ปัจจัยที่มีผลกระทบต่อการใช้ความรู้ของสาขาธนาคารต่างๆ ในประเทศไทย

Factors Affecting Knowledge Application of Thai Banks' Branches in Thailand

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บทคัดย่อ

การศึกษานี้มุ่งเน้นในปัจจัยที่มีผลกระทบต่อการใช้ความรู้ (Knowledge application) ของสาขาธนาคารในประเทศไทย ปัจจัยต่างๆ ในการศึกษานี้ได้แก่ การสนับสนุนทางด้านเทคโนโลยีสารสนเทศ การทำงานเป็นทีมเครือข่ายทางสังคม และ การสื่อสารภายในองค์การ ผลของการศึกษานี้ทำให้ทราบว่าการสื่อสารภายในองค์การ และเครือข่ายทางสังคมมีอิทธิพลอย่างมากต่อการใช้ความรู้ตามลำดับ นอกจากนี้ในการวิจัยนี้ยังมีการอภิปรายถึงข้อเสนอแนะและแนวทางทางในการวิจัยทางด้านการจัดการความรู้ในอนาคต

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Abstract

This study focuses on factors affecting knowledge application of bank branches in Thailand. Four factors were information technology support, teamworking, social network and internal communication. The findings indicated that internal communication and social network had high influence on knowledge application respectively. The suggestions and directions for future research in the areas of knowledge management were also discussed.

คำสำคัญ : การใช้ความรู้ การสื่อสารภายในองค์การและเครือข่ายทางสังคม

Keywords : Knowledge Application, Internal Communication and Social Network

Introduction

According to Grant (1996), the importance of knowledge and its management has been highly recognized in several research works, representing several research traditions, including organizational learning, management of technology, and managerial cognition. In knowledge-based economy, organizations need to utilize their resources effectively and knowledge is obviously one of the most important resources of the organizations. Nonaka (1991) stated that knowledge exists in human beings and thus managing or applying knowledge is involved with people both within the organizations and people outside. In order to apply knowledge effectively, there are four major factors; information technology support, social network, internal communication and teamworking.

Knowledge application becomes an important task for any organization in all industry, including banking industry. In the knowledge-based society, banks have to effectively apply their knowledge to outperform their competitors. According to Bank of Thailand (2008), Ssince 1997, the development of banking laws and regulations has brought significant changes to the domestic banking industry, including the entry of foreign banks to compete within the Thai banking industry, increasing competition and making it fiercer than ever. Further, new technology and management skills have changed the way banks used to operate. Internet banking, for example, and electronic machines have been introduced to serve customers faster and to lower the costs of bank operation in the long run. As for the degree of competition in the Thai banking industry, there was clearly a higher degree of competition through these financial reforms. The Thai government had the Financial Sector Master Plan to help strengthen the financial systems.

According to the Bank of Thailand (2008), there are three forces of change in the Thai banking industry.

1. The emergence of New Technology

With new application of new technological tools, banks have created more convenient and efficient channels of delivery of financial services, such as E-banking service. With these new tools, financial service providers are available not only at bank branches, but also at bank customers' computers at home or at the office. The physical barriers of banking services

are now removed and banks have to compete at competitive levels where customers have more knowledge to demand more complicated banking services, and banks need to compete and utilize their resources to offer better services than their competitors (Tanriverdi, 2005).

2. Liberalization and Deregulation

The globalization and international banking trend moves towards financial liberalization and deregulation, resulting in higher competition among banks, and banks have to enhance their efficiency because the competition in Thailand is not limited among domestic Thai banks; international banks are also allowed to compete for the same customer base and the same types of services provided by Thai banks. Moreover, the problems or challenges mainly concern the ability to cope with the new banking environment, and banks need to try to gain more benefits from liberalization and deregulations. Banks have to manage resources effectively to be aligned with business opportunities and strategies to maintain or improve their organizational performance (Ishida, 2002).

