



KNOWLEDGE MANAGEMENT IN RISK MANAGEMENT: EVIDENCE FROM MALAYSIAN MULTINATIONAL INSURANCE COMPANIES

Minah Japang

Universiti Malaysia Sabah, Labuan, Malaysia

Md Hafizi Ahsan

Universiti Malaysia Sabah, Labuan, Malaysia

Email: mina1511@ums.edu.my

Abstract: Since Malaysian announced her own Knowledge Economy Master Plan in her National Budget 2000, knowledge management has gained attention in many business organizations to remain competitive and innovative. Numerous insurance multinational companies started to recognize the new knowledge disseminations strategy by developing and manipulating the valuable knowledge of their employees' main assets to create a greater organizational knowledge-base strategy. Thus, this paper objectively describes the role of ICT infrastructures namely knowledge network and knowledge-based system embedded when managing knowledge assets among the multinational insurances operators in Malaysia. The focal point is to how technological advancement factors such as knowledge system and knowledge network helped enhancing knowledge sharing and knowledge codification within the scope of analyzing the existing practices of knowledge management activities in selected insurance companies operated in Northern Region of Peninsular Malaysia. In line with the objectives of the study, open-ended interview questionnaires have been distributed to business development managers and human resource development or training managers, as well as respective respondents who are dealing with insurance. The result indicated that ICT infrastructures, knowledge-based system and knowledge network have the significant relationship towards respondent's personal knowledge management experience.

Keywords: *knowledge management, knowledge capture systems, & knowledge network and multinational insurance companies*

INTRODUCTION

The emerging concept of knowledge management practices impartially popular in Malaysian business culture since it has launched her own Knowledge-based Economy Master Plan in her National Budget 2000. The Knowledge-based Economy Master Plan marked as a key initiative of the Government further

accelerate the development of the nation into a knowledge-based economy as well as in achieving the objectives of Vision 2020. The Master Plan provides a strategic framework outlining the changes to the fundamentals of the economy (EPU, 2002). Since then many companies responded by leveraging heavily on its information and communication technologies (ICTs). Earl (2002) justified knowledge management is one set of practices that takes



advantage of the ICT infrastructure, and then mixed it with the use of good human resources practices. As a result, insurance companies being part of the most dynamic financial sector have responded by managing their knowledge to ensure the ability to compete in this new emerging economy.

Business segments in Malaysia has undergo increasingly intensified competition as the rapid pace of technological advancement and product diversification. Like other sectors, the insurance industry in Malaysia undergoing significant changes especially after throughout The Asian Financial Crisis 1997. The increase in customer expectations as the investors learned a moral hazard shock form the crisis as well as the emerging pace of competition among the domestic insurance market, whereby increasing market integration marked by implications of mergers and acquisitions of minor players.

Another issue to be addressed would be an on-going implementation of Malaysian Knowledge-based Economy Master Plan announced by Economic Planning Unit, Malaysian Prime Minister Department (EPU, 2002). The Master Plan outlined the need for development of major ICT infrastructures to support and stimulate the knowledge dissemination, which includes databases, networking, multimedia, Internet services, telecommunications and ICT services, connectivity to the Internet and an enabling legal system for information. In conjunction with the emerging new economy driven master plan, constantly bring forward new input in national economy whereby knowledge has become the key differentiating value-added for modern organization core capabilities, supported by ICT accessible throughout the organizational hierarchy. Nevertheless, knowledge dissemination is seen as part of the strategic operational strategy among the insurance businesses players, especially amongst the multinational insurance companies.

Edwards, Shaw, & Collier (2005) primary issue when discussed the emerging concept of knowledge management is concerning two major

issues. The main questions is be positioned what appropriate role underneath the ICT infrastructures in knowledge based organization. How would the organization positioning ICT role in embracing appropriate strategy when come to application of knowledge management activities. It was hard to retain the talented people in the industry due to the nature of competitive insurance business segment and fluctuation of Malaysian investment market. For the above reasons, two main questions were addressed in the effort to understand the role of ICT infrastructures featuring in Earl's model (Prusak, 1997). In short, this study attempted to answer the following research questions:

1. Are there some kinds of integrating knowledge infrastructures (network and knowledge based systems) within the company to facilitate knowledge sharing and collaboration activities both internally and externally?
2. Are the knowledge management characteristics and infrastructures within the company facilitating knowledge management activities among the workers?

