KNOWLEDGE MANAGEMENT PRACTICES: A DESCRIPTIVE STUDY OF THE INSURANCE INDUSTRY

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KNOWLEDGE MANAGEMENT PRACTICES: A DESCRIPTIVE STUDY OF THE INSURANCE INDUSTRY

A thesis submitted to the Graduate School in partial fulfillment of the requirements for the degree

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ABSTRAK

Amalan Pengurusan Pengetahuan: Satu Tinjauan Industri Insurans

Tujuan utama kajian ini adalah untuk menghuraikan elemen amalan pengurusan pengetahuan dalam industri insurans. Semenjak Malaysia melangkah masuk ke dalam ekonomi berasaskan pengetahuan banyak syarikat insuran telah bertindak dengan memberikan tumpuan terhadap penggunaan teknologi maklumat dan telekomunikasi (ICTs). Senario ini memberikan penerangan asas kepada usaha syarikat insurans dalam membangunkan aset pengetahuan.. Tambahan pula dengan keadaan pasaran insurans dan perlaburan yang tidak menentu; organisasi berasaskan insurans menyedari akan kepentingan pengetahuan sebagai strategi untuk berdaya saing. Kajian dibuat berdasarkan model pengurusan pengetahuan yang telah dibangunkan oleh Earl (1994) yang kemudiannya dimantapkan semula oleh Prusak (1997). Satu kajian tinjauan dibuat dengan melibatkan 11 buah syarikat insurans yang telah dikenalpasti mempunyai pemahaman terjadap pengurusan pengetahuan sementara responden kajian dipilih di kalangan 110 orang pekerja yang terlibat secara langsung dengan industri insurans. Sebagai memantapkan lagi instrumen kajian, satu set borang soal-selidik temuduga berstruktur dibentuk dan dikemukakan kepada tiga orang pengurus sumber manusia syarikat insuran terbabit. Dapatan kajian menunjukkan terdapat usaha syarikat insuran dalam menguruskan aset pengetahuan masing-masing. Aset pengetahuan bagi responden dirujuk kepada individu yang berupaya mentafsirkan pengetahuan yang dimliki dan mengkongsikan pengetahuan berkenaan dalam bentuk produk nyata seperti realisasi idea baru dan prosedur yang meningkatkan kualiti produk dan perkhidmatan insuran. Walau bagaimanapun, kajian juga mendapati bahawa syarikat insuran turut merujuk pengurusan pengetahuan perlu juga disokong oleh kecekapan syarikat dalam memanfaatkan sepenuhnya penggunaan teknologi seperti perangkaian aliran pengetahuan dan pembangunan sistem berasaskan pengetahuan yang diselaraskan aktiviti pembudayaan organisasi pembelajarannya. Maka kajian mencadangkan agar syarikat insuran mengadak.an program yang dapat meningkatkan keupayaan aset inteleknya seperti mewujudkan pendekatan yang lebih mantap dalam menterjemahkan pengetahuan individu kepada pengetahuan organisasi. Selain itu, kajian ini turut mengemukakan beberapa isu dan cabaran pengurusan pengetahuan dalam industri insuran. Kesimpulannya, amalan pengurusan pengetahuan yang sedia ada bagi pemiagaan berasaskan insuran masih diperingkat swal dengan menjurus kepada pembentukkan budaya inovasi perkhidmatan melalui sokongan perkongsian teknologi sebagai usaha memantapkan daya saing, di samping mempertahankan prestasi pemasaran polisi insuran dan juga meningkatkan produktiviti individu. Kajian ini telah menyediakan asas tentang amalan pengurusan pengetahuan bagi kajian lanjutan pada masa depan.

ABSTRACT

The main purpose of this study was to describe the elements of knowledge management activities within the insurance industry. Since Malaysia entered its knowledge-based economy many insurance companies have responded by leveraging heavily on its information and communications technologies (ICTs). This scenario described the efforts of insurance companies developing its 'know-ledge assets. Moreover, the emerging fluctuations of Malaysian insurance and investment market have directly incorporated the idea of using knowledge and information as sources of differentiation strategy. The study done was based on Earl's (1994) knowledge management model quoted from Prusak (1997). A survey was conducted among 11 insurances companies, which involved 110 full-time cross-departments insurances personnel. Additionally, a structured interview was carried out among three managers of human resource management in the insurance companies. The findings showed a significant effort of management on its knowledge assets which referred as those who were able to translate their knowledge and communicate them into tangible products such working ideas and procedures to provide quality products and services delivery. However, the study also found that organizational knowledge of the insurance businesses was not only located in people' head. Some respondents rather view organizational knowledge as to the extent that insurance companies utilized its technologies such as knowledge networks, and knowledge based system in its organizational learning culture. This suggests that the insurance companies must provide considerable programs that can enhance its knowledge assets such as by developing sustainable approach to transfer individual knowledge to organizational knowledge. Furthermore, the study identified some challenging issues of managing knowledge within the insurance industry. In conclusion, the existing knowledge management practices in insurance lbusiness indirectly focused in creating innovative service culture supported by collaborative technologies to secure advantage, sustainable marketing policies performance as well enhancing individual productivity by leveraging on knowledge assets in human resources. This research has provided the basis for future research on knowledge management practices.

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CHAPTER 1

INTRODUCTION

1.0 Research Background

Since Malaysia entered its knowledge-based economy, many insurance companies have responded by leveraging heavily on its information and communications technologies (ICTs). For example, Ang (2003) reported that Malaysia National Insurance Berhad (MNI), have launched its external marketing network called MNI Online, known as the first direct-to-customer sales channel for the company insurance products in the Asian region. Another insurer, Great Eastern Life Assurance (M) Berhad, have formed its partnership with Intel Electronics (M) Sdn Bhd by investing in its wireless technology notebook computer called "Centrino" as part of the company "Agent Empowerment Strategy" purposely launched to facilitate its frontline customer service agents (Lee, 2003). Therefore, in an effort to improve the insurance industry in Malaysia, the insurance companies had learned to develop its knowledge assets. Moreover, the emerging fluctuations of Malaysian insurance and investment market have directly incorporated the idea of using knowledge and information as sources of differentiation strategy.

Earl (2002) justified knowledge management is one set of practices which takes advantage of the information communication technology (ICTs) infrastructures, and then mixed it with the use of good human resource practices, other than taking into account of the development of organizational structure. Prusak (1997) made it slightly specific when he linked knowledge assets on what companies know, how it knows, and how fast the companies can know something new. As a result, insurance

companies being part of the financial sector have responded by managing their knowledge to ensure the ability to compete in this new emerging economy.

According to the Economic Planning Unit (1998), in terms of life insurance policies, as a portion of population, Malaysia is still low at 27.2% as compared with many developing countries. However, Bank Negara Malaysia (1999) reported that there was rapid growth at an average annual rate of 18.6% that reached RM 38,743.4 million by end of 1998. However, more than five and a half times the size of industry assets was reached in 1999 indicating the dramatic evolution of the insurance industry market structure in Malaysia over the years 1989 to 1998. Moreover, the report also revealed that Malaysian life insurance industry recorded significant growth over the period of one decade where premium in force grew at an average rate of 19.1% reaching RM 6,208.3 million in 1998 with the highest growth of 26% recorded in 1991. These figures slightly indicated the higher understanding among Malaysians towards the need of insurance coverage besides the implementation of annuity scheme. As for the insurance companies, it was the right time to take hold of any business opportunity.

Consequently, knowledge management has gained attention because many of the financial services organizations such banks and insurance companies were increasingly aware that knowledge is a critical and important resource to an organization's ability to remain competitive and innovative. This trend has raised several issues and the financial sector such as insurance companies need to recognize that by developing and manipulating the valuable knowledge of their employees they would be able to create a greater organizational knowledge base. This can be achieved by managing four components of the knowledge management model namely knowledge systems, networks, learning organizations dimension and knowledge workers as stated as human resource component of the knowledge management model as proposed by Earl (1994) and quoted by Prusak (1997).

This study focused on the knowledge management activities carried out by a small sector of the financial services, that is the insurance industry, which is one of the most competitive business segment in the Malaysian economy. The insurance industry's move is parallel with the dynamic business changes as this sector involves

investment and risk management. Along the changes, insurance companies realized the need to foster a change management activities such knowledge management practices as most of these companies websites have incorporated many knowledge management topics. For example, the Great Eastern Assurance (M) Bhd have a specific column that caters for the knowledge worker while the American International Assurance (M) Co Ltd. website also discusses about knowledge worker competencies.

1.1 Problem statements

There were a few of studies on knowledge management practices within Malaysia literature. Existing studies did describe the role of human resource management practices on knowledge management practices. For instance, Yahya and Goh (2002) had done a survey among managerial-level employees of Malaysian companies located in the Federal Territory and the Klang Valley with aimed specifically at analyzing the extent of human resource management contribution towards an organization's level of knowledge management practices. The responses showed that the four human resource management areas did have a significant correlation with the overall knowledge management and the five knowledge management activities. Their discussions suggested that organizations need to encourage team building training to provide not only skills and techniques of effective co-operation and collaboration, but also to include "group emotional intelligence", which was viewed as the main factor that can build trust in sharing knowledge among peers. However, this study only looked at the human resource side of knowledge management practices and focused on four areas of human resources management components namely training, decision-making, performance appraisal and reward and compensation practices.

Like other sectors, the insurance industry in Malaysia was also undergoing significant changes. There were a number of key reasons that led to these changes. First, was the increase in customers expectations. For example, Bank Negara Malaysia (1999) reported that the rapid annual growth of the insurance market for the years 1989-1998 was influenced by significant growth in product development of

the life insurance industry which has gradually transformed the shift in perception of consumers at large.