3. Increasing Customer Sophistication

Bank consumers currently have many ways to access financial products and services. With new competitors, including foreign banks and nonbanks, such as AEON and GE Capital, domestic banks have had to adjust their resource and capabilities in order to improve their performance. In addition, new technological delivery methods, such as electronic banking or mobile banking, have been introduced to provide financial services to customers. For this reason, customers are becoming increasingly sophisticated in their demands for faster and more convenient services from financial service providers. In the past, banks competed heavily in traditional savings instruments. Currently, new investment products are being introduced to customers and have become new areas of competition. Banks now encounter these new challenges and need to adjust and improve their business operations to respond more efficiently and effectively to customers' expectations and to deal with competitors in the banking industry (Kubo, 2006).

In addition, according to Kubo (2006), the changes in the competitive environment of the Thai banking industry are noticeable in

terms of ownership structures and regulations. After the financial crisis, for several banks the ownerships, formerly belonging to families, were transferred to the state and international banks. Although several changes occurred after the crisis in banking operations, the six largest banks provided approximately 70 percent of the total loans of the banking sector, indicating the stable market shares dominated by big banks.

In this study, the author has chosen to study seven commercial banks which have more than 100 full branches, located in the Bangkok area, including:

- Bangkok Bank
- Krung Thai Bank
- Kasikorn Bank
- Siam Commercial Bank
- Bank of Ayudhya
- TMB Bank
- Siam City Bank

These seven banks account for 837 branches out of 1,101 branches of all banks in Bangkok. Since Bangkok is the capital of the country, bank competition is significantly high there. The importance of knowledge management in Bangkok is crucial for the branches to be able to respond to this competitive environment. Banks are one of the most important business sectors in the economy of any country. Moreover, the nature of the banking business is to operate 24 hours, such as ATM services. This implies the crucial role of knowledge management for banking operations.

Literature Review

The author reviewed several aspects related to knowledge, knowledge application, and four factors, which were teamworking, internal communication, information technology support and social network, affecting knowledge application as follows.

Characteristics of Knowledge

Ju, Li and Lee (2006) have stated that knowledge can represent different characteristics. If knowledge is complex, the cost of knowledge acquisition tends to be higher and it is more difficult for organizations to access such knowledge.

McDermott (1999) has suggested that knowledge differs from information, and sharing knowledge requires different concepts and tools. There are six aspects of knowledge that are different from information.

1. Knowing is a human act. Knowledge always involves people, especially people that know.

2. Knowledge is a residue of thinking. Thinking is a key to making information useful for users. Moreover, it transforms information into insights and insights into solutions for business practices. In one way, knowledge also comes from experience, but the experience alone is not sufficient, meaning that experience needs to be combined with thinking.

3. Knowledge is created in the present moment. Most people cannot articulate what they know and it is largely invisible to their thoughts when they have questions and start to think about the answer to a problem.

4. Knowledge belongs to communities. People learn and create knowledge when participating in communities, including families, neighbors, and with colleagues. For example, marketing specialists learn market survey methods, but they also learn marketing perspectives by asking questions about product use, customer behaviors, and so on. This knowledge is embedded in the marketing discipline and can be transferred to others by professional practices.

5. Knowledge circulates through communities in many ways. Knowledge can flow within and through professional communities and from one generation to the next. The knowledge of communities is in the form of unwritten work routines, work products, textbooks, procedures, stories and specialized languages.

7. New knowledge is created at the boundaries of old knowledge. In learning new things, people normally compare the new things they learn with what they already know. The practice of professional work is related to the thinking that comes from experience and current information, and new knowledge emerges from thinking at the basis of current practice.

Types of knowledge

Karkoulian, Halawi and McCarthy (2008) have stated that knowledge has two forms, explicit and tacit. The first type is explicit knowledge, which can be documented and shared through information technology (IT). Explicit knowledge is structured, has fixed content, and is externalized and conscious (Martensson, 2000; Haldin-Herrgard, 2000). The second type is tacit knowledge, which exists in the human mind, behavior and perception. The characteristics of tacit knowledge are that it is personal, cognitive, and is difficult to explain in words or in writing (Gore and Gore, 1999).