Therefore, the objectives of this paper study focused on mainly two issue which are to investigate the ICT role (both knowledge networks and knowledge systems) used in managing the organizational knowledge specifically in the insurance company., as well as to describe the knowledge disseminations infrastructure dimensions that enabling the knowledge management practices in the insurance industry. The study focal point would be on how these ICT infrastructures help spurred knowledge management activities carried out within small component of insurances industry and the paper narrowed its scope to analyze the existing practice of knowledge management in the selected insurance companies in Northern Region of Peninsular Malaysia.

In brief, to define the knowledge assets is complex as the term 'knowledge' itself widely subjective concept and hard to understand. However, a basic understanding of the concept



of knowledge and knowledge assets is crucial in developing the appropriate method of knowledge management studies. For example, Nonaka (1991) early definition of knowledge offered an incredible insight about the topic on knowledge management when discussed knowledge-creating companies and shared how Japanese businesses have successfully put knowledge creation at the centre of company's strategy. Thus in his next work (Nonaka & Teece, 2001), seeing knowledge from the of human resource terminology as to what the extent individuals or teams of employees know or the know-how on what to do, that differentiate knowledge as intangible assets. The arguments are true as knowledge by nature is different by their availability and enforceability of property right, where each individual and organization acquired with specific context based on time and space. Another prudent prominent idea of knowledge management technological proficiency from Microsoft founder Bill Gates who preferred knowledge management as nothing more than managing information flow, ensured getting the right information to the right people who need able to translate the knowledge into tangible products (Call, 2005).

These definitions indeed provide brief understanding of knowledge as output of social interaction scenario between individual and group of people. However, the operational aspect of knowledge seems to widely spread in the scope of organizational knowledge that embedded in term of structured knowledge located in the set of company's rules, processes, tools and routine. This definition seems synonymous with what Prusak (1997) has described earlier when he redefined knowledge as to the degree the companies know, how it knows and how fast the companies can know something new. When linked to insurance business, knowledge perceived and explained through the company's client-relationship management, as well as in sales and marketing competencies. On the other hand, Abell & Oxbrow (2001) looked at the overall picture of knowledge express in the expertise, experience and capability of staff, integrated with operations processes and corporate memory. Therefore,

Davenport & Prusak (2000) rapidly suggested, as an intangible assets that very valuable which need systematic attentions and carefully nurture, should be management foremost agenda in this century.

MANAGING KNOWLEDGE AND ACHIEVING COMPETITIVE ADVANTAGES IN THE INSURANCE INDUSTRY

Managing knowledge and achieving competitive advantages are the ingredients of today's business success in the 21st century (Wiig, 1997). According to Drucker (1993, 2008), knowledge is the most important source of wealth and basic economic resource in the contemporary society, whereas Sanchez (2001) postulate to be competitive in today's global marketplace, knowledge has perceived to be a key corporate asset in term of increasing a firm's competitiveness, corresponding to Nonaka (1991) inspiration of how an organization be able to maintains and act intelligently to sustain its long-term competitive advantages via developing, building and organizing its knowledge assets. Moreover, managing the knowledge assets ventured as one of the crucial factor in increased speed of competition and increased customer's expectation (Knowles et al., 1999). Thus, Storey (2001) mentioned Alfred Marshall's (1890) idea of knowledge management who observed that the important element of the organizational capital was organizational knowledge apart the organization structure. American International Assurance (M) Co. Ltd., Great Eastern Life Assurance (M) Berhad, ING Life Assurance (M) Berhad, and Malaysian national Assurance Berhad (MNI) have built up their internal knowledge-based material with regard to knowledge management components (Ang, 2003a, 2003b; Lee, 2003).

According to Abell & Oxbrow (2001), knowledge organization operated on the bases of several characteristics such as applying business intelligence and maintaining company's reputation in term of preserving client relationship. This explanation is relevant within



the insurance companies, because the key business consideration of managing risk in this industry was client relationship as well as outsourcing business intelligence via online e-business products and services. The Malaysian National Insurance Berhad (MNI) is a good example of outsourcing, where its MNI Online Services outsourced with Siebel Enterprise to provide an integrated networking throughout its Asian branches for transaction and document-oriented information processing (Lee, 2003). In addition, Croft, Norton & Whyte (1999) commented that in the insurance industry, the companies did spend a great deal of time and investment researching potential new financial products that might be required by the customers, developing the products and training its branch employees to deliver them to targeted customer.