Second, was the emerging pace of competition among the domestics insurance market, as well as by implications of mergers and acquisitions of minor players. For example, Fernandez (2002) who analyzed the Malaysian insurances market mentioned of stiff competitions faced by insurance companies specifically in the development of new products as to ensure the tremendous improvement of the domestic financial market. The question now lies on how the insurance companies used its knowledge assets in order to keep up with this fierce competition

Third, is the on-going implementation of the Malaysian knowledge based economy in which knowledge has become the key differentiating value and added for modern organizations core capabilities, supported by information and communication technologies accessible throughout the organizational hierarchy. Therefore, many business organizations have placed knowledge at the heart of their corporate business strategy. This situation has reached a point whereby insurance companies need to identify what is the important knowledge used to differentiate itself in the insurance market.

No matter how many issues are raised within the domestic insurance market, the most important issue is the concern on how these companies handle changes more effectively than other sectors as the insurance industry is an integral part of the financial system that constantly grow in an increasingly dynamic business environment. The secret is in applying the most suitable knowledge management practices that are responsive to the changing business environment in Malaysia.

Another important issue is that the insurance industry is also faced with high staff mobility with an extremely high turnover rate being the norm, where sales agents both fulltime or part time basis frequently work from remote and diverse locations, and tended to quit easily. It was hard to retain the talented people in the industry due to the nature of competitive business and fluctuation of Malaysian investment market. Therefore, this research will also look into the issue on the retention of its knowledge workers.

For the above reasons, this study focused on the knowledge management activities carried out within small the component of insurances industry as it was acknowledged that knowledge management is very relevant to the many practices in the insurance industry because of the nature of the environment of the services. The scope of the study is narrowed to the insurance industry, which is a financial service industry that is mainly involved in the business of providing individuals or organizations protection against any uncertainty of loss and risk in return for monetary considerations called premium. This service is aimed at providing protection to loss of properties, incomes or life. The main purpose of the study is to analyze the existing practices of knowledge management in the selected insurance companies in Kedah, Penang and Perlis.

1.2 Research Questions

Four main questions were addressed in the effort to understand the knowledge management practices featuring in Earl's (1994) model, which was adapted by Prusak (1997). In short, this study attempted to answer the following research questions:

- i) How do insurance companies describe its knowledge workers?
- ii) How do insurance companies view learning organization in general?
- iii) Are there some kinds of integrating knowledge infrastructures (network and knowledge based system) within the company to facilitate knowledge sharing and collaboration activities both internally and externally?
- iv) Are the knowledge management characteristics and infrastructures within the company facilitate knowledge management activities among the workers?

1.3 Objectives Of The Study

There were four main objectives of this study, which are:

- 1.3.1 To identify the descriptive component of the knowledge workers in the insurance company
- 1.3.2 To investigate the communication networks and knowledge system used in the insurance company
- 1.3.3 To identify the learning organization dimensions associated with bottom-line adaptation of knowledge management system in the insurance company
- 1.3.4 To describe the overall dimensions of knowledge management practices in the insurance industry.

1.4 Conceptual Framework

The management of change happened at the whole cycle of insurance companies hierarchy because knowledge management activities are not only limited to the managerial level but also up to the bottom line. Therefore, in order to get a big picture of knowledge management practices by the insurance companies, this study intended to investigate the Earl's (1994) knowledge management model that was adapted by Prusak (1997). There were four dimensions of knowledge management characteristics within this model. First, it is concerned with knowledge-based system, which aimed to focus at the databases, knowledge capturing system and decision tools that are used to facilitate managing knowledge within the organization. Second, it is about knowledge networks that appeared to be the measurement of knowledge flow as well as communication flow, which in turn is characterized by knowledge sharing and dissemination throughout the entire organization. The third dimension of Earl's (1994) knowledge management model is about the knowledge worker, a human resource management aspect of the model. This dimension involves the articulation of the core people, skills and meritocracy

aspect of the human resources component within the knowledge-based enterprises. The fourth dimension of the model is about the learning organization dimension that consists of knowledge collaboration, human resources development and training, as well as the culture aspect of executing knowledge management strategy.

1.5 Methodology

In general, this exploratory research aimed to describe the existing knowledge management practices in the insurance industry, by studying a number of insurance companies operated in Kedah, Penang, and Perlis. Based on the Earl's (1994) model, the study was carried out by using a survey where the primary data was collected through structured Likert-scale and dichotomous scale type of measurements. In line with the objectives of the study, open-ended interview questionnaires were distributed to business development managers and human resource development or training managers dealings with insurance in Kedah.

1.6 Limitations Of The Study

The study was limited to the selective insurance companies due to the limited duration of time in getting information within fives months. The scope of this study only specified to the 11 selective insurance companies which are members of Life Insurance Association of Malaysia (LIAM) listed in the LIAM's website. In selecting the sample for the respondents, a set of questionnaires was distributed randomly among the insurance personnel from 11 selected insurance companies operating in Kedah, Penang and Perlis, which have several bases on understanding of the knowledge management practices in theirs websites.

CHAPTER 2 LITERATURE REVIEW

2.0 Introduction

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. Knowledge was mentioned as the most powerful engine of production. Thus, this section outlines the relevant literatures and previous studies regarding knowledge and its characteristics, and knowledge management and its components within a chosen model.

It was widely known that in today's global marketplace, knowledge has been perceived to be a key corporate asset in term of increasing a firm's competitiveness (Sanchez, 2001). Nowadays, the successes of many firms are those that consistently create knowledge, expose it widely throughout the organization and quickly represent them in new technologies and products. For example, the study done by Knowles et al. (1999) on performance of Manitoba Knowledge Management Assessment (1999) in the insurance sectors throughout Manitoba, has established an insight on new technology that affected the increasing speed of competition and increased customers' expectation. The conclusion made from the study indicated that these new technologies have shaped significant changes within the insurance industry not only in Canada, but also in the global insurance market.

While in the Malaysian perspectives, two main issues influenced the domestics insurance market. First, is about the shortage of professional and skilled staffs despite the incentives given and the encouragement given to insurers to spend at least 4.5% of their total gross salary as expenditure on human resources and skill development since 1984 as initiated by the Economic Planning Unit (1998). This issue however, has brought forward the need to restructure the industry so as to ensure its competitiveness in the financial market.

Second, how do companies in the industry face the emergencing competition? Fernandez (2002) quoted Chia (2002), President of Life Insurance Association of Malaysia (LIAM), stating that until February 2002, the Malaysia insurances industry particularly life insurance segment, was expecting double digit growth of 10% to 15% with the premium rates of the entire industry to increase between 5% to 10% in term of new policies and underwritten sums assured. This figures expressed the fierce competition faced by the insurance companies. Meanwhile, Sooi (2003a) reported that life insurance premiums were expected to go up again as insurance companies struggled to cope with poor investment returns and economic uncertainties. This significant growth will then affect the need to implement a number of highly innovative and bold knowledge management programmes for the industry, for instance, as more insurance companies compete to coming up with new policies and additional benefits on financial coverage for Severe Acute Respiratory Syndrome (SARS) (Sooi, 2003b). This report seems parallel with the current social situation, described the major the social event that influenced the innovation process in the insurance companies.

Therefore, the current issues once again have become the main factors that influenced the insurance companies to build its knowledge-based management. When visits were made to the insurance companies websites, numerous companies, such as 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 materials so as to facilitate and assist their agents and staffs with current issues especially with regard to knowledge management components. In this respect, the definitions of knowledge are essential especially in discussing several on-going knowledge management studies.

2.1 Definition of knowledge and classification of knowledge

In brief, the meaning of knowledge is complex and hard to understand. However, a basic understanding of the concept of knowledge is essential in developing the appropriate method of knowledge management studies. Moreover, there were

various definitions of knowledge. For instances, Noe (2002), a human resources development writer defined knowledge as to the extent individuals or teams of employees know or the know-how on what to do, and he defined the scope of organizational knowledge as structured knowledge located in the set of company's rules, processes, tools and routines. This definition seems synonymous with what have been discussed earlier described by Prusak (1997) when he redefined knowledge as to the degree the companies know, how its knows and how fast the companies can know something new. When linked to insurance business, this knowledge is perceived and explained through the company's client-relationship management, as well as in sales and marketing competencies. Knowledge is also linked to learning from industry's best practices empowered by information technology info-structure and human resource management practices that existed internally.

On the other hand, Abell and Oxbrow (2001) looked at the overall picture of knowledge that expressed in the expertise, experience and capability of staff, integrated with processes and corporate memory. Their definition synchronized with Carneiro (2000) who defined knowledge based on the combination of creativity value that enables the transformation of one form of knowledge to the next new interpretations of knowledge specifically aimed to generate another knowledge level. The level of knowledge described in this transformation process involved the reskilling of human resources analytical and reasoning ability, combined with marketing and clients relations competencies and corresponding to the self-motivated changes in managing risk and uncertainties.

However, further explanations of knowledge lied within the individual experience as an illustration of learning activities and experimentation that will bring out occupational expertise to company's innovation strategies. For example, Morden (1999) has extracted the view of Davenport and Prusak (1998) who defined knowledge as:

'a fluid mix of experience, value, contextual information, and expert insight that provides a framework for evaluation and incorporating new experiences and information. It originates, and is applied, in the mind of the knowers.' The above definition gives the simple impression in defining knowledge as an occurrence in people's heads, resides in individual beliefs or norms and daily experience. In the insurance business environment, definitions of knowledge refer to sales or marketing competencies and product development or premiums services quality that encompassed every frontline customer services employees. Henderson and Lentz (1996) acknowledged the frontline customer services employees as agents, who are the key personnel in providing personal financial counseling to satisfy their customers' preferences for a broad range of insurance and savings products. In the life insurance market segment, the main personnel who do business directly with customers are agents, financial planners, unit managers and agency leaders. Thus, a major portion of the frontline customers relation employees in insurance business tend to be the knowledge workers beside the management team itself.