Knowledge Application

Lubit (2001) has stated that outstanding knowledge application can assist the organizations in building a sustainable competitive advantage. Further, Ju, Li and Lee (2006) and Cui, Griffith and Cavusgil (2005) have suggested that knowledge application means the process of using knowledge and this includes storing, retrieving, applying, contributing and sharing knowledge.

The concept of knowledge application results from the configurations of organizational structure and culture (Cui, Griffith and Cavusgil, 2005).

According to Tanriverdi (2005), using data from 250 Fortune 1,000 firms, knowledge application leads to greater organizational performance due. In addition, cross-unit synergies from the product, customer, and managerial knowledge resources of the firm created by knowledge application enhance the financial performance of the organization (Ju, Li and Lee, 2006).

Teamworking

Many organizations currently operate with the concept of team-based organizations, allowing employees to meet in order to identify and solve problems together.

Greenough (1998) has identified from research findings that workers highly value the opportunity to interact and to know more about other team members, resulting in knowledge transfers and exchanges among organizational members.

The culture of teamworking is an important aspect for the organization as the dynamic force to adapt to the new realities of the business world (Bradley, 1994). Therefore, senior managers have to plan carefully how to create an effective teamworking environment in the organization. Team learning has become one of the most important elements in teamworking as an important aspect leading to knowledge management in organizations. It is crucial to encourage teams to review their knowledge and experience from working and exchanging information among team members in order to improve the problem solving and decision making of the team and the organization. With a closer working relationship, organizations can clearly benefit from knowledge flows among individuals, groups, and departments with the clear guidelines provided by the organization executives.

Internal communication

In relation to the aspect of knowledge management, in Nonaka's work on The Knowledge-Creating Company (1991), redundancy the conscious overlapping of company information, business activities, and managerial responsibilities generates frequent dialogue and communication among workers, helping in the transfer of tacit knowledge. Thus, having frequent dialogues and communication assists with internal knowledge sharing, knowledge acquisition, knowledge conversion or creation, and knowledge application in the organization. Therefore, effective internal communication is significant for knowledge storage and capturing.

Welch and Jackson (2007) have indicated that internal communication is comprised of the interactions and relationships between stakeholders within organizations across a number of interrelated dimensions, including internal line manager communication, internal team peer communication, internal project peer communication, and internal corporate communication. Furthermore, the participants in internal communication include all groups at different levels in the organization, as follows:

- all employees
- strategic management: the dominant coalition, top management or
- strategic managers (CEOs, senior management teams)
- day-to-day management: supervisors, middle managers or line-managers (directors, heads of departments, team leaders, division leaders, the CEO as line manager)
- work teams (departments, divisions) and
- project teams (internal communication review group, company-wide e-mail implementation group)

Information Technology Support

Iftikhar, Eriksson, and Dickson (2003) have stated that information technology offers one of the strongest components of knowledge management development and includes a range of systems offering capabilities in knowledge management. Even though there are many benefits that information technology has obviously provided for organizations, many concerns about the application and management of information technology should be raised, especially regarding large and complex information systems. In addition, several

organizations have not understood that when they acquire information technology, the systems will generate good management outcomes. AccordngAccording to Radhakrishnan, Zu and Grover (2008), information technology provides three characteristics of impacts on operational processes.

1. Information technology can be automated to increase the ability to produce more or provide better quality output from input.

2. Information technology can be useful in storing, retrieving, manipulating, and disseminating information.

3. Information technology can transform operational processes by changing and improving the pattern of how organizations interact within their value chain.

Social Network

According to Gregory (2007), the social network is a set of relationships between a group of individuals or organizations that usually have similar interests, and with these networks one can utilize the network or connections to learn from others. The social network can also be an important source of knowledge. By interacting with customers and suppliers, or by learning from external experts, an organization can capture and acquire new knowledge. In their research, Somchai Numprasertchai and Igel (2005) stated that by forming social networks, for example, collaboration and exchange among universities and government agencies and industries can help to generate greater breadth and depth of research knowledge than pure in-house development. Weber and Khademian (2008) have noted that it is important to focus on relationships and involvement in taking what is known among social network participants and engaging the exchange among social network participants; in this way, new information or knowledge can be developed and combined into functional and useful practices for problem-solving purposes.

