SOCIAL CAPITAL, KNOWLEDGE SHARING, AND PERFORMANCE

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SOCIAL CAPITAL, KNOWLEDGE SHARING, AND PERFORMANCE

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The purpose of the study is to examine the linkage of the three types of social capital in organization which can enhance knowledge sharing and influence to organizational performance. The conceptual model is deployed from the Nahapiet and Ghoshal’s model (1998); and the linkage among the three types of social capital is developed from Tsai and Ghoshal’s argument (1998), and Uphoff (1999). The study explores Bandura’s cognitive theory (1977, 1986, 1989, and 2001) to develop the proposed model.

The approach is quantitative research which questionnaire is designed from the theories and previous studies. Convenient data is collected from a 167 branches including 1,440 respondents in the Bangkok area, Region 6 and 12 since all the regional managers are willing to collect the questionnaires launched through the mail.

Structural Equation Model is extrapolated by using Amos version 21.0 for Windows in analyzing the statistical values. The SEM approach involved the confirmatory approach to model specification. The factor analytic model approach consisted of four main constructs of interest- three types of the social capital and the knowledge sharing, and a CFA to statistically test how and the extent to which the observed variables were linked to their underlying latent factors. An integrated SEM was then proposed which incorporated the potential outcomes of the knowledge sharing as mediating the relationship between the social capital and the performance. The factor analytic model, utilizing CFA approach provided valuable insight for model modification to achieve a better data to model fit, and helped to determine the most relevant indicators for the study constructs to test the hypothesized structural model.
The model re-specification resulted in a final SEM reflective of the results from the CFA was validated by various goodness of fit indices. The convergent validity, the discriminant validity, and the nomological validity were tested. The hypothesized model was statistically supported with the collected data. The research confirmed the three types of social capital were linked. Cognitive social capital was the exogenous variable affected to structural social capital relational social capital, and knowledge sharing, which direct and indirectly causing to the organizational performance. Three types of social capital and the knowledge sharing were interpreted as factors which increased the organizational performance. All significant paths were positively related to the organizational performance. The findings provided empirical evidence that cognitive social capital had the strongest total effects to performance while relational social capital had the strongest direct effect to performance. Additionally, knowledge sharing enhanced effects from the three linkage of social capital to boost organizational performance.
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Of course, all errors in this dissertation remain my sole responsibility.

On the last note, I am most grateful to my Mom-Premjit who is always be my inspiration to persist and keep going.

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CHAPTER 1

INTRODUCTION

1.1 Significance of the Study

The aim of this study is to examine the linkages of the three types of social capital which can enhance knowledge sharing and influence on organizational performance. This study focuses on the Government Savings Bank of Thailand (GSB), a state-owned enterprise, which is the biggest state enterprise bank in terms of assets, deposits, NPLs’ to loans, and is relatively older than other state enterprises.

Most state-owned enterprises in Thailand have ceased to function. Some organizations, however, have survived with strong subsidies from an annual government budget. Therefore, the question is what has made this organization remain healthy, energetic, and profitable without any support from the government budget, even with its slogan “Guaranteed by the Government.”

There are many possible approaches to epitomize organizational performance. From the industrialization era, social theorists try to find out “what makes an organization effective.” Not only theories in the organizational sciences but also other social sciences contribute in some techniques to searching for the determinants that make organizations more effective. For instance, marketing concentrates on increasing revenues and market shares, while the interest of financial concepts focuses on the sources and uses of funds utilize in the organization. Production and operations concern the managerial decisions regarding product design and the production system. The main objective of production is to produce the goods and services in the most efficient and economical way. Accounting develops and provides accounting standards and rules for profit and non-profit organizations presenting useful financial reporting, characterizing and analyzing healthy organization via various financial
sheets. Unlike other social scientists, organization theorists focus on the cooperative systems (Barnard, 1938) composed of people and groups environmental influences.

Organizational effectiveness introduces the problems inherent in defining and measuring effectiveness. There are lists of different determinants that have led to the conclusion that organizational effectiveness means different things to different people, which also reflects the different interests of the evaluators. Of course, one might argue that organizational effectiveness requires multiple determinants. There is no best criterion for evaluating an organization's effectiveness; thus, this study investigates how the social capital in the organization affects the organizational performance.

Organizational theories suggest that organizations can perform better than competitors in the same market depending on their competitive advantage (Porter, 1985); a state of competitiveness of the organization reached through a level of efficiency and productivity which ensures a sustainable market presence (Boulescu, Ghita, and Mares, 2002). Efficiency means the extent to which objectives are achieved (Drucker, 1999) in terms of minimal cost, which refers to the rates of the resources usage in achieving the objectives (Roger and Wright, 1998). Effectiveness means “to do planned things well” (Drucker, 1999), as for example with precision in achieving targets and the achievement of objectives (Perrow, 1967).

As proposed by Kaplan and Norton, the balanced scorecard emerged in the early 1990s. The balanced scorecard contains a set of performance measures including financial performance, customer relations, internal business processes, and organizational learning and growth activities (Kaplan and Norton, 2000). Advocates of the balanced scorecard suggest that organization should develop and use its own scorecard measures to reflect its goals and strategy. As a model of performance measurement, the GSB under the supervision of the Ministry of Finance was encouraged to adopt this strategic instrument to measure organizational performance as well. The GSB’s balanced scorecard is implemented by translating the GSB’s vision and strategy into operational measurements. The holistic scorecard creates shared understanding among bank staffs to contribute their efforts to firm success.

The GSB management team has linked this strategic tool to support the provisions of incentives to individual remuneration by transforming performance
criteria to each subdivision and individual. Since 2004, the key performance indicators (KPIs) were communicated and assigned to organizational unit, bank branch and individual. Although the bank’s KPIs includes financial and non-financial measures, the bank branches’ KPIs are mostly financial dealings reflecting their main functions for examples- the economic profit, the amount of net deposit, the growth of assets. This study uses the bank branch as a unit of analysis for scrutinizing what makes this organization perform well.

Although the conventional views of organizational leadership have generally assumed that leaders are the key factor in performance and organizational success, Lieberson and O’Conner (1972) found that leaders have little impact on organizational performance because they are constrained by situational factors. Sociologists have employed various mediating variables to measure and describe the impact of leadership on organizational performance, such as organizational structure, communication, conflicts, and organizational devices (Blau and Scott, 1962), and sales, earnings, and profit margins (Lieberson and O’Conner, 1972). According to prior literature, social capital and knowledge sharing were examined in terms of their impacts on organizational performance (Batiargal, 2000; Fredette, 2009; Kim, Lee, Paek, and Lee, 2013; Wu, 2008; Wu and Leung, 2005). The current study examines social capital and knowledge sharing as an intangible resource affecting organizational performance.

As mentioned in the previous section, organizational theorists indicate that employee behavior is critical for an organization’s efficiency and effectiveness. Several theories have been referred to by researchers to explain how team performance is affected by different structures and diverse memberships. Some researchers have explored the role of team processes that link diversity and performance variables (Kilduff, Angelmar, and Mehra, 2000; Pelled, Eisenhardt, and Xin, 1999). The main context factors that have been investigated are task characteristics, organizational culture, strategic industry context, and temporal effects. Haas (2010) analyzed 30 empirical studies on direct diversity-performance effects. The reviews provided contradicting evidences; finally, this review concluded that there is no general rule concerning what the right combination of individuals will be for a successful team regarding performance.
According to the resource-based view literature, organizational theorists have been concerned with understanding why some organizations perform better than others and have frequently looked to the resource-based view of the firm as a model for explaining the sustained competitive advantage that some organizations possess (Barney, 1991; Conner, and Prahalad, 1996). The resource-based view emphasizes that a firm utilizes its resources and capabilities to create a competitive advantage that ultimately results in superior value creation. Armit and Schoemaker (1993) explained that resources are stocks of available factors that are possessed by the organization, and capabilities are an organizational capacity to organize and manage resources.

Organizational resources and capabilities are strengths that organizations can use to conceive of and implement their strategies. Most analysts are concerned about tangible resources—physical capital—and ignore intangible resources or capital in the organization, such as social capital and cultural capital. Unlike other researchers, who see such organizational advantage as accruing from the particular capabilities that organizations have for creating and sharing knowledge, Nahapiet and Ghoshal (1998) developed the notion that social capital within an organization is likely to be a source of competitive advantage for the firm. They argued that social capital facilitates the creation of new intellectual capital; an organization in the institutional setting is conductive to the development of high levels of social capital; and it is because of their more dense social capital that firms, within certain limits, have an advantage over markets in creating and sharing intellectual capital and organizational-level performance. In other words, both of them assert that networks of strong interpersonal relationships within an organization ultimately facilitate its success.

Regarding to Nahapiet and Ghoshal finding that social capital can create and share intellectual capital; this current study develops the model by observing knowledge sharing as mediator variable influenced to organizational performance. Literatures reveal that knowledge sharing is positive relationship with performance (Cummings, 2004; Kraidan and Goulding, 2006; Weber and Weber, 2010).

This dissertation will particularly examine the Government Savings Bank (GSB), a state-enterprise. The GSB was established in 1913, the first public bank in Thailand. A key reason for examining the GSB is that this state enterprise has long been sustainable for a hundred year. There are few organizations in Thailand which
have lasted over 100 years without any support or subsidy from the governmental budget. Generally, organizational theorists have used a biological metaphor with respect to the life of organizations (Camazine, 2003). Organizations are born, grow, and need continual nourishment for survival. Organisms themselves are shaped by natural selection: those that perform well are able to persist, and those that perform poorly will not survive.

Another reason for focusing on the GSB, it is one of the largest banks in Thailand. In terms of state-enterprise banks, the GSB is the largest bank in terms of capital funds, and the oldest bank among the state banks: the Bank for Agriculture and Agricultural Cooperatives, the Export and Import Bank, the Government Housing Bank, the Islamic Bank, the SME Bank, and the Thai Military Bank. Even though the comparison to Thai commercial banks has been made in banking industry, GSB performance has always been ranked at the top or the second in terms of assets size, deposits, loans, and NPLs’ to loans.

The GSB operational procedures seem to be more complex and risky rather than other state banks or commercial banks. As a state enterprise and governmental mechanism, the GSB has responsible for making revenues to the state, supporting governmental populist policies, mobilizing savings throughout the country by encouraging people habits to save money, providing small loans and banking services for all walks of life to be able to easy access to the bank.

In the banking industry, banks are traditionally established by investors and expand its capital by raising funds in the capital market. As the state financial institutes in Thailand, all banks were instituted by the government policies and expand capital funds by government budget. For example, the government regularly increased capital funds to the Bank for Agriculture and Agricultural Cooperatives (cabinet resolution 1996, 1999, and 2012); periodically supplied government budget to enlarge capital funds for expanding services to the exporters’ customers of the Export and Import Bank (cabinet resolution 1998, 2008, 2009, and 2012); made available for enlarging funds to provide housing loan for the Government Housing Bank (2010, 2012), and supported the additional state banks in a regular basis. Although the government regularly allocated budget to support the state enterprise
banks, it is the fact that the GSB has never been granted from any other source except the King Rama IV donation for establishing a small savings entity for educating Thais to save money.

Furthermore, this particular bank is attractive for studying because social capital effect in state-enterprise bank is unknown. This study is among the first to examine social capital and knowledge sharing as an organizational resource. Importantly, empirical research on social capital is needed to help clarify and strengthen the concept theoretically in order to appropriately apply it with the specific context. Previous studies in the banking industry have not adopted an integrated model that explores the organizational performance through the linkages of the three types of social capital and knowledge sharing. The research study extends social capital and knowledge sharing by examining the impacts and effects on the formal organization such as state enterprise bank.

Social capital and knowledge sharing are particularly important to the state enterprise bank because it enhances organizational effectiveness, yet few empirical studies have been conducted to examine the particular outputs or effects. Thus, the aim of this study is to analyze how the level of social capital in the GSB impacts its performance. According to the literature review, Guiso, Sspienza, and Zingales’ (2004) results also show a positive and significant link between social capital and the efficiency of banking industries. Shipilov (2006) analyzed social capital in Canadian investment banks and the research results show that firm networks affect bank performance. On the other hand, Naghavi, Salavati, and Movahed (2011) studied social capital in governmental, private, and newly-privatized banks in Iran; the research results show that social capital is not affected by the governmental or private structure of a bank, but the most influencing factor which decreases social capital is privatization.

Little is known about social capital and knowledge sharing effect in state enterprise banks as no known empirical studies exists which examine the outcomes of social capital and knowledge sharing relevant to state enterprise bank performance. The relevance of social capital and knowledge sharing theories in state enterprise bank performance is an area of interest with much yet to be empirically investigated.
An empirical study needs to be investigated social capital and knowledge sharing in state enterprise bank in Thailand. Many researches utilize social capital and knowledge sharing has been conducted from different cultures and contexts. According to Hofstede (1994), the present view of management was established in the western-oriented frame of reference, especially the Anglo-American orientation that many apparent realities are only social constructs and are therefore subject to change. Organizational theories and concepts might not apply in the Thai organizational culture and contexts. Consequently, there is a need for empirical evidence to support social capital and knowledge sharing concepts in Thai bureaucratic organization.

1.2 Objectives of the Study

The goal of this research is to examine, empirically, particular concept of social capital and knowledge sharing directly and indirectly influence on organizational performance. Secondly, the study focuses on how the three types of social capital interact and influence knowledge sharing and organizational performance. Thirdly, this research study examines the manifest variables of social capital and knowledge sharing in Thai context.

1.3 Scope of the Study

This study investigates the Government Savings Bank, state-own enterprise bank, one of the biggest banks in Thai banking industry. The research study examines 167 out of a total 598 bank branches in 2011. The 167 branches are taken from five regions—Regions 1, 2, and 3 located in the Bangkok area. Region 6 is located in the upper-central part of Thailand comprising six small provinces: Nakhon Sawan, Chai Nat, Uthai Thani, Phichit, Phetchabun, and Lop Buri. Region 12 is located in the north-east including five provinces: Ubon Rachathani, Buri Ram, Surin, Yasothon, and Si Sa Ket. In total, the research study observed social capital in 167 bank branches in 12 provinces throughout the country.
This dissertation utilizes quantitative methodology and cross-sectional study. Respondents are bank branch staff. Amos 21.0 was deployed for analyzing and evaluating the research model.

1.4 Limitations

Since time and budget were limited for the present study, the dissertation utilizes a cross-sectional design, whereas Adler and Kwon (2002) propose that longitudinal studies are necessary to develop understanding of the dynamic interplay between human and social capital. The study was also limited to the accuracy of the respondents’ responses, which is far beyond the control of the researcher. A selective sample area is one of the limitations in this study. Although the respondents are 1,440 within 167 branches, it might be another limitation for advocating that data are represented the bank population.

1.5 Benefits of the Study

This research study is expected to contribute to scholarly knowledge. The research results will enhance academic knowledge in relation to social capital and its influence on firm performance in the Thai context. The study examines to current situations that might impact the concept of social capital, and this topic has not been sufficiently researched. Particularly, a study of this topic in a different context by adopting reliable and accurate research methods meeting international standards will be useful to Thai academics. This will lead to the creation of temporary knowledge that provides practical knowledge that can be used in the future. In particular, the academic progress in the development administration will be more strengthen because a big state enterprise bank in Thailand was tested to show why and how the bank perform well.

The results of the study concerning the social capital influences on organizational performance can be used to examine the involved authorities’ performances in both their proactive and defensive activities in relation to the
National Economic and Social Development Plan, which emphasizes social capital and economic development. Those that are involved in administration and politics, and policy and planning, will have a better understanding of the Thai social capital in the bureaucratic organizations, especially study in the state enterprise bank.

Further, the research results provide an understanding for the improvement of the social capital of Thai organizations. Based on the results of the study, one will have a better understanding of the linkages three types of social capital that can boost knowledge sharing and influence on organizational performance. Leaders and management teams in organizations can improve their performance via their enhancement of social capital.

Finally, the research findings will benefit development administrators in terms of organizational implementation and studying a real case will help to improve the social reality. Managers routinely confront the complexities inherent in goal attainment; from this study they can obtain reasonably valid information for assessing their organization’s effectiveness.

1.6 The Organization of this Dissertation

This dissertation is organized into five chapters. Chapter I begin with the statement of significance for the study, and then provide a broad view of the research direction with a brief elaboration. Chapter 2 comprehensive reviews the literatures of various paradigms, theoretical base of the study, and correspondingly the conceptual model and research hypotheses are proposed. Then, Chapter 3 describes the methodology of the research, measurement scales, tools, and variables are discussed, followed by Chapter 4, which presents the research findings. Chapter 4 focuses on the interpretation of the statistical results, reliabilities and validities of the constructs, measurement model and structural model are tested. The last section, Chapter 5, draws out discussion, conclusions based on the findings, the implications of the findings, assesses the utility of the social capital concept in studying in the state enterprise bank—the Government Savings Bank.
CHAPTER 2

REVIEW OF THE LITERATURE

This chapter begins with the development of the conceptual model. Then, all of the variables related to the model construct were reviewed from previous studies. In the conceptual model, there are four independent variables which are: (1) cognitive social capital, (2) structural social capital, (3) relational social capital and (4) knowledge sharing. The dependent variable is branches performance using the KPI’s of the branch managers, which represents branch. Branch performance (PERFORM) was archived from the bank data.

Cognitive social capital (COGNITIVE) is comprised of shared values and goals. Structural social capital (STRUCTURAL) is considered as the frequency of relationships among members, the affections among members in the community, and the frequency and period of time spent in communicating and participating in the bank’s activities. Relational social capital (RELATIONAL) can be defined as the individual trust among members and the organization and the employees’ commitment to the organization. Knowledge sharing (KSHARING) refers to the individual’s attitude toward transferring and receiving knowledge from person to person, person to group, and person to organization.

The section 2.1 describes how the conceptual model was constructed. The section 2.2 to 2.6 summarizes the measurement of variables. Previous literatures led the present author to assemble the indicators of each variable for determining the best view of construct validity. The definitions and characteristics of variables are clearly defined and cover important aspects of the content universe. The section 2.7 concludes the conceptual model of the study explaining the linkage of social capital related to knowledge sharing and influenced to organizational performance.
2.1 The Conceptual Model

Based on Nahpiet and Ghoshal’s work, this dissertation develops the initial step in conceptualizing the conceptual model. Also, the structure of social capital here has been modified based on Tsia and Ghoshal’s model (1998), which initially observed how the three types of social capital interact and influence one another and facilitate value creation to organization. They proposed that structural social capital will be positively influenced and associated with cognitive social capital. Unfortunately, it appeared that structural social capital was not a prerequisite for creating a shared vision. Although the study spotlights the linkages of the three types of social capital, a major change in the model is that cognitive social capital is a prerequisite factor directly affecting structural social capital and relational social capital, and also indirectly affecting relational social capital via structural social capital. Consequently, this research study assumes that the three types of social capital are linked and interact together as resources within the organization; they serve to enhance organizational performance.

Before discussing the construction of the conceptual model for this study, it is necessary to investigate what social capital is. Social capital can be understood as a set of informal norms (OECD, 2001; Putnam, 2000) and values common to the members (Fukuyama, 1995; Halpern, 2005) of a specific group that allows cooperation (Field, 2003; Lin, 2001) among them. Therefore, it is a component of the social theory that is being considered as a key element for human and economic development (Macke and Dilly, 2010), which can improve the efficiency of society by facilitating coordinated actions (Bourdieu, 1997; Putnam, 2000).

Attempts to more thoroughly conceptualize social capital have been broadly described by many scholars identifying different characteristics- as an asset embedded in the relationship of individuals, communities, networks, or societies (Burt, 1997; Coleman, 1990; Nahapiet and Ghoshal, 1998; Walker, Kogut, and Shan, 1997); as a kind of capital (Bourdieu, 1990); and as a moral resource (Hirschman, 1984). This research identifies social capital as an asset embedded in the relationship of individuals, strong ties of networks, and the mental process of actors in the network.
Social capital has been posited at several levels of analysis drawing on different perspectives. Researchers use the level of social capital in describing the attributes of nations or geographic regions (Bankston and Zhou, 2002; Coleman, 1988; Fukuyama, 1995; Portes, 1998; Putnam, 1995); communities (Putnam, 1993b); individual networks (Burt, 1992); firms in their interactions with other firms (Baker, 1990); individual actors (Belliveau, O’Reilly and Wade, 1996); and aggregate component of groups (Buy and Bow, 2002; Kilpatrick, Bell, and Falk, 1998; Newton, 1997; Sander, 2002). Social capital thus crosses several levels of analysis and has been described using both a macro (society, nation, and region), meso (group), and micro (individual) lens (Paxton, 1999). This study considers the organization as a collective, net social capital was resulted from the capability of all internal resources, as well as human resources and their relations within the organization. Social capital is identified as aggregate elements of members in the network of bank branch. Members in the network engage individual capabilities and efforts in reaching the goals.

From a survey of the literatures, it was found that there are few researches that investigate the linkages among the three types of social capital. Analyzing relevant journal articles from 1989 through 2008 yielded 245 articles. Payne, Moore, Griffis, and Autry (2010) found that those articles focused primarily on theory conceptualization, measurement, and level of analysis.

Currently, Sechi, Borri, Lucia, and Celmins (2010) utilized Tsai and Ghoshal’s model to investigate the dynamics of social learning in territories with regards to environmental knowledge in the Republic of Latvia. They studied types of social capital and an environmental dimension as well as the linkage among such types. The main results provided support for Tsai and Ghoshal’s works, according to structural and cognitive social capitals were significantly related to relational social capital and enable knowledge exchange. They found divergent results from Tsai and Ghoshal’s main pattern. Significant unexpected causal effects were found; there were negative correlations between structural social capital and cognitive social capital, and a negative effect of cognitive social capital on knowledge acquisition. However, they asserted that the discrepancy may rely on the different context.
With respect to these ideas, the study hypothesizes how the three types of social capital interact among themselves and how they influence knowledge sharing, which in turn influences organizational performance. However, the current study examines the linkage of social capital in different model. It is considered that cognitive social capital caused social strong ties and relational social capital rather than structural social capital fostered cognitive social capital and relational social capital. This assertion is derived from multiple schools of thought within the social structure search for what makes people “build, continue, or reconstitute” their network ties. Regarding this issue, the theory of human actions is explained from various views, including theories of self-interest (Smith, 1776), social exchange (Blau, 1968; Homans, 1961; Thibaut and Kelley, 1959), mutual or collective interest (Olson, 1971), and the cognitive theories (Bandura, 1977, 1986, 1989, 2001).

From the cognitive perspective (Rousseau, 1767; Hegel, 1910; Alberson, Aronson, McGuire, Newcomb, Rosenberg, and Tannenbaum, 1968), the theory stresses what members think other group members know and like. The balance theory of Heider (1946) asserts that if two people are friends, they may have the same criteria for the assessment of an object. When people interact in small groups, similar evaluations of an object are a key indicator in explaining how communication ties are created within a group and the development of partnership within groups.

Human behavior is related to the agent’s beliefs and desires that lead to bodily actions, and these beliefs are derived from the mental model (Johnson-Laird, 1983). For this reason, Bandura (1977, 1986, 1989, and 2001) argued that mental states cause human actions. His works contribute to social cognitive theory, self-efficacy, and personality psychology. Bandura’s analyses became known as social cognitive theory.