In line with the same argument, Carneiro (2000) has expressed that knowledge in addition to the experience of innovations, and managing changes in technology has allowed the company to anticipate and prepare certain reactions coping with a new external potential especially when significant change occurred. As in the Malaysian's insurance market, Sooi (2003b) reported there was competition among insurance companies that correspond to the public's awareness of current uncertainties such as the case of Severe Acute Respiratory Syndrome (SARS) disease. Such awareness generate new developments of SARS-related policies among the insurance companies such as the Great Eastern Life Assurance (M) Bhd, Hong Leong Assurance Bhd (HLA) and American Home Assurance Co (AHA). The study implied that insurance companies have significantly learned from market experience in spite of influences by domestic social uncertainties. Therefore, experience is perceived as an important part of building up companies' expertise when experience viewed as knowledge that allowed each individual worker to recognize and deal with diversified issues and complexities that occurred in the organizations.

On the other hand, Bollinger and Smith (2001) have come out with arguments on the critical distinction between information and knowledge. According to them, information is processed data and can reside within computers that made it increasingly available to everyone. While, knowledge is the understanding,

awareness, or familiarity acquired through study, investigation, observations or experiences over the course of time. Their definition seems to view knowledge as beyond an individual's interpretation of information based on personal experiences, skills and competencies. Moreover, they classified organizational knowledge as being found in employees' knowledge about customers, products, processes, mistakes and success gained through the sharing of experiences and effective practices or through sharing with others sources of knowledge from within or outside the organization. The view expressed by authors mean that human resources capabilities are the accumulation of individual knowledge among people within the companies.

In addition to the present definitions, Soliman and Spooner (2000) had quoted Stewart (1997) who argued that knowledge is also known as "intellectual capital" and found in three forms, namely, human capital, structural capital, and customer capital. Human capital resides in the knowledge within an employee's tacit knowledge, which is referred to as individual way of thinking, analytical abilities as well as intelligent capability, which set apart in the knowledge worker. Structural capital resides itself within the organizational level which referred to organizational information technology system, organizational structure, organizational culture and finally, customer capital stand as the external collaborative consideration in defining every part of organizations' knowledge.

On the other hand, Bahra (2001) has offered an alternative definition of organizational knowledge. He described the knowledge is located in three major components namely, human resources, which is referred as the tacit side of organizational knowledge found in the people's head. Secondly, knowledge is found within an organizational know-how, where knowledge viewed as the advancement of organizational technology and procedures, underpinning the infro-structure of data or records archives and patents, that provide the information and resources for supporting organizational memory. Thirdly, is the knowledge resided in an organizational culture, which directly supported the learning organization culture, because learning is seen as the organization's abilities to collaborate and share knowledge, communicated freely throughout organization and motivate people to learn or unlearn.

However, when linked into any business practices, the most relevant knowledge distinction is between explicit and tacit knowledge. Many authors and researchers pinpointed the differences between the two types of knowledge. Table 2.1.1 below outlined the relevant literatures, which explained the differentiation between tacit and explicit knowledge.

Table 2.1.1: Definitions of explicit and tacit knowledge according to numerous authors

	Authors	Definitions/Examples • .	
1.	Skyrme (2000) in Morey, Maybury & Thuraisingham (2000)	Explicit knowledge is the codified and written such as a computer record and can be expressed in some tangible form can be easily reproduced and easily disseminated throughout organization	
		Tacit knowledge is less diffusible in nature and need the proper converts on process into explicit knowledge and transferable through mechanisms like observations, personal communications or on-the-job training.	
2.	Horibe (2001)	Explicit knowledge is documented procedures, policy manuals and reports on best-practices or in anything that has been recorded for public consumption	
		Tacit knowledge is what's in a person's head. This can be knowledge that has never made known into public documents or made meaningful explicitly. Experts estimate that the tacit knowledge represents roughly 80% of the whole knowledge within organizations.	
3.	Bollinger & Smith (2001)	Explicit knowledge is clearly formulated or defined and made it easily accessible and codified in tangible forms such as databases or publications.	
		Tacit knowledge is unstated knowledge in peoples' head and often hard to transfer. It includes lessons learned, know-how, judgment, rules of thumb and intuition.	

Based on above table, it obvious that explicit knowledge is found in the tangible forms while tacit knowledge resides within people's head, which in turn is hard to transfer freely within the organizational hierarchy. With regard to the insurance industry, explicit knowledge is shaped by the knowledge system and networks used in the companies. While the demographic characteristics of the respondents' profile can be used to describe the tacit knowledge of the people which is shared through the knowledge based system, network and learning organization of the Earl's (1994) knowledge management model.

2.2 Linking knowledge and knowledge management

In general, knowledge management is still struggling with the definite description, because there were many definitions of knowledge management due to the broad series of perspectives, interests and issues represented by various authors. For instance, Bhatt (2001) defined knowledge management as a process of knowledge creation, validation, presentation, distribution, and application. These five phases of knowledge management reflected the ability of the organization to learn, unlearn or relearn by essentially building, maintaining, and replenishing the core competencies of knowledge assets within the organization.

The above definition seems to be supported by Von Krogh, Roos, and Kleine (1998) who viewed knowledge management as being concerned with question of knowledge production, reproduction, distribution, application and logistics, which in turn depend on individual specific bearer, and the ability in multiplying organizational knowledge. They predict that in the near future, more and more company will increasingly learned in managing its knowledge bases in order to secure competitive advantage and maintaining a powerful market presence. This is certainly true in the insurance business environment where insurance companies continue to grow more rapidly than ever, and as the financial markets keep up with the global change. Thus, the insurance industry will proceed to be a sector that need to manage its knowledge assets through the development of a vigorous knowledge management practices that are regarded as an essential role in modern companies.

However, Noe (2002) has came up with human resources management point of view when defining knowledge management as to the process of enhancing company performance by designing and implementing tools, processes, system, structures and culture to improve the creation, sharing, and use of knowledge. He extensively referred to human resources as the main factor of knowledge creation and the dissemination of competencies. In others words, any implementation of knowledge management strategy must be allied together with the core of people with knowledge, skills and talent, and then only it can help the company to come up with the new products, in addition to be able to deliver products quickly to the market, and better serve customers with the new brands through the development of

innovative products or services. Consequently, any organization that put forward knowledge-based activity will able to attract new employees and retain current ones by giving people opportunity to learn and develop in their employees' training and development blueprint.

Additionally, Abell and Oxbrow (2001) discussion has derived an interesting point of view on the subject of knowledge management philosophy in the business practices. From their standpoint, knowledge management responsibility requires the management of the balance of people, processes and technology that determined the organizations and its relationship with its markets. When allied with the insurance industry, knowledge management also means about creating an environment where knowledge is valued and where managers can recognize the differences between information and knowledge, while at the same time, understand the interdependencies between information and knowledge, in relation to organizational culture that valued creativity and innovation.

In order to provide relevant guidelines of implementing knowledge management strategy, Stebbins and Shani (1995) earlier had carried out a comparative study on the R&D division between two organizations, namely a chemical firm and a university-based rehabilitation hospital that revealed organizational design did have a significant impact in retention of knowledge worker, who represents the source of tacit knowledge within the organization. On the other hand, Dermott and O'Dell (2001) carried out a survey on ways to overcome culture barriers to sharing knowledge. They conducted a face-to-face interview during visits to five companies that were known to have a corporate culture that supports sharing knowledge. The study found that a successful knowledge management strategy was influenced by the organizational norms that encourage a variety of work patterns combined with a well facilitated communication flow between people in different locations, and from different departments which provided and produced something that individuals were willing to pay. The main intention was to internally build up a solid flow of knowledge sharing environment, where everyone in the organization freely trusts each other and willingly shared his or her area of expertise.

Conversely, Manville and Foote (1998) have emphasized that any company, which intended to execute a knowledge-based strategy, has not been seen to completely managing its knowledge, but rather than on nurturing its people with knowledge. This statement brings forward another explanation of the human resources strategy on the unification of knowledge component and human factors within the organization. For example in the strategic decision-making process, managers regardless of their position, require complete and updated information according to their level of activities. Nevertheless, Morden (1999) quoted Davenport and Prusak (1998) who provided a significant insight in explaining what an organization and its employees know was slightly representing the whole organization's functions. Thus, Bahra (2001) once again emphasized knowledge management as an integrated and organized approach in identifying, managing and sharing all of an enterprise's assets, including database, documents, policies and procedures as well as expertise and experience held by individual workers. This situation is well suited in the insurance business where agents and frontline customers services employees have learned to adapt the information in the organizational setting to deliver sales presentation to targeted prospects.

Although the definitions mentioned above had suggested a variety of approaches to knowledge management, these definitions were compatible with the general overview of managing intellectual assets for innovation as mentioned by Knowles *et al.*, (1999) who see knowledge management as the creation, evolution, exchange and application of new ideas into marketable goods and services for the success of an enterprise. Furthermore, Abell and Oxbrow (2001) viewed knowledge management practice founded in a discipline that promoted an integrated approach in creating, capturing, organizing, accessing and utilization of an enterprise's information assets. These information assets may include databases, documents, policies and procedures, as well as the uncaptured tacit expertise and experience resident in individual workers. In conclusion, knowledge management organizations typified by encouragement of ideas, rewarding success, allowed people to learn from failures, success, problems and solutions, and encouraged people to seek assistance.

2.3 Knowledge management in the insurance industry

There were many arguments in defining the nature of knowledge enterprises. According to Abell and Oxbrow (2001), knowledge organization operated on the bases of several characteristics such as applying business intelligence and maintaining companies 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 main purpose of practicing business intelligence is partly for sustaining companies reputation due to their strong knowledge and performance capabilities that are essentially important in managing risk. For example, insurer such as The Malaysian National Insurance Berhad (MNI) outsourced knowledge-based networking with Siebel Enterprise software package for its MNI Online Services, which provide an integrated networking throughout its Asian branches that allowed for transaction and document-oriented information processing.

A United Nations study on The Economic And Social Survey of Asia And The Pacific (1999) has indicated that in the more advanced countries, new applications of ICT are profoundly changing the nature and structure of the financial industry such as the insurance business. The financial services sector in particular has been transformed in terms of improvements in the speed, reliability and cost by the proper manipulation of vast quantities of information related to financial, inventory and sales transactions. Thus, the implications of this study will briefly provide a glimpse of the innovation processes within the industry itself.