Thai Banks and Knowledge Management

Thai banks are organizations facing high competition and fast-changing business environment and they need to effectively apply their knowledge as one of the most important resources. In order to survive and to remain competitive, Thai banks have been involved significantly in knowledge management activities. Several banks have proposed programs to focus more on knowledge and to embrace the idea of knowledge-based

organizations. For example, according to Kasikorn Bank (2009), Kasikorn Bank introduced a new dimension of knowledge that goes beyond financial services, called "K Now"(pronouncing "know"), aiming to provide a financial advisory services offering new vistas in access to financial information, news and tips, all smartly presented to ensure that it is all easy to digest to help customers efficiently manage their wealth.

According to Bangkok Bank (2009), Kasikorn Bank (2009), Krung Thai Bank (2009), Siam Commercial Bank (2009), and the Thai Military Bank (2009) have conducted several similar activities related to managing knowledge in their organizations, including;

- Close communication within banks for information exchange and sharing. All banks have stated that clear vision must be communicated throughout the banks and effective information flow is significant for supporting the bank's operations.

- Building a social network. Business partners and alliances are crucial for success in the banking business. All banks have emphasized the creation of new alliances and new networks founded in order to learn about and acquire new knowledge beneficial to their businesses.

Rationale for the Study

As the author has reviewed past literature, it was found that there was no empirical study about the relationship among knowledge application, internal communication, social network, information technology support and teamworking. Therefore, to study the relationship among these factors can help both academics and practitioners understand and improve the knowledge application. Two objectives of this research are, firstly, to study the influence of social network, internal communication, information technology support, and teamworking on knowledge application in bank branches. The second objective is to investigate the degree of influence of each factor on knowledge application in bank branches.

In the knowledge-based economy, banking is one of the most competitive industries in Thailand (Bank of Thailand, 2008). The need for understanding the knowledge application is crucial to the way to improve knowledge management. Therefore, studying factors affecting knowledge application in the banking sector is important to improve their operations. Moreover, according to Bangkok Bank (2009), Kasikorn Bank (2009), Krung Thai Bank (2009), and Siam Commercial Bank

(2009), the concept of knowledge management and knowledge application is clearly adopted and implemented by these banks. Furthermore, the study in banking industry can clearly represent the results of knowledge application and its relationships with other factors.

Data Collection MethodResearch Methodology

The study used questionnaires as a tool to collect data for the data analysis. The author randomly selected the bank branches by using Microsoft Excel with random functions. When targeted branches were selected, questionnaires were sent and followed up by telephone calls and bank visits. Last, the author collected all 277 questionnaires with no missing values, because when some questions were unanswered, the author called back or visited the branch so that the questionnaires could be completed. The total time spent on the data collection was approximately three months, from March to May 2008.

In addition, the author used structural equation modeling to help analyze the relationship of factors or constructs in this study, because from the purpose of this study, the author aims to achieve two objectives which are, firstly, to study whether there are influences of social network, internal communication, information technology support, and teamworking on knowledge application in bank branches. Secondly, the author expected to investigate the degree of influence of each factor on knowledge application. In order to achieve both objectives, according to Hair, Black, Babin, Anderson, and Tatham (2006), structural equation modeling is used in this study because it can analyze all relationships in the model simultaneously and test whether the data collected fitted well with the proposed model, while multiple regression analysis cannot. Thus, structural equation modeling can provide more reliable results of the study of relationship of factors far greater than multiple regression analysis.

Structural Equation Modeling

As structural equation modeling is also known as a technique for theory testing. Hair et al. (2006) Hair, Black, Babin, Anderson, and Tatham (2006) stated that theory can be thought of as a systematic set of relationships providing a consistent and comprehensive explanation of phenomena and the model is used to represent the theory.