According to Bandura’s cognitive theory, when people believe that they are motivated to build their social network more in tune with their own values and the kinds of relationships that they engage in, then people tend to form different kinds of relationships with different people. Human behavior, as it is purposive, is regulated by forethought: people set goals for themselves and they plan courses of action that will likely meet the desired and positive outcomes. Additionally, in this context, people established strong ties with others like them and refrain from behaving in ways that violate their personal standards because it can cause them to disapprove of
themselves. With other people with whom they are typically not that close, they develop weaker ties and this helps them to address a larger variety of what are most likely more specific needs.

As pointed out by Uphoff (1999), the cognitive category of social capital derives from mental processes and resulting ideas, and is reinforced by culture and ideology, specifically the norms, values, attitudes and beliefs that contribute to cooperative behavior and mutually-beneficial collective action. According to Uphoff and Wijayaratna (2000) and Krishna and Uphoff (2002), cognitive social capital predisposes people to mutually-beneficial collective action.

In line with these theories, this study developed a model by assuming that the cognitive social capital is only exogenous variable directly caused structural and relational types; and indirectly effect to relational social capital via structural social capital (Figure 2.1).

![Figure 2.1 Linkages among Social Capital Types](image)

**2.1.1 Social Capital, Knowledge Sharing, and Performance**

Types of social capital of Nahapiet and Ghoshal’s framework have become the most influential in studying social capital and intellectual capital. Another contribution in this direction has been examined by Adler and Kwon (2002) who have expressively rename the intellectual capital to knowledge sharing. Since then, most of the past studies highlight the importance of social capital as a driver for knowledge sharing in organizations (Adler and Kwon, 2002; Coleman, 1988; Fukuyama, 1995;
Hazleton and Kennan, 2000; Inkpen and Tsang, 2005; Nahapiet and Ghoshal, 1998; Widen-Wuff, 2004). Such authors point out how different types of social capital may enable the sharing of different kinds of knowledge.

Figure 2.2 shows the relationships among the three types of social capital and knowledge sharing. It is hypothesized that cognitive social capital is the exogenous variable that causes other variables in this model. The next stage will explain the influences of the three types of social capital and knowledge sharing on organizational performance.

![Figure 2.2 Relationships of Three Types of Social Capital and Knowledge Sharing](image)

A large number of research studies on Nahapiet and Ghaoshal’s model have been carried out worldwide and a growing number of practical cases on different forms of social capital are being reported (Bock, Zmud, Kim, and Lee, 2005; Borgatti and Cross, 2003; Chui, Hsu, and Wang, 2006; Huysman and Wulf, 2005; Inkpen and Tsang, 2005; McFadyen and Cannella, 2004; Thomas-Hunt, Ogden, and Neale, 2003; Tsai, 2002; Tsai and Ghoshal, 1998; Wasko and Faraj, 2005; Widen-Wuff, 2004; Wulff and Ginman, 2004; Yli-Renko and Autio, 2001).

In the field of organization studies, there have been numerous research studies observed the relationships of social capital and business success (Kilkenny, Nalbarte, and Besser, 1999), performance (Batjargal, 2000; Fredette, 2009; Wu, 2008; Wu, and Leung, 2005), innovation (Cook, and Clifton, 2004; Landry, Amara, and Lamari, 2000), revenue (Jenssen, and Greve, 2002; Johnson, Suarez, and Lundy, 2002), sales
and value added (Chen, Tzeng, Ou, and Chang, 2007; Fafchamps, and Minten, 2002; Lechner, Dowling, and Welpe, 2006; Smerek, and Denison, 2007; Westlund, 2006; Zhang, and Fung, 2006), launching a new venture (De Clerk, and Arenius, 2003), profits and employment (Bosma, Van Praag, Thurik, and De Wit, 2004; Chen, Tzeng, Ou, and Chang, 2007), growth (Cook, and Clifton, 2004; Cook, Clifton, and Oleaga, 2005; and Cook, 2007; Lou, Griffith, Liu, and Shi, 2004; Westlund, and Nilsson, 2005), return on investment (Chen, Tzeng, Ou, and Chang, 2007; Lock Lee, 2008; Lou, Griffith, Liu, and Shi, 2004), return to asset (Smerek, and Denison, 2007; Zhang, and Fung, 2006), market-to-book ratios (Lock Lee, 2008; Smerek, and Denison, 2007), total shareholder return (Lock Lee, 2008), and etc.

It can be seen that a number of previous researches have been conducted to focus on the relationship of social capital and knowledge sharing, or examine whether the relationships of social capital is able to enhance organizational performance or create the capabilities of organization. It is rare to investigate the linkages of the three types of social capital, knowledge sharing, and performance (Chui, and Hsu, 2006; Kim, Lee, Paek, and Lee, 2013; Sechi, Borri, Lucia, and Celmins, 2010). For this reason, it is a significant study to observe the relationships among those factors.

Additionally, most of the literatures on Thailand examine themes of the community, such as good governance (Albritton and Bureekul, 2002), psychosocial well-being among adolescents in the Northeast region (Luang-Ubol, 2010), decentralization in the municipal government (Mahakanjana, 2004), public goods (Potipiti, 2010), community movements (Kata, 2004 and Leknoi, 2008), distance learning in rural areas (Yiengprugsawan, Seubsman, and Sleigh, 2011), political participation in local politics (Kanchanakit, 2004), village migrant networks (Curran, Garip, Chung, and Tangchonlatip, 2005), and community knowledge management (Wanthanang, 2010). Although there have been studied in communities, it cannot be found any literature result in the field of organization study. It is attraction for empirically investigating themes of the organization performance, specifically in the banking industry.

Based on the findings of prior studies as well as deductive reasoning, the model hypothesizes that the linkages of social capital are expected to be positively effects on knowledge sharing in organization and increase the organizational unit’s
performance that enhances the overall performance of the organization. Knowledge sharing is also expected to mediate the effects of social capital on organizational performance. The hypothesized structural model of social capital, knowledge sharing, and performance are depicted in Figure 2.3. This causal model is empirically investigated using the GSB as a case study.

![Proposed Conceptual Model](image)

**Figure 2.3** Proposed Conceptual Model

### 2.2 Cognitive Social Capital

As the concept of cognitive social capital rooted in the mental process among thought, affect, and action, there are multiple schools of thought within the social cognitive theory including the theory of self-interest (Smith, 1776), social cognitive (Bandura, 1977, 1986, 1989, 2001). Social cognitive theory (Bandura, 1977, 1986) is helpful for understanding and predicting both individual and group behavior and identifying the methods in which behavior can be modified or changed. Bandura’s theory places strong emphasis on human cognition, and he asserts that cognition interacts with behavior, personality and the environment—human actions result from the mind as an active force that constructs one’s reality, selectively encodes information, and performs behavior on the basis of values and expectations. A person’s own reality is thus defined as the interaction of the environment and one’s cognitions, which can change over time though the learning process.
Social cognitive theory is highly relevant to organizational studies (Simon, 1956). Simon investigated decision-making theory and summarized how the cognitive theory is highly relevant to leadership, job performance, motivation, and control systems. As mentioned in chapter 1, this study hypothesizes that the cognitive social capital is linked to structural and relational social capitals. The next step is to explain the role of the cognitive social capital links to knowledge sharing and performance.

Nahapiet and Ghoshal (1998) posit cognitive social capital that refers to “shared representations, interpretations, and systems of meaning among parties” that enable individuals within the network to make sense of information and to classify it into perceptual categories. It facilitates the exchange of information that allows individuals to share each other’s thinking processes. Shared goals can motivate team members to share knowledge and cooperate with each other (Arnett and Badrinarayanan, 2005).

Some schools of thought assert that the cognition is imperative in relation to the fundamental rationale of bounded rationality in group thinking and action. Because people observe, interpret and evaluate the world according to their categories or mental frameworks of perception, interpretation and evaluation (Davis and Thompson, 1994). Humans are rationale; therefore, expectation, belief, self perception, goals, and intentions derive give shape and direction to their behavior (Bandura, 1986). Uphoff (1999) pointed out that the cognitive category of social capital derived from mental processes and resulting ideas, attitudes, and beliefs that contribute cooperative behavior and mutually beneficial collective action.

According to Inkpen and Tsang, 2005, they argued that the cognitive stems from different mental models. In order to motivate individuals to share knowledge, members’ cognition would help in the achievement of this knowledge, welding processes to a great extent. Shared visions and goals can act as a bonding mechanism between network members. These bonding mechanisms allow members within a network to feel comfortable sharing resources and knowledge.

Within the organizational context, members can contribute more effectively when they understand how their work fits with the organization’s vision, mission, and goals. Organizational motivation may increase levels of employee participation in knowledge sharing (Kollock, 1998). However, an increased sense of group identity
and attitude can better create knowledge sharing in organizations (Grant, 1996; Kogut and Zander, 1992; Spender, 1996). Gagné (2009) found that cognitive social capital is positively related to having positive attitudes toward knowledge sharing.

In social cognitive theory, Bandura (1986) believes that self-regulation of motivation and performance attainments are governed by self-regulatory mechanisms. Cognitive psychology explains the central role in this regulatory mental process that works through people’s beliefs in their personal efficacy. People believe in their capabilities to mobilize the motivation, cognitive resources, and courses of action needed to exercise control over events in their lives. People with the same skills may perform poorly, adequately, or extraordinarily, depending on whether their self-beliefs of efficacy enhance or impair their motivation and problem-solving efforts. Performance success strengthens self-beliefs in capability; failures create self-doubts.

Bandura (1989) asserts that human self-direction and self-motivation operate partly through people’s internal standards and their evaluation of their own behavior. People seek self-satisfactions by adopting goals and evaluating one’s progress in relation to goals. Goals can improve individuals’ psychological well-being and accomplishments in terms of providing a sense of purpose and direction, guiding and motivating performance as well as helping to build people’s beliefs in their capabilities. Thus, he postulates that perceived self-efficacy enhances organizational performance.

The cognitive dimension of social capital, described by Nahapiet and Ghoshal (1998), means that as human interacts with one another as part of a collective, they are able to develop a common set of goals and a shared vision for the organization. In addition, Coleman (1990) has affirmed that shared visions and goals, and the collectively-held values that underlie them, help to promote integration and create a sense of shared responsibility and collective action. Shared goals are the extent to which team members share a common understating of achievement of group tasks and outcomes (Inkpen and Tsang, 2005). The cognitive dimension reflects the degree to which team members are committed to defined and accepted goals. Shared values can be considered the key elements of high performance organizations and teams, while the members of the organization bring their best efforts to its success and are committed to it.
The key facet of the cognitive dimension is considered as shared vision and shared goals (Chui, Hsu, and Wang, 2006). Nahapiet and Ghoshal’s as well as Tsai and Ghoshal’s models explain the concept of cognitive social capital as the shared vision and shared goals of members in the organization. Shared vision is defined as members in the organization that are enthusiastic about pursuing the organizational vision, including members sharing the same ambition at work. Sharing goals means that members are enthusiastic about pursuing the collective goal, enthusiastic about pursuing the mission and they know what and how to achieve important work.

Previous studies were thoroughly reviewed, and they give a picture of cognitive social capital as the primary variable, called the exogenous latent variable, as the causal factor influenced to other factors in the model. Cognitive social capital is the latent variable that is related to a set of manifest variables, as discussed below.

Shared vision means the conception of a person seeing him or her as one of the individuals in the group (Nahapiet and Ghoshal, 1998). Tsai and Ghoshal (1998) noted that a shared vision embodies the collective goals (Naghavi, Salavati, and Mavahe, 2011) and aspirations of the members of an organization in proper ways of acting in a social system. Employees view themselves as partners in charting the direction of the organization (Sinkula, Baker, and Noordewier, 1997) and future achievements (Chen, Chang, and Hung, 2007).

When the organization’s members have the same perceptions about how to interact with one another, they can avoid possible misunderstandings in their communications and have more opportunities to exchange their ideas, information, or resources freely. An organization’s members that share a vision will be more likely to become partners—sharing, exchanging, integrating, and combing resources (Darvish and Nikbakhsh, 2010), helping others solve their professional problems and providing a better way to meet organizational missions and goals (Chiu, Hsu, and Wang, 2006).

Hoe and McShane (2002) defined shared vision as a clear, common, specific picture of a truly-desired future state, one that creates a sense of support and inspires people with a compelling common identity and sense of purpose. Members who shared the same picture to organization, they prioritized important work.

A shared vision can be defined as the capability to perceive and interpret information, to formulate problems, to generate alternative solutions, to define the
decision making process, and to reach a consensus (Watson, Kumar, and Michaelsen, 1993; Janssen, Vliert, and Veenstra, 1999; Kilduff, Angelma, and Mehra, 2000 quoted in Fernandez and Gardey, 2010).

Cognitive social capital can be defined in terms of shared goals. For example, shared goals can be seen as the degree to which one has collective goals, missions, and visions that are similar to those of others (Wong, Wong, Hui, and Law, 2001). With shared goals, members in the community can cooperate in actions aimed at a common destination and for the final benefit of the organization (Cohen and Prusak, 2001); the individuals then work together as a team, supporting and encouraging each other.

Shared goals are the primary dimension of cognitive capital. The goals are shared when members of a network share a common understanding and approach to achievement of network tasks and outcomes (Inkpen and Tsang, 2005). Shared goals can be considered the force that hold people together and let them share what their willing to contribute their efforts to achieve goals. The ability of people to work together for common purposes in groups and organizations consists of a certain set of informal values and norms shared among members of a group that permit cooperation among them (Fukuyama, 1995, 1997). A shared goal can be viewed as the mutual responsibilities or bonding mechanism that help different parts of a network integrate and share knowledge in order to reach the goals (Anderson, 1990, Schnake and Cochran, 1985). With collective goals, organization members tend to believe that other employee’s self-interest will not affect them adversely and they all contribute their efforts to help achieve their mutual goals (Chow and Chan, 2008).

When there is a total agreement on the organization’s vision across all levels, functions and divisions, all employees are committed to the goals of the organization. They view themselves as partners in changing the direction of the business unit and there is a commonality of purpose in such organization (Ma’atoofi and Tajeddini, 2010). Shared goals can be seen in terms of the mission that members in the organization want to accomplish; members in the organization for example concentrate on achieving its mission, values, and objectives. An organization’s members agree on what is important at work, and members are enthusiastic about
pursuing the collective goals and mission of the whole organization (Chow and Chan, 2008).

From the literature review, it can be concluded that a shared vision embodies the collective goals and aspirations of the members of an organization, members are enthusiastic about pursuing the organization’s vision (Chen, Chang, and Hung, 2007; Inkpen and Tsang, 2005; Nahapiet and Ghoshal, 1998, and members share the same ambition at work (Darvish and Nikbakhsh, 2010; Tsai and Ghoshal, 1998). Shared goals represent the force that hold people together and let them share what they are willing to contribute in terms of efforts to achieve goals (Inkpen and Tsang, 2005).

Members in the organization are enthusiastic about pursuing the collective goals. The members are working toward the specific goals, and demonstrate a commitment to the values and beliefs that guide to collaboration. When a shared goal is present in the network, members have the same enthusiasm about pursuing the mission (Chow and Chan, 2008; Wong, Wong, Hui, and Law, 2001); thus, it can encourage members to agree on what is important for work (Chow and Chan, 2008). Cognitive scientists have confirmed shared vision and goals play a remarkable powerful, performance-driving function.

2.3 Structural Social Capital

Individuals interact with one another as part of a collective; they are better able to develop a common set of goals, and shared vision for the organization (Coleman, 1990). Leena and Van Buren (1999) explain the phenomenon associability and conclude that the cognitive aspect is reinforcing the structural and relational components of social capital. People, who share the same mental models about their work, are also more likely to interact with one another resulting to the strong ties (Mohammed and Dumville, 2001).

Leena and Pil (2006) stated that the structural social capital refers to the connecting among actors with whom and with what frequency they share information. The organization can be viewed as a social network. Social network theory defines society as built up of individuals in various forms, with weak and strength ties. A number of researches has confirmed that strong social ties provide firms with access
and resources, such as knowledge to reduce costs (Bonner, Kim, and Cavusgil, 2005; Luo, 2003). Strong social ties allow the flow of valuable information or knowledge into the actors to behave proactively and innovatively regarding the firms (Luo, 2003; Walter, Auer and Ritter, 2006). This flow of knowledge may take the form of information and know how, skills, management capabilities, and market knowledge (Kale, Singe and Perlmutter, 2000), which can leverage to improve firm growth and overall firm performance (Bonner, Kim, and Cavusgil, 2005).

The interactions between human thought and the organizational social context can create organizational knowledge. A social tie is also relevant for examining individual action such as knowledge sharing within a collection. Nahapiet and Ghoshal (1998) relied on Granovetter’s (1992) concept of social capital as an integrative framework for understanding the creation and sharing of knowledge in organizations. They argued that organizations have unique advantages for creating knowledge over more open setting.

The literature on social networks suggests that workplace social network ties can be used as a vehicle to transfer important work-based information and knowledge throughout the organization (Levin and Cross, 2004; Marouf, 2007; Sparrowe, Liden, Wayne and Kraimer, 2001). The findings from Laila’s research results (2007) have indicated that the strength of relationships contributes in a significant way to the sharing of public and private knowledge in the organization.

Frequent and close social interactions permit actors to know one another, to share important information, and to create a common point of view. Thus, the social ties interaction network is likely to be perceived as trustworthy by others in the network, and people are willing to share knowledge and information through their social strong ties (Hansen, 1998, 1999).

According to several authors, the strength of the interpersonal connection can also affect how easily knowledge is transferred (Szulanski, 1996; Uzzi, 1997; Hansen, 1999). Strong ties for example can influence the value of knowledge via screening and matching, and their research results also show that the strengths of the firm’s ties can influence the transfer of knowledge and increase the firm’s capabilities (Cohen and Levinthal, 1990; Uzzi and Lancater, 2003).
Uzzi (1997) has asserted that an organization that lacks frequent and extensive communication among members is unlikely to share knowledge, as the weak ties among members in units are unable to share knowledge. The factors that inhibit knowledge sharing include close and frequent interactions between members on the team leading to unit effectiveness because of the time integration of knowledge across individuals.

Mutual benefits can also be seen to create cooperation and relations, as organizations that synergize rapidly and establish new strategic partnerships can experience substantial results. The amount of information sharing is related to the quality of group decisions (Larson, Christensen, Franz and Abbott, 1998). The knowledge sharing by a large proportion of group members should also make each member more aware of other group members’ roles in the team. By sharing with one another, members learn about the responsibilities of each group member. Knowledge of each group’s members’ roles makes task behavior more visible and at the same time clarifies expectations and accountability. If members of networks engage in the sharing knowledge it can enhance the group’s performance (Wagner, 1995).

The performance of firms can be benefit from network ties in the form of access to information and resources and more rapid product development. Cooperative behavior in the organization requires knowledge of an individual’s inclination to cooperate and the contextual stimulation for cooperation. Such cooperation behavior is fundamental to how people deal with interpersonal relationships, how they interact with others, and their openness to the influences that stem from the situation.

Strong networks reduce the transaction costs associated with a business relationship, facilitating the exploitation of profitable actions and making simpler the achievement of economic aims by involved partners (Walker, Kogut, and Shan, 1997). Strong ties allow a firm to develop reliable and effective communication channels with its customers, reducing the uncertainty about economic performance outcomes (Hite 1999; Nohria 1992). Several research findings have revealed the positive impact of social strong ties on performance (Cross and Parker 2004; Cross Borgatti, and Parker, 2001).
This study expects that the strong ties will be positively related to job performance. Specifically, when members exchange and share information as well as knowledge with a larger proportion of other members, the group should benefit in terms of greater cooperation, greater information sharing, a stronger sense of accountability, greater agreement on expectations, and higher engagement in goal attainment.

Repeated and long-lasting relationships between the actors in the network are key characteristics of social networks (Podolny and Page, 1998). Sociologists for example have identified strong ties among members in the networks that they associate with frequently—people establish in-depth connections that reinforce their personal beliefs and provide them with the support required to face life’s challenges; further, people pay more attention to the development of their connections to increase their success. Such ties can be defined as the degree of the support received for the transfer of goods, services, and information, and the level of relational embeddedness and strong social attachment promotes the cohesion among the members in the networks (Kale, Singh, and Perlmutter, 2000; Uzzi, 1996).

In terms of tie strength, literatures amorphous characterize in various ways. However, it can be measured in three areas—interactions, affection, and time spent (Krackhardt, 1992). The literature led the present author to define structural social capital as one of the endogenous latent variables in the model. The measurement of each manifest variable is defined and described below.

According to the social network theories, the strength of ties means that there is a very relationship with members in the organization. In other words, good relationships and good services characterize the tie. (Chiu, Hsu, and Wang, 2006; Krackhardt, 1992; Smith, Collins, and Clark, 2005). Peng and Luo (2000) argued that Guanxi, a good connection and relationship among Chinese firms, affects resources and business information, increases sales growth (Park and Luo, 2001), and improves macro organizational performance.

Another characteristic of strong ties is frequency of interactions (Gilsing and Nooteboom, 2004; Grannovetter, 1973), and the recency of contacts (Lin, Dayton, and Greenwald, 1978). Interaction perhaps represents the frequency of communication among members of the communities (Chiu, Hsu, and Wang, 2006; Leenders, Engelen,
and Kratzer, 2003), the number of times of collaboration (McFadyen and Cannella, 2004), and frequency of participating in meetings and associations (Hansen, 1998, 1999; Landry, Amara, and Lamari 2002). Strong ties are also portrayed in terms of the length of the communication (Chiu, Hsu, and Wang, 2006; Leenders, Van Engelen, and Kratzer, 2003; Reagans and McEvily, 2003).

Krackhardt (1992) has explained that social strong ties can be viewed in terms of affection. He defines affection as the motivation to treat others in positive ways. Strong ties are also portrayed in terms of love and repeated and prolonged interactions among members or parties (Krackhardt, 1992; Uzzi, 1997). The more social interactions are undertaken by exchange partners, the greater the intensity enhances (Larson, 1992; Ring and Van de Ven, 1994).

Krackhardt (1992) also has identified strong ties as close-knit bonding. Reagan and McEvily (2003) argue that the strength of ties is based on closeness. Chiu, Hsu, and Wang (2006) noted that social interaction ties represent close relationships. Strong ties are comprised of interpersonal closeness (Balkundi and Harrison, 2006; Granovetter, 1973; Hansen, 1999; Moran, 2005), the emotional intensity of the contact with the social network (Levin and Cross, 2004; Smith, Collins and Clark, 2005), and intimacy (Easley and Kleinberg, 2010).