In addition, Croft, Norton and Whyte (1999) commented that in the insurance industry, the companies did spent 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. However, very seldom would these companies take into account that the knowledge asset that can be found is in its employees' heads. Therefore, business organizations such as the insurance companies would need to put into action the practice of

knowledge management strategy as the companies would continuously experiencing unparallel change which Sanchez (2001) characterized as mass events and processes. The changes are manifested dramatically in market changes apart from the complexity of clients' interrelated requirements. Hence, insurance companies need to identify and acquire adequate knowledge and skills to perform better, in order to cope with intense competition in line with financial market adjustments.

Moreover, Marchand (1998) has reviewed that the management of intellectual capital in Skandia Assurance and Financial Services, a Swedish Assurance Company as the main success story of managing knowledge in the insurance and risk management industry. For instances, Von Krogh, Roos and Kleine (1998) quoted a case study done by Marchand (1998) who has showed the significant findings on business concept which pursued adding value throughout information sharing and knowledge acquisition. The knowledge was generated from the 46,000 company's partners as well as was disseminated to them freely among their employees. This knowledge management practices enabled information shared on products and customers across the company's value chain. Thus, the total business concept is aimed specifically at managing information and knowledge flexibility, although at the lowest cost possible, for the company's continuous learning and change was being applied into its business structure that responded to the environments of customer, partners, employees and stakeholders.

Another lessons of knowledge management practice in the insurance industry can be extracted from Knowles *et al.* (1999) study on the knowledge management practices in insurance sector in Manitoba. It was learned that there were several factors that were enablers to the organizational knowledge management strategy. First, the insurance broker acceptance is critical to the success of these companies, because agents who usually offer an array of products from various companies, would affect customer retentions of the companies, value chain. Upon the sales presentations, the customer scenario must therefore include not just at the stage in the end purchas of the product, but also the brokers in the industry applicable to customer relationship management system (CRM).

Second, the study by Knowles *et al.* (1999) also revealed that companies' reputation are based on the ability to "delivering on the promise". The products offered within the industry tend to be similar across most companies, so as in the Malaysian insurance business, the products and services have almost the same features of monetary coverage. Market leaders in a given product area tend to be those who specialized in that area, and who can therefore provide additional value due to their expert knowledge of a certain niche. For example, the Malaysian Assurance Alliance Berhad specialized in the Malaysia's campaigns of "Sihat Malaysia" and offer a wide range of medical and life coverage premium aimed to the middle and lower income groups as niche market. Although competitors often quickly copy product innovations, the specialist companies generally offer a depth of understanding and the ability to "deliver on the promise" and in this manner gain a competitive edge within their niches.

Other findings of several studies also found that another critical element of managing change in the insurance sector in Manitoba depended up the technology accessibilities that allowed some companies to rapidly gain their competitive advantage (Knowles *et al.*, 1999). Thus, the study helped in understanding the nature of insurance industry as a knowledge-based sector that acquire all companies to quickly analyze and adapt to the new IT environments. Therefore, in the insurance sector, the works by Senge (1992) on continuous learning organization and continuous training have been accepted as important element of human resources development programme in order improve employee's knowledge and make it up-to-date and to increase the abilities to respond immediately to client's queries.

In Malaysia, many players in the insurance sector are large global companies with offices and clients in a number of countries. Bank Negara Malaysia Insurance Annual Report (2000) indicated that foreign controlled insurers continued to be accounted for the major market share of life insurance business and from the five largest insurers, four were foreign-controlled, underwriting 65% and 73% of sums insured and annual premiums respectively. In contrast, the five smallest insurers, all of whom are Malaysian-controlled, only garnered 3% to 6% of sums insured and annual premium respectively (Bank Negara Malaysia, 2000).

Table 2.3.1: Market share of life insurers 1999

Annual Premium and Insurers	% Share of Annual Premiums in Force (Individual Life)
Annual Premium more than RM500 each	
(Great Eastern Life)	29
(American International Assurance/AIA)	18
(Aetna Universal)	10
(Malaysian Assurance Alliance/MAA)	8
(Prudential)	8

Source: BNM Insurance Annual Report 2000 in Nair, (2002) published in *Malaysia Business Times* 15 February, 2002.

Table 2.3.1 shows the market players in the life insurance industry in Malaysia for the year of 1999. Based on the table, it was evidenced that foreign-controlled insurers such as the Great Eastern, AIA, Aetna, MAA and Prudential attributed about 73% of the life insurance sector in Malaysia where 29% of the market share had been controlled by the Great Eastern Life while 18% by AIA (Nair, 2002).

Moreover, another trend of the insurance market in Malaysia is the consolidation of the industry by Bank Negara Malaysia (BNM) via mergers and acquisitions (M&A) in its Financial Sector Master Plan (FSMP) that was launched in 1 March 2001. Consequently, in the BNM 2000 Insurance Annual Report issued in early 2001, BNM stated that six mergers and acquisitions had completed as shown in Table 2.3.2 below.

Table 2.3.2: Recent and ongoing M&A in the insurance sector

Example of Recent and Ongoing M&A in The Malaysian Insurance Sector
Malaysia British & Allianze
Mayban Assurance & Fortis
MCIS Insurance & Zurich Insurance
Great Eastern Life & Overseas Assurance Corporation
Malaysia National Insurance & Sime AXA Assurance
Mayban Assurance & UMBC Insurance
Kurnia Insurance & Nusantara Insurance
Talesco Insurance, Tenaga Insurance & Malaysia and Nippon Insurance
United Orientl Assurance & Capital Insurance
Source: BNM Insurance Annual Report 2000 in Nair, (2002) published in <i>Malaysia Business Times</i> .

Source: BNM Insurance Annual Report 2000 in Nair, (2002) published in *Malaysia Business Times*.

15 February, 2002

The effect from Bank Negara Malaysia is Financial Sector Master Plan (FSMP) has partly resulted in the development of insurance people's knowledge and skills in areas of management, information technology and underwriting processes of the industry as whole. On the other hand, the convergence of knowledge creation and accumulation within the organizational boundaries has been encouraging the

modernizing processes of insurer's agencies force. There has been efforts in increasing productivity and encouraging product innovation in order to fulfill sophisticated consumers' demands (Nair, 2002). In view of the above scenarios, the insurance industry must apply new techniques of managing its knowledge and information.

2.4 The Research Framework

This study is based on Earl's (1994) knowledge management model quoted from the work of Prusak (1997). The model offered four interrelated combinations of human resources factors and technologies infrastructures that are built up on the strategic capabilities of managing knowledge. In the first place, a company have to recognize as valuable the infrastructures such as knowledge system and networks and coordinated them with employees' skills and abilities in order to become a learning organization with knowledge workers.

Therefore, in order to understand the existence of knowledge management practices in eleven selected life insurance companies in Kedah, Penang and Perlis, the study was an attempt to explain and confirm the knowledge management model and its impact in the industry. The primary components of Earl's (1994) knowledge management model is shown in the Figure 2.4.

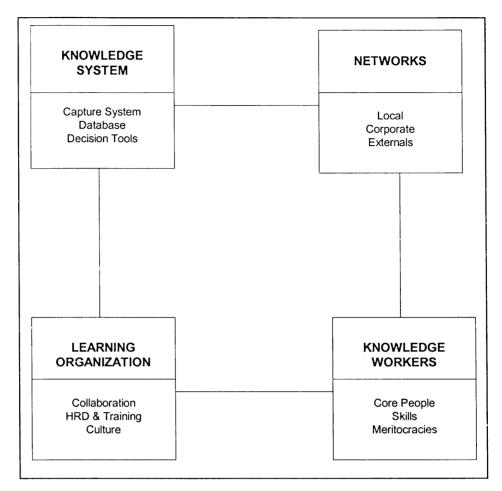


Figure 2.4: Knowledge Management Model

Adapted from Earl (1994, p.62) in Prusak, Lawrence. (ed). (1997). *Knowledge In Organizations*. Resources for the knowledge-based economy. Boston: Butterworth-Heinemann.

Based on Figure 2.4, Earl (1994) regarded knowledge management to be dependent on four components and the combination between technology infrastructure indicated by the first variable entitled knowledge system that consists of items such as capture system, database and decisions tools.

The second variable of this model were the networks, as a part of technology infrastructure in implementing knowledge management practices. An important nature of network in implementing knowledge management practices emphasized the importance of communication network. Earl (1994) viewed network as consisting of items such local networks in the form of communication flow and knowledge flow between internal individuals at various hierarchy within the organizational level. Furthermore, network also include corporate communication

techniques between organizations and its partner, branches commonly included in corporate websites and the networks also deal with external knowledge and information exchanged between companies and its external business environment such as markets trends, latest issues on products designed, or current problems and its solutions and competitors.

The other two components of Earl's (1994) knowledge management model are characterized from the human resource management viewpoints as vital elements in building up the strategic capability of managing organizational knowledge asset (Prusak, 1997). The first variable was learning organization, set up to facilitate the collaboration, human resource development, training and organizational culture. The second variable would be the basic selection process of knowledge workers and consisted of items such the core people, skills and the practice of meritocracies in the selection process of employees (Prusak, 1997).

Alternatively, Tyler and Swailes (2002) examined the same model by carrying out a survey among the young managers of the national services in England. The study was based on Earl's (1994) knowledge management model. The findings of the study found that heavy investment in technology was not the main successful factor in implementing knowledge management as compared to investment in people, particularly in employees' training and team work abilities. Thus, the model confirmed the human resources factor as important in knowledge management component. Also, knowledge based system and network revealed that the information and telecommunications technologies are embedded within the organizations. The details of the four components that build up the model are described in previous literatures.

