	24.9000	11.403	.706	.760
Projection19	25.1000	11.128	.579	.779
Projection20	25.1667	11.868	.533	.787
Projection21	25.1000	11.679	.591	.778
Projection22	25.4333	12.047	.419	.809

Scale: Willingness in Decision

Case Processing Summary

		N	%
Cases	Valid	30	100.0
	Excluded[a]	0	.0
	Total	30	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.866	7

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
WLDecision1	22.7000	23.183	.284	.885
WLDecision2	22.7667	20.530	.546	.858
WLDecision3	22.2333	21.771	.614	.855
WLDecision4	22.9000	17.679	.813	.820
WLDecision5	22.9333	18.271	.798	.824
WLDecision6	22.9333	16.478	.793	.823
WLDecision7	22.5333	17.982	.663	.845

Scale: Willingness in Implementation

Case Processing Summary

		N	%
Cases	Valid	30	100.0
	Excluded[a]	0	.0
	Total	30	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.709	7

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
WLImplementation1	23.3000	12.286	.443	.670
WLImplementation2	23.3667	13.344	.378	.686
WLImplementation3	24.3000	12.217	.364	.694
WLImplementation4	23.5333	13.361	.546	.663
WLImplementation5	23.7667	11.771	.666	.621
WLImplementation6	24.0333	12.792	.357	.692
WLImplementation7	24.3000	11.872	.342	.707

Scale: Willingness in Benefit

Case Processing Summary

		N	%
Cases	Valid	30	100.0
	Excluded[a]	0	.0
	Total	30	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.860	5

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
WLBenefit1	15.1667	9.178	.777	.803
WLBenefit2	15.0333	9.689	.690	.829
WLBenefit3	14.7667	9.978	.777	.805
WLBenefit4	14.4667	10.326	.745	.814
WLBenefit5	15.2333	12.530	.417	.886

Scale: Performance in Decision

Case Processing Summary

		N	%
Cases	Valid	30	100.0
	Excluded[a]	0	.0
	Total	30	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.818	7

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
PEDecision1	16.0000	15.448	.533	.798
PEDecision2	15.8667	14.395	.491	.807
PEDecision3	15.9000	14.231	.591	.787
PEDecision4	16.4000	15.076	.529	.798
PEDecision5	16.1667	13.868	.694	.770
PEDecision6	16.4000	15.283	.494	.804
PEDecision7	15.8667	13.913	.591	.788

Scale: Performance in Implementation

Case Processing Summary

		N	%
Cases	Valid	30	100.0
	Excluded[a]	0	.0
	Total	30	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.741	7

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
PEImplementation1	19.5333	18.120	.434	.716
PEImplementation2	19.6000	16.386	.679	.653
PEImplementation3	20.4667	18.671	.440	.713
PEImplementation4	19.7000	19.803	.362	.730
PEImplementation5	19.9000	18.714	.582	.687
PEImplementation6	20.5667	18.806	.505	.700
PEImplementation7	20.6333	19.964	.249	.760

Scale: Performance in Benefit

Case Processing Summary

		N	%
Cases	Valid	30	100.0
	Excluded[a]	0	.0
	Total	30	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.856	5

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
PEBenefit1	11.4333	10.599	.731	.809
PEBenefit2	11.2000	12.028	.595	.845
PEBenefit3	11.2000	11.131	.827	.789
PEBenefit4	10.9000	11.197	.559	.863
PEBenefit5	11.4000	12.317	.709	.822

Scale: Expectation in Economic

Case Processing Summary

		N	%
Cases	Valid	30	100.0
	Excluded[a]	0	.0
	Total	30	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.810	7

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
EXEconomic1	25.6333	11.757	.427	.805
EXEconomic2	25.2333	11.771	.611	.779
EXEconomic3	25.8333	12.144	.224	.856
EXEconomic4	25.4667	11.223	.768	.758
EXEconomic5	25.5000	10.397	.671	.761
EXEconomic6	25.5333	10.120	.741	.748
EXEconomic7	25.8000	10.924	.596	.776

Scale: Expectation in Socio-Cultural

Case Processing Summary

		N	%
Cases	Valid	30	100.0
	Excluded[a]	0	.0
	Total	30	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.791	8

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
EXSocio1	29.8000	11.131	.456	.774
EXSocio2	30.1000	9.817	.595	.751
EXSocio3	29.5667	11.082	.661	.749
EXSocio4	29.7667	10.530	.637	.746
EXSocio5	29.6667	11.126	.363	.793
EXSocio6	29.9000	11.197	.435	.778
EXSocio7	30.1000	12.093	.340	.789

Scale: Expectation in Environment

Case Processing Summary

		N	%
Cases	Valid	30	100.0
	Excluded[a]	0	.0
	Total	30	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.896	12