Wang (2005) further added that the insurance companies could achieve competitive advantage if they manage knowledge pertaining to service quality and performance. Although knowledge is intrinsically difficult to imitate, it can be the essential resources to create sustained competitive advantage as it is closely linked to specific organizational structure and culture (Alavi & Leidner, 2001) in addition to organizational own experiences and accumulated experiences (Bollinger & Smith, 2001). Human beings are relatively proficient at interpreting knowledge within a broader context, combining knowledge with other types of information and synthesizing various unstructured forms of knowledge (Davenport & Prusak, 2000). The employees in the insurance industry play important role in the business performance and their corporation, attitude and empowerment could be important in determining whether their companies are ready for knowledge management initiatives or not. The insurance industry can reap the benefit of the KM adoption and practice by recognizing the needs or problems; perhaps some infrastructure work and knowledge audit to be planned earlier and educating the employees to implement the activities associated with KM.

NETWORK SYSTEM AND KNOWLEDGE SYSTEM IN KNOWLEDGE MANAGEMENT MODEL

Based on definition by Preez, Louw, & Lutters (2008) a knowledge network denotes between people and resources, whereby the relationship between them imply capturing, transferring and creating knowledge for purpose of creating value. Accordingly, their definition indicate that an integrated knowledge network spans all domains, communities, and trust relationships with the goal of fostering sustainable innovation that will continue to promote competitiveness of its users. However, contained by Earl's knowledge management model, knowledge as an input that appears to be a significant component of knowledge acquirement, before being distributed via organizational knowledge based network (Prusak, 1997). However, knowledge network in this paper describes as both internal and external form of communication behavior among employees within the selected insurance companies. These communication networks are representing the accessibility of the information flow and communication structure along the businesses unit within the companies' hierarchy.

Early work by Earl (2002) who completed a case study at Skandia International and Shorko Films found that network act as both capturing and underwriting transaction cost used to update the corporate database and disseminate knowledge-based parameters, trends and tools. Further classic example presented by the work of Botkin (1999) who discussed the successful of managing knowledge would require a network management model that presents the more reliable network structure with three main components, namely showed the inter flow of knowledge sharing relationship, high connectivity and system that are interdependence. This description lithely provide an general overview of the knowledge network as an effective network which includes the basic features and need to be highly integrated of diverse roles in managing best business practices. The main goal of the knowledge network would be generated new



knowledge by converting individual learning to organizational knowledge and recycling of tacit knowledge into explicit knowledge as well as reintegrating it as tacit knowledge throughout the entire organization. The process of transferring and reusing knowledge within a network would require facilities and resources. Thus, prove the need to optimize communication costs and processing time.

KNOWLEDGE SYSTEM IN KNOWLEDGE MANAGEMENT MODEL

When constructing knowledge management practices, companies have often relied on its capabilities to apply and on well-developed knowledge-based system. The functions of the system are important as a distribution channel of capturing experiences and explicit knowledge through the acquisition of information or data. Therefore, many companies have built their corporate databases aimed specifically at securing and storing their intellectual capital or intellectual patterned assets (Prusak, 1997). Moreover, a knowledge-based system enabled employees' accessibility to the organizational experience, and when used together with decision making tools, such as screen-based analyses, allowed firms developed new knowledge-based products.

However, Cafneiro (2000) argued that most of organizations regardless size have difficultly in developing its practical strategic knowledge-based as knowledge tends to flow in continuously and in random manner. Thus made amount of

information flow vary across management activities. The same argument indeed outlined basic challenges of knowledge-based system in creating knowledge out of pool of information that described by Dierkes (2004) the shifts from artifact-centered technologies to system-centered technologies.

Swan et. al (1999) in order made knowledge management strategy in modern knowledge organization, an organization should focused on both technical and social dimensions of managing knowledge flow such implied in knowledge-based system, as well as be able to exploit the existing knowledge stored in knowledge databases and exploration for new knowledge were both actively embraced. However, the limitation of this case study has lack of social and culture engagements of organizational change process linkage different level of organizational hierarchy.