Ullman's (2006) stated that structural equation modeling (SEM) can be seen as a

collection of statistical techniques allowing a set of relations between one or more independent variables and one or more dependent variables to be analyzed and studied. In addition, structural equation modeling is also known as causal modeling, causal analysis, simultaneous equation modeling, and analysis of covariance structures. In SEM, constructs (or latent variables) are shown in circles and the observed variables (or measured variables) are depicted in rectangles.

Model Fit Indices

In structural equation modeling, the validity of the measurement model relies on the goodness of the fit of the measurement model and the sufficient evidence of construct validity. This goodness of fit shows how well the proposed or specified model can reproduce the covariance matrix among the indicator items.

There are several fit indices for model assessment. According to Hair et al. (2006), Hu and Bentler (1999), MacCallum and Austin (2000), main fit indices are used for model assessment, including Comparative Fit Index (CFI), Normed Fit Index (NFI), Non-Normed Fit Index (NNFI), and Incremental Fit Index (IFI).

Table 1 Measures of the Structural Model Fit**Table 1** Measures of the Structural Model Fit

Items	Criteria
Comparative Fit Index (CFI)	>0.90
Normed Fit Index (NFI	>0.90
Non-Normed Fit Index (NNFI)	>0.90
Incremental Fit Index (IFI)	>0.90

Source : Hu and Bentler, 1999; Hair et al., 2006.

Reliability Analysis, Convergent Validity and Discriminant Validity

Reliability analysis showed that all constructs had the Cronbach's alpha higher than .80, (the lowest value was .852) indicating highly reliable constructs (Hair et al., 2006). Anderson and Gerbing, (1988) provided comprehensive understanding for convergent

validity and discriminant validity , which were important validities to measure before further conducting research on structural equation modeling.

According to Hair et al. (2006), convergent validity means the ability of some measures to have convergent validity when they are highly correlated with different measures of similar constructs. In other words, convergent validity is the extent to which the scale correlates positively with other measures of the same construct. The results shown as convergent validity were tested by evaluating the magnitude of factor loadings of observed variables on the proposed constructs or latent variables. To measure, convergent validity, confirmatory factor analysis was used by confirming that all scale items loaded significantly on their hypothesized construct factors (Anderson and Gerbing, 1988). Anderson and Gerbing (1988) also stated that when all the t-values exceed the standard of 2.00, satisfactory convergent validity is indicated. The chi-square statistic tests of both measurement models are significant as anticipated when the sample size becomes large. Other fit indices demonstrated good fit of the models. The results of this study provided the lowest t-value of 9.775, greater than 2.00.Discriminant validity can indicate that one construct differs from other constructs. According to Anderson and Gerbing (1988) and Jiang, Klein, and Crampton (2000), the discriminant validity was examined for each pair of constructs at a time to compare the difference between $\chi 2$ test of fixed and free models, where the results should exceed $\chi 2\ (1, 0.05)=3.841$ in order to conclude that two constructs has discriminant validity. In this study, the lowest difference between free and fixed models was 31.551, higher than 3.841, showing that the constructs have discriminant validity.

Results and Discussions

For the results of this study, the author discussed the descriptive statistics, proposed model and parameter estimates as well as discussion of the results as follows.