In the social networks, strong ties facilitate the information flow (Nahapiet and Ghoshal, 1998; Tsai and Ghoshal, 1998), and members in the networks easily ask for advice from other members (Dakhli and Clercq, 2004). Researchers explain social ties as follows: when members in the organization face a problem, they have opportunities to ask for advice or help from other members (Larson, 1992; Ring and Van de Ven, 1994). Strong ties encourage greater motivation for helping and supporting each other in the networks and normally exhibit easy access. Grannovetter (1982) has explained for example that people that feel insecure in their immediate environment are more likely to resort to the development of social strong ties for protection and the reduction of uncertainty. Affection provides more assistance and support to one another (Seibert, Kraimer, Liden, 2001). A network of advice interactions stems from routine work problems and a network of love in relationships in the firm (Krackhardt, 1992).
Granovetter (1973) proposes that the strength of a tie is probably a linear combination of the amount of time. Several theorists have also explored the idea that strong ties have developed through time (Balkundi and Harrison, 2006; Chiu, Hsu, and Wang, 2006; Granovetter, 1973; Hansen, 1999; McFadyen and Cannella, 2004). Krackhardt (1992) argues for the importance of strong relationships, where people have known each other for a long time and have developed affection for each other. Frequency of organizational meetings as well as participating in the organizational activities increased the strength of ties (Landry, Amara, and Lamari, 2002).

2.4 Relational Social Capital

The third dimension of social capital is relational. Tsai and Ghoshal (1998) asserted that shared vision, the key manifestations of cognitive social capital, may encourage the development of relational social capital. Social interaction ties may inspire trust and perceived trustworthy which represent the relational dimension (Krackhardt, 1992; Nelson, 1989).

Tsai and Ghoshal defined the relational dimension of social capital as assets that are rooted in these relationships, such as trust and trustworthiness. Trust is a characteristic of an association, but trustworthiness is an element of an individual actor engaged in the affiliation (Barney and Hansen, 1994).

Researchers have suggested that trust is one key aspect of the relational social capital and a facilitator of collective action (Coleman, 1990; Fukuyama, 1995). The theme of relational social capital can be linked to work commitment, which refers to the individual accepting an organizational goal and desiring to make efforts for the benefit of the organization (Mowday, Steers, and Porter, 1979). Relationships have often been referred to cooperative advantage. Commitment and trust are key factors in enhancing successful relationships (Morgan and Hunt, 1994). Trust generally is viewed as an essential ingredient for successful relationships (Berry, 1995, Morgan and Hunt, 1994). Similarly, commitment is recognized as an essential ingredient for successful long-term relationships (Dwyer, Schurrm and Oh, 1987; Morgan and Hunt, 1994). The achievements of mutual gain are developed through credible relationships which require such attributes as trust and commitment between partners (Kwon, 2011).
Researchers have asserted that strong ties are typically associated with trust and facilitate the flow of information (Gulati, 1998; Rowley, Behrens and Krackhardt, 2000). Trust plays a key role in the willingness of network actors to share knowledge (Nahapiet and Ghoshal, 1998; Tsai and Ghoshal, 1998). A lack of trust may lead to competitive confusion about whether or not a network firm is an ally (Powell, Koput, and Smith-Doerr, 1996). Trust is process based, in the sense that members regularly test each other’s integrity—as trust develops over time, opportunities for knowledge sharing between network members’ increase, and trust can be analyzed as the fundamental energetic element of networks. Confidence in others is also essential to accepting the value of information, knowledge, referrals, and promises that are supported by the networks (Cross, Borgatti and Parker, 2001; Hansen, 2002; Borgatti and Cross, 2003).

Hausman (2001) proposed that trust and commitment are relationship strength that influences the efficiency of firms. This statement has been empirically supported in a variety of inter-firm relationships (Gilliland and Bello, 2002; Hausman, 2001). Previous scholars show that relational social capital is defined as one of the exogenous latent variables which are comprised of trust and commitment.

Trust stimulates, in particular, people to recognize the quality and the quantity of transferring knowledge and of simultaneously evaluating the outcome of knowledge exchange. From another point of view, trust is not only a necessary condition but also a product of knowledge exchange and sharing (Davenport and Prusak, 1998). Mutual trust among organization members could facilitate knowledge flow thoroughly and transparently within the organization (Nahapiet and Ghoshal, 1998). Additionally, Davenport, Davies and Grimes 1998’s study of collaborative RandD project teams also supports this assertion. They found that mutual trust among team members would help remove the barriers of knowledge communication, enhance the quality and quantity of exchanged knowledge, and promote the efficiency of knowledge communication. People who are easy going tend to be more trustworthy in the network partner (Leena and Van Buren, 1999)

According to Mishra and Morrisey (1990), organizational trust facilitates open communication in organizations, sharing of information, and participation of the employees in decision making and thus increasing their productivity. Realization of
the climate of trust in organizations results in job satisfaction, organizational commitment, clarification of roles, and increase performance.

Trust is the key success factor that impacts banking activity and banking performance (Mukherjee and Nath, 2003). Because of its nature, banking contracts belong to a special type of contract where trust between parties is essential. Argyris (1964) argued that the degree of trust and respect between management and employees has a direct effect on the performance of the organization. A low level of trust or distrust makes employees frustrated and aggressive as they attempt to go outside the rules of management and set inappropriate goals that do not contribute to organizational performance.

Trust is multifaceted and takes a variety of forms, for example, reputation-based trust, where referrals and gossip are used to gauge others. Burt (1992) has acknowledged that “providing a reliable flow of information...is a matter of trust, of confidence in the information passed and the care with which contacts look out for your interests.” A trust relation is less likely to betray each other’s (Krackhardt, 1990; McEvily, Perrone and Zaheer, 2003).

Trust is an important factor for running a business (Greiling, 2007; Zaheer and Venkatraman, 1995). The positive effect of trust on task performance has been proven by Costa, Roe and Taillieu (2001). Their research confirms the importance of trust for the functioning of teams in organizations. Smith and Barclay (1997) show that perceptions of mutual trustworthiness and trusting behaviors were positively related to task performance and mutual satisfaction. Mutual high trust reinforces and escalates exchanges between the parties (Blau, 1964).

Organizations can reduce transaction costs by increasing trust. Members trust in their organization’s possible influence on its effectiveness and efficiency, and trust among groups in the organization is also a key element of the cooperative relationships that enable extra performance (Pierce and Gardner, 2004).

Social exchange arguments also can be used to support the effect of trust propensity to outcomes. According to Rotter (1980), the research result shows that individuals with a high trust propensity would themselves act more in a cooperative, pro-social, and moral manner across contexts and situations. Researchers have tended to support this claim, as higher scores on trust tend to be associated with increased
help offering, and decreased cheating (Rotter, 1980; Stack, 1978; Colquitt, Scott, and LePine, 2007).

Trust between employees and organization facilitates management, effective use of resources, and affects all activities of the organization (Conn, 2004; Cross and Cummings, 2004; Wayne, Shore and Liden, 1997), which is shown as an important factor in the improvement of organizational performance (Jones, 2001; Mayer, Davis, and Schoorman, 1995; Musacco, 2000).

Trust is the expectation that arrives within a community of regular, honest, and cooperatives behavior. This study examines individual trust in the organization. Individual trust captures the interpersonal facets of trust, such as a belief that members will help others out of difficulties, that all members are willing to give a hand in collective goals, the belief that other members will not be harmful to their work or tackling thorny problems, and the belief that everybody will act in line with the aims of the organization and that they would be honest.

Trust reflects an individual’s beliefs in other members’ non-opportunistic behavior, promise keeping, behavior consistency, and trustfulness (Chui, Hsu and Wang, 2006). Trust bears great importance in the establishment of social relations (Yilmaz and Atalay, 2009; Sparito, 2001). In this sense, trust means the willingness of members to be vulnerable to help other members out of difficulties (Mayer, Allen, and Smith, 1993).

According to Fukuyama (1995), trust is the expectation that rises in a society where all the members act in line with the shared norms, regularly, honestly and cooperatively. Trust can be defined as the set of beliefs that the group is well-intentioned, fair, and constructive, and is based on ethical norms (Carnevale and Wechsler, 1992). It is the belief that the organizational members will always try and help other members out if one gets into difficulties (Chow and Chan, 2008).

As Blau (1964) described the trust process, individuals initiate an exchange by making an investment in another party by offering a favor. The others will be motivated to reciprocate their favor with a similar return. Thus, in organizational trust, members are willing to give a hand when others need it (Chow and Chan, 2008).

Trust can be viewed as an agreement between person, group, or organization and another person confirming that they would keep his rights safe in economical and
social exchange (Hosmer, 1995; Brown, Erwin, Petkov, 2006). Mayer, Allen, and Smith (1993) proposed that trust is the expectation that the other party’s act can have important results. According to Leena and Van Buren (1999), trust means the belief in and acceptance of the ability of individuals to contribute their efforts to helping others collectively.

Trust can be viewed in relation to the organizational culture, one that encourages people to engage in solving problems and making the job easier. Certain environmental conditions allow a person to reliably expect to be able to obtain and use the resources made available through his or her contacts (Gambetta, 1988; Ring and Van de Ven, 1994; McAllister, 1995; Nahapiet and Ghoshal, 1998). Mutual trust among members means that other members will not cause harm in their work (Chow and Chan, 2008). Luhmann (1979) cited in Yilmaz and Atalay (2009) states that trust can be viewed as the belief of a person that the acts of the other consider his or her own good.

Gabarro (1978) bases the concepts of trust on the openness in the behavior of two people against each other because of several reasons. The reasons are explained that the other person does not have any ill intentions and acts considerably, not capriciously. Mooradian, Renzi and Matzler (2006), and Wekselberg (1996) defined trust as the belief that other party is willing to act in a way that would not cause any trouble or create any risk for him. Gilbert and Tang (1998) note the belief that everybody would act in line with the aims of the organization and they would be honest. Trust seems to include the idea that a person like oneself is less likely to engage in betrayal (Moran, 2005). Additionally, trust is the belief that most people are sincere, fair, and have good intentions (Mooradian, Renzi and Matzler, 2006), and other parties are willing to act in a way that would not cause any trouble or create any risk for him/her (Wekselberg, 1996). In addition, Gilbert and Tang (1998) characterized trust as the belief that everybody would act in line with the aims of the organization and they would be honest with others.

Trust in the firm is the positive expectations of an employee about the applications and policies of the organization, even in risky situations, and the support of the organization (Lewicki and McAllister 1998; Yilmaz, 2008). Employees trust in the organization when they have heard that it has benefits to them (Clegg, Pitsis,
Rura-Polley, and Marosszeky 2002). Organizational trust increases employees’ self-assurance and erases their fear of the rules of the organization (Humprey, 1995; Rehfeld, 2001). According to Sashkin and Burke (1990), trust is the employees’ belief in the administration, which makes them fulfill all the orders without questioning.

Relational social capital can be defined as commitment to organization. Commitment refers to a psychological state the binds the individual to the organization (Allen and Meyer, 1991). Affective commitment is a mindset of the employee that is affectively committed to strongly identifying with the goals of the organization and desires to remain a part of it. Committed employees are willing to put in a great deal of effort that goes beyond normal expectations to help the organization to succeed. As Meyer and Allen (1997) argue, affective commitment is positively related to individuals’ willingness to commit extra effort to their work, and this is the kind of commitment that can be expected to be related to the willingness to donate and receive knowledge.

Hinds and Pfeffer (2003) sum up that that the individuals that are more committed to the organization, and have more trust in both management and coworkers, are more likely to share their knowledge. A number of research studies have specifically investigated the relationship between commitment and knowledge sharing and confirm affective commitment as an important variable in explaining knowledge sharing (Hislop, 2003; Hoff and Weena, 2004; Jarvenpa and Staples, 2001; Kelloway and Barling, 2000; Scarbrough, 1999; Smith and McKeen, 2002). These literatures lead us to expect that affective commitment positively influences the extent to which people share their knowledge. Based on these studies, a model is presented in which affective commitment is positively related to knowledge sharing. The conceptual model also supported by Smith and McKeen (2002) that commitment to the organization is an important part of a knowledge-sharing culture.

It is commonly believed that committed employees will also work harder and be more likely to “go to the extra mile” to achieve the organizational performance and objectives. Kanter (1968) views organizational commitment as the willingness of workers to devote energy and loyalty to an organization. Buchanan (1974) conceptualizes commitment as a partisan, affective attachment to the goals and values of the organization, to one role in relation to the goals and values, and to the
organization for its own sake. Porter, Crampon and Smith (1976) identify organization commitment as the relative strength of an individual’s identification with involvement in a particular organization (Mowday, Steers, and Porter 1979).

Meyer et al. (1993) and Baugh and Roberts (1994) found that committed employees had high expectations of their performance and therefore they performed better. Committed employees give a big contribution to organizations because they perform and behave in achieving the organizations' goals. Committed employees are proud and happy to say that they are members of the organization, and people that are committed to their organization believe in it and feel good about it; they do the best for the organization (George and Jones, 1996).

Affective commitment has been most strongly linked to positive work-related behaviors (Meyer, Stanley, Herscovitch and Toponosky, 2002; Coleman, Irving, and Cooper, 1999. Varieties of research indicate that there is an obvious link between the affective commitment of an employee and his or her job performance (Ali, Karamat, Noreen, Khurram, Chauadary, Nadeem, Jamshaid, and Farman 2011; Chen, Silverthrone and Hung, 2006; Clarke 2006; Cohen, 1996; Sinclair, Tucker, Cullen, and Wright, 2005; Dunham, Grube and Castaneda, 1994; Khan, Ziauddin, Jam and Ramay 2010; Rashid, Sambasvani and Joari, 2003; Shore, Barksdale and Shore, 1995; Suliman and Lles, 2000).

Although Allen and Meyer provided three types of commitment measurement, this study deploys only the affective commitment to measure an employee’s attachment to the GSB and the bank’s goals. Finegan (2000) claimed that each type of commitment produces effects differently and separately. Researchers also confirm that three types of commitment are distinguishable from each other. Each facet of commitment is exclusive and can be used to clarify the commitment of the employee within the organization (Bergmann, Lester, De Meuse and Grahn, 2000; Meyer et al, 2002; Meyer and Allen, 2004).

In conclusion, relational social capital concludes trust (Gulati, 1998; Rowley, Behrens, and Krackhardt, 2000) and trustworthy (Chui, Hsu, and Wang, 2006; Cross, Borgatti, and Parker, 2001; Hansen, 2002; Borgatti and Cross, 2003) among members in the network, and member’s trust in organization (Nahapiet and Ghoshal, 1998), and

2.5 Knowledge Sharing

Authors’ points out the types of social capital are enabling the sharing of different kinds of knowledge (Adler and Kwon, 2002; Coleman, 1988; Fukuyama, 1995; Hazleton and Kennab, 2000, Inkpen and Tsang, 2005). Knowledge sharing comprises a set of shared understandings related to providing employees with access to relevant information and building and using knowledge networks within the organization (Hoegl, Parboteeah and Munson, 2003). Knowledge sharing can occur at individual and organizational levels (Calantone, Cavusgil, and Zhao 2002; Scarbourough, 2003). However, this study aims to highlight the individual level.

Knowledge sharing refers to the activities of transferring or disseminating from one person, group organization to another (Lee, 2001). Knowledge sharing is similar to knowledge transfer, but the “sharing” term often refers to the exchange of knowledge that does not have a clear objective and does not require knowledge utilization as with knowledge transfer (King and Marks, 2004). Although person-to-person transfer may be relatively inefficient, it can be very effective when the objective and intended use of the transfer is clear (Zainol and Zaki, 2010).

Knowledge sharing involves a set of behaviors that aid in the exchange of acquired knowledge (Chow and Chan, 2008). Many theories have shown statistically various determinants that influence knowledge sharing in the organization (Bock and Kim, 2002; Ramasamy, Goh and Yeung, 2006; Wong, Wong, Hui, Law, 2001). Many authors have also theorized that social capital contributes to knowledge sharing and that knowledge sharing also is one of the key benefits of firm performance (Gulati, 1998; Sandefur and Laumann, 1998). A growing number of studies show that knowledge sharing has contributed positively to firm performance (Abrams, Cross and Levin, 2003; Cumming, 2004; Gupta and Govindarajan, 2000; Hansen, 1999; Kulp, Lee, and Ofek, 2004; Spencer, 2003).

Knowledge sharing can be explained as attitudes; or willingness to donate, and receive information. Knowledge is about beliefs, values, and commitment (Nonaka
and Takeuchi, 1995). Here knowledge sharing is defined as one of the endogenous latent variables.

A firm can successfully promote a knowledge-sharing culture by changing employees’ attitudes and behaviors to promote willing and consistent knowledge sharing (Connelly and Kelloway, 2003; Lin and Lee, 2004). Chow and Chan (2008) characterize knowledge sharing as the degree of one’s favorable, perceived as important thing, and the belief in sharing.

As Meyer and Allen (1997) argue, affective commitment is positively related to individuals’ willingness to commit extra effort to their work, and this is the kind of commitment that can be expected to be related to the willingness to donate and receive the knowledge. Willingness and eagerness are attitudes of people toward knowledge sharing.

Willingness implies a positive attitude to other members of a group, a readiness to reply to colleagues kindly. De Vries, Van den Hooff, and Ridder (2006) argue that actors are willing to provide access to their personal knowledge, but they expect others to behave similarly. Members of a group will not begin to actively share their knowledge if they are not sure whether others are also willing to contribute to the group.

Knowledge sharing is the group norm of reciprocity (Coleman, 1988, Putnum, 1993). The collectivism norm salient within the social structure can create a successful public good in the form of shared intellectual capital (Nahapiet and Ghoshal, 1998). Thus, group norms result in personal attitude willingness.

Eagerness, as well, implies a positive attitude to actively show knowledge about a certain subject. Van den Hooff, De Ridder and Aukema (2004) define it as the extent to which an individual has a strong internal drive to communicate his or her individual intellectual capital to other group members. An actor that is willing to contribute knowledge will disburse his or her knowledge to others. People are eager to let others know what they know because they themselves consider it valuable and expect their individual knowledge to be appropriated by others (De Vries, van den Hooff, and de Ridder, 2006).

Wasko and Faraj (2005) suggest that employees are motivated when they think that knowledge sharing behaviors will be worth the effort and are able to help
others. Therefore, the expectation of individual benefits can encourage employees to share knowledge with colleagues. As Hall (2001) has argued, people are more willing to share their knowledge if they are convinced that doing so is useful—if they have the feeling that they share their knowledge in an environment where doing so is appreciated and where their knowledge will actually be used.

Personal attitude towards the willingness and eagerness to share knowledge will not be effective if the actors do not act in reality. Knowledge sharing success depends on behavioral factors (Ismail and Chue, 2005). This study focuses on individual behavior as a mechanism that creates knowledge sharing effectiveness.

Knowledge sharing refers to the disbursement of one’s’ knowledge and experience affected to others. It is manifested that change in the knowledge sharing in organization can be measured changes in performance (Argote, Ingram, 2000). This definition implies that the knowledge sharing behavior consists of both bringing and getting knowledge. Ardichvill, Page and Wentling (2003) note that knowledge sharing consists of both the supply and demand of new knowledge. Other researchers have made a distinction between similar processes, but mostly in terms of one active and one more passive process (De Leeuw van Weenen, 2002). Van der Rijt (2002) made a distinction between donating and receiving information, active donor and passive receiver (Olernkamp, 2001) or donating knowledge and collecting knowledge (Van den Hooff and Van Weena, 2004).

According to Van den Hooff and De Ridder (2004), knowledge donating is defined as “communication based upon an individual’s own wish to transfer intellectual capital” and knowledge collecting as “attempting to persuade others to share what they know.” Consequently, these two distinct processes are active in the sense that one is either engaged in active communication with others for the purpose of transferring knowledge, or consulting others in order to gain some access to their intellectual capital (Hooff and Weena, 2004).

Davenport and Prusak (1998) indicated that knowledge is personal, and that the willingness to contribute knowledge to colleagues has just begun to be seen as effective in the management of the knowledge resources in the organization. The purpose of contributing knowledge is that it becomes collective knowledge for the
organization over time, and a record of the stock of knowledge can be maintained and made available to the organization.

Knowledge sharing can be distinguished as the collection of knowledge. Lin (2007) argues for example that knowledge collecting consists of the processes and mechanisms of gathering information and knowledge from internal and external sources. The process of knowledge collecting in which organizational knowledge becomes group and individual knowledge involves the internalization and socialization of knowledge.

Knowledge collecting represents a key aspect of a successful project (Hansen, 1999), and improves performance (Jantunen, 2005). A firm with proficiency in gathering and integrating knowledge is more likely to be unique, rare, and difficult for rivals to replicate, and hence has the potential to sustain and perform well. This study expects that the employee that both donates and collects knowledge to and from colleagues respectively is likely to perform well and make the organization better in terms of long-run competitiveness.

Most theorists advocate that successful knowledge management could be obtained through organizational culture and behavior (Davenport and Prusak, 2000), suitable technology (Lee and Ahn, 2007), and the reward system. However, the research results show that there is no relationship between rewards and knowledge sharing (Bock and Kim, 2002; Kohn, 1993). In fact, the individual plays significant role in knowledge sharing (Constant, Kiesler and Sproull., 1994; Goodman and Darr, 1998; Hansen, 1999; Jarvenpaa and Staples, 2001; Lee and Ahn, 2007; Nonaka and Takeuchi, 1995). Individuals can be satisfied with the confidence in their ability to contribute to the organization or to help others (Constant et al., 1994; Kankanahalli et al., 2005).

According to the Theory of Reasoned Action (Fishbein and Ajzen, 1975), human beings are usually quite rational and make systematic use of the information available to them. A person’s performance of a specified behavior is determined by his behavioral intention to perform the behavior. The intention is jointly determined by the person’s attitude toward the behavior. The person’s belief in the behavior leads to certain outcomes and his/her evaluations of these outcomes.

While economic exchange theory concerns extrinsic benefits, social exchange theory concerns intrinsic rewards (Blau, 1964). On the other hand, the benefits
involved in social exchange tend to engender feelings of personal obligation, gratitude, and trust. Participation enhances a person’s personal reputation in the network. Members attempt to maintain their reputation because it is an important asset to guarantee that one is valued within collective or organization (Jones, Hesterly and Borgarri, 1997).

This study follows Nahapiet and Ghoshal’s model for explaining the individual’s attitude toward knowledge sharing. The study expects that people that have intentions to render their knowledge would seem to mainly foster a sense of social exchange relationship. Knowledge sharing is a very individualistic behavior. Knowledge sharing allows employees to experience a large scope and depth of association in the organization, and employees that associate to a great extent among organizational members tend to have positive attitudes toward knowledge sharing.

Knowledge sharing, in this study, incorporates three main themes: attitude of sharing (Coleman, 1988, Hall, 2001; Ismail and Chue, 2005; Nahapiet and Ghoshal, 1998; Putnum, 1993; Wasko and Faraj, 2005), willingness to donate knowledge (Ardichvill, Page and Wentling, 2003; Argote, Ingram, 2000; De Leeuw van Weenen, 2002; Van den Hooff, De Ridder and Aukema, 2004; Van der Rijt, 2002), willingness to collect knowledge (Ardichvill, Page and Wentling, 2003; Argote, Ingram, 2000; De Leeuw van Weenen, 2002; Van den Hooff, De Ridder, and Aukema, 2004; Van der Rijt, 2002).