Figure 1: Knowledge management practice technology proficiency model (reversed) adapted from Earl (1994)

RESEARCH FRAMEWORK

In general, this exploratory study aimed to describe the existing knowledge management

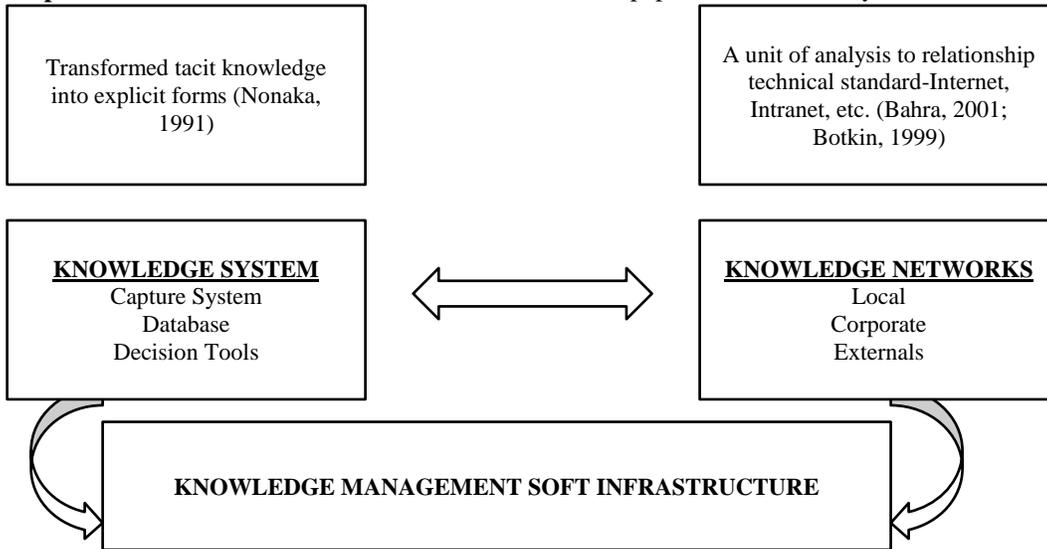


practices in the insurance industry, by studying a number of insurance companies operated in Northern Region of Peninsular Malaysia. In line with the objectives of the study, open-ended interview questionnaires distributed to business development managers and human resource development or training managers dealing with insurance.

The research framework

This study is based on Earl’s knowledge management model quoted from the work of Prusak (1997) The model original version of the model offered four interrelated combinations of human resources factors and technologies infrastructures that built up on the strategic capabilities of managing knowledge. However as this paper focused mainly on the technologies

The respondents and research instrument



The respondents of this study were the 18 (see Table 1) insurance companies members of LIAM operated in Malaysia. The main respondents were staffs who were occupying various positions sales and marketing activities, business development managers and human resource development or training managers dealing with insurance includes unit managers. Open-ended questionnaires adapted from the “Twenty questions about knowledge in organizations” from Ernst & Young Center for Business Innovation and Business Intelligence (1997) with minor modification.

infrastructure of knowledge management practices, the model narrowed to the two major knowledge captures architecture namely knowledge network and knowledge system.

ANALYSIS AND FINDINGS

Objective 1: To investigate the communication networks and knowledge systems used in the insurance company.



Table 1: Technology and Tools for Enhancing Organizations Knowledge Based System

Characteristics of Technology & Knowledge Sharing Tools	Percentage
Face to Face Discussion	95.3%
Company Conferences	53.5%
Personal Web Pages	23.3%
Document Sharing Systems	58.1%
Emailing	62.8%
Intranet	67.4%
Community Chatting	16.3%
Company Bulletin	74.4%
Decision Support Tools	55.8%
Videoconferencing	18.6%
Corporate/ Company Website	46.5%
Groupware	23.3%