2.4.1 Knowledge System in Knowledge Management Model

In building up the knowledge management practices, companies have learned to rely its capabilities on the applicability and well-developed knowledge-based system. The functions of the system are important to be a distribution channel to capture experience and 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 (Prusak, 1997). Besides, knowledge system enabled the accessibility by employees to organizational experience, and when linked together with decision tools, such screen-based analyses, can be exploited into new products of knowledge.

However, Carneiro (2000) argued that most of the organizations had difficulty in developing its practical strategic knowledge system because knowledge tend to flow in a continuous and in unsystematic manner which had caused the amount of information processing resources to vary by levels in management activities. This was the most challenging aspect for the knowledge system in creating knowledge out of information. There was the need of getting to the essence of information, making sense of it, making it meaningful and useful before being stored as explicit knowledge in tangible provisions. Such explicit knowledge will be on customer relationship management, client's databases, analysis software, documents sharing systems, content management and the like.

Another point about knowledge system literature could be found in Nonaka (1991) that discussed about knowledge-creating companies and how Japanese business companies put knowledge creation at the center of a company's strategy as quoted in Howard and Haas (1993). According to Nonaka (1991), the critical function of a knowledge system was managing knowledge creation as the enabling processes of making tacit knowledge into explicit forms. In this process, a team played a central role that provided a shared context at all levels of an organization. Therefore, the Great Eastern Life Assurance (M) Berhad, initiated a partnership with Intel Electronics (M) Sdn Bhd with the intention to provide information sharing environment where insurance people at all levels of the company would be able to share information as they need as an essential part of the empowerment strategy (Lee, 2003).

Another example of knowledge system initiatives comes from the Malaysian insurance market as seen from the launching of the MNI Online. This is the first direct-to-customer sales channel for insurance products in the Asian region. It is a mutual partnership program between the Malaysia National Insurance Berhad with Siebel eBusiness Application called *Siebel Systems* to outsourced Siebel Insurance.

The system that enables insurance companies to manage, synchronize, and coordinate all customer touch points across any channel of interaction. MNI Online has helped the insurer company to double its rate of sales conversion within 12 months of launching (Ang, 2003).

In the proposed model in this study, knowledge systems performed the structuring, processing, editing and storing of multimedia documents. As an example, sales agents or financial planners will be able to plan their weekly targets on First Year Premium (FYP), monthly commissions, and built up their own client's databases. Despite the formatted data of transactions systems, the knowledge capture system in the multimedia documents would include presentations kits, video or audio files that can link or transformed into other forms of business marketing tools. The functions of multimedia documents provide explicit knowledge that is accessible for the entire business unit. In the insurance business environment, each agency unit functions as the business unit throughout the insurance companies and authorized unit managers or agency leaders to perform recruitment of new agents or financial planners.

There were various examples of knowledge systems that exist in organizations. Osterle, Fleisch and Alt (2000) provide an example of a basic system such as groupware systems, search engines, experts systems, discussion forums, video conferencing and databases. However, when linked to the knowledge management system in the insurance industry, the most common systems are clients' databases that provide information on clients insurances policies and claims status, web-based transactions system via company's intranet, and decision tools such as Investment Link Software (ILS). Therefore, knowledge system remained as one of enabling knowledge stored in explicit form before shared it or distributed them throughout various organizational levels.

2.4.2 Network in Knowledge Management Model

Within a given framework, networks appear to be a significant component of knowledge acquirement, before being distributed via a knowledge network. A case study by Earl's (1994) at Skandia International and Shorko Films quoted from Prusak (1997) found that networks acted as both capturing and underwriting

transactions to update the corporate database and disseminated along knowledge-based parameters, knowledge trends and knowledge tools. In this study the networks variable looked into internal and external form of communication behavior among the employees in the insurance companies and to assess the information as well as knowledge flow within each business unit throughout the companies.

In order to understand the network function in knowledge management practices, Botkin (1999) discussed the successful aspect of managing knowledge would require a network management model which shows the network form, where the three components namely relationship, connection, and interdependence are the basic features. Further explanations of network management would include basic features created that are interdependent among business units where the manager's role and practices require efficient integration. The main goal of the network would be to generate new knowledge by converting individual learning to organizational knowledge as well as the recycling of tacit knowledge into explicit knowledge and reintegrating it as tacit knowledge by the whole organization. It was understood that the processes of transferring and reusing of knowledge within the network would require facilities and resources, and thus create a need to optimize the communication costs and process time.

On the other hand, Pettigrew and Fenton (2000) mentioned that the primary roles of networks in organization represented a shift away from transactions among client's and company's sales force. In this role, networks also play as a unit of analysis to relationships between local, corporate and externals networks in the exchange of knowledge and experience. They argued that networks appeared mainly in the context of interorganizational networks as a key to social control and consistency of transactions. Furthermore, they indirectly related about networks focus that involved the identification of patterns of directions and indirect linkages among persons and positions. As a result, Pettigrew and Fenton (2000) have put forward an idea that networks were concerned with the establishment of knowledge sharing because networks contributed to an understanding of the flows of resources and people as well as in developing of decision-making theories, strategic control, knowledge flows, and innovation within organizations.

On the other hand, researchers such Swan, Newell, Scarbrough and Hilsop (1999) examined that there were two types of network models carried out in the knowledge-based enterprises in their study. One was concerned with cognitive network model, quite popular at a financial institution such as Ebank. The other one was community-networking model, which was commonly used in insurance business, such as at American International Assurance (M) Co Ltd (AIA), which formed the community based networking via its company's websites (http://www.aia.com.my). The advantage of this type of network was valued relationship among the clients and insurers, which made the networks focused more on a series of private networked relationship.

On the processes of knowledge creation and sharing, Miller (2001) attested that community networking was grounded within a series of components described as human resources, intellectual resources and external resources. Human resources can be manifested in the form of experience, expertise, knowledge and skills that people brought into the network with them each day. Hence, the information flow in the network-aided human resources gained its knowledge through collective external resources such as discussion groups, dialogues between team members, and between each business units throughout the company, shared context of experiences which blended effectively to achieve the company's visions and objectives.

Additionally, Botkin (1999) acknowledged Intranets as the most common form of internal network build by the knowledge business, which allowed companies to outsource the management and technology, which shaped as the backbone of knowledge communities. For example, the foreign-controlled insurers in the Malaysian insurance market has their own knowledge communities in business via a variety of groups of people with the common feeling to create, share, and use new knowledge for tangible business purposes that were accessible through their websites (³Various Companies' Websites, 2003). Most of these knowledge communities are bonded with a sense of belonging that underlie within organizational citizenships and corporate cultures with shared values or a common commitment among individuals in particular companies and their clients.

Many writers such as Margretta (1999) quoted by Evans and Wurster (1997), Breau and Smith (2001) quoted from Bahra (2001) have examined that most companies had built the same network with technical standard commonly referred as the Internet, Intranet and Emailing business based environment. Internet operates as a connections technology to everyone regardless of personal connection and geographical boundaries, whilst extranets, connected companies to one another, and Intranets, connected individuals within companies. However, Internet has become the greatest model of a network global organization that represents external network within every insurance companies. However, the impact of networks had brought dramatic changes to the role of the traditional business transactions by the emergence of wireless communications networks where frontline customers services agents are able to submit their sales policies online. The main objective of networks have been found as technologies for supporting value creation for the future, and has also been viewed as the top technology for supporting knowledge exploitation.

Therefore, the network study in this model is intended to find out the communication flow and knowledge flow within three components of the networks namely local network via Intranet, groupware such Lotus Note, and documents sharing system. While corporate network can be seen from the organizational structure facilitates knowledge system environment, investment in telecommunications network and external network that are linked with professional organizations are becoming benchmarking practices from others organizations in critical areas.

2.4.3 Learning Organization In Knowledge Management Model

The third variable in the model under study was learning organizations. This component of knowledge management model looked into the need of collaborative organizational functioning such as team work to build the process knowledge as new marketing strategy shared by the sales agents. It has been identified that the employees' training and development practices in term of technology-use training can be the sources of knowledge processing skills. This component of knowledge management also aimed to analyze the correlations between education level and the knowledge collaborations process among the insurances personnel based on

positions. As knowledge of individuals becomes understood and adopted by their work group and as knowledge of one group is shared with others groups, it would affect the organizational learning capability (Sanchez, 2001), and this would bring forward the learning organization dimension of insurance personnel in the study.

In general, the popular clarification on the theory of organizational learning has been attributed to Senge (1990), who viewed organizational learning as a reflection derived from cognition of individual members of the organization that formed organizational memory. Learning agents located through individual employees discoveries, inventories and evaluations. The implications of Senge (1990) learning organizations idea pointed that the process of organizational learning correlated to individual learning by using human memory with the combination of team learning processes because teams were viewed as the fundamental learning unit of the modern organization. Teams learning helped companies produced extraordinary results and responsible for individual members to grow knowledge more rapidly because knowledge acquired from the teams learning enabled companies to overcome intrinsic obstacles to learning, and developed dynamic ways of pinpointing business threats asides recognizing new opportunities.

Additionally, Senge's (1990) teams learning seems to synchronize with Nonaka's (1991) arguments on the roles team work in knowledge-based business environment. According to Nonaka (1991) teams is the vital part of knowledge creating company because teams seem to be important sources of learning and knowledge enhancement through knowledge sharing where individuals shared a common purpose and experience on similar problem and came together during the exchanged of ideas and information. In the insurance business environment, teams are always made up within each business unit commonly referred as agencies forces that consists of agency leaders, unit managers and salespersons. These teams move to achieve each target sales and rewards collectively within the company's performance policy.