2.6 Organizational Performance

The concept of organizational performance has been defined in different moments by the specialized theorists. In academic, the school achievement is represented by an average of school grade; while the university performance is benchmarked with research performance. In business, organizational performance is traditionally assessed by accounting statements, especially the profit and loss statement. Organization performance is a comparative analysis of performance and goal settings. Generally, there are various measurements analyzed: financial performance, market performance, shareholder value performance, and production capacity performance.
Organizational performance and effectiveness are most often used and related issues. Although the study of organizational performance has been widespread with challenges for decades, it still remains an important topic for the academic studies. The challenges take account of the lack of consensus in defining organizational effectiveness and determining what dimensions of performance should be measured and how they should be measured.

According to the classical organizational theorists, Fayol (1916), Gulick (2004, 1937), Taylor (2004, 1912) and Weber (2004, 1922) tried to analyze organizational effectiveness in terms of the efficiency that resulted from the implementation of principles of management. The greatest contributions to organizational theories focused on task performance. Since then, copious theories, concepts, and frameworks have been proposed in the continuing discussion.

During 1950s, the General Electric Company, a multi-national corporation, developed and incorporated a set of performance measurements for its departments such as short-term profitability, market share, productivity, product leadership, personnel development, employee attitudes, public responsibility, balance between short-range objectives and long-range goals.

Organizational performances indicators are constructed via the experiences people regular encounter those organizations. The corresponding tools have been developed and considered a wide range of indicators which are believed to drive organizational performance. In 1990s, one of the most popular measurements has been developed by the Harvard Business School called the balanced scorecard. At that time, a similar approach was built up by the European Foundation for Quality Management as well.

It has been accepted that the balanced scorecard procedure is a high quality instrument for structuring an array of performance measures. It links between the espoused strategies of an organization and the performance measures. It measures, monitors, and controls in four major areas (financial, customer, business process, and innovation and learning) which organizational performance measures are to be devised. This specific approach requires a focus on “the key success factors” that are believed to generate enough performance measures.
From literature reviews, organizational performance or effectiveness are described as goal accomplishments (Barnard, 1938; Ezioni, 1964; Price, 1968; Hall, 1978), ability to acquire resources from its environments (Georgopolous and Tannenbaum, 1957; Yuchtman, and Seashore, 1967; Katz and Khan, 1965), balanced scorecard (Kaplan and Norton, 1992).

As described earlier, organizational performance is one of the most important criteria for measuring organizational outcomes and success. Campbell, McHenry and Wise (1990) define performance as the observable things people do that are relevant for the goals of the organization. Therefore, organizational performance is multidimensional; there is not one outcome, one factor or one anything that can be pointed to and labeled as job performance.

Organizations always make investment to develop and improve their employee effectiveness. By measuring performance how well one performs in his or her job depends on several factors such as goal settings in terms of financial indicators, the personality, the general cognitive ability, the job involvement, and the environment of work. As well, the job performances of the overall branch managers in this study are also multidimensional factors. The GSB utilizes the performance appraisal system to measure its staff performance and effectiveness. The performance appraisal report contains many elements; however, it can be separated into two parts—the first section consists of a number of operating goals; and the latter is organizational citizenship behavior. The proportion of value weighting is 70:30. This means that the bank pays more attention to the branch manager in reaching the operating goals than the behavior. The study uses the operating goals as the end result to measure performance because the bank’s measurements are easily perceived as being measurable and not ambiguous as with the concepts of personality, sportsmanship, altruism, courtesy, consciousness, and other subjective factors, which can be argued.

The first part of the performance appraisal is the operating goal, which is measured in terms of financial performance. Similar to most organizations, a good financial performance is the key driver. It is an objective measure for assessing how well an organization performs its daily activities and operations and how it is able to
generate revenues. It is an indicator of the general financial health of the organization over a given period of time.

The branch manager is expected to be deeply engaged in the bank’s performance, and he/she is appraised according to a systematic and periodic process that assesses job performance and productivity in relation to certain pre-established criteria and organizational objectives. The goal set of each branch varies depending on economic factors. For example, the goal setting in the Bangkok metropolitan is actually higher than in the regions. Of course, the provincial branches are more accountable than the district branches. Goal settings among branches are freely negotiated.

As mentioned above, this study focuses on the job performance of the branch manager. According to the bank performance appraisal system, each branch manager reports his or her operating performance to the bank every month and quarterly. At the end of the year, the branch performance is rated, ranked, and appraised by his or her supervisors in terms of percentage compared to the goal set.

A rating point system is used for job performance. The performance in this study was depicted as the dependent variable. In terms of the structural equation model (SEM), it is so-called the purely endogenous variable, which is entirely determined by the states of other variables in the system.

The main idea of this research is to link the social capital concept with the mediating connections of knowledge sharing to performance. It is reasonable to think that differences in financial performance factors are influenced by the linkages of social capital; as well as the impact of knowledge sharing.

Exogenous and endogenous variables of the model are presented in Table 2.1. A set of variables are constructed to observe and measure the factors.
Table 2.1 Exogenous and Endogenous Variables

<table>
<thead>
<tr>
<th>Latent Variables</th>
<th>Manifest Variables</th>
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<tbody>
<tr>
<td><strong>Exogenous variable</strong></td>
<td>1. Understand organizational vision (Cohen, 1990; Nahapiet and Ghoshal, 1998)</td>
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<td></td>
<td>3. Enthusiastic (Nahapiet and Ghoshal, 1998; Tsai and Ghoshal, 1998; Chen, Chang, and Hung, 2007)</td>
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<td></td>
<td>4. Plan to achieve goal (Chow, and Chan, 2008; Fukuyama, 1995, 1997; Inkpen and Tsang, 2005)</td>
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<td></td>
<td>5. Goal challenge (Naghavi, Salavati, and Mayahed, 2011)</td>
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<td></td>
<td>7. Prioritized important work (Hoe and McShare, 2002; Kilduff, Angelma, and Meha, 2000)</td>
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<tr>
<td></td>
<td>8. Deploy organization mission (Cohen and Prusam, 2001; Ma’atooﬁ and Tajeddini, 2010; Wong, Wong, Hui, and Law, 2001)</td>
</tr>
<tr>
<td><strong>Endogenous Variables</strong></td>
<td></td>
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<tr>
<td></td>
<td>3. Willingness to work with others (Cohen and Levinthal, 1990; Uzzi and Lancater, 2003)</td>
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<tr>
<td></td>
<td>4. Willingness to support others (Wager, 1995; Walker, Kogut, and Shan, 1997)</td>
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<tr>
<td></td>
<td>5. Willingness to serve others (Cross and Parker, 2004; Cross, Borgetti, and Parker, 2001; Grannovetter, 1992)</td>
</tr>
<tr>
<td>Latent Variables</td>
<td>Manifest Variables</td>
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<td>--------------------------</td>
<td>-------------------------------------------------------------------------------------</td>
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<tr>
<td>- Structural Social Capital (cont.)</td>
<td>6. Ability to help people (Grannovetter, 1992)</td>
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<tr>
<td></td>
<td>7. Willingness to work with others (Levin and Cross, 2004; Sparrowe, Linden, Wayne, and Kraimer, 2001)</td>
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<td></td>
<td>8. Willingness to support others (Levin and Cross, 2004; Sparrowe, Linden, Wayne, and Kraimer, 2001)</td>
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<tr>
<td></td>
<td>9. Willingness to serve others (Levin and Cross, 2004; Sparrowe, Linden, Wayne, and Kraimer, 2001)</td>
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<tr>
<td></td>
<td>2. Be trustworthy (Chui, Hsu, and Wang, 2006; Cross, Borgatti, and Parker, 2001; Hansen, 2002; Borgatti and Cross, 2003)</td>
</tr>
<tr>
<td></td>
<td>3. Easy going (Leena and van Buren, 1999; Pierce and Gardner, 2004; Rotter, 1980)</td>
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<td></td>
<td>5. Trust in organization (Mishra and Morrissey (1990; Nahapiet and Ghoshal, 1998)</td>
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</table>
Table 2.1 (Continued)

<table>
<thead>
<tr>
<th>Latent Variables</th>
<th>Manifest Variables</th>
</tr>
</thead>
</table>
| Knowledge sharing (KSHARING) | 1. Attitude of sharing (Coleman, 1988, Hall (2001; Ismail and Chue, 2005; Nahapiet and Ghoshal, 1998; Putnum, 1993; Wasko and Faraj, 2005)  
2. Willingness to donate knowledge (Ardichvill, Page, and Wentling, 2003; Argote, Ingram, 2000; De Leeuw van Weenen, 2002; Van den Hooff, De Ridder, and Aukema, 2004; Van der Rijt, 2002)  
3. Willingness to collect knowledge (Ardichvill, Page, and Wentling, 2003; Argote, Ingram, 2000; De Leeuw van Weenen, 2002; Van den Hooff, De Ridder, and Aukema, 2004; Van der Rijt, 2002) |
| Performance (PERFORM) | Performance appraisal result from bank’s KPIs obtained from bank data (Kaplan and Norton, 2000) |

The literature supports the conceptual model of this study; however, it is challenging to observe whether social capital and knowledge sharing influence organizational performance in different contexts and whether it can be applied to the Thai context, especially to the bank being discussed here or not. The results from the data collection will be processed to confirm the theories. The current study hypothesizes that cognitive social capital is exogenous factor and produces the positive effects on structural social capital, relational social capital, knowledge sharing, and performance. The next hypothesis is structural social capital is positive influenced on rational social capital, knowledge sharing, and performance. As the results, relational social capital has positive relation to knowledge sharing and performance as well. Finally, knowledge sharing is positive effect to performance.
The relationships among the variables mentioned above are depicted by means of the Amos scheme. In general, the structural equation models are schematically portrayed using the particular configurations of four symbols. Circles or ellipses represent observed latent factors, squares or rectangles represent observed variables, single-headed arrows represent the impact of one variable on another, and double-headed arrows represent the covariance or correlations between pairs of variables. All of the variables in this model were derived from various literatures for answering the research objectives. This proposed model was developed and theories were tested for these relationships. The model summarized in Figure 2.1 is an integration of the linkages of social capital selected because of their applicability to understanding a specific aspect of the knowledge sharing which affects its performance.

2.7 Summary

The conceptual model shows that organizational performance depends on knowledge sharing and the linkages of social capital, which are relational, structural, and cognitive. In addition, knowledge sharing is influenced by the three types of social capital. Additionally, relational social capital depends on structural social capital and cognitive social capital, where structural social capital is influenced by cognitive social capital.

In building the particular model, four configurations are shown in the analytical process:

1) The path coefficient for the regression of the observed variable onto the unobserved latent variable,

2) The path coefficient for regression of one factor onto another factor,

3) Measurement error associated with observed variables, and

4) Residual error in the prediction of unobserved factor.
As noted earlier, the schematic representations of models or path diagrams provide a visual portrayal of the relations which are assumed to hold among the variables according to the literature. The results and discussion of this model are presented in chapter 4 and 5. The next chapter describes the methodology of the study.
CHAPTER 3

RESEARCH METHODOLOGY

As reviewed in the previous chapters, the conceptual framework and path diagram were developed. This chapter addresses the approach to the study. It provides an explanation of the research methodology used to conduct this study. The steps of quantitative method are used as follows:

3.1 Research design
3.2 Sampling Design
3.3 Operational definition
3.4 Tools
3.5 Variables and measurement
3.6 Data collection procedures
3.7 Data analysis
3.8 Conclusion

3.1 Research Design

This research adopted a quantitative method by using a cross-sectional design on the Government Savings Bank, which is an old, large and complex organization, comparing members in different areas. Generally, the main task of a cross-sectional approach is to compare the examinees concerning different characteristics, and to allow researchers to explore the relationships among variables as they naturally occur without any manipulation of the situation. Payne, Moore, Griffis and Autry (2010) found that most empirical studies on social capital utilized a cross-sectional approach. Thus, a cross-sectional study is the best way to determine prevalence and is useful in identifying the associations that can then be more rigorously studied using a cohort study or randomized controlled study. It was assumed that this study responded to these advantages. This study was not respond to longitudinal studies, which require
enormous amounts of time and are often quite expensive, and sometimes participants drop out of the study, shrinking and decreasing the data collected.

Within the quantitative framework, the structured rank scale questionnaire survey tool is used to measure social capital and knowledge sharing. Members in the branch, considered as the basic unit of social capital accumulation, were asked to rate items in the questionnaire. Generally, the personal cognitive, social structure ties, and social relations emerge because social norms are enforced to shape the behavior of members in the organization. Although respondents were asked individually, social capital was apprehended as accumulations from individual to branch. Thus, individual rating scales were calculated to represent the overall picture of branch.

In the social capital literature, Burt (1992) defined social capital at the individual level of analysis as the friends, colleagues, and more general contacts through which one receive opportunities to use his or her financial and human capital. Coleman’s (1988) work concerns social capital as a resource for persons. Kilby (2002) states that social capital exists within levels or scales as one feels that he or she belong to family, community, profession, country, etc. At the same time, Adler and Kwon (2002) support this, stating that social capital's sources lie in the social structure within which the actor is located. The literature suggests that the tools needed to measure social capital at the level of the employed individual are very different from those needed to measure social capital at the level of households, communities, organizations, or countries (Kassa and Parts. 2008; Lillbacka, 2008).

Thus, social capital can be thought of as having an individual and an aggregate component (Buys and Bow, 2002; Newton 1997; Slangen et al., 2003; Singh, 2005; Uzzi and Lancaster, 2003). That is, social capital belongs to the group and can be used by the group or individuals within the group (Kilpatrick et al. 1998; Sander 2002). Moreover, Brewer (2003) states that although social capital was originally conceived as a community-wide concept, it should be observable at the individual level. That is why this study focuses on the individual level.

The items were used to measure the manifest variables constructed from the previous literatures. Before collecting the data, the questionnaire was tested and retested to ensure that the questions are measuring what they were intended to measure and were a reliable and valid measurement as well as practical.
3.2 The Sample

For this study 167 branches were selected: 75 from the Bangkok metropolis and 92 from provincial branches (see Table 3.1). Questionnaires were sent out to all employees in each of the 167 branches. The responses were then aggregated to the branch level, which is the unit of analysis in this study.

Table 3.1 Gross Provincial Products, Number of Branches, and Employees

<table>
<thead>
<tr>
<th>Province</th>
<th>Gross Provincial Product (Baht per year)</th>
<th>Branches (Unit)</th>
<th>Employees (Person)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Bangkok metropolis</td>
<td>456,911</td>
<td>75</td>
<td>1,002</td>
</tr>
<tr>
<td>2. Lop Buri</td>
<td>86,862</td>
<td>9</td>
<td>92</td>
</tr>
<tr>
<td>3. Nakhon Sawan</td>
<td>70,035</td>
<td>11</td>
<td>126</td>
</tr>
<tr>
<td>4. Chai Nat</td>
<td>67,078</td>
<td>6</td>
<td>59</td>
</tr>
<tr>
<td>5. Uthai Thani</td>
<td>61,356</td>
<td>3</td>
<td>43</td>
</tr>
<tr>
<td>6. Pichit</td>
<td>57,167</td>
<td>7</td>
<td>59</td>
</tr>
<tr>
<td>7. Petchabun</td>
<td>53,715</td>
<td>8</td>
<td>78</td>
</tr>
<tr>
<td>8. Ubon Ratchathani</td>
<td>44,800</td>
<td>17</td>
<td>133</td>
</tr>
<tr>
<td>9. Buri Ram</td>
<td>39,761</td>
<td>10</td>
<td>77</td>
</tr>
<tr>
<td>10. Su Rin</td>
<td>37,525</td>
<td>7</td>
<td>75</td>
</tr>
<tr>
<td>11. Yasothon</td>
<td>34,181</td>
<td>6</td>
<td>75</td>
</tr>
<tr>
<td>12. Si Sa Ket</td>
<td>34,042</td>
<td>8</td>
<td>72</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>167</td>
<td>1,891</td>
</tr>
</tbody>
</table>


Questionnaires were administered to a total of 1,891 employees, producing 1,725 returns, and with an overall response rate of 91.22% within the selected branches. A summary is provided in Table 3.2.
Table 3.2 The Sample

<table>
<thead>
<tr>
<th>Region</th>
<th>Branch (unit)</th>
<th>Employee</th>
<th>Response</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangkok</td>
<td>75</td>
<td>1,002</td>
<td>901</td>
<td>89.92</td>
</tr>
<tr>
<td>Region 6</td>
<td>44</td>
<td>457</td>
<td>424</td>
<td>92.78</td>
</tr>
<tr>
<td>Region 12</td>
<td>48</td>
<td>432</td>
<td>400</td>
<td>92.59</td>
</tr>
<tr>
<td>Total</td>
<td>167</td>
<td>1,891</td>
<td>1,725</td>
<td>91.22</td>
</tr>
</tbody>
</table>

The unit of analysis of this study is bank branch level. Bank performance is critically dependent on the effective performance of each branch. A branch manager is responsible for all functions of the branch and ensures that the branch’s goals and objectives are met. Branch manager delegates tasks to members in the team. Therefore, the values of good services derive from the employees’ capabilities of delivering remarkable results (Gelade and Yong, 2005). Branch performance is resulted from individual performance in the team. Branch success depends on the effectiveness of teamwork in that network. Good teamwork is strongly related to good performance. Teamwork in this study means the overall social capital of the branch: - members have clear goals and responsibilities consistent with the bank’s culture and core values. Members in a team mutually create strong sense of honesty, confidence, and team spirit through reinforcement, shared activities, trust, commit, and supports development for sharing knowledge to create the network success.

The unit of analysis for this study was the bank branch, not the individual. Level of social capital and knowledge sharing of each branch were aggregated from calculating the total value of each item marked by individual’s employees in each branch divided by numbers of staff. Then, the weighted average values of items from individuals were summarized to represent values of items of each branch.

This study perceived social capital as group level (Bourdieu, 1986; Coleman, 1988; Putnam, 1993). Social capital was derived from the classical theory that is because the workers as individual invest and acquire certain capital of their own, develop and maintain capital as a collective asset to enhance group member’s quality of work life. Social capital was represented by aggregating the size of the group
network and the volume of capital possessed by members (Bourdieu, 1986). Social capital was specified by its effect in particular individual action (Coleman, 1990).

3.3 Operational Definitions

The following sections describe the operational definition of each variable. The dependent variable was the branch performance resulting from its branch KPI. The independent variables were constructed in this model for the associations of social capital, and knowledge sharing. The literature and previous studies led the researcher to develop items to measures these variables as follows.

3.3.1 Dependent Variable

3.3.1.1 Performance

Data were archived from the databank. According to the bank branch appraisal system, the regional manager appraises branch performance in terms of percentage from the existing records compared to its branch KPIs settings. The one that reaches the goal settings will get the maximum 100 percent and lower according to its performance. Performance ranking is published in the regional quarterly meeting.

One might argue that bank branches operate in a variety of local environments. Some branches are located in wealthy communities and some in deprived communities. For these reasons, the senior bank management set the targets differently according to the branch size and location, especially regarding the differences in the local micro-economy surrounding the branch. Thus, the performance measurement system as precise and valid concerning whether the branch had achieved its goal set.

3.3.2 Independent Variable

3.3.2.1 Cognitive Social Capital

According to the theoretical framework and the previous studies, it can be seen that shared vision and shared goals were defined similarly, differently, and
with mixed definitions. The cognitive social capital, therefore, can be measured as shared vision and shared goals.

3.3.2.2 Shared Vision

Shared vision can be demonstrated as the common view of members, interests, intense and eager enjoyment to contribute to the organization, sense of responsibility, and the sense of self-efficacy in achieving goals, missions, and task settings. Shared vision can be viewed as a bonding mechanism that helps different parts of an organization to integrate or combine resources (Darvish and Nikbakhsh, 2010) and the aspirations of the members of an organization in proper ways of acting in a social system (Tsai and Ghoshal, 1998; Naghavi, Salavati and Mavahed, 2011). Chiu, Hsu, and Wang (2006) proposed 3 items to measure shared vision and shared goals. Ma’atoofi and Tajeddini (2010) defined shared vision as a total agreement on the organizational vision across all levels of functions and divisions, and offered 3 items to measure it. Tsai and Ghoshal (1998) argued that within a firm cognitive capital is embodied in a shared vision, i.e., collective goals and the aspiration of the parties, and is present when partners have similar perceptions of common goals and how they should interact.

3.3.2.3 Shared Goals

Inkpen and Tsang (2005) defined shared goals and cultures as the primary types of cognitive capital. They argued that goals are shared when members of a network share a common understanding and approach to the achievement of network tasks and outcomes. Shared goals can be described as the degree to which one has collective goals, missions, and visions with other people (Wong, Wong, Hui and Law, 2001). It is important for any partnership to be successful that it is based on shared goals. People are willing to share mutual interests, and work towards the same goals. The joint work is successful for both parties, and a collaborative relationship develops because of their shared goals.

Therefore, it can be concluded that cognitive social capital can be defined as the transmission and shared understanding of social knowledge associated with shared vision (Chui, Hsu and Wang, 2006; Darvish and Nikbaksh, 2010; Fernandez and Garder, 2010; Ma’atoofi and Tajeddine, 2010, Naghavi, Salavati, and

3.3.2.4 Structural Social Capital

Structural social capital, in this study, focused on the social strong ties. Strength of ties means the access or pathway members have to each other based on structural arrangements. Strong ties can be seen in terms of good relationship, frequency of interactions among members, frequency of discussion/communication, and the proximity of interaction that characterizes ties among members.

Structural social capital can be defined as affection (Chui, Hsu and Wang, 2006; Erickson and Yancey, 1980). Affection in strong ties can be measured in terms of emotional intensity and intimacy, and close relationships, a more assistance or support of one another, and whether they are relative and confidential.

Time spent among members in their network can be illustrated as structural social capital (Chui, Hsu and Wang, 2006; Granovetter, 1973; Krackhardt, 1992). Time spent can be measured in terms of the length of time that two actors spend with each other, and the extended interaction period of time.

From the previous literatures, it can be concluded that strength of ties is composed of three manifest dimensions: interaction (Chui, Hsu, and Wang, 2006; Gilsing and Nooteboom, 2004; Granovetter, 1973; Krackhardt, 1992; Landry, Amara, and Lamari, 2002; Lin, Dayton and Greenwald, 1978; Leenders, Van Engelen, and Kratzer, 2003; McFadyen and Cannella, 2004), affection (Chui, Hsu, and Wang, 2006; Erickson and Yancey, 1980; Lin, Ensel, and Vaugin, 1981; Krackhardt, 1992; Friedkin, 1980; Granovetter, 1973; Moran, 2005; Nahapiet and Ghoshal, 1998; Ring and Van de Ven, 1994; Seibert, Kraimer, and Liden, 2001; Smith, Collins, and Clark, 2005; Tsai & Ghoshal, 1998), and time spent (Chui, Hsu, and Wang, 2006; Granovetter, 1973; Krackhardt, 1992).
3.3.2.5 Relational Social Capital

Relational social capital can be defined as the characteristics and quality of the relationship between members and the organization. It is the mutual confidence that a member has in exchange transactions that other member will not exploit one’s vulnerabilities. It can be concluded from the previous literature that relational social capital comprises trust and affective commitment.