The first objective of this paper was to investigate the communication networks and knowledge system used in the insurance company. There were twelve characteristics of the technology and knowledge tools used for enhancing organization knowledge based systems in this study. Table 1 summarizes the results of analysis, where there were two main flows of information and knowledge sharing approaches, namely face-to-face discussion forum (95.3%) and company's bulletin (74.4%) that have been widely used for enhancing respondents organizational knowledge systems. In term of decision tools, about 56% of the respondents utilized certain statistical and accounting software such Investment Links Software (ILS) and WSIS when come to decisions making about certain policies. Moreover, 54% of the respondents used to capture knowledge by attending their internal company conference, annually organized by companies' headquarters. Nevertheless, one training manager had highlighted a significant tool of his company's knowledge acquisitions by annually organizing internal managerial conferences as a channel to captures updates of marketing and sales skills, buildup knowledge networks via partnership and reasonable outsourcing of certain critical business technologies based solution. The figure also reveals that a proportion of 23% of the respondents who had connected via groupware and this characterized the internal networks systems of the insurance companies. Additionally, the figure also indicates the

characteristics of the basic knowledge networks that appeared within the insurance companies. Groupware, for instances provided a vehicle for any financial organizations to remain flexible and able to reduce service lead-time, yet support the externals salespersons in providing customers focused strategy because groupware was able to provide employees with greater information.

Objective 2: To describe the knowledge disseminations infrastructure dimensions that enabling the knowledge management practices in the insurance industry.

Based on the open-ended questions, the interviewees understood that strategic knowledge assets are found in people who can translate the tacit knowledge into explicit form, stored in databases, disseminated its knowledge via corporate networks. Such understanding therefore made a remarkable insight to the need of knowledge captures systems that enable learning organizations culture be cultivated as majority of the top management concerned this component of knowledge management variables seen as the biggest challenges and issues among respondents.

Table 2 indicates the regression analysis of the knowledge network and knowledge system markes as independent variable in the knowledge management model towards respondents' personal knowledge management experience. The R² value of 0.542 indicates that



54.2% of the variances in cited personal knowledge management experience explained by these two ICT infrastructures in the model. The standardized regression coefficient of (Beta = 0.618, $p < 0.05$) suggested that knowledge-based system as the most biggest variable that contribute to the experience of managing personal knowledge while knowledge networks appeared to be second contributing variable towards personal managing knowledge experience (Beta = 0.153, $P < 0.05$). As this paper objectively focuses on the correlation of ICT infrastructures of the knowledge management practices, the results suggest that insurance

such as communication skills and coaching or monitoring sales. These efforts seen to be parallel with human ability that utilized technology aimed at the achievement of company goals (Prusak, 1997; Senge, 1990).

Therefore, the unique part of managing personnel with individual knowledge as well as organizational knowledge had lead to the combination of ICT infrastructures to the right people that will help insurance companies' shaped knowledge-based management strategy. Thus, in order to ensure that successful knowledge management to work well, insurance

Table 2: Regression analysis for knowledge network and knowledge system towards personal knowledge management experience

Variable	Personal knowledge management experience			
	Unstandardized coefficients (B)	Standardized coefficients (Beta)	t	Sig.
(Constant)	2.082		6.725	0.000
KM networks	0.108	0.153	0.982	0.332
KM system	0.421	0.618**	3.967	0.000
F value	23.663**			0.000
R ²	0.542			
Adjusted R ²	0.519			

** $p < 0.05$

companies' knowledge management practices slightly depended on two main variables, namely personal beliefs and knowledge-based system acquired within the company.

CONCLUSION

The result also indicate that insurance companies shared best practice from other organization, which require the openness of knowledge sharing from acquired knowledge of the past performance and the retention of higher knowledge through the full utilization of the organizational ICT infrastructures. On the other hand, from the interviews, managers had defined their companies' knowledge assets in people who can translate their knowledge into actions that can achieve corporate objectives. Whilst the core competencies of this knowledge assets turn out to be the ability to transfer individual knowledge and know-how business practices

companies had to build up so-called serious ICT automation strategy. This suggests the insurance companies must provide a program that can excel its knowledge assets such as by developing the sustainable approach to transfer individual knowledge to organizational knowledge via its ICT infrastructures and modern knowledge-network architectures.

Furthermore, the study also suggests that insurance companies overall knowledge-based system should be utilized heavily not only for carrying out certain tasks but also for web-based training sessions as the result of the study did imply that the majority of respondents were connected internally and externally throughout the companies. A unified model of dynamic knowledge-based system can be derived from the knowledge creation process and 'Ba' concept (Nonaka & Toyama, 2003; Nonaka, Toyama, & Konno, 2000). Finally, this study concluded that



knowledge management practices in the insurance business directly focus on the creation of innovative service culture supported by collaborative technologies to secure competitive advantage, sustainable marketing policies performance as well enhancing individual productivity by leveraging on knowledge assets aside in human resources.

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