Furthermore, another element of learning organizations components of knowledge management process is in setting up of the corporate memory. Abell and Oxbrow (2001) acknowledged that knowledge management processes being the main activity to make the corporate memory effective and well built, which would enable the

whole organization to learn from previous corporate experience. The unique part of corporate memory is always referred to as a complex mix of who knows what, who has been where, who understands through analysis, which understands through intuition and the information collected and recorded throughout the organization. The argument was based on the basis that corporate instincts was developed through a healthy and active corporate memory, which indirectly emerged in the form of collective knowledge and organizational know-how. Therefore, learning organization recognized it as one of the idea of building up corporate memory via its knowledge system and cultures. When linked to the insurance business training environment, which is considered as the real business dealings among new agents or financial planners who would act as the agency force usually formed in a small dynamic team. These teams are set up as an adaptive agents to carry out company's marketing intelligent system. Whatever the outcome, these team perceptions are offered as additional knowledge to the corporate memory and experience.

Moreover, Wexley and Latham (2002) provide the characteristics of organizational knowledge and skills acquisitions placed in a continuous learning work environment. Their arguments made knowledge and skills acquisitions as the major responsibility of every employee, where learning activities are supported through social interaction and work relationship. Furthermore, there are formal systems that reinforce achievement and provide opportunities for personal growth and innovation, also encouraging competition to exist both within and outside the organization. The same idea was provided by Garvin (1993) as quoted from Liebowitz (1999) who had given the broad side of organizational learning in knowledge management practices. He justified learning organizations as an important process for creating, acquiring and transferring knowledge, and modifying individual behaviors to reflect new knowledge and insights. While Storey (2001) mentioned that learning about innovation required innovative approaches to learning activities as a critical process for organizational success, particularly when it comes to knowledge work.

2.4.4 Knowledge Workers in Knowledge Management Practices

Earl's (1994) model in Prusak (1997) recognized that the most important aspect of implementing knowledge management must involve organization employees who are known as knowledge workers. This component of knowledge management would comprise skilled, experienced and continuous knowledge acquisition of human resources in the organizations. Kubo and Saka (2002) defined knowledge workers by the work they do, work which is relatively unstructured and which reflected the changing demands of organizations.

Knowledge worker in knowledge management model also take into account the aspect of human resources capital of the knowledge-based organization. The knowledge workers are the people facing the challenge in creating knowledge-based management. This component can be mapped out by the demographics variables of the employee's background. As knowledge workers work together with the computer, the study will assess the employee's knowledge of IT and some other knowledge management activities that appeared in the organization.

The nature of knowledge worker, according to Kubo and Saka (2002) are seen in those who had gained knowledge from relationship experience and are extremely valuable only to that company and not to any other. Conversely, Allee (1997), explained knowledge workers are referred to as workers who were competent in manipulating and sorting out symbols and concepts, who worked with knowledge and information. On the other hand, Drucker (1999) referred to knowledge worker as an executive or manager and the term has been expanded to mean most white-collar and professional workers. However, in this study, the knowledge workers are referred to insurance personnel in term of their experience. positions and qualifications because in insurance business environment, every personnel should be knowledgeable with their nature of the jobs requirement. These people are the unit managers and sales agents and other agency force employees who have the *know-how* competencies.

CHAPTER 3 METHODOLOGY

3.0 Introduction

As stated earlier this study intended to identify the existing knowledge management practices among the selected insurance companies by determining their practices in terms of knowledge management model as proposed by Earl (1994) in Prusak (1997).

The research conducted was based on survey type as Sekaran (2000) viewed surveys as a useful and powerful method in finding answers to quantitative research's objectives. A combination of several types of questions was proposed in carry out the survey. Most questions was designed using the Likert Scale to evaluate the responses based on the respondent's experience.

In order to get a clear picture of the knowledge management practices in the insurance industry, a structured interview questions was prepared as part of the primary data collection. The interviews were carried out among three insurances personnel who was holding managerial post such as business development managers and human resources development or training managers of the respective insurance companies.

This survey also comprised the analysis of organizational documents as a part of data collection method as mentioned by Cassell and Symon (1994) and quoted Forster (1994) who put forward the analyses of documents, administrative and archival sources as a method to be employed by researchers. Organizational documentation comes in many forms, such as company annuals reports, companies selection interview documents, websites and press releases, which reflected the simultaneous records of events in selected companies. This analysis helped the researcher to look more closely at the major process and developments of companies knowledge-based activities. As for this study, the documents were provided through e-mail with the subjects as part of the structured interviews on some questions.

3.1 Population

The population of this study were the 18 insurance companies, members of LIAM that operated in Malaysia. Table 3.1.1 listed the 18 population of the study. The main respondents were staffs who were occupying various positions such as unit managers, sales agents, insurance brokers, agency leaders, agency assistants and heads of departments of the insurance companies who were mainly involved in the sales and marketing activities as well as administrating their own departments.

These insurance companies provided a broad range of investment cum life policies and medical based financial products and services designed to meet the protection, assets accumulation, and advice needs of their clients. Product included life, health and disability insurance, annuities and pensions schemes, mutual funds and savings plans. Sales agents, unit managers, financials planner and agencies leaders provided personal financial counseling to satisfy customers' preferences for a broad range of insurance and savings products.

Table 3.1.1 Summary of the population of the study.

	Companies	Web Address
1.	Allianz Life Insurance Malaysia Berhad	http://www.allianz.com.my
2.	AMAL Assurance Berhad	NIL
3.	AmAssurance Berhad	http://www.ambg.com.my
4.	American International Assurance Co Ltd	http://www.aia.com.my
5.	Asia Life (M) Berhad	http://www.asialife.com.my
6.	EON CMG Life Assurance Berhad	NIL
7.	Great Eastern Life Assurance	http://www.lifeisgreat.com.my
8.	Hannover LifeRe, Malaysian Branch	http://www.hannoverlifere.com
9.	Hong Leong Assurance Berhad	http://www.hla.com.my
10.	*ING Insurance Berhad	http://www.inginsurance.com.my
11.	John Hancock Life Insurance (M) Berhad	http://www.jhancock.com.my
12.	Malaysian Assurance Alliance Berhad	http://www.maa.com.my
13.	Malaysian Life Reinsurance Group Berhad	NIL
14.	Malaysia National Insurance Berhad	http://www.mni.com.my
15.	Mayban Life Assurance Berhad	http://www.maybanlife.com.my
16.	MCIS ZURICH Insurance Berhad	http://www.mciszurich.com.my
17.	Prudential Assurance Malaysia Berhad	http://www.prudential.com.my
18.	Tahan Insurance Malaysia Berhad	http://www.tahaninsurance.com

Source: Life Insurance Association of Malaysia. http://www.liam.com.my

3.2 Sample

Due to the limited time and resources, this study focused only on 11 selected companies with about 412 fulltime personnel. These companies operated in Kedah, Perlis and Penang based on convenience sampling method that constituted the Kedah area such as Alor Setar and Sungai Petani; Bukit Mertajam for Penang and Kangar for Perlis. The sample for the 110 questionnaires consisted of staff closely linked to insurance business such as sales agents, unit managers, financial planners, agency leaders, agency assistants and head of department, which were categorized by management team of insurances' companies. Most of these respondents were engaged in a wide variety of sales and marketing, administration department and claims offices. All the respondents were full-time of insurances' business staffs that volunteered to participate in this study. The characteristics of the sample are summarized by the Table 3.2.1 below.

Table 3.2.1: Sample of the study

	Table 5.2.1: Sample of the study				
	Companies	Branch Location			
<u> </u>	Allianz Life Insurance Malaysia Berhad	Alor Setar			
2	American International Assurance Co Ltd	Alor Setar, Sungai Petani, Penang			
3	Asia Life (M) Berhad	Alor Setar			
4	Great Eastern Life Assurance	Alor Setar			
5	Hong Leong Assurance Berhad	Alor Setar, Sungai Petani			
6	ING Insurance Berhad	Alor Setar			
7	John Hancock Life Insurance (M) Berhad	Alor Setar			
8	Malaysian Assurance Alliance Berhad	Alor Setar			
9	Malaysia National Insurance Berhad	Alor Setar			
10	MCIS ZURICH Insurance Berhad	Alor Setar			
11	Prudential Assurance Malaysia Berhad	Alor Setar, Kangar, Penang			

A total of 110 questionnaires were mailed to the insurance personnel of which 43, that's 39%, responded. These respondents represented an estimated 412 full times considered knowledge workers of the eleven selective insurances companies operated in the above-mentioned areas.

3.3 Research instrument

The primary data collection instrument was a structured mail questionnaire which included closed and open-ended questions. In order to establish the statistical relationship on numerical comparisons among the variables in the Earl's model, the questionnaire comprised of structured Likert point-scale questions. Thietart et al. (2001) had suggested such structured point-scale can aid researchers to carry out correlation and regression analysis.

The research instruments were built up on various sources such the Knowledge Centric Organizations Questionnaire 1999 (KCOQ), Knowledge Management Practices 2001, a survey from Science, Innovation and Electronic Information Division of Statistics Canada and "Twenty Questions About Knowledge In Organizations" from Ernst & Young Center for Business Innovation and Business Intelligence.

In order to get the bigger picture on knowledge management at the corporate and industry levels, the research instruments also included structured interview questions aimed specifically to identify the knowledge management practices in depth. At this juncture, the concurrent existing knowledge management models have not yet being able to provide the major understandings on knowledge management among the managerial practitioners. The structured interview designed was based on questions raised in Beijerse (1999) who identified the main concepts of knowledge management.

3.3.1 Questionnaire development

The first section of the questionnaire consisted of items on the demographic characteristics of the respondents. The responses were classified according to eight items: gender, age group, educational background, years of experience in the insurance business, position in the organization, number of employees in the agency or department, monthly income and technology assessment.

The second section of the questionnaire was designed to access the respondent's concept of managing organizational knowledge, tools and process. The questions were designed based on 5 point Likert-Scale which allowed the researcher to perform certain numerical operations on the data regarding what constituted critical knowledge, knowledge based tools and managing knowledge process through knowledge based system and networking that have been carried out in the organization.

There were seven items to measure the extent of the list on knowledge that was important as perceived by the respondents. There were seven items choosen to represent the important knowledge as regarded by the insurance industry, adapted from the "Twenty Questions About Knowledge In Organizations" from Ernst & Young Center for Business Innovation and Business Intellingence (1997).