Trust can be measured in terms of the individual and the organization. Trust means trustworthiness, being sincere, reliable, the belief in good intent and in people’s reliability, and belief in their perceived openness. When trust occurs, it can be seen that members will always try to help each other out of the difficulties, and give a hand when others need cooperation. People are always doing things for each other (Coleman, 1988). Members contribute to their organization as an obligation, or to repay a debt.

The affective commitment in this model refers to employees’ emotional attachment to, identification with, and involvement in the organization (Allen and Meyer, 1990). Affective commitment can be measured as the attachment of an individual’s fund of affectivity and emotion to the group (Kanter, 1968), as a partisan, affective attachment to the goals and values of the organization (Buchanan, 1974), to one’s role in relation to goals and values, and to the organization for its own sake, apart from its purely instrumental worth. Porter, Crampon and Smith (1976) defined organizational commitment as the relative strength of an individual’s identification with and involvement in a particular organization. An employee that is affectively committed strongly identifies with the goals of the organization and desires to remain a part of the organization.

Therefore, relational social capital can be defined as trust (Coleman, 1980), and affective commitment to organization (Allen and Meyer, 1990; Porter, Crampon and Smith 1976)

3.3.2.6 Knowledge Sharing

Knowledge sharing is the attitudes and behavior of members in an organization. Davenport (1997) defined sharing as a voluntary act. Sharing implies a conscious act by an individual that participates in the knowledge exchange even though there is no compulsion to do so. It is the mutual perspectives, ideas, and
intentions that competitive advantage results from sharing, collaborating synergistically toward common outcomes.

Sharing knowledge is defined as the exchange process among members in organization; Members mutually gain knowledge from one another, evaluate, and integrate knowledge to strengthen their capacity to create sustainable development for their organization. Sharing knowledge requires a process of mutual perspective taking where distinctive individual knowledge is exchanged, evaluated, and integrated with others in the organization. Knowledge sharing implies a relation between at least two parties, one that possesses knowledge and the other that acquires knowledge. Hinds and Pfeffer (2003) distinguished both attitude and motivation factors to define knowledge sharing. Attitude factors are primarily related to an individual’s ability to share knowledge; motivational factors concern their willingness and eagerness to share. From the previous literature and studies, it was seen that knowledge sharing process can be measured with three manifest variables: attitude, donating, and collecting knowledge.

Attitude to share the knowledge can be operationalized as the degree to which one has a favorable evaluation of performing the knowledge sharing behavior. Knowledge sharing is about beliefs, values, and commitment (Nonaka and Takeuchi, 1995). Intension to share knowledge is mainly influenced by an employee’s attitude towards knowledge sharing (Chatzoglou and Vraimaki, 2009). The attitude of sharing is used to describe individuals’ behavior from satisfying their individual needs, focusing on both common and individual goals. It is also refers to the individuals’ feeling when sharing the knowledge with other members, such as good, bad, of worth, or enjoyable. They believe that their daily work performs well because of its contribution to work knowledge. Knowledge sharing will help members in networks achieve their organizational objectives. Individuals perform well because they are also more willing and eager to both donate and collecting knowledge (Pascoe, Ali and Warne, 2002). They behave as though it were a normal thing.

Donating knowledge is the behavior of the individual in providing access to personal knowledge. Individuals share information, skills, experience, and what they are good at with others in the organization, and they see the benefits of donating information and a shared common understanding for the creation of intellectual capital, and actors exchange information with each other. De Vries, van

Collecting knowledge is the opposite side of donating knowledge. It is a process on the demand side; employees are confident of receiving information from the donor. Collecting knowledge implies a positive behavior to actively show their individual knowledge considered as valuable and appreciated by others. De Vries, et.al. (2006) deployed 4 items to measure knowledge collecting. Van den Hooff and Van Weena (2004) utilized 8 items to determine the collection of knowledge.

3.4 Tools

3.4.1 Questionnaires

The current study used a questionnaire for collecting data. Payne, Moore, Griffis, and Autry (2010) observed that 109 articles use social capital as the key research construct, rather than merely mention the term, and found that 80 articles in empirical research used questionnaires. Of the 80 reviewed articles, social capital was utilized as an independent variable. Explaining performance is a popular goal for social capital studies. The performance in this study was measured at multiple levels of analysis, including the individual, group, project, and organizational levels.

The questionnaire was designed in Thai and translated into English later on. Sentences requested both optimistic and pessimistic perspectives. The questionnaire was developed to obtain information about three types of social capital and the knowledge sharing. It comprises three parts; part one requires a respondent to answer about his/her demographic data; in part two, the respondent has to indicate the extent to which he/she agreed or disagreed with 51 formulated items related to the independent variables; and part three is an open area for any comment or suggestion. Items were measured on a 5-point Likert scale. The score rating was weighted from 1 to 5. The criteria for assigning scores both positive and negative statements are shown in Table 3.3.

The self-administered questionnaires were sent via the banking postal delivery to the bank branch staff to complete. This method is convenient and appropriate for a
large number of people because it is simple, time effective, and an economical way of collecting a large amount of raw data for the purpose of statistical analysis. There was no problem about the return rate of the questionnaire because the regional managers were willing to collect the questionnaires. Since this research studies a single organization, answering in a “nameless” questionnaire, the respondents felt free to rate each item without any problems; and make sure that the analysis would be restricted to an aggregated level that would prevent the identification of any individual or branch unit. All the completed questionnaires had been mailed back to the researcher via the bank mailing system.

Table 3.3 Criteria for Scoring

<table>
<thead>
<tr>
<th>Statements</th>
<th>Least likely</th>
<th>Less likely</th>
<th>Not less and not much</th>
<th>More likely</th>
<th>Most likely</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Negative</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

3.4.2 Scale Construction

From the literature review, it was found that the independent variables in this area could be designed according to items which represented the content construct. Krishna and Sharader (1999) indicated that the scale of social capital may have to be constructed separately for each different context, while instruments can be devised that will assist in the construction of such a scale among each of these different contexts.

The items for the scales were developed by extending theorists’ arguments and drawing on existing questions from previous studies. For example, the social capital scales were drawn from Nahapiet and Ghoshal (1998), Granovetter (1973), Krackhardt (1992) and Fukuyama (1995). The commitment scales were derived from the Myer, Allen, and Smith’s (1993) affective commitment. The knowledge sharing scales were deployed from Van den Hooff and Van Weena (2004), Van den Hooff
and Hendrix (session D-3). For each set of measure, a starting set of criteria led to the formation of questions that related to a series of theorized underpinning dimensions.

The scale construct for the independent variables is a subjective measurement. In this survey, the researcher used negative sentences to minimize the acquiescence problem (tendency of a respondent to agree with a statement without considering the content of the item) and extreme response bias. The respondents were forced to consider the question and hopefully evaluate their degree of either agreement or disagreement by checking the meaningful answer—one of five response categories for each item. Ten negative questions completely reversed the scales by transforming and recoding them into different variables in order to save the raw scores.

3.4.3 Items

Items were derived from previous studies; however, some sentences were modified in conformity with the Thai context. The respondents were asked questions in the Thai language. The 51 items were designed to measure the independent variables in the study. Eight items were designed to measure cognitive social capital, 16 items were created to illuminate the ties strength, which represents structural social capital. Twelve items were developed to determine relational social capital. Lastly, and 15 items were depicted to test knowledge sharing.

The tone and mood of a sentence were re-contoured to the bank culture. For example, the item, “I have a very good relationship with my colleagues,” was identified by expanding it into four questions for describing this sentence. The good horizontal links in and organization were magnified as follows: I like joining my colleagues’ wedding party/and other relatives’ wedding parties; I like joining the Buddhist monk ordination ceremony of my colleagues’ son; When my colleagues get sick, I present them with a gift basket; and I always join a funeral ceremony out of respect for the departed person.

According to the literature review, “knowledge” has been defined in general terms. In a bureaucratic organization, tacit knowledge development is derived from relationships, social networks, communities of practice, which is completely different in the working climate. “Knowledge” in the Thai context might be construed in a different way. The present author I constructed three items related to knowledge
sharing as follows: “When the branch manager is furious, we will talk in a whisper,” “I will tell my colleague who is/are the VIP customer(s)” and “My colleagues will provide the secret information to me.”

The items were selected and developed in accordance with content validity. To make sure that the study was able to scientifically answer the question, it is intended to answer, different people were piloted to comment and make suggestions for improving the items. Questionnaire was also sent to three institutions—Chulalongkorn University, University of the Thai Chamber of Commerce, and Sasin Graduate Institution of Business Administration—in order to modify the items. Then, the questionnaire designed was pre-tested with the bank staff excluding in the sample size.

Transition questions were used to make different areas flow well together. To make the questionnaire clear, easy to follow, and well presented, the 51 items were grouped by sequential access with part “I,” and then followed with part “colleagues.” An attempt was made to provide evidence that the bank staff they behaved in practice in the way that the present author thought that they should.

3.4.4 Quality Assessment

Researchers exploited face validity and reliability to assess the quality of items constructed.

3.4.5 Face Validity

To assess the quality of items, face validity was utilized. Face validity is the extent to which the content of the items is consistent with the construct definition, based solely on the theories and the researcher’s judgment, as explained in the previous section, as items developed.

3.4.6 Reliability

Reliability is one of the key statistical requirements of quantitative research. It is common in exploratory study for the survey instrument to be subject to a reliability examination. Similar to numerous exploratory researches, this study used the Cronbach Alpha ($\alpha$) to test the reliability of each measure. The threshold for the Cronbach alpha is the higher the coefficient alpha, the better. According to
Tabachnick and Fidell, (2007) and Hair (2010), the alpha treats any covariance among items as a true-score variance, even if the items co-vary for spurious reasons. A commonly-accepted rule of thumb for describing internal consistency using Cronbach’s Alpha is as follows: $\alpha \geq 0.9$ = excellent, $0.8 > \alpha \geq 0.9$ = good, $0.8 > \alpha \geq 0.7$ = acceptable, $0.7 > \alpha \geq 0.6$ = questionable and $0.6 > \alpha \geq 0.5$ = poor (Cortina, 1993; Cronbach, 1957; Kline, 1999; Pallant, 2007).

### 3.5 Variables and Measurements

Operational definition leaded to construct various manifest variables for four variables. Items were developed to explain the variables. Table 3.4, 3.5 3.6 and 3.7 showed items construct for cognitive social capital, structural social capital, relational social capital, and knowledge sharing, respectively.

**Table 3.4** Items Developed for Cognitive Social Capital

<table>
<thead>
<tr>
<th>Item</th>
<th>Acronym</th>
</tr>
</thead>
<tbody>
<tr>
<td>- I am enthusiastic about pursuing the bank’s vision.</td>
<td>VISION</td>
</tr>
<tr>
<td>- I propose a super intelligent service method to my branch.</td>
<td>METHOD</td>
</tr>
<tr>
<td>- I am enthusiastic about pursuing the collective goals.</td>
<td>ENTHUS</td>
</tr>
<tr>
<td>- I and my colleagues mutually plan to achieve goals.</td>
<td>PLAN</td>
</tr>
<tr>
<td>- It is boring that my goal is increasing every year (R).</td>
<td>INCREASE</td>
</tr>
<tr>
<td>- In my branch, we mutually act to attain the goal.</td>
<td>GOAL</td>
</tr>
<tr>
<td>- Every job is equally important (R).</td>
<td>EQUALW</td>
</tr>
<tr>
<td>- I use the appropriate tools to support the mission of my branch.</td>
<td>MISSION</td>
</tr>
</tbody>
</table>

Regarding to structural social capital, it was developed 2 items to measure interactions (Chui, Hsu and Wang, 2006; 2 items measured affections, and 2 items
developed to determine time spent. This study deployed 8 items to verify structural social capital.

**Table 3.5** Items Developed for Structural Social Capital

<table>
<thead>
<tr>
<th>Item</th>
<th>Acronym</th>
</tr>
</thead>
<tbody>
<tr>
<td>- I dislike joining my colleagues’ wedding party / and other relatives’ wedding party (R).</td>
<td>MARRY</td>
</tr>
<tr>
<td>- I dislike joining the Buddhist monk ordination ceremony of my colleagues’ son (R).</td>
<td>MONK</td>
</tr>
<tr>
<td>- When my colleagues get sick, I present them with a gift basket.</td>
<td>SICK</td>
</tr>
<tr>
<td>- I always join a funeral ceremony out of respect for the departed person.</td>
<td>DEAD</td>
</tr>
<tr>
<td>- My colleagues believe that I can help them when they face problems.</td>
<td>DEPEND</td>
</tr>
<tr>
<td>- My colleagues want to work with me.</td>
<td>COWORK</td>
</tr>
<tr>
<td>- I support my colleagues for promotion.</td>
<td>GROWTH</td>
</tr>
<tr>
<td>- I am very close to my colleagues, like members of their family.</td>
<td>FAMILY</td>
</tr>
<tr>
<td>- When I face a problem, I have never asked my colleagues for advice or help (R).</td>
<td>QUIET</td>
</tr>
<tr>
<td>- I lend my help / serve my colleagues.</td>
<td>SERVICE</td>
</tr>
<tr>
<td>- It is a normal thing that colleagues make mistakes.</td>
<td>FORGIVE</td>
</tr>
<tr>
<td>- I accept my colleagues’ ability.</td>
<td>ACCEPT</td>
</tr>
<tr>
<td>- I spend my free time assisting my colleagues.</td>
<td>SUPPORT</td>
</tr>
<tr>
<td>- I spent my free time on the bank activities.</td>
<td>HOLIDAY</td>
</tr>
<tr>
<td>- I contribute my time to customers.</td>
<td>TIME</td>
</tr>
<tr>
<td>- I always hold a lengthy of discussion with my colleagues.</td>
<td>DISCUSS</td>
</tr>
</tbody>
</table>
Table 3.6 Items Developed for Relational Social Capital

<table>
<thead>
<tr>
<th>Item</th>
<th>Acronym</th>
</tr>
</thead>
<tbody>
<tr>
<td>- My colleagues are honest.</td>
<td>HONEST</td>
</tr>
<tr>
<td>- My colleagues help me when I ask them.</td>
<td>HELP</td>
</tr>
<tr>
<td>- My colleagues always make the job difficult (R).</td>
<td>TROUBLE</td>
</tr>
<tr>
<td>- My colleagues behave in line with the bank’s ethics.</td>
<td>ETHIC</td>
</tr>
<tr>
<td>- My bank is secure.</td>
<td>SECURE</td>
</tr>
<tr>
<td>- My bank is transparent.</td>
<td>TRANSPAR</td>
</tr>
<tr>
<td>- I propose products and services suited to the customers.</td>
<td>PRODUCT</td>
</tr>
<tr>
<td>- I compare products with the products of other banks,</td>
<td>COMPARE</td>
</tr>
<tr>
<td>- I do my work as assigned (R).</td>
<td>ONLY</td>
</tr>
<tr>
<td>- I really feel as if my bank’s problems are my own.</td>
<td>PROBLEM</td>
</tr>
<tr>
<td>- I have to be clear when someone complains about the bank.</td>
<td>HEAR</td>
</tr>
<tr>
<td>- My bank has a great deal of personal meaning for me.</td>
<td>GSB</td>
</tr>
</tbody>
</table>

According to Lee and Ahn, 2007; Chow and Chan, (2008), 3 items was used to define trust. Kwon and Suh (2004) deployed 10 items to measured level of trust and 3 items to measure commitment in supply chain relationships. Romano (2003) conceptualized and operationalized 10 items to clarify trust. Morgan and Hunt (1994) exploited 7 items to indicate trust. As well as, Colquitt, Brent A. Scott, and Jeffery A. LePine (2007) use 6 items to measure ability to trust. The trust construct was measured with 7 items and 4 items was designed to capture commitment (Garbarino and Johnson, 1999). With regard to the literature, most researchers utilized 6 items of Meyer, Allen and Smith’s scale (1993) to measure commitment to organization. This study deployed 12 items to measure relational social capital.
Table 3.7 Items Developed for Knowledge Sharing

<table>
<thead>
<tr>
<th>Item</th>
<th>Acronym</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Whenever I learn something new, everyone tells me about it.</td>
<td>NEW</td>
</tr>
<tr>
<td>- Shared skills/knowledge/information seems to work added.</td>
<td>FLOW</td>
</tr>
<tr>
<td>- Shared skills/knowledge/information seems to achieve the goal.</td>
<td>ACHIEVE</td>
</tr>
<tr>
<td>- It wastes time to share skills/knowledge/information (R).</td>
<td>BUSY</td>
</tr>
<tr>
<td>- When the branch manager is furious, we talk in a whisper.</td>
<td>MOOD</td>
</tr>
<tr>
<td>- I share the information I have with colleagues when they ask me to.</td>
<td>ASK</td>
</tr>
<tr>
<td>- I partly share my skills with colleagues when they ask me to (R).</td>
<td>N-ALL</td>
</tr>
<tr>
<td>- Having had a training course, I am able to provide knowledge to my colleagues.</td>
<td>TRAIN</td>
</tr>
<tr>
<td>- I prefer discussing in the knowledge forum.</td>
<td>EXCHANGE</td>
</tr>
<tr>
<td>- I will tell my colleagues who are VIP customers.</td>
<td>CUSTOMER</td>
</tr>
<tr>
<td>- Colleagues share information with you.</td>
<td>FRIEND</td>
</tr>
<tr>
<td>- I double check when colleagues provide information (R).</td>
<td>VALID</td>
</tr>
<tr>
<td>- Having had a training course, colleagues provide knowledge to you.</td>
<td>TEACH</td>
</tr>
<tr>
<td>- Colleagues prefer to discuss for improving the work process.</td>
<td>IMPROVE</td>
</tr>
<tr>
<td>- My colleagues provide the secret information to me.</td>
<td>DATA</td>
</tr>
</tbody>
</table>

willingness to share. Box and Kim (2002) identified 6 items to measure attitude to share, 5 items to clarify intention to share, and 7 items to signify the behavior to share. Davenport and Prusak (2000); Hsu, Ju, Yen and Chang (2007) utilized 8 items to evaluate knowledge sharing behavior. This research developed and utilized 15 items to illustrate knowledge sharing.

### 3.6 Data Collection and Procedures

The questionnaire developed by the researcher was used to gather the data. The 1,891 questionnaires were sent to 167 selected branch managers during April, 2013. A letter embedded into a pack of questionnaire introduced the study and the researcher, and contained the bank approval letter. The assurance of confidentiality was informed in the letter; as well as contact information of the researcher in case the respondent had any question about the study. Questionnaires were distributed to each branch equivalent to numbers of branch staff obtaining data from an internal bank manpower record. As requested of the researcher, branch manager was asked to gather questionnaires, and sent back to the researcher via the bank mail. The entire data collection process was complete during May, 2013. 1,440 questionnaires were sent back to the researcher.

### 3.7 Data Analysis Procedures

Data collected from the 1,440 respondents were managed as follow: - cleansing data, then, averaging value of item in each branch by summing up each item values divided by number of staff to represent item value of branch. Data were analyzed with a principal component factor analysis to examine the factorial validity of the scales.

#### 3.7.1 Construct Validity

This research study examines the reliability and validity of the survey instruments using a robust approach—the SEM technique. With this technique, validity and reliability are examined using the Confirmatory Factor Analysis (CFA) approach. Construct validity is made up of four components: face validity, convergent validity, discriminant validity, and nomological validity.
Convergent validity was utilized when items to measure a common underlying factor all have relatively high standardized loading on the hypothesized factor (Kline, 2005). Convergent validity is the extent to which the indicators of a specific construct “converge” or share a high proportion of variance in common. There are three measure requirements in convergent validity: factor loading, average variance extracted (AVE), and reliability.

According to Hair et al. (2006), a good standardized loading factor of each measurement latent variable quantified from the manifest variable should be above 0.5 and preferably 0.7 or higher. All loadings were significant, as required for convergent validity. The AVE should be 0.5 or higher to suggest adequate convergent validity. AVE estimates also should be greater than the square of the correlation between that factor and other factors to provide evidence of discriminant validity. Lastly, the construct reliability should be .7 or higher to indicate adequate convergence or internal consistency.

\[ VE = \frac{\sum_{i=1}^{n} \lambda_i^2}{n} \]

In the formula above \( \lambda \) represents the standardized factor loading of items. Therefore, for \( n \) items, the AVE was computed as the sum of the squared standardized factor loadings divided by the number of items, as shown above. As mentioned above, an AVE of .5 or higher indicates adequate convergent validity. An AVE of less than .5 indicates that on average, there was more error remaining in the items than there was variance explained by the latent factor structure imposed on the measure.

The third requirement for the convergent validity was construct reliability (CR). The CR was computed from the sum of factor loadings (\( \lambda_i \)), squared for each construct and the sum of the error variance terms for a construct (\( \delta_i \)) using the above formula. The rule of thumb for a construct reliability estimate is that .7 or higher suggests good reliability. Reliability between .6 and .7 may be acceptable provided that other indicators of a model's construct validity are good. High construct reliability indicates that internal consistency exists.
Discriminant validity is the extent to which the construct is truly distinct from other constructs. According to Campell and Fiske (1959), and Blunch (2008), discriminant validity is assessed by comparing the AVE of each construct with the shared variance between constructs. If the average variance extracted estimates should be greater than the corresponding squared interconstruct correlation estimates (SIC). If they are, this indicates that the measured variables have more in common with the construct they are associated with than they do with the other constructs.

Farrell (2010) asserted that discriminant validity establishment is crucial for conducting a latent variable analysis. Without it, researchers cannot be certain whether results confirming hypothesized structural paths are real or whether they are a result of statistical discrepancies. Discriminant validity means that a latent variable is able to account for more variance in the observed variables associated with it than a) measurement error or similar external, unmeasured influences; or b) other constructs within the conceptual framework. If this is not the case, then the validity of the individual indicators and of the construct is questionable (Fornell and Larcker, 1981).

Nomological validity, developed by Cronbach and Meehl (1955), is a subset of construct validity. The nomological network includes the theoretical framework construct for measurement, an empirical framework showing how the constructs can be measured, and specification of the linkages among these two frameworks. Thus, the nomological validity is to test the linkage of theoretical realm with the observable result. To demonstrate the nomological validity in this model, the theoretical framework construct for measurement is positively and significantly related based on the social capital and knowledge sharing theories.

The measurement model was assessed to explore the causal relationships among the association of social capitals, and the mediating of knowledge sharing, which affect the performance of the organization. The measurement model was used to test the congruence of the causal relationships from the theoretical assumption and the empirical data by using the maximum likelihood estimation method run by AMOS version 21.0. The statistical significance was accepted with an alpha at level 0.05.

$$CR = \frac{\left( \sum_{i=1}^{n} \lambda_i \right)^2}{\left( \sum_{i=1}^{n} \lambda_i \right)^2 + \left( \sum_{i=1}^{n} \delta_i \right)^2}$$
Generally, structural equation method can be decomposed of two sub-models: a measurement model and a structural model. The measurement model defines the relations between the observed and unobserved variables. It provides a link between the scores on a measuring instrument and the underlying constructs they are designed to measure. The measurement model, then, represents the CFA model described in this study. In contrast, the structural model defines the relations among the unobserved variables that directly or indirectly influence the changes in the value of certain other latent variables in the model.