Table 2 Descriptive Statistics of Observed Variables

Factors/ Constructs	Observed variables	Min	Max	Mean	S.D.
Information Technology Support	it1: Our bank branch provides IT support for communication among members.	2	7	6.16	0.915
	it2: Our bank branch provides IT support for searching for and accessing necessary information.	2	7	6.16	0.895
	it3: Our bank branch provides IT support for systematic knowledge storing.	2	7	6.15	0.965
	it4: Our bank branch provides IT support for collaborative work with other branches.	3	7	6.16	0.895
	it5: Our bank branch provides IT support for data analysis.	1	7	6.00	1.068
Knowledge Application	kap1: Our bank branch has processes for applying knowledge learned from experience.	2	7	5.87	0.844
	Kap2: Our bank branch uses knowledge to adjust business operations.	3	7	5.97	0.851
	kap3: Our bank branch is able to locate and apply knowledge to changing competitive conditions.	3	7	5.95	0.881
Social Network	sn1: Our bank branch has close co-operation with our stakeholders, such as companies, universities, technical colleges, etc. are fomented.	1	7	5.74	1.018
	sn2: Our bank branch is in touch with professionals and expert technicians.	3	7	5.67	0.931
	sn3: Our bank branch encourages its employees to join networks made up of people (such as customers and suppliers) from outside the organization.	2	7	5.52	1.009
Teamworking	tw1: In our bank branch, we have a team-based working environment.	2	7	6.13	0.760
	tw2: In our bank branch, we have team-based problem solving.	2	7	5.96	0.811
	tw3: In our bank branch, we use team-based decision-making methods.	2	7	5.97	0.836
Internal Communication	ic1: Our bank branch has frequent communication within the organization.	4	7	6.24	0.752
	ic2: Our bank branch has effective processes for communication among departments.	1	7	5.94	0.823
	ic3: Our bank branch has processes for two-way communication between management and staff.	2	7	5.94	0.909
	ic4: Our bank branch has processes supporting information flow within the organization.	3	7	5.84	0.820
	ic5: Our bank has processes for exchanging information and ideas within our branch.	4	7	5.88	0.852
Branch Size (Persons)		6.0	45	14.78	5.075
Branch Age (Years)		2.0	62	21.31	9.799
The number of years the respondents have worked in the branch.		1.00	39	9.16	8.054

The data were collected from seven banks in the proportion discussed in the previous chapter, totaling 277 bank branches. For data collection, questionnaires were distributed to bank branches in the Bangkok area. The main respondents were bank managers and assistant bank managers, and in some cases the managers assigned other staff to answer the questionnaires. From the data collection, bank managers and assistant managers of bank branches were the respondents to the questionnaires at 88.81% and others assigned by bank managers were 11.19%.

Proposed Model

The proposed model of four factors (information technology support, teamworking, internal communication, and social network) and knowledge application