On the other hand, there were five items designed to measure to degree of agreement (1 as Strongly Disagree and 5 as Strongly Agree) among the respondent's with regard to their companies' local, corporate and external network. The last section of part one outlined the degree of agreement (1 - Strongly Disagree and 5 - Strongly Agree) among the respondent's regarding their companies' knowledge system that was used within the companies.

The third section of the questionnaire was designed specifically to investigate the learning organization activities that have been implemented in the organization. This section was constructed with 14 elements on learning organization criteria, which consisted of collaboration of knowledge sharing among respondents, peers and managers, characterized by three dimensions namely human resource development and training activities, organizational learning culture as important dimensions in knowledge sharing and organizational collaboration process within the insurance companies. These 14 elements were adapted from the combination of Knowledge Centric Organizations Questionnaire 1999 (KCOQ) and Knowledge Management Practices 2001, a survey from Science, Innovation and Electronic Information Division of Statistics Canada regards learning organization processes.

The fourth section of the questionnaire was designed specifically to investigate the respondents' personal experience and beliefs of knowledge management activities that already existed in the companies. The questions aimed specifically to find out the explicit knowledge management practices that existed in the individual level that might revealed the actual knowledge management process in the organizational level. There were two components of this section that outlined the personal experience and personal beliefs about learning and knowledge acquisition within the companies.

The fifth section of the questionnaire was designed specifically to investigate the issues and challenges faced by respondents in the implementation of knowledge management. The questions in this section were designed with the aim to identify the three biggest difficulties in managing knowledge in respondents' point of view. The complete questionnaire is attached as Appendix A at the back of the report.

3.3.2 Structured interview questionnaire

The structured interview questionnaires containing items measuring the knowledge management strategy and knowledge acquisition activities were distributed among three business development managers of the selective foreign companies. These companies had indicated their understanding of knowledge management practices via their companies web site. The questionnaires contained open-ended questions. The interview questionnaires are attached as Appendix B.

3.4 Results from the pilot study

This section shows the findings from the pilot test of the survey instrument. The main purpose of this pilot study was to ensure the reliability of the survey's instrument. The reliability of the questionnaire was measured using Cronbach's Coefficient Alpha (α) on the inter-item consistency reliability of the multipoint-scaled items of the survey instrument. Sakaran (2001) pointed that the reliability of a

measured instrument indicated the goodness implied by the stability and consistency of each questions in measuring the variables derived from the model.

Table 3.4.1: Crosstabulation analysis of the pilot respondents

		Gender		
	Position	Male	Female	Total
	Sales Agent	2	2	4
	Unit Manager	5	1	6
	Agency Assistant	1	0	1
	Financial Planner	2	1	3
	Clerica! Staff	0	1	1
	Management Team	4	1	5
Total		14	6	20

Table 3.4.1 indicates that there are 20 respondents involved in the pilot test. There were 14 Males and 6 Females of insurances' personnel occupied in this pilot test. The respondents consist of 6 Unit Managers, 5 Management Team with the portfolio as administrative executives, heads of departments such life marketing executives and unit sales managers as well as group sales managers, 4 Sales Agent, 3 Financial Planners and the other two entitled themselves as Agency Assistant and Clerical Staff of the insurance company.

3.4.1 Reliability for the "importance of knowledge" in the insurance industry

This section shows the consistency and test reliability coefficient for the 5 point Likert-Scale variables of the important knowledge as perceived by the respondents of the insurance industry. The degree of measurement justified using 5 point scale with 1 as "Not important at all", 2 as "Not important", 3 as "Somewhat important", 4 as "Important" and 5 as "Extremely important".

Table 3.4.2: Mean and Reliability Coefficient Result on the "importance of knowledge"

Item for the case of how much the knowledge important to the respondents	Reliability Coefficients (Alpha/ (α))	Mean
1. Knowledge about emerging problem solving techniques/ technologies	.80	4.15
2. Knowledge about competitors	.78	3.80
3. Knowledge about current and prospect customers	.79	4.15
4. Knowledge about best practices/ effective process of the tasks	.76	4.15
5. Knowledge about emerging market trends	.75	3.80
6. Knowledge about our own competencies and capabilities	.79	4.30
7. Knowledge about our own products and services	.79	4.50

N of Cases = 20

Alpha = .81 Standardized item alpha = .82

Table 3.4.2 above showed the extent the knowledge is important within the insurance industry based on the respondents' nature of job. Based on the table, the seven questions indicated dimensions for industry on the importance of knowledge measured have an alpha value 0.81 to 0.82.

3.4.2: Reliability for the personal experience and beliefs

In order to get the clear illustrative point of view regarding knowledge management in the real organizational setting, the respondents were asked questions pertaining to their personal beliefs and experience in daily working environment. Ten elements were involved, derived from the Knowledge Centric Organization Questionnaire (KCOQ) that were used to measure the knowledge management benchmarking activities in the American Navy. The reliability coefficient alpha value for each question span was between 0.83 to 0.85, which showed the high consistency, and stability of the five items that measured the two dimensions of knowledge management practices among the respondents.

3.4.3 Reliability for the overall variables in the research instrument.

Table 3.4.3 below showed the mean, standard deviation and coefficient alpha for five components of the main independent variables within the Earl's knowledge management model. From the table, it can be seen that the alpha value ranged

between 0.94 to 0.95 and showed a higher consistency and stability of the respondents' responses towards the overall questionnaires.

Table 3.4.3: The mean, std dev and reliability coefficients alpha for overall questionnaire

Item for the overall variables of knowledge management in the organization	Reliability Coefficients (Alpha/(a))	Mean	Std Dev
Network	.92	3.56	.78
Knowledge system	.93	3.78	.93
Learning Culture	.94	3.86	.82
Learning Collaboration	.93	3.81	.74
Human Resources Development & Training	.94	3.98	.65

N of Cases = 20

Alpha = .9433

Standardized item alpha = .9467

3.5 Validity of the research instrument

The questionnaires were adapted from three main sources that has been used by management consultant in various department such as The Department of Navy (DON), Information Management/Information Technology (IM/IT) Strategic Plan of America, and the ¹Knowledge Centric Organization (KCO) model. The KCO model emphasized a balanced approach addressing technology, process, content, culture and learning. While the other instrument were adapted was from the ²"Twenty Questions About Knowledge In Organizations" from Ernst & Young Center for Business Innovation and Business Intelligence. The third source was from Knowledge the Management Practices 2001, a survey from Science, Innovation and Electronic Information Division of Statistics Canada.

Upon completing the sourcing of the necessary questions from the instruments, the draft questionnaire was attested by the academic supervisor, one business development manager and one training manager. The content validity was checked among all dimensions in order to ensure the instrument can measures the concept of knowledge management within the model.

3.6 Data analysis method

The data from the questionnaires was analyzed using the Statistical Package for the Social Sciences (SPSS) version 11.5. The analysis part included descriptive statistics such cross- tabulation for the demographic variable to identify the descriptive component of the knowledge workers in the insurance companies. While the analysis on correlation was carried out to identify the learning organization dimensions associated with the communication networks and knowledge system used in the insurance companies. The regression analysis was carried out for the purpose of describing the overall dimensions of knowledge management practices in the study.

On the other hand, for qualitative data, the techniques of triangulation and thick description were used to describe the information from structured interview questionnaire. Owens (1987) pinpointed that triangulation techniques helped researchers to cross-check the multiple data-gathering techniques such as interviews, document analysis, companies' annual report and questionnaires. While thick description also helped in getting data from the analysis of several documents and cross-checked with selective interviews and annual report to produce a realistic picture on the nature of the insurance business environment.

CHAPTER 4 FINDINGS AND DATA ANALYSIS

4.0 Introduction

This section lists the findings of the study regarding the four main component of Earl's (1994) knowledge management model and based on the study's objectives.

4.1 The background information of the respondents

As stated earlier, the respondents of this study consisted of staff that were closely linked to the insurance business such as sales agents, unit managers, financial planners, agency leaders, agency assistants and head of department, which comprised the management team in the insurances' companies. Most of these respondents were engaged in wide variety activities such as sales and marketing, administration department and claims officers. The selected respondents were full-time of insurance business staffs that volunteered to participate in this study. Table 4.1.1 below shows the demographic variables of the respondents.

Table 4.1.1: Profile of the respondents

Respondents Profile		Frequency	Percentage	
Gender	Male		58.1	
	Female	18	41.9	
Age Group	Less than 25 year	5	11.6	
5 1	25-30 year	12	27.9	
	31-35 year	4	9.3	
	36-40 year	6	14.0	
	41-45 year •	9	20.9	
	More than 45 year	7	16.3	
Current income (per month)	Less than RM500	1	2.3	
	RM501-RM1000	6	14.0	
	RM2001-RM2500	3	7.0	
	RM2501-RM3000	7	16.3	
	RM3001-RM3500	5	11.6	
	RM3501-RM4000	4	9.3	
	More than RM4001	17	39.5	

^{*}N=43

Table 4.1.1 gives the general features of the respondents under study. There were 25 males (58.1%) and 18 females (41.9%) who responded to the questionnaires. This gives the impressions of almost equal distribution of gender within the study. Furthermore, the table also shows that 27.9% (12) of the respondents were from the age group of 25 to 30 years old, 20.9% (9) of them were from the group age of 41 to 45 years old, while 16.3% (7) of them were more than 45 years old. This reveals that the demographic variables consist of experienced workers within the industry. Whilst in terms of the monthly income, the majority or 39.5% of the respondents had income of more than RM4001 per month; about 16.3% were in the income group of RM2501 to RM3000 and 14% were from middle income of RM501 to RM1000 per month. The earlier data and observations already revealed that the group of respondents which income more than RM4001 per month were from management team, such as unit managers and financial planners.