None of the variables in this study was directly observed, called the latent variables. Latent variables can be examined and measured by using a set of observed items measuring behaviors, also called manifest variables. Associated with each observed variable is an error term, and with the factor being predicted, a residual term; there is an important distinction between the two. Error is relevant to observed variables depicting that measurement are imperfect indicator of such a concept. Measurement error derives from two sources: random measurement error and error uniqueness. Residual terms represent error in the prediction of endogenous factors from exogenous factors. Both measurement and residual error terms represent unobserved variables. Unlike those associated with most other SEM programs, Amos path diagrams provide these error variables as circle enclosures by default.

![Figure 3.1](image)

**Figure 3.1** Relationships between Latent and Manifest Variables

### 3.7.2 Structural Equation Modeling (SEM)

Structural equation modeling was used to test the cause and effect relationship among the main constructs of the hypothesized model. Structural equation modeling can be either a regression analysis with a factor analysis or a path analysis with a factor analysis. The SEM provides a family of related statistical techniques (Kline,
In this study, the model consists of two parts: the structural model and the measurement model. The structural model describes the causal connections among the latent variables. The mapping of these connections was the main purpose of the analysis. The measurement model describes the connections between the latent variables and their manifest indicators (Blunch, 2008).

Amos 21.0 was deployed for evaluating the research model and the hypotheses proposed. It is important to examine the “fit” of an estimated model to determine how well it models the data. For the assessment of the fit for the hypotheses, the study used the overall fit measures.

### Table 3.8 Indices for Model Assessment

<table>
<thead>
<tr>
<th>Indices</th>
<th>Assessment</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-square fit index</td>
<td>- Also called discrepancy or model Chi-square</td>
<td>p value: &gt;.05: acceptable</td>
</tr>
<tr>
<td></td>
<td>- How it quantifies the differences between the observed and the estimated covariance matrix</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Very sensitive to a larger sample size</td>
<td></td>
</tr>
<tr>
<td>Relative chi-square</td>
<td>- Also called normal or normed Chi-square</td>
<td>&lt;2: good fit (Ullman, 2001);</td>
</tr>
<tr>
<td>CMIN/DF</td>
<td>- This is the chi-square fit index divided by degrees of freedom.</td>
<td>&lt;3: adequate fit (Kline, 2005);</td>
</tr>
<tr>
<td></td>
<td>- Less dependent on sample size</td>
<td>&lt;5: cutoff (Schumacker &amp; Lomax, 2004).</td>
</tr>
<tr>
<td>Goodness of Fit index</td>
<td>- Sample based, analogous to $R^2$</td>
<td>= 1.0 perfect fit;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&gt;.95: good fit;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&gt;.90: adequate fit; (Kline, 2005)</td>
</tr>
</tbody>
</table>
### Table 3.8 (Continued)

<table>
<thead>
<tr>
<th>Indices</th>
<th>Assessment</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comparative fit index</td>
<td>- The degree of fit between the hypothesized and null measurement models</td>
<td>&gt;.95: good fit;</td>
</tr>
<tr>
<td>CFI</td>
<td>- The least dependent on sample size</td>
<td>&gt;.90: adequate fit; (Bentler, 1990; Bentler &amp; Bonett, 1980)</td>
</tr>
<tr>
<td>Tucker Lewis or Nonnormed fit index</td>
<td>A relative fit index that compares the model being tested to a baseline model (null model), taking into account the degree of freedom</td>
<td>&gt;.95: good fit;</td>
</tr>
<tr>
<td>TLI or NNFI</td>
<td>- Relatedly independent on sample size</td>
<td>&gt;.90: adequate fit; (Tucker &amp; Lewis, 1973)</td>
</tr>
<tr>
<td>Root mean square error of approximation</td>
<td>- How well a model fits a population square error of not just the sample used for estimation</td>
<td>&lt;.05: good fit;</td>
</tr>
<tr>
<td></td>
<td>- Less dependent on sample size</td>
<td>&lt;.08: adequate fit;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&lt;.10: cutoff;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Browne &amp; Cudeck, 1993)</td>
</tr>
</tbody>
</table>

### 3.8 Conclusion

This chapter restated the proposed model and provided information for data collection. The survey instrument was used to achieve the research objectives by using questionnaire developed and constructed from various literatures. Krishna (2007) cites that social capital, like gross national product, is a theoretical construct. It cannot be measured directly but must be assessed instead in terms of its elemental components. The elements of social capital are mostly not directly observable. People carry inside their heads the experiences and expectations that make them behave in certain ways. The proxy measure of social capital in one social setting will not clear when similarly observed within other settings.
The respondents are the bank branch staff working in the Bangkok metropolitan area, Region 6 and 12 in Thailand. However, the unit of analysis is branch level. The dependent variable is the scale rating for each branch, resulting from the branch’s KPI. The 51 items as independent variables were developed from previous studies and test-retested to make sure that the scales construct was valid and reliable. The structural equation model by using Amos Program version 21 was deployed for depicting, hypothesizing, developing, and measuring the goodness of fit. Finally, statistically fit indices were chosen to assess the SEM fit with the data. The results are presented in the next chapter.

The rest of the paper is comprised of chapter 4 and 5. Chapter 4 explores quantitatively, at the branch level, the influence of social capital and knowledge sharing on the bank’s performance. Chapter 5 draws out the implications of the findings and assesses the utility of the social capital concept and knowledge sharing in studying Thai contexts.
CHAPTER 4

FINDINGS

The primary objective of the study was to examine the relationships among social capital, knowledge sharing, and performance in the Government Savings Bank of Thailand. The structural equation model was used to test the theories. Therefore, this chapter reports the research results of the statistical data analysis proposed in chapter 3. The research questions guided the achievement of the purpose of this study. This chapter is divided into three sections:

4.1 The Measurement Model
4.2 The Structural Model: Influence of Social Capital and Knowledge Sharing on the Performance Model
4.3 The Revised Model

4.1 The Measurement Model

4.1.1 Exploratory Factor Analysis (EFA)

The model generation started with exploratory factor analysis, then, followed by a confirmatory analysis to test the measurement model. Exploratory factor analysis is classical technique for mapping the dimensionality of a data set. The initial items included 51 indicators proposed for the four construct factors. A principal component factor analysis utilized varimax rotation extracted. The results showed that the KMO measure of sampling adequacy was met with a value of .86, and the Bartlett’s Test of Sphericity was significant at the .00 level, indicating that the correlations among the survey items were significant and the strengths of the relationships among the variables were appropriate for interpretation. An EFA included the remaining 16 variables which resulted in four factors with eigenvalues over 1.0 explaining 51.29% of the total variance. Eigenvalues ranged from 14.29 to 2.35 for all factors extracted. The factor loading ranged from .69 to .91. Factor 1, 2, 3, and 4 were named as
cognitive, relational, structural, and k-sharing, respectively, in accordance with the extraction. 35 items were removed from the result of factor analysis.

**Table 4.1** EFA of Questionnaire Variables

<table>
<thead>
<tr>
<th>Component</th>
<th>Factor1: Cognitive</th>
<th>Factor2: Relational</th>
<th>Factor3: Structural</th>
<th>Factor4: Ksharing</th>
</tr>
</thead>
<tbody>
<tr>
<td>VISION</td>
<td>.84</td>
<td>.03</td>
<td>.05</td>
<td>.03</td>
</tr>
<tr>
<td>GOAL</td>
<td>.82</td>
<td>.15</td>
<td>.08</td>
<td>.02</td>
</tr>
<tr>
<td>ENTHUS</td>
<td>.82</td>
<td>.07</td>
<td>.04</td>
<td>.25</td>
</tr>
<tr>
<td>PLAN</td>
<td>.81</td>
<td>.16</td>
<td>.03</td>
<td>.04</td>
</tr>
<tr>
<td>METHOD</td>
<td>.81</td>
<td>.11</td>
<td>.04</td>
<td>.27</td>
</tr>
<tr>
<td>FAMILY</td>
<td>.75</td>
<td>.03</td>
<td>.91</td>
<td>.21</td>
</tr>
<tr>
<td>DEPEND</td>
<td>.75</td>
<td>.01</td>
<td>.80</td>
<td>.11</td>
</tr>
<tr>
<td>FORGIVE</td>
<td>.74</td>
<td>.09</td>
<td>.79</td>
<td>.06</td>
</tr>
<tr>
<td>SUPPORT</td>
<td>.71</td>
<td>.08</td>
<td>.79</td>
<td>.05</td>
</tr>
<tr>
<td>HONEST</td>
<td>.30</td>
<td>.09</td>
<td>.05</td>
<td>.78</td>
</tr>
<tr>
<td>ETHIC</td>
<td>.36</td>
<td>.09</td>
<td>.05</td>
<td>.76</td>
</tr>
<tr>
<td>TRANSPAR</td>
<td>.34</td>
<td>.04</td>
<td>.10</td>
<td>.75</td>
</tr>
<tr>
<td>MOOD</td>
<td>.15</td>
<td>.75</td>
<td>.06</td>
<td>.04</td>
</tr>
<tr>
<td>ASK</td>
<td>.20</td>
<td>.71</td>
<td>.12</td>
<td>.22</td>
</tr>
<tr>
<td>TRAIN</td>
<td>.23</td>
<td>.70</td>
<td>.02</td>
<td>.05</td>
</tr>
<tr>
<td>FRIEND</td>
<td>.08</td>
<td>.69</td>
<td>.04</td>
<td>.05</td>
</tr>
<tr>
<td>Eigenvalues</td>
<td>14.29</td>
<td>5.78</td>
<td>2.72</td>
<td>2.35</td>
</tr>
<tr>
<td>% of variance</td>
<td>29.17</td>
<td>11.80</td>
<td>5.54</td>
<td>4.79</td>
</tr>
</tbody>
</table>

**4.1.2 Item Reliability Analysis**

In the scale construct process, the questionnaire was reviewed based on the theoretical framework and the guidance of the experts from various universities. The questionnaire initially included 51 items; after testing with EFA, the variables were eliminated to 16 indicators. The four factors extracted were tested as individual scales to measure the extent to which multiple indicators represented the constructs. Cronbach’s reliability alpha was calculated to assess the internal consistency for all scales. The result showed alpha range from .75 to .96 presented in Table 4.2. The alpha on standardized items for all scales met the minimum level of acceptability.
**Table 4.2** Cronbach’s Alpha

<table>
<thead>
<tr>
<th>Cronbach's Alpha</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>OVERALL</td>
<td>.96</td>
</tr>
<tr>
<td>COGNITIVE SOCIAL CAPITAL</td>
<td>.94</td>
</tr>
<tr>
<td>VISION</td>
<td>.93</td>
</tr>
<tr>
<td>METHOD</td>
<td>.91</td>
</tr>
<tr>
<td>ENTHUS</td>
<td>.91</td>
</tr>
<tr>
<td>PLAN</td>
<td>.91</td>
</tr>
<tr>
<td>GOAL</td>
<td>.93</td>
</tr>
<tr>
<td>STRUCTURAL SOCIAL CAPITAL</td>
<td>.92</td>
</tr>
<tr>
<td>FAMILY</td>
<td>.89</td>
</tr>
<tr>
<td>DEPEND</td>
<td>.90</td>
</tr>
<tr>
<td>FORGIVE</td>
<td>.88</td>
</tr>
<tr>
<td>SUPPORT</td>
<td>.91</td>
</tr>
<tr>
<td>RELATIONAL SOCIAL CAPITAL</td>
<td>.87</td>
</tr>
<tr>
<td>HONEST</td>
<td>.87</td>
</tr>
<tr>
<td>ETHIC</td>
<td>.75</td>
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<tr>
<td>TRANSPAR</td>
<td>.83</td>
</tr>
<tr>
<td>K SHARING</td>
<td>.90</td>
</tr>
<tr>
<td>MOOD</td>
<td>.88</td>
</tr>
<tr>
<td>ASK</td>
<td>.86</td>
</tr>
<tr>
<td>TRAIN</td>
<td>.84</td>
</tr>
<tr>
<td>FRIEND</td>
<td>.85</td>
</tr>
</tbody>
</table>

A total of 17 items correlation table with mean and standard deviations was shown in Table 4.3. The 17 items were significant correlated with each other. All correlations were greater than .50 at the level of .01 (two tailed, N = 167).
Table 4.3 Items Correlations for CFA and SEM Analysis

<table>
<thead>
<tr>
<th>Observed variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
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<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
<th>15</th>
<th>16</th>
<th>17</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.ENTHUS</td>
<td></td>
<td>1</td>
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<td></td>
</tr>
<tr>
<td>2.METHOD</td>
<td>.75*</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>3.VISION</td>
<td>.75*</td>
<td>.85*</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>4 PLAN</td>
<td>.68*</td>
<td>.75*</td>
<td>.86**</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>5.GOAL</td>
<td>.65*</td>
<td>.67**</td>
<td>.75**</td>
<td>.74**</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>6.FAMILY</td>
<td>.62*</td>
<td>.66**</td>
<td>.71*</td>
<td>.86**</td>
<td>.78*</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>7.DEPEND</td>
<td>.65*</td>
<td>.67**</td>
<td>.70**</td>
<td>.67**</td>
<td>.86**</td>
<td>.76**</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>8.FORGIVE</td>
<td>.64*</td>
<td>.63**</td>
<td>.68**</td>
<td>.62**</td>
<td>.66**</td>
<td>.82**</td>
<td>.76**</td>
<td></td>
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<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>9.SUPPORT</td>
<td>.61*</td>
<td>.68**</td>
<td>.70**</td>
<td>.63**</td>
<td>.65**</td>
<td>.73**</td>
<td>.69**</td>
<td>.73**</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>10.HONEST</td>
<td>.70*</td>
<td>.67**</td>
<td>.68**</td>
<td>.62**</td>
<td>.65**</td>
<td>.62**</td>
<td>.60**</td>
<td>.64**</td>
<td>.67**</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.ETHIC</td>
<td>.64*</td>
<td>.66**</td>
<td>.73**</td>
<td>.65**</td>
<td>.74**</td>
<td>.68**</td>
<td>.66**</td>
<td>.66**</td>
<td>.69**</td>
<td>.70**</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.TRANSPAR</td>
<td>.59*</td>
<td>.63**</td>
<td>.65**</td>
<td>.61**</td>
<td>.65**</td>
<td>.62**</td>
<td>.62**</td>
<td>.63**</td>
<td>.69**</td>
<td>.60**</td>
<td>.76**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13.MOOD</td>
<td>.62*</td>
<td>.58**</td>
<td>.63**</td>
<td>.62**</td>
<td>.64**</td>
<td>.68**</td>
<td>.68**</td>
<td>.64**</td>
<td>.67**</td>
<td>.59**</td>
<td>.70**</td>
<td>.62**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14.ASK</td>
<td>.55*</td>
<td>.59**</td>
<td>.58**</td>
<td>.57**</td>
<td>.55**</td>
<td>.61**</td>
<td>.61**</td>
<td>.61**</td>
<td>.55**</td>
<td>.57**</td>
<td>.56**</td>
<td>.62**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15.TRAIN</td>
<td>.55*</td>
<td>.59**</td>
<td>.66**</td>
<td>.64**</td>
<td>.59**</td>
<td>.63**</td>
<td>.57**</td>
<td>.62**</td>
<td>.61**</td>
<td>.59**</td>
<td>.62**</td>
<td>.61**</td>
<td>.67**</td>
<td>.71**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16.FRIEND</td>
<td>.60*</td>
<td>.65**</td>
<td>.71**</td>
<td>.74**</td>
<td>.68**</td>
<td>.65**</td>
<td>.62**</td>
<td>.60**</td>
<td>.62**</td>
<td>.55**</td>
<td>.67**</td>
<td>.61**</td>
<td>.71**</td>
<td>.69**</td>
<td>.74**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17.PERFORM</td>
<td>.75*</td>
<td>.78**</td>
<td>.82**</td>
<td>.78**</td>
<td>.79**</td>
<td>.77**</td>
<td>.77**</td>
<td>.75**</td>
<td>.79**</td>
<td>.73**</td>
<td>.72**</td>
<td>.67**</td>
<td>.71**</td>
<td>.78**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S.D.</td>
<td>.27</td>
<td>.27</td>
<td>.26</td>
<td>.26</td>
<td>.31</td>
<td>.34</td>
<td>.26</td>
<td>.31</td>
<td>.31</td>
<td>.30</td>
<td>.31</td>
<td>.34</td>
<td>.28</td>
<td>.25</td>
<td>.22</td>
<td>.48</td>
<td></td>
</tr>
</tbody>
</table>

**Note:** ** Correlation is significant at the 0.01 level (2 tailed)
N=167
4.1.3 Confirmatory Factor Analysis (CFA)

The factors extracted as a result of the EFA provided evidence to identified and assess the proposed model. A CFA was further utilized to test the measurement models for each study construct, before examining the structural model. According to the different hypothesized models, the confirmatory factor analysis model was used individually to estimate the relationship between each the latent variable and related items. The measurement-testing model focused on the linear functions between the latent variables and their observed indicators in the model. Four measurement sub-models—(1) cognitive social capital, (2) structural social capital, (3) relational social capital, and (4) knowledge sharing, were examined by using the Amos 21.0 software program.

The four CFA solutions were derived from the validated data on 167 branches. According to the rule of overall fit measures, p-value must be greater than 0.05; the CMIN/DF should not be greater than 3.0; the GFI, CFI, and TLI must be greater than 0.9; and the RMSEA should be less than 0.08.

The five constructs were allowed to co-vary freely in the CFA model. Model estimation was done using the maximum likelihood approach, with the item correlation matrix as input. Table 4.4 presents the summary of measurement scales. The assessment of the measurement model of the five factors is presented in Figure 4.1.
Table 4.4 Summary of Measurement Scales

<table>
<thead>
<tr>
<th>Construct</th>
<th>Measure</th>
<th>Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>VISION</td>
<td>I am enthusiastic about pursuing the bank’s vision.</td>
<td>.94</td>
</tr>
<tr>
<td></td>
<td>I have proposed a super intelligent service method to my branch.</td>
<td>.90</td>
</tr>
<tr>
<td>METHOD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENTHUS</td>
<td>I am enthusiastic about pursuing collective goals.</td>
<td>.81</td>
</tr>
<tr>
<td>PLAN</td>
<td>My colleagues and I together plan to achieve goals.</td>
<td>.90</td>
</tr>
<tr>
<td>GOAL</td>
<td>In my branch, we mutually act to attain goals.</td>
<td>.82</td>
</tr>
<tr>
<td>FAMILY</td>
<td>I am very close to my colleagues as though I were a member of their family.</td>
<td>.90</td>
</tr>
<tr>
<td>DEPEND</td>
<td>My colleagues believe that I can help them when they face problems.</td>
<td>.85</td>
</tr>
<tr>
<td>FORGIVE</td>
<td>It is normal for colleagues to make mistakes.</td>
<td>.89</td>
</tr>
<tr>
<td>SUPPORT</td>
<td>I spend my free time assisting my colleagues.</td>
<td>.84</td>
</tr>
<tr>
<td>HONEST</td>
<td>My colleagues are honest.</td>
<td>.80</td>
</tr>
<tr>
<td>ETHIC</td>
<td>My colleagues behave in line with the bank’s ethics.</td>
<td>.89</td>
</tr>
<tr>
<td>TRANSPAR</td>
<td>My bank policies are transparent.</td>
<td>.82</td>
</tr>
<tr>
<td>MOOD</td>
<td>I share the information I have with my colleagues when they ask me to.</td>
<td>.82</td>
</tr>
<tr>
<td>ASK</td>
<td>I share the information I have with my colleagues when they ask me to.</td>
<td>.79</td>
</tr>
<tr>
<td>TRAIN</td>
<td>Having had a training course, I provide knowledge to my colleagues.</td>
<td>.84</td>
</tr>
<tr>
<td>FRIEND</td>
<td>Colleagues share information with you.</td>
<td>.88</td>
</tr>
<tr>
<td>PERFORM</td>
<td>Percentage of performance success compare to goals.</td>
<td>1.00</td>
</tr>
</tbody>
</table>
Figure 4.1 The Measurement Model

Chi-square = 226.278, df = 110, p = .000
CMIN/DF = 2.057, GFI = .860, CFI = .960, TLI = .951, RMSEA = .080
The measurement models depicted the relationships among the independent variables based on their CFA structure models. The measurement model resulted in acceptable fit indices to the data shown in Table 4.5.

**Table 4.5** Statistical Fits in the Measurement Model

<table>
<thead>
<tr>
<th>MODEL</th>
<th>P value</th>
<th>CMIN/DF</th>
<th>GFI</th>
<th>CFI</th>
<th>TLI</th>
<th>RMSEA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.00</td>
<td>2.06</td>
<td>.90</td>
<td>.96</td>
<td>.95</td>
<td>.08</td>
</tr>
</tbody>
</table>

Additionally, the convergent validity of the scales was verified by using three criteria by Fornell and Larcker (1981): 1) all factor loadings should be significant at 0.5, and ideally 0.7 or higher; 2) the average variance extracted (AVE) by each construct should exceed the variance due to measurement error for that construct and should exceed 0.5, and 3) construct reliability between .6 and .7 may be acceptable provided that the indicators of a model’s construct validity are good. For the current measurement model, all loadings were above the 0.7 threshold (see Table 4.6). The AVE ranged from .69 to 1.00. The composite reliabilities of the constructs ranged from .73 to .79. Hence, all three conditions for convergent validity were met. Table 4.6 shows correlations and AVE.

**Table 4.6** Correlations and AVE

<table>
<thead>
<tr>
<th>Construct</th>
<th>AVE</th>
<th>CR</th>
<th>Squared Inter-construct Correlation (SIC=IC*IC)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>COGN</td>
</tr>
<tr>
<td>COGNITIVE</td>
<td>0.77</td>
<td>0.79</td>
<td>0.77</td>
</tr>
<tr>
<td>STRUCTURAL</td>
<td>0.76</td>
<td>0.78</td>
<td>0.74</td>
</tr>
<tr>
<td>RALATIONAL</td>
<td>0.70</td>
<td>0.74</td>
<td>0.22</td>
</tr>
<tr>
<td>K-SHARING</td>
<td>0.69</td>
<td>0.73</td>
<td>0.07</td>
</tr>
<tr>
<td>PERFORMANCE</td>
<td>1.00</td>
<td>0.07</td>
<td>0.05</td>
</tr>
</tbody>
</table>
Further, the discriminant validity of the scales was assessed using the guideline suggested by Kline (2005): the corresponding squared inter-construct correlation estimates (SIC) should be less than the construct average variance extracted (AVE). If they are, this indicates the measured variables have more in common with the construct they are associated with than they do with other constructs. AVE estimates in the Table 4.6 are larger than the corresponding squared inter-construct correlation estimates. Hence, the test of discriminant validity was acceptable. This study concluded that the scales have sufficient construct validity.

Finally, the nomological validity was tested by examining whether the correlations between the constructs in the measurement model made sense. The construct correlations were used to assess this. Two indicators were used to demonstrate the nomological validity: the construct had to be positively related based on the theories reviewed, and the construct model all correlations had to be positive and significant. In this model, the correlations were significant at the level 0.001, which met the requirement.