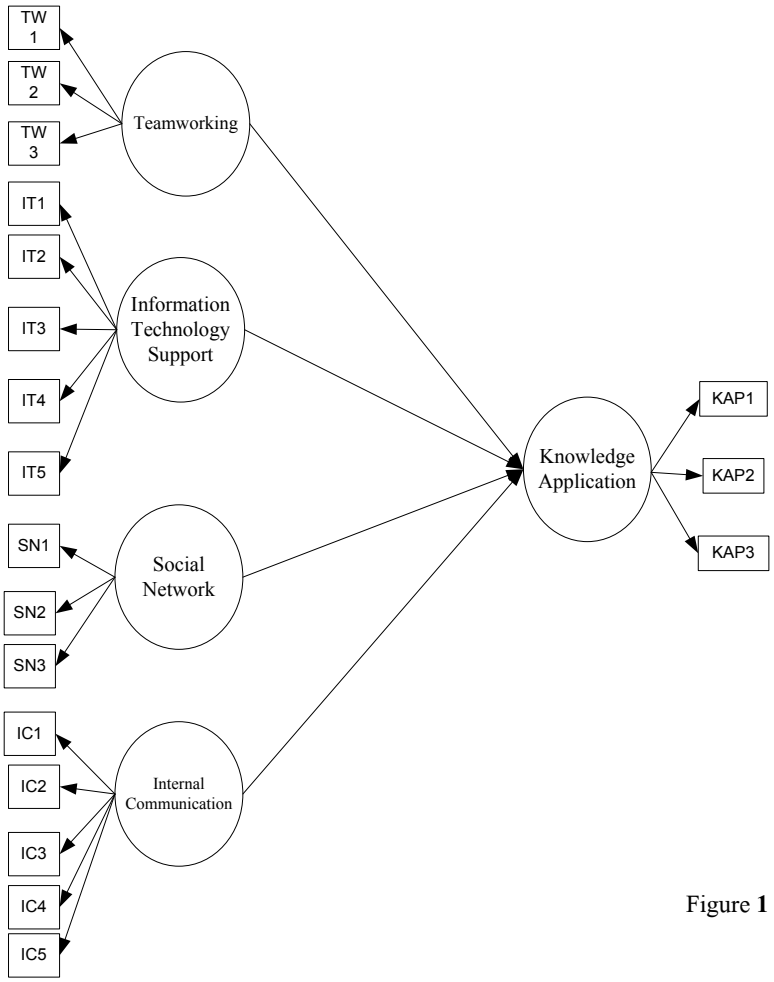

Figure **1** Proposed Model

According to the objectives of this study, the relationships between four factors or constructs, including social network, information technology support, teamworking, and internal communication, and knowledge application were shown in the figure above. All four factors were hypothesized to have positive influence on knowledge application. Additionally, the author also tested whether the data fit well with the proposed model and therefore structural equation modeling was used to analyze to get the fit indices.

Table 3 The Results of Proposed Model

Items	**Fit Indices**	**Criteria**
Comparative Fit Index (CFI)	0.931	>0.90
Normed Fit Index (NFI	0.939	>0.90
Non-Normed Fit Index (NNFI)	0.948	>0.90
Incremental Fit Index (IFI)	0.948	>0.90

Note: Chi-square = 569.664 based on 148 degrees of freedom

The fit statistics exceeded the criteria of 0.90. CFI, NFI, NNFI and IFI were higher than 0.90. Therefore, it can be concluded that the model fit well with the data. Therefore, further analysis can be conducted.

Table 4 The Relation of Parameters and Parameter Estimates of Proposed Model

The Relation of Parameters	**Standardized Estimates**
Information Technology Support → Knowledge Application	.151* (3.200)
Teamworking → Knowledge Application	.239* (4.786)
Social Network → Knowledge Application	.308* (6.380)
Internal Communication → Knowledge Application	.340* (4.904)

Note: * indicated statistical significance at .05 and t-values are shown in parentheses.

This model showed the effects of the factors of information technology support (path coefficient = .151 and t-value = 3.200), social network (path coefficient = .308 and t-value = 6.380), teamworking (path coefficient = .239 and t-value = 4.786) and internal communication (path coefficient = .340 and t-value = 4.904) directly on knowledge application. This step indicates clearly the effects of four factors on knowledge application at the bivariate level where internal communication and social network have the highest effects on knowledge application respectively. The goal of this model is to study the direct impact of the four factors and knowledge application.

The results of the study provided answered to two objectives. Firstly, all four factors had positive influence on knowledge application, while the degrees of influence on knowledge application were varied. Moreover, the results also provided that internal communication, social network, teamworking, and information technology support had statistically significant influence on knowledge application respectively and this finding showed that the research met the second objective.

Conclusions and Further Research

To conclude, with the purpose to study how four factors, which were social network, internal communication, teamworking, and information technology support, affected knowledge application, this paper had achieved its objectives. The author had proposed two objectives of the study and the conceptual framework, followed by collecting and analyzing data and discussing the research results. This research has identified factors affecting knowledge application. The findings of this study provided that in order to achieve greater success in knowledge application activities, organizations have to focus on the effectiveness of these factors, including information technology support, social network, teamworking, and internal communication. Moreover, the influences of internal communication and social network appeared to have higher impacts on knowledge application of the organization. The implications for bank branch managers and other business practitioners are that the importance of each resource or factor on knowledge application is different. According to the results, they should focus more on the activities to improve internal communication and social network activities. For examples, bank

managers can encourage and facilitate the flow of information within the organizations. Increasing the frequency of communication and allowing two-way communication can lead to more effective internal communications. In addition, for improving social network, the managers should try to find more ways to increase the collaboration with external experts and stakeholders. Additionally, supporting employees to participate with external network, especially with customers and suppliers can improve the effective social network. All these activities can be accomplished and then the organizations can also improve knowledge application. Therefore, Moreover, organizations should focus more on these factors to improve the long-term performance of managing organizational knowledge. For the future studies, researchers can extend the development of these constructs for studying in the other dimensions of knowledge application management research, such as the concept of knowledge management capabilities and the relationship between knowledge management capabilities and organizational performance.

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