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
EXEnvironment1	48.5000	34.121	.449	.897
EXEnvironment2	48.1667	35.592	.557	.892
EXEnvironment3	48.2333	32.668	.637	.886
EXEnvironment4	48.1667	32.144	.647	.886
EXEnvironment5	48.3667	32.378	.668	.885
EXEnvironment6	48.0667	33.720	.627	.887
EXEnvironment7	48.1000	32.990	.798	.880
EXEnvironment8	48.3000	32.631	.617	.888
EXEnvironment9	48.1667	34.213	.395	.901
EXEnvironment10	48.1333	33.016	.727	.883
EXEnvironment11	47.8667	34.189	.661	.887
EXEnvironment12	48.1667	30.833	.719	.882

Scale: Perception in Economic

Case Processing Summary

		N	%
Cases	Valid	30	100.0
	Excluded[a]	0	.0
	Total	30	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.857	7

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
PREconomic1	18.8000	25.200	.646	.835
PREconomic2	18.2333	23.909	.688	.828
PREconomic3	18.2667	26.271	.455	.861
PREconomic4	18.1333	25.292	.583	.843
PREconomic5	18.2667	24.478	.589	.843
PREconomic6	18.7667	22.944	.763	.816
PREconomic7	18.9333	24.271	.646	.834

Scale: Perception in Socio-Cultural

Case Processing Summary

		N	%
Cases	Valid	30	100.0
	Excluded[a]	0	.0
	Total	30	100.0

a. Listwise deletion based on all variables in the procedure.

Cronbach's Alpha	N of Items
.885	7

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
PRSocio1	16.2000	18.303	.750	.781	.859
PRSocio2	16.1333	22.051	.484	.525	.890
PRSocio3	16.1333	18.395	.848	.804	.846
PRSocio4	16.2667	19.444	.756	.734	.859
PRSocio5	16.1000	19.472	.647	.683	.873
PRSocio6	16.0000	21.448	.537	.523	.885
PRSocio7	16.1667	20.075	.720	.817	.864

Scale: Perception in Environment

Case Processing Summary

		N	%
Cases	Valid	30	100.0
	Excluded[a]	0	.0
	Total	30	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.927	12

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
PREnvironment1	31.7000	73.803	.614	.923
PREnvironment2	31.4000	72.593	.669	.921
PREnvironment3	31.6333	76.378	.525	.926
PREnvironment4	31.7333	73.582	.540	.927
PREnvironment5	31.8000	72.855	.788	.917
PREnvironment6	31.6333	70.999	.708	.920
PREnvironment7	32.0000	70.414	.835	.914
PREnvironment8	31.7667	74.392	.771	.918
PREnvironment9	31.8333	74.075	.567	.925
PREnvironment10	32.0000	72.621	.828	.916
PREnvironment11	31.7000	70.217	.754	.918
PREnvironment12	31.7667	70.668	.757	.917

APPENDIX J

MRA

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.774[a]	.598	.594	.32025

a. Predictors: (Constant), Perception , Willingness, Awareness, Expectation

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	60.360	4	15.090	147.138	.000[b]
	Residual	40.510	395	.103		
	Total	100.870	399			

a. Dependent Variable: Performance
b. Predictors: (Constant), Perception , Willingness, Awareness, Expectation

Regression

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.622	.199		3.120	.002
	Awareness	.014	.034	.013	.410	.682
	Willingness	.226	.048	.261	4.680	.000
	Expectation	-.181	.049	-.207	-3.703	.000
	Perception	.752	.032	.762	23.458	.000

a. Dependent Variable: Performance

APPENDIX K

T-TEST

T-Test

Paired Samples Statistics					
		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	EXECO	4.4568	400	.63144	.03157
	PRECO	3.4029	400	.57815	.02891
Pair 2	EXSOC	4.4082	400	.63634	.03182
	PRSOC	3.3679	400	.56530	.02826
Pair 3	EXEVN	4.4408	400	.58111	.02906
	PREVN	3.3873	400	.55263	.02763

Paired Samples Test									
		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	EXECO - PRECO	1.05393	.82081	.04104	.97325	1.13461	25.680	399	.000
Pair 2	EXSOC - PRSOC	1.04036	.77784	.03889	.96390	1.11682	26.750	399	.000
Pair 3	EXEVN - PREVN	1.05354	.73366	.03668	.98143	1.12566	28.720	399	.000

Paired Samples Statistics					
		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Expectation	4.4353	400	.57723	.02886
	Perception of Airline's Performance	3.3860	400	.50962	.02548

Paired Samples Test									
		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Expectation - Perception of Airline's Performance	1.04928	.72150	.03607	.97835	1.12020	29.086	399	.000

BIOGRAPHY

NAME	Mr. Withep Watawuti
ACADEMIC BACKGROUND	Master of Public Administration Program, National Institute of Development Administration.
	Bachelor of Art of Humanities faculty. The University of Thai Chamber of Commerce
EXPERIENCES	Present: In-flight Manager of cabin attendant at Thai Airways International Public Company Limited.