4.2 The Structural Model: Influence of Social Capital and Knowledge Sharing on Organizational Performance

Building on the results of the measurement modeling illustrated in the previous section, this section contains a series of structural models which test the theoretical arguments laid out in the chapter 2 and illustrated in chapter 3. This cross-sectional evaluation allows an investigation of the relationships among cognitive social capital, structural social capital, relational social capital, knowledge sharing, and performance. Since the measurement models were supported through the good fit indices, the structure models for this study were then used to investigate the relationships among the variables.

The structural model reflecting the assumed linear, causal relationships among the constructs was tested with the data collected from the validated measures. The model fit indices were within the accepted thresholds: CMIN/DF =2.06, GFI=.90, CFI= .96, TLA = .95 and RMSEA= .08.
Figure 4.2 Structural Model Results

The resulted SEM model from Amos 21.0 was described graphically in Figure 4.2. The model analysis was conducted to determine the causal effects among the variables of cognitive social capital, structural social capital, relational social capital, knowledge sharing, and performance. Figure 4.2 showed the results of model tests. The software provided statistical results in the figure: factor loadings of manifest variables in each latent variable, the explanatory power of the research model and the percentage of explained variance in the endogenous latent variables, and the path coefficient values. The result showed that all manifest variables were highly correlated to the latent variables indicating that all factors are well constructed. All paths exhibited strong positive and significant effect on performance. In addition, the explanatory power of the research model was very high indicating that the hypotheses were able to effectively explain or greater predictive power.

The fitted model was simplified to illustrate the level of significant of path coefficient. As shown in Figure 4.3, all path coefficients were significantly at the level of .001, .01, and .05 (***(p<.001, **(p<.01, *(p<.05)). In terms of the relationships among factors, the results showed that all factors were positive associations with organizational performance; all hypotheses were supported.
Cognitive social capital as the sole exogenous variable directly and/or indirectly influenced the four endogenous variables: structural social capital, relational social capital, knowledge sharing, and their roles in promoting the performance level. Structural social capital had significantly positive impact on relational social capital, knowledge sharing, and performance. Similarly, relational social capital showed strong positive effect on knowledge sharing and performance. Knowledge sharing exhibited positive and significant path to performance as well.

The explanatory power is also account for high percentage of variance of the model. The SEM model explained approximately 87 percent of variance in performance. Approximately, R-square values showed 79, 83, and 74 percent of variance in knowledge sharing, relational social capital, and structural social capital were explained by the model.

**Figure 4.3** Simplified Results Model (n = 167)

Table 4.7 illustrates the Squared Multiple Correlations of the structural model. The coefficient of the multiple correlations takes values between zero and one; a higher value indicates better predictability of the dependent variable from the independent variables. The result showed that the squared multiple correlation of the performance was .87, whereas the squared multiple correlation of the structural social capital was at a valued of .74, relational social capital .83, and knowledge sharing at .79.
Table 4.7 Squared Multiple Correlations of the Model

<table>
<thead>
<tr>
<th>Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>STRUCTURAL</td>
</tr>
<tr>
<td>RELATIONAL</td>
</tr>
<tr>
<td>KSHARE</td>
</tr>
<tr>
<td>PERFORMANCE</td>
</tr>
</tbody>
</table>

Table 4.8 Standardized Regression Weights of the Structural Model

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Estimate</th>
<th>Standardized Estimate</th>
<th>S.E.</th>
<th>C.R.</th>
</tr>
</thead>
<tbody>
<tr>
<td>COGNITIVE → STRUCTURAL</td>
<td>1.04</td>
<td>.86***</td>
<td>.08</td>
<td>11.99</td>
</tr>
<tr>
<td>COGNITIVE → RELATIONAL</td>
<td>.47</td>
<td>.47***</td>
<td>.11</td>
<td>4.18</td>
</tr>
<tr>
<td>STRUCTURAL → RELATIONAL</td>
<td>.40</td>
<td>.48***</td>
<td>.10</td>
<td>4.20</td>
</tr>
<tr>
<td>COGNITIVE → KSHARE</td>
<td>.30</td>
<td>.27*</td>
<td>.14</td>
<td>2.07</td>
</tr>
<tr>
<td>RELATIONAL → KSHARE</td>
<td>.39</td>
<td>.36*</td>
<td>.17</td>
<td>2.25</td>
</tr>
<tr>
<td>STRUCTURAL → KSHARE</td>
<td>.28</td>
<td>.30*</td>
<td>.12</td>
<td>2.23</td>
</tr>
<tr>
<td>COGNITIVE → PERFORMANCE</td>
<td>.49</td>
<td>.26**</td>
<td>.17</td>
<td>2.91</td>
</tr>
<tr>
<td>KSHARE → PERFORMANCE</td>
<td>.31</td>
<td>.18*</td>
<td>.15</td>
<td>2.02</td>
</tr>
<tr>
<td>RELATIONAL → PERFORMANCE</td>
<td>.62</td>
<td>.33**</td>
<td>.22</td>
<td>2.82</td>
</tr>
<tr>
<td>STRUCTURAL → PERFORMANCE</td>
<td>.35</td>
<td>.22*</td>
<td>.15</td>
<td>2.34</td>
</tr>
</tbody>
</table>

Note: * p<.05, ** p<.01, *** p<.001

The estimate and the standardized regression coefficients were explained in order to determine the validity of the hypothesized paths. The statistical significance of all structural parameter estimates are illustrated in Figure 4.2, and shown in Table 4.7. Standardized estimates are used when comparing direct effects on a given endogenous variable in a single group study. Table 4.8 shows that the critical ratio (CR) value is greater than 1.96 for a regression weight, and that the path was
significant at the .05 level or better. In the standardized estimate column, three asterisks (***)) indicate a significance smaller than .001; two asterisks indicate significance at the level of .01. All paths in the hypothesized model are significant at the level of .001, .01, and .05, accordingly.

The predictors of cognitive social capital showed a significant amount of variance in the full structural model; the path flowing from cognitive social capital to structural social capital (standardized estimate .86, C.R. = 11.99, p = .001); the path flowing from cognitive to relational social capital (standardized estimate .47, C.R. = 4.18, p = .001); the path flowing from cognitive social capital to knowledge sharing (standardized estimate .27, C.R. = 2.07, p = .05); and the path flowing from the cognitive social capital to performance (standardized estimate .26, C.R. = 2.91, p = .01).

Similarly, the path flowing from structural social capital to relational social capital (standardized estimate .48, C.R. = 4.20, p = .001); the path flowing from structural social capital to knowledge sharing (standardized estimate .30, C.R. = 2.23, p = .05); and the path flowing from structural social capital to performance (standardized estimate .22, C.R. = 2.34, p = .05) were significant.

As well as, the path flowing from relational social capital to knowledge sharing (standardized estimate .36, C.R. = 2.25, p = .05); and the path flowing from relational social capital to performance (standardized estimate .33, C.R. = 2.82, p = .01) were significant. Finally, the path flowing from knowledge sharing to performance was significant at the level of .05; the standardized estimate = .18, C.R. = 2.02.

Table 4.9 Standardized Effects to Performance

<table>
<thead>
<tr>
<th>EFFECT ON PERFORMANCE</th>
<th>DIRECT</th>
<th>INDIRECT</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>COGNITIVE</td>
<td>0.26</td>
<td>0.63</td>
<td><strong>0.89</strong></td>
</tr>
<tr>
<td>STRUCTURAL</td>
<td>0.22</td>
<td>0.24</td>
<td>0.46</td>
</tr>
<tr>
<td>RELATIONAL</td>
<td><strong>0.33</strong></td>
<td>0.06</td>
<td>0.39</td>
</tr>
<tr>
<td>K-SHARING</td>
<td>0.18</td>
<td>0.00</td>
<td>0.18</td>
</tr>
</tbody>
</table>
Several causal relationships between factors were found to be significant. Amos 21.0 analyzed both the direct, indirect, and total effects to explain how the exogenous variable influenced the endogenous variables. Additionally, latent variables are a hypothetical construct derived from other observed indicators in a causal full model. The analyses of the direct, indirect, and total effects are presented in Table 4.9. For instance, the cognitive social capital had the strongest total effect on performance value at .89, whereas the other factors—structural social capital, relational social capital, and knowledge sharing totally affected performance at .46, .39, and .18, respectively.

The path coefficients in Table 4.9 indicate that relational social capital, with the strongest direct effect, had a significant influence on performance at 0.33, whereas cognitive social capital, structural social capital, and knowledge sharing had a direct effect on performance at 0.26, 0.22, and 0.18, respectively.

In addition, the path diagram was decomposed the associations among several factors in the model to explain the magnitude of the indirect effects. The magnitude of the indirect effects was determined by taking the product of the path coefficients along the path way between the causally related variables. Table 4.10 showed the magnitude of indirect effect between cognitive social capital, structural social capital, and relational social capital were estimated by multiplying the path coefficient from one factor through its effect on the other.

The results also indicate that the cognitive social capital affects organizational performance directly and indirectly via its direct effect on structural, relational, and knowledge sharing. The indirect effect of cognitive social capital was .63, which was greater than the direct effect (.26). The indirect routes were generated into 7 paths. The indirect path from cognitive-structural-performance was the highest value weighted .19 to .63, indicating that this path was contributed 30% to the total indirect effect. The results also showed that the association of the three types of social capital that was caused from cognitive social capital effect on performance was 76%. The relationships of the linkages of social capital indirectly via knowledge sharing can be boosted 24%.
Table 4.10  Indirect Effect Path

<table>
<thead>
<tr>
<th>Indirect Path</th>
<th>effect</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cognitive to Performance</strong></td>
<td>0.63</td>
<td></td>
</tr>
<tr>
<td>cognitive=.86</td>
<td>struct=.22</td>
<td>perform</td>
</tr>
<tr>
<td>cognitive=.47</td>
<td>rela=.33</td>
<td>perform</td>
</tr>
<tr>
<td>cognitive=.27</td>
<td>kshare=.18</td>
<td>perform</td>
</tr>
<tr>
<td>cognitive=.86</td>
<td>struct=.48</td>
<td>rela=.33</td>
</tr>
<tr>
<td>cognitive=.86</td>
<td>struct=.30</td>
<td>kshare=.18</td>
</tr>
<tr>
<td>cognitive=.47</td>
<td>rela=.36</td>
<td>kshare=.18</td>
</tr>
<tr>
<td>cognitive=.86</td>
<td>struct=.48</td>
<td>rela=.36</td>
</tr>
</tbody>
</table>

| **Structural to Performance** | 0.24   |    |
| struct=.48                  | rela=.33 | perform | 0.16 | 66 |
| struct=.30                  | kshare=.18 | perform | 0.05 | 22 |
| struct=.48                  | rela=.33 | kshare=.18 | perform | 0.03 | 12 |

| **Relational to Performance** | 0.06   |    |
| rela=.36                    | kshare=.08 | perform | 0.06 |    |

A model was hypothesis that organizational performance is directly affected by structural social capital, and directly via its direct effect on relational social capita, and knowledge sharing. The results also indicated that the indirect effect of structural social capital was .24, which was greater than the direct effect (.22). The indirect routes were generated into 3 paths. The indirect path from structural–relational—performance was the highest value weighted .16 to .24, indicating that this path was contributed 66% to the total indirect effect. The relationships between structural social capital and relational social capital indirectly via knowledge sharing boosted 34% to organizational performance.

It was also hypothesis that organizational performance is directly affected by relational social capital, and indirectly via its direct effect on knowledge sharing. One indirect route was calculated via its direct effect on knowledge sharing. The results also revealed that the indirect effect of relational social capital was .06, which was less than the direct effect (.33).
4.3 The Revised Model

The process of scale construction was designed with 8 items to determine the cognitive social capital. Similarly, structural social capital, relational social capital, and knowledge sharing were assembled into 16, 12, and 15 items, respectively. The exploratory factor analysis was used to extract the initial indicators. The rotated component correlation matrix indicated that the compositions of the factors are distinct and independent from each other. Therefore, 51 items were modified through the SEM instruments; the final CFA models showed a good fit with the collected data. The items were then reduced from 51 to 17. The remaining items were shown in Table 4.11. The factors extracted as a result of the EFA verified data for a reasonable model to be identified and tested with the confirmatory method. The four latent factors identified through the EFA were reflected in the final model.

Table 4.11 Remaining Items

<table>
<thead>
<tr>
<th>Construct</th>
<th>Measure</th>
<th>Acronym</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive</td>
<td>I am enthusiastic about pursuing the bank’s vision.</td>
<td>VISION</td>
</tr>
<tr>
<td></td>
<td>I have proposed a super intelligent service method to my branch.</td>
<td>METHOD</td>
</tr>
<tr>
<td></td>
<td>I am enthusiastic about pursuing collective goals.</td>
<td>ENTHUS</td>
</tr>
<tr>
<td></td>
<td>My colleagues and I together plan to achieve goals.</td>
<td>PLAN</td>
</tr>
<tr>
<td></td>
<td>In my branch, we mutually act to attain goals.</td>
<td>GOAL</td>
</tr>
<tr>
<td>Structural</td>
<td>I am very close to my colleagues as though I were a member of their family.</td>
<td>FAMILY</td>
</tr>
<tr>
<td></td>
<td>My colleagues believe that I can help them when they face problems.</td>
<td>DEPEND</td>
</tr>
<tr>
<td></td>
<td>It is normal for colleagues to make mistakes.</td>
<td>FORGIVE</td>
</tr>
<tr>
<td></td>
<td>I spend my free time assisting my colleagues.</td>
<td>SUPPORT</td>
</tr>
<tr>
<td>Relational</td>
<td>My colleagues are honest.</td>
<td>HONEST</td>
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<tr>
<td></td>
<td>My colleagues behave in line with the bank’s ethics.</td>
<td>ETHIC</td>
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<td>My bank policies are transparent.</td>
<td>TRANSPAR</td>
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A confirmatory factor analysis technique was next provided assistance in refining the measurement models for each factor constructed. The measurement model was depicted to test the statistical requirement fit indices. Collected data from 167 bank branches which employed 1,440 respondents were tested. The fit of this measurement model was good enough, showing fit with the collected data. The regression weight for the structural model demonstrated statistically-significant strong relationships between the independent variables and the dependent variable.

According to the path diagram in the hypothesized model, the standardize regression weight estimate revealed that there were positive relationships among the variables. This research study spotlights one organization—the Government Savings Bank. The intention of this study was to observe an association with reference to three types of social capital, which can develop knowledge sharing; and all of them influenced on the organizational performance. Based on the results of the collected data analysis with Amos 21.0, the findings were recapitulated to respond to the objective of the research. The statistical outputs and research results were consistent with previous researches and the literatures, as mentioned in the preceding chapters.

This study hypothesized that cognitive social capital is the most important exogenous variable as the causal factor of the hypothesized model. The cognitive social capital bonds to structural and relational social capitals. Based on the cognitive model, self-efficacy contributes autonomously to and enhances organizational performance. Cognitive social capital stimulates team members to engage in a
network. Within a social network, employees share familiar standpoint, shared views, or appreciated the nature of the connections between the individuals in an organization. Interaction within a network can also help exchange information informally. Cooperation derives from members sharing similar interpretative frameworks, elucidating the importance of the cognitive dimension of social capital. The findings showed that cognitive social capital contributes to the creation, development, and maintenance of social relation. It is also important to note that cognitive social capital strengthens the member network and facilitates the creation and transfer of tacit knowledge. The breadth of the cognitive social capital influences not only knowledge sharing but also enhances organizational performance.

The estimates of the standardized regression weight from cognitive social capital to other factors were significant high. The results considerably support the cognitive social capital theory; that is. “…when people believe, they are motivated to build their social network more in tune with their own values and the kinds of relationships that they engage” (Bandura, 1986). The findings herein are consistent with the extant literature reviews.

This study attempted to investigate cognitive social capital as the cause and link with the other types of social capital. The finding provides additional support for cognitive social capital as rooted in the mental processes among thought and resulting ideas, and reinforced by the norms, attitudes and beliefs that contribute to structural network ties with cooperative behavior and mutually beneficial collective action. The findings support Krishna and Uphoff’s (2002) proposition that is cognitive social capital caused and linked other types of social capital. At the same time, the research results also support Tsai and Ghoshal’s finding that is strong social interaction (structural) is not a prerequisite for creating a shared vision (cognitive).

The next hypothesized path model showed that structural social capital (social strong ties) reinforced personal relationship and behavior such as trust, and commitment. Strong social ties reduce the transaction costs (Blau, 1968) associated with a business relationship, reducing the uncertainty about economic performance outcomes. Communication amongst members in organization increase trust and develops cooperation. It also provides a flow of value information or knowledge to the organization’s members to behave proactively and innovatively for the firms. The
flow of knowledge sharing can leverage the improvement of organizational growth and overall firm performance.

The initially-hypothesized structural model was examined to test the hypotheses proposed. The three paths of the structural social capital were supported on the results of the standardized regression coefficients, standardized efforts, and the critical ratio. The path diagram from structural social capital to relational social capital, structural social capital to knowledge sharing, and structural social capital to performance demonstrated the estimates standardized regression weight a statistically-significantly positive level of .001, .01, and .05, respectively. The standardized estimations of these path diagrams were measured at .48, .30, and .22. The estimate of squared multiple correlations values .74. The statistical results also significant supported structural social capital; that is, “…closure networks are powerful because close contact among members facilitates monitoring and enforcement of common expectations and norms which can reduce the transaction cost (Coleman, 1982; Blau, 1964; 1968).” The results indicated that the structural social capital stimulate trust and trustworthiness (Tsai and Ghoshal, 1998) which characterize relational social capital. The findings confirm that members in the network interact more frequently; their trusting and committing relationships will be converted into knowledge sharing, and performance. Literatures on ties strength put in the picture of strong ties interactions allow actors to know another to share important information, and create a common point of view to enhance the performance (Krackhardt, 1992; Nelson, 1989). The findings showed that strong ties had a significant, positive effect on relational social capital, knowledge sharing, and performance; the results also supported Tsai and Ghoshal’s model.

Prior studies have consistently found that knowledge sharing is positively related to strong ties (Wellman and Wortley, 1990; Tsai and Ghoshal 1998) found that social interaction ties had a strong effect on trust in the context of resource exchange and production innovation within the organization. Additionally, Chui, Hsu, and Wang (2006) found that strong social ties had indirect effects on knowledge quality via trust.

Subsequently, it was as well hypothesized that higher relational social capital enhances the willingness to share knowledge in organization, reduces cost and
improves performance. The knowledge sharing attitude and behavior may emerge when relational social capital exists. The conditions of relational social capital carry on economic performance. Relations high in trust and members committed to the organization imply more efficiency in the organization. Trust facilitates social and resource exchange, increases communication, and enhances cooperation between individuals. High levels of trust ultimately increase knowledge sharing and enhance teamwork. When members act at a higher level of interpersonal relationships, the time and effort for acquiring information are reached quickly as members more readily share information and knowledge to enhance their performance. Interpersonal interactions are also a key component of group cohesiveness, which tends to contribute to group performance.

The research findings showed that relational social capital was a statistically significant relationship, positive effect on knowledge sharing and performance. The two paths of the relational model were also supported on the results of the standardized regression coefficients, standardized efforts, and the critical ratio. The statistical outputs showed that the estimates standardized regression weight from relational social capital to knowledge sharing and performance were at a statistically positive level of .01 and .05. The paths flowing from relational social capital to knowledge sharing and performance were .36 and .33, consecutively. The estimate of squared multiple correlations values was .83. The results indicated that relational social capital influenced knowledge sharing and performance. The findings had consistently found to Li and Zhu, 2009; Khan et al., 2011; Matzler, Renzl, Mooradian, Krogh, and Mueller, 2011; Tsai and Ghoshal 1998; Wu, 2007).

Furthermore, the Amos outputs also showed that relational social capital had the strongest direct effect on performance; the direct path value was .33, whereas the direct effect of cognitive social capital, structural social capital, and knowledge sharing on performance were .26, .22, and .18, respectively. Thus, the findings supported the hypothesized path models. The corresponding results also supported previous scholars (Li and Zhu, 2009; Tsai and Ghoshal 1998; Wu, 2007), indicating that relational social capital especially trust each other and trust in organization enhances knowledge sharing and organizational performance because it lubricates the social machinery of the organization that makes the organization function.
The last hypothesis was that the sharing of operational knowledge improves organizational performance. An appropriate knowledge is shared amongst members and effectively utilized can be enhance organizational efficiency. Information flows create organizational advantage by enhancing the capacity to absorb, assimilate, and transfer ideas which enhance its strategic assets and facilitate processes that enable the organization to behave proactively and innovatively. Subsequently, it was presumed that the relationships between knowledge sharing and organizational performance are positively linear.

The initially-hypothesized path model of knowledge sharing was examined to test. One path was supported based on the results of the standardized regression coefficient at .18, with standard effect = .15, and the critical ratio = 2.02. There was a positive statistically-significant causal relationship between knowledge sharing and performance.

Hence, as supported by the findings herein, the sharing and transfer of tacit and explicit wisdom of individuals and groups within an organization can increase organizational performance. Consistent with previous research (Wilson and Spoehr, 2010), the research results supported the idea that the sharing of knowledge within an organization really improves organizational performance. The findings provided additional support that the three types of social capital contributes to knowledge sharing and that knowledge sharing is also one of the key benefits of organizational performance.

Additionally, the Amos output indicated that the standardized total effect of organizational performance depends on cognitive social capital, structural social capital, relational social capital, and knowledge sharing. The total effects on performance value were .89, .46, .39, and .18, accordingly. The research findings supported the research questions. The total effect of each construct was boosted by the indirect effect, considerably. According to the analysis of the diagram path, cognitive social capital had the strongest effect on performance. It is also important to note that the direct effect of cognitive social capital on performance was .26, whereas the power of the indirect paths was stronger than the previous path, especially when passing through knowledge sharing (power = .15).
The research findings showed structural social capital had the second strongest effect on performance. The findings revealed that the direct and indirect paths were likely to be equal to the effect on performance. Additionally, the relational social capital had the strongest direct effect on performance, whereas its indirect effect was .06. Finally, knowledge sharing was less powerful in relation to the performance, as its direct effect was only .18.

As described earlier, the linkages of the three types of social capital and knowledge sharing were found to predict successful organizational performance. The study examined the relationship among the three types of social capital and showed how each of them contributed to knowledge sharing and organizational performance. The model supported here suggests that enhancing cognitive social capital may lead to higher levels of organizational performance. Cognitive social capital was the cause of the other two types of social capital and they were closely associated together. Cognitive social capital as an exogenous latent variable exercised positive effects on structural social capital, relational social capital, knowledge sharing, and increased organizational performance. The findings also provided a clear picture of the role of structural social capital by showing how strong ties has significant, directly and indirectly, accumulated and reinforced to relational social capital, knowledge sharing, and organizational performance. The finding provided strong support for the argument that relational social capital facilitates knowledge sharing, and organizational performance; and this finding was robust at the branch unit levels. The analysis suggested that the organization should be concerned about the creation of cognitive social capital as the antecedent of organizational performance.

The next chapter provides the conclusion, limitations, implications, and recommendations of the study.
CHAPTER 5

CONCLUSION

The previous chapter provided an overview of the analytical models, indicating the effect of the linkages of the three types of social capital and knowledge sharing on organizational performance. In this chapter, the model as hypothesized is discussed based on the organizational theories. After discussing the findings and addressing possible implications, recommendations for future research, contributions, limitations, and the chapter conclusion are presented. The construction of this chapter is organized as follows:

5.1 Discussion
5.2 Implications
5.3 Recommendation for Future Research
5.4 Contributions
5.5 Limitations
5.6 Conclusion

5.1 Discussion

In Chapter 1, it was asked, “What makes the organization efficient?” Definitely, different disciplines have different perspectives. Even in organization theory, theorists have different criteria leading to conclusions as to what makes the organization effective. In fact, organizations are indeed the products of individual human actions. Humans in social networks are the key factor in the creation of the quality of organizational life; their unique resources create value for the organization, and according to the resource-based view (Barney, 1991), such unique resources are central to the organization’s competitive advantage. This study integrates social capital and knowledge sharing as organizational resources and capabilities into the research model.
For this reason, it was realized by the present author that social capital is one of the organizational resources that can be used to achieve sustainable competitive advantage, as social capital has been viewed as an essential asset for the organization’s success. The linkages of the three types of social capital are conceptualized in terms of having the capability of increasing knowledge sharing, which in turn influences organizational performance.

This research study has examined the bank branches of the Government Savings Bank; the sample size was 167 branches located in Bangkok and rural areas, as mentioned in the previous chapter. As reported in chapter 4, the empirical results of this study generally supported the research hypotheses by revealing the linkage of the three types of social capital and knowledge sharing that significantly affects organizational performance. The confirmatory factor models and the structural model hypothesized were seen to fit the collected data. Additionally, construct validity was established by examining convergent and discriminant validity, which confirmed that the hypothesized structural paths were real and that they were a result of statistical discrepancies. Significantly, the study found that cognitive social capital was the exogenous variable that directly affected structural social capital, and then indirectly affected relational social capital, and through knowledge sharing, organizational performance.

Overall, the findings generally supported the proposed model, which was deeply rooted in the theoretical foundations of social capital theory and knowledge sharing. The study was able to sufficiently capture the diversity of the different types of social capital; the results are a significant step in illustrating how information sharing may be a mediating variable that helps to explain the different and occasionally inconclusive empirical results of the link between social capital and performance in the literature. More importantly, the study shows that different types of social capital have different degrees of reliance on information sharing as the mediator that extends their respective effects on the improvement of competitiveness. In conclusion, this study provided an alternative explanation for the divergent and conflicting empirical results concerning the link of social capital and knowledge.

This study also produced findings that would be interesting from theoretical and practical perspectives. First, the results support the importance of social capital
and knowledge sharing in explaining the GSB bank staffs’ behaviors in the organization. The findings also offer insights into the value of cognitive social capital that causes the linkages of the three types of social capital and its effect on knowledge sharing and organizational performance.

The findings further indicate that cognitive social capital has the strongest effect on organizational performance—cognitive social capital builds strong social ties among the network actors in the GSB, and effects trust in and commitment to the organization. The stronger is the cognitive social capital, the stronger are the ties to the organizational network, and the higher are the trust and commitment to the organization. Cognitive social capital increases knowledge sharing that can increase employees’ competence in improving performance, and it is noteworthy that cognitive social capital may be an organizational resource that can also facilitate employees’ capabilities within the banking service system.

The statistical research results show the linkage of three types of social capital; scholars and practitioners in the banking industry have not adopted an integrative model that explores the effectiveness of organizational performance from a holistic point of view, and few studies have investigated the linkages of the three types of social capital or the effects of social capital on knowledge sharing. It is a challenge for organizational study to examine the linkage of the three types of social capital in terms of the enhancement of organizational performance.

This study also investigated the individual’s attitudes in each branch and combined these attitudes for group or unit analysis. As seen in the study, performance is a result of the behavior of the members in the network, and the social capital and knowledge sharing in each branch also derived from the individual as the total efforts to achieve organizational performance. A number of studies have treated social capital and knowledge sharing as an individual effort and not in terms of collective resources; they have failed to identify social capital and knowledge sharing as effects that derive from the action of individuals. Again, it would be interesting for future research to investigate social capital and knowledge sharing from the point of view of collective resources.

The findings indicate that all of the types of social capital are strongly associated with knowledge sharing and have a strong effect on organizational
performance. It is remarkable that social capital and knowledge sharing can enhance organizational performance, and this framework is an under-researched subject in the area social capital and knowledge sharing vis-à-vis the support of organizational performance (Kim, Lee, Paek, and Lee, 2013). For this reason, it is necessary to scrutinize this issue in a deeper fashion.

This research differs from previous studies in that it simultaneously investigates the attribution factors that exert an influence on organizational performance, and it helps to expand the studies that examine the latent variables in each factor constructed. The structural model that was developed in this study can be of benefit for academic resources in terms of testing or postulating the relationships among the categories of variables.

The research results also reinforce the concept of self-efficacy in the areas of cognitive development (Bandura, 1983, 1986, 1989, 2001)—cognitive processes take a variety of forms, and much of human behavior is regulated by the force of the thought that embodies cognized goals. Personal goal setting is influenced by a person’s own appraisal of his or her capabilities, and a strong sense of self-efficacy can enhance one’s personal accomplishments in a variety of ways. People with a high sense of self-efficacy, for example, have a positive view that guides and supports them in achieving their desired performance level.

The findings also support the idea of Tsai and Ghoshal (1998); that is, that the three types of social capital are linked. They also underline the findings of Uphoff and Wijayaratna (2000) and Krishna and Uphoff (2002), who have asserted that cognitive social capital predisposes people to collective action that is beneficial to all parties. Consequently, it is suggested here that cognitive social capital has a strong influence on the structural and relational social capital within the organization.

The study results additionally reveal that knowledge sharing in the organization is one of the key driving regarding the improvement of organizational performance, and that relational social capital has the strongest effect on knowledge sharing. This finding also supports the idea that the organization requires trust on the part of everyone in order to create an organizational environment that enhances knowledge sharing (Serrat, 2009).

These findings have identified four key factors associated with organizational performance, and a model has been drawn that is coherent enough to challenge the
prevailing view and provides insights into an alternative basis for organizational design. The approach taken in the present study can be seen as a move away from command- and control-type organizations to those in which cooperation constitutes the social capital and knowledge management within the organization. The results suggest that this represents a major challenge for theory and for practice. The present author believes that other theories might also benefit from this model. In general, the theory of organizational behavior, including the resource-based view theories that include strong cognitive social strong ties, trust, and knowledge sharing in terms of process or outcome variables, can benefit from the clarification of their relationships.

5.2 Implications

With regards to academic and theoretical implications, this research makes the following three contributions: first, a valid factor structure for three types of social capital and knowledge sharing; second, measurement of each factor in the bank settings was validated; and third, a structural model involving the three types of social capital, knowledge sharing, and performance was developed.

According to the literatures review, this framework has never been empirically tested in any kind of setting. Therefore, based on organizational practice, the major contribution of this research was to explore a valid factor structure of social capital and knowledge sharing in the Thai contexts using the Structural Equation Model with one simple data set, and to confirm this factor structure using CFA models, including statistical requirements.

Regarding the academic contributions, the research extended the validation of these measurement models by using the multitrait-multimethod matrix approach to examine validity and evaluate discriminant validity as well as to measure nomological validity before exploring the structural equation model. The statistical requirements were reached in this study.

The final academic contribution was to develop the linkage of the three types of social capital and hypothesized that cognitive social capital is the exogenous variable constituting structural social capital and relational social capital.

Regarding the practical implications, the research results may provide human resource management and leaders with insight into how cognitive social capital
influences other factors. The three types of social capital as well as knowledge sharing can be created via organizational interventions.

5.3 Recommendations for Future Research

The limitation of the study provided some ideas for future research. To generalize these findings, more bank branch units need to be explored. Since the sample size in this study seemed to be adequate, future research in various regions would likely provide stable outputs.

This study focused on a sole organization. The hypothesized model was significant in meeting the statistically requirements; however, potential research should emphasize various organizations in order to stabilize the model.

Based on the Tsai and Ghosal’s (1998) concept, Uphoff and Wijayaratna’s (2000) and Krishna and Uphoff’s (2002) models, this study hypothesized relationships among the three types of social capital. The cognitive dimension was seen to be linked to the structural and relational types of social capital. The research results supported the previous proposition. There have been few studies exploring the linkage of the three dimension of social capital. Therefore, it is recommended for prospective research to look into this issue.

The value of this model for theory development of any of the forgoing domains, and for the practical application of these theories, will depend on the extent of the boundary conditions and the validity of the propositions. Therefore, it is hoped that future researchers will take up the challenge and test these propositions and examine the boundary conditions.

5.4 Contributions

This investigation of three types of social capital, knowledge sharing, and organizational performance in combination, makes a significant contribution to the organizational capability literature as well as to the social capital literature and knowledge sharing literature. This study has demonstrated the effects of these exogenous variables on the endogenous variable. That is, as much as the literature has
established the importance of social capital embedded in interpersonal relationships, the present author believes that it is equally useful and important to recognize that social capital and knowledge sharing can build important relationships through the organizational interventions which were suggested in the previous section.

The formation of social capital depends on the organizational interventions and interaction among the organizational members. As mentioned in the previous chapters, organizational social capital is rooted in the mental processes among members’ thought, affect, and action. Human behavior is governed by perceptions and organizational environments. Expectation, belief, self-perceptions, goals and intentions give shape and direction to behavior. Human action is viewed as the product of the central role of the cognitive, the self-regulatory and self-efficacy.

Members in the organization create, maintain, dissolve, and possibly reconstitute network ties. That is when people believe, they are motivated to build their social network more in tune with their own values and the kinds of relationships that they engage in. They establish strong ties and intelligently organize in harmony with cooperation for mutual benefit.

Social networks empower the collective action that will enhance the rational decision making at the organizational level or eradicate the irrational decision making. Social networks form “participation” in the organization. Members participate in organizational activities, informal meetings, and clubs; they commit to their network and are willing to exchange their information related to the organizational context. Their networks have influential power for the collective action that empowers organizational performance.

Strong interpersonal relationships create trust in wider networks. Trust is regarded as a source of relational social capital. Trust and honesty are based on personal experience. Organizational trust builds and retains its advantage through the dynamic and complex interrelationships among members in the organization. Trust can reduce cost and improve organizational performance. Trust is one of the most valuable of the group components and it is essential to the processes of influence and collaboration, and also promotes group success. Trust within the organization increases efficiency and effectiveness by encouraging managers to freely exchange ideas and information. The relational interactions between members influence performance.
The interaction of cognitive social capital, structural social capital, and relational social capital embeddedness is important because it influences the socially complex micro practices among group members that lie at the core of capacity performance, and shape the social micro foundations of the organization’s capability evolution.

Organization and leadership should establish organizational mechanisms to increase information self-efficacy and connectivity efficacy by creating an environment conductive to sharing, as well as positive attitudes toward sharing. Numerous management practices may simultaneously affect a number of the socio-psychological factors in facilitating or encouraging knowledge sharing, such as work design, training programs, development performance appraisal, incentive programs, an open and trusting culture, etc.

5.5 Limitations

In spite of the compelling results that were obtained herein, there are a few limitations that should be taken into consideration when generalizing the findings to other populations. Nevertheless this research study established convergent validity along with the discriminant validity and nomological validity, it is expected that the present results will be generalizable across banks and other institutions. The issue of external validity may be of concern when considering the applicability of research conducted on a bureaucratic banking sample. Without comparative studies, a similar claim cannot be made for the bank institutions. Thus, care should be taken to ensure that the results are not interpreted beyond the limits of this study. The present author’s focus was on examining whether the model of relationships among variables was consistent with specific causal relationships.

Although the unit analysis was carried out at the branch level, subsequent research could build on exploratory study by using multi-level modeling. This could furnish valuable quantitative evidence on the relative importance of the individual versus organizational determinants of organizational outcomes. It would also be necessary to conduct more detailed investigation at different levels of the
organizational hierarchy to fully explore how social capital translates into better performance.

Nonetheless, the data for this study were collected from one bureaucratic organization. Furthermore, the data were “convenience collected” since the regional managers were willing to help collect the data. The analysis has examined a particular group of bank staff during a specific time period. It would therefore be important to identify whether the relative importance of organizational social capital and structure may differ over time and time periods and in other organizational settings, as well as the leadership in the organization. For example, further research in other bank units or different banks could cast light on the comparative generalizability of the results presented here. The degree of social capital within the organization analyzed here may therefore be unrepresentative of that found in those operating within other units or institutions.

Another limitation of the study is that the cross-sectional analysis was of a static nature. However, longitudinal studies could serve to provide temporal separation of measurement whereby the bank staff could provide information on the predictor and criteria variables at different points in time, and hence the data and information would be more useful than in a study like this one. The study focuses on the sample units in the bank, specificities that can restrain possible generalization of the findings.

The present findings are an initial step on the road to causality determination. This should be considered when generalizing the findings to the population because this sample served as a convenience sample for developing a preliminary framework that can be used in understanding the importance of competitive resources in the organization. The comparative models served as a preliminary source of understanding the potentiality of the Amos program. Model invariance is considered to be preferred analysis for assessing whether measurement and structural models are equivalent across groups.
5.6 Conclusion

This dissertation assesses a theoretical framework for forming an integrative model which allows for the exploration of the influence of social capital and knowledge sharing on organizational performance. Additionally, the study examines the linkages of the three types of social capital, and their effects on knowledge sharing organizational, which in turn promote organizational performance. The empirical findings from the initial test of the framework supported the fundamental distinction made between two principal forms of social capital and knowledge sharing. The results of the research point to the importance of understanding the cognitive social capital of the group.

The findings expressed concern over the existing conceptions of the role of the informal social relationships in the organization. Decades ago, Burns (1977) noted that Roethlisberger and Dickson saw the informal organization “as receptacle for observations about the behavior, relationships, the sentiments and belief…taken to be irrelevant to the formal organization or incompatible within it,” and that Barnard saw it as “an essential adjunct to the formal organization.” Social capital and the willingness to share knowledge have been examined with the understanding that they are central to the real world of organizations.

Social capital provides organizations with greater coherence of action due to organizational stability and shared understanding. The major benefit of social capital is that it enables organizations’ members to coordinate their actions to achieve desired outcomes. Simply stated, investment in social capital produces organizational values.

The findings establish the idea that the concept of social capital seems to be a very compatible, useful, and important one for the organizations. The organization must sustain and enhance the original social capital with which they were formed and broaden it into a variety of key areas.

Organizational executives have a pivotal role in carrying out the following functions: fostering social capital in order to recruit and develop broad members, obtain organizational support, develop strategic competitiveness, engage in advocacy, better group relations, and create a shared mission within the organization and its employees. Leaders must also decide how and where to invest in social capital and the
knowledge sharing in organizations and they must be active in seeing that social
capital becomes a reality.

Some of the recommendations suggested for leaders are the following: create a
shared vision among members that is in line with the direction of the organization,
thus creating trust in the organization and developing awareness of social networks.
They should also assess their own network, estimating the distance between
individuals and build genuinely reciprocal relationships and assess opportunities to
connect with different groups (Brass and Krackhardt, 1999).

In order to build a shared vision, top management must encourage people to
create visions that will enable them to cope with the organization’s core purposes and
not just the leader’s personal vision. Leaders must also be able to determine the core
values of the organization and define core purposes and envision the desired future by
asking relevant and significant questions; for example: Where do we want to go?
What do we want to create? How can we best operate and work together? It can be
thus seen that is necessary to establish markers that indicated the success of the
organization.

Additionally, trust in the organization can be seen as a key element in the
organization’s successful performance. Cohen and Prusak (2001), for example,
courage leaders to foster trust by being trustworthy and having open relationships
and by encouraging openness in others—they suggest that organizations should invest
in networks and provide resources to make sure that participation takes place. These
authors additionally recommend recognizing and encouraging others to build social
capital; and last, they encourage the use of storytelling and narratives to reinforce the
concepts of social capital and its benefits.

In creating a knowledge-sharing culture, leaders can utilize new management
techniques to increase the collaboration within their teams, departments, and within
the organization, and they should also communicate their collaborative approaches
clearly and embed them in their business practices. In this way, the results of the
collaboration can be measured. Naturally, trust among the organization’s members is
necessary in order to bring about constructive collaboration. This sharing of thoughts
and idea among the members of the organization will serve as a basis for establishing
the knowledge-creating process within the organization and in this way a sense of
sharing and collaboration will be created from the existing social capital (Bock and Kim, 2002; Davenport, 1997). Although people may not be willing to accept shared knowledge from others because of lack of trust (Bircham, 2003), an effort in this direction must be made.

It should be recognized, however, that an attitude of knowledge sharing in itself is not sufficient for people to be able to increase organizational productivity through the exchange of ideas; the infrastructure of technology and services can also be effective in realizing the goal of knowledge sharing (Ojo and Grand, 2009; Sanghani, 2009). It should also be recognized that information technology can help the organization manage and leverage knowledge systematically and actively, and in order to achieve this, leaders must provide appropriate information technology that is easy to access and share. This ability to access and share knowledge between individuals and among the units of the organization can greatly increase the organization’s performance (Hendricks, 2005).
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APPENDICES
APPENDIX A

QUESTIONNAIRE IN THAI
แบบสอบถามการวิจัย เรื่อง ทุนทางสังคม การแลกเปลี่ยนความรู้ กับผลสำเร็จในการทำงาน

เรียน คุณผู้ตอบแบบสอบถาม

แบบสอบถามนี้ เป็นส่วนหนึ่งของการทําวิจัยสำหรับหลักสูตร Doctor of Philosophy in Development Administration (International Program) คณะรัฐประศาสนศาสตร์ สถาบันบัณฑิตพัฒนบริหารศาสตร์ เพื่อศึกษาสมการโครงสร้างที่มีผลต่อความสำเร็จในการทำงาน

ผู้วิจัยขอความร่วมมือจากท่านในการตอบแบบสอบถามนี้ และโปรดระบุข้อเสนอแนะเพื่อความสมบูรณ์ของข้อมูลโดยยินดีที่จะจ่ายท่านทุกท่านกับความรับผิดชอบ เพื่อผลทางการศึกษาวิจัยทั้งนี้

จึงเรียนมาเพื่อโปรดให้ความร่วมมือตอบแบบสอบถาม และขอขอบพระคุณในความร่วมมือ ณ โอกาสนี้

ส่วนที่ 1: ข้อมูลส่วนบุคคล

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ส่วนที่ 2: ข้อคําถามเกี่ยวกับทุนทางสังคม และการแลกเปลี่ยนความรู้

โปรดทําเครื่องหมาย √ ในช่องที่ใกล้เคียงความรู้สึกท่านมากที่สุด

1 = ไม่เห็นด้วยที่สุด 5 = เห็นด้วยมากที่สุด

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<td>ฉันทุ่มเทตั้งใจทํางานตามวิสัยทัศน์และภารกิจธนาคาร</td>
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<td>ฉันและเพื่อนร่วมงานมีการวางแผนงานร่วมกัน เพื่อทําให้ได้ผลการบรรลุเป้าหมายของสาขา</td>
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<td>ทีมงานสามารถมีการสร้างสรรค์และคิดหาความเป็นไปได้ได้อย่างเต็มที่</td>
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<td>ฉันมีการเรียนรู้สิ่งใหม่ ๆ ทุกช่วงเวลาเพื่อความตื่นเต้นในการทํางาน</td>
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<td>เป็นเรื่องเสียเวลา แล้วมีข้อดีที่มีอยู่ คือให้โอกาสทางการทำงานให้เจ้าหน้าที่</td>
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ส่วนที่ 3: ข้อมูลส่วนบุคคล

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ขอขอบพระคุณในความร่วมมือที่ท่านให้แก่การวิจัยที่มีอยู่นี้

ที่หน่วยงานนี้

กฤษณา ฟองธนกิจ
ผู้วิจัย

แบบสอบถามนี้เป็นส่วนหนึ่งของการวิจัยสำหรับหลักสูตร Doctor of Philosophy in Development Administration (International Program) คณะรัฐประศาสนศาสตร์ สถาบันบัณฑิตพัฒนบริหารศาสตร์ เพื่อศึกษาสมการโครงสร้างที่มีผลต่อความสำเร็จในการทำงาน และขอขอบพระคุณในความร่วมมือ ณ โอกาสนี้
ส่วนที่ 2: ข้อคำถาม (ตอบเบี่ยง)

โปรดทำเครื่องหมาย √ ในช่องที่ใกล้เคียงความรู้สึกท่านมากที่สุด
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ส่วนที่ 3: ความคิดเห็นเพิ่มเติม

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### ABBREVIATIONS AND SYMBOLS

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<thead>
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<th>Abbreviations</th>
<th>Equivalence</th>
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<tr>
<td>AVE</td>
<td>The Average Variance Extracted</td>
</tr>
<tr>
<td>CFI</td>
<td>Comparative Fit index</td>
</tr>
<tr>
<td>CMIN/DF</td>
<td>Relative chi-square</td>
</tr>
<tr>
<td>CR.</td>
<td>The construct reliability</td>
</tr>
<tr>
<td>C.R.</td>
<td>The Critical Ratio</td>
</tr>
<tr>
<td>df</td>
<td>Degree of freedom</td>
</tr>
<tr>
<td>e</td>
<td>Error</td>
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<tr>
<td>GIF</td>
<td>Goodness of Fit index</td>
</tr>
<tr>
<td>GSB</td>
<td>The Government Savings Bank</td>
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<tr>
<td>IC</td>
<td>Inter-construct correlation</td>
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<td>NNFI</td>
<td>Nonnormed fir index</td>
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<tr>
<td>n</td>
<td>Number of sample size</td>
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<td>(R)</td>
<td>Reverse item</td>
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<tr>
<td>res</td>
<td>Residual</td>
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<tr>
<td>RMSEA</td>
<td>Root Mean Square error of approximation</td>
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<tr>
<td>SIC</td>
<td>Squared inter-construct correlation estimates</td>
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<td>SEM</td>
<td>Structural Equation Model</td>
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<tr>
<td>S.E.</td>
<td>Standard Effort</td>
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<td>TLI</td>
<td>Tucker Lewis Index</td>
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<tr>
<td>$\alpha$</td>
<td>The Alpha</td>
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<tr>
<td>$\beta$</td>
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<tr>
<td>$\bar{x}$</td>
<td>Mean</td>
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<td>$\lambda$</td>
<td>The Standardized factor loading</td>
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<tr>
<td>$i$</td>
<td>The number of items</td>
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<tr>
<td>$\delta_i$</td>
<td>Sum of the error variance terms for a construct</td>
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<tr>
<td>$\chi^2$</td>
<td>Chi-square fit index</td>
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</table>
BIOGRAPHY

NAME
Krishna Fongtanakit

ACADEMIC BACKGROUND
Political Sciences, Chulalongkorn University, 1978
Law, Sukhothai Thammathirat University, 2004
Accounting, Sukhothai Thammathirat University, 2007
Management, Sasin Graduate Institute of Business Administration of Chulalongkorn University, 1995
Public Administration, National Institute of Development Administration, 1996

PRESENT POSITION
Senior Vice President

EXPERIENCES
Personnel, Bank for Agriculture and Agricultural Cooperatives
Secretary to the President, the Government Savings Bank