4.1.1 Respondents personal and basic technological accessibility

Another important element of knowledge management practices in organizations comprised of the ownerships of personal computers and office help desks which provided reasonable facilities for implementing specific knowledge-based task such as financial analysis in decision-making processes, weighing relevant industry information or data (explicit knowledge) storage system, knowledge dissemination as well knowledge acquisitions. Based on the demographic variables the study seek to describe the technology accessibilities among the respondents. Figure 4.1.1 and Figure 4.1.2 provide the insights on the availability of the personal computers and help desks among the respondents.

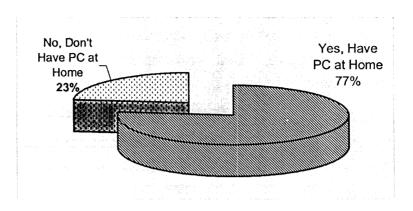


Figure 4.1.1: Technology accessibility of the personal computer among respondents

Figure 4.1.1 above shows the percentage of an ownership of personal computer among the respondents. The figure reveals that 77% (33) of the respondents have their own personal computers at home, and 55% (18) of them used the PCs for an average of two hours per day. Only a small portion of 23% (10) of the respondents stated that they did not have a personal computer at home.

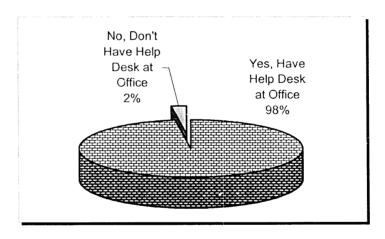


Figure 4.1.2: Help desks technology in office

On the other hand, Figure 4.1.2 above exhibits the help desk element of knowledge capture systems within the company level. The figure exhibits that about 98% (42) of the respondents across various positions have help desks provided by their companies. The majority of 33% (14) of the respondents used to operated their help desks for an average eight hours per day, which comprised of the management team personnel such as human resources and training managers as well the branch manager. While three categories of workers such unit managers, sales agents and financial planners operated their help desks for an average of four to fives hours per

day. Furthermore, the figure also reveals only a very small portion of 2%, expressed the unavailability of such facilities.

4.2 Knowledge worker skill and respondents profile of insurance industry

The first objective of this study was to identify the descriptive characteristics of the knowledge workers in the insurance industry. Since there were many definitions of knowledge workers as defined by many authors, this study made use of critical demographic variables to identify the knowledge workers characteristics.

The demographic variables, in term of respondent's qualifications and working business experience as well as their positions were used to define the characteristics of the knowledge workers in the knowledge management model. This description was based on previous definitions of knowledge workers, such as the definition by Drucker (1999) of knowledge worker as an executive or manager, has characterized knowledge workers as having certain positions within organizations. On the other hand, Kubo and Saka (2002) defined knowledge workers by the work they do and they have gained knowledge from experience such as the business experience in the insurance industry. Table 4.2.1 below and Table 4.2.1 in the other page provide the descriptive profile of respondents' qualifications, business involvement, and positions and all these helped to describe the knowledge workers characteristics in the insurance industry.

Table 4.2.1: Respondents qualifications

Respondents Qualifications and Core People		Frequency Percentag	
Qualification	SPM/SPMV	10	23.3
	STPM/Diploma/A Level	12	27.9
	Bachelor Degree	19	44.2
	Master Degree	4	9.3
Professional Qualification	Yes	12	27.9
•	No	31	72.1
	N=43		

Table 4.2.1 exhibits the respondents qualifications. Based on the table, about 44.2% of the respondents were bachelor degree holders while 27.9% of them have STPM or Diploma holders, while 23.3% of the respondents had SPM or SPMV qualifications.

However, only a small portion (9.3%) of the respondents have masters degree. This reveals that about 37.2% of the respondents can classified as knowledge workers based on the previous literatures. However, a majority of 72.1% of the respondents didn't have any professional qualifications as compared to 27.9% who have a professional qualification. Figure 4.2.1 below shows the proportion of the various professional qualifications among the respondents.

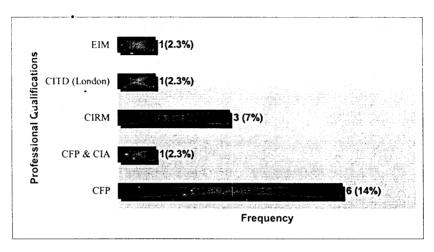


Figure 4.2.1: Respondents' professional qualifications

Based on Figure 4.2.1, about 14% (6 respondents) of the overall 12 respondents who had professional qualification had Certified Financial Planner (CFP), 7% (3) respondents out of 12 respondents had a professional qualification and had qualified as Certified In Risk Management. Only 1 respondent had both qualifications such as Certified Financial Planner and Certified In International Accounting. The respondent was also a member of Malaysian Institute of Accountant. On the other hand, there were two who had Certificates In Training and Development from London and EIM. This explains the credibility of the respondents who can be categorized as knowledge workers in the insurance industry.

Table 4.2.2 below exhibits the respondent's position, respondent's experience drawn from the many years of their involvement in the insurance business environment and the number of peoples in each business unit in which the respondents worked. The table reveals that more than half (65.2%) of the respondents in this study consisted of Unit Manager (32.6%) and Management Team (32.6%). The members of the

Management Team came from various departments such as the Human Resources Manager, Training Manager, Business Development Manager, Branch Manager, Head of Operations and Administration, Agency Leaders and Group Sales Manager as well as Life Marketing Executives. There were 18.6% of the respondents who considered themselves as sales agents, 11.6% called themselves as Financial Planners and the others considered themselves as clerical staff and agency assistant. When it comes to positions, about 33 (76.7%) of the 43 respondents in the study were knowledge workers.

Table 4.2.2: Respondents' position, number of experience and size of the business unit

Position, experience & s	Frequency	Percentage	
Respondents Position			•
	Sales Agent	8	18.6
	Unit Manager	14	32.6
	Agency Assistant	1	2.3
	Financial Planner	5	11.6
	Clerical Staff	1	2.3
	Management Team	14	32.6
Years Involve In Insuran	ce Business		
	Less than 1 year	3	7.0
	1-3 years	12	27.9
	4-6 years	10	23.3
	7-9 years	5	11.6
	10-15 years	5	11.6
	More than 15 years	8	18.6
Number of people in bus	iness unit		
•	Less than 10 people	8	18.6
	10-15 people	14	32.6
	16-20 people	3	7.0
	21-25 people	1	2.3
	26-30 people	3	7.0
	More than 30 people	14	32.6

N = 43

In addition to Table 4.2.2, about 27.9% of the respondents had been involved in the insurance business for 1 to 3 years. While 23.3% stated they are already involved in the business for 4 to 6 years, 18.6% were seriously involved for more than 15 years and 23.2% stated that they were in the industry for 7 to 15 years which indicates that about 18 respondents in the study can be considered as experienced workers. However, in term of the size of the business unit showed that a majority of the respondents had worked in groups between 10 to 15 peoples and as for the 14 respondents from Management Team stated that they used to work in a bigger size of

the business unit, which consisted of more than 30 peoples. The nature of business unit of insurance companies can be best described as the size of agency.

4.2.1 Knowledge workers activities in insurance business environment

The knowledge workers were not only characterized by their technology capabilities, but also through the analyzing of the various activities, which were relevant to insurance business and industry. There were ten activities listed as shown in Figure 4.2.1.1 below.

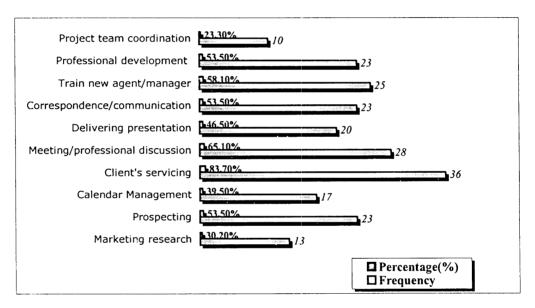


Figure 4.2.1.1: The respondent's activities in insurance industry

Figure 4.2.1.1 provides tens main activities carried out by the respondents within the insurance industry, which also reveals the nature of tasks carried out as part of the clients relationship management in managing risk. Based on the above figure, 83.7% of the respondents spent their times in client' servicing activities, 65.1% respondents spent their times in meeting and professional discussions sessions, while 58.1% respondents spent their times in training new agents and or managing development training. However, there were approximately 53.6% of respondents who spent most of their time in three activities namely attending the professional development program, correspondence or communication via various media, and prospecting as part of marketing activities of the life insurance industry. The least

preferable activities among the respondents belong to project team coordination (23.3% of respondents) and marketing research involving about 30.2% of respondents' times. On the other hand, calendar management only consumed about 39.5% as preferable activity carried out by the respondents as compared to delivering sales presentation as preferred by 46.5% of the respondents.

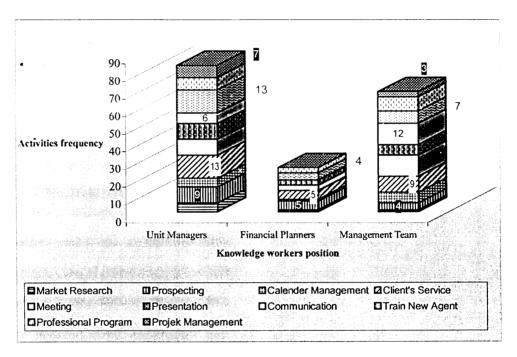


Figure 4.2.1.2: Frequency of activities carried out based among the knowledge workers.

Figure 4.2.1.2 reveals the frequency of activities carried out based on respondents position. The figure tells a variety of activities carried out by the knowledge workers across different positions. For example, about 13 of the unit managers spent most of their times in two main activities, namely training new agents and servicing client's policies. Conversely, 9 of the knowledge workers from management team preferred to spent most of their times in servicing client's policies and only 7 of them spent most times in training new agents. The relevant explanation of these results best fit the 4 respondents who regarded themselves as head of the human resources development and training department while another was given the task of branch manager and agency leaders portfolio.

Other significant activities among the management team category of knowledge workers (12 of them) were spent in correspondence and communications activities.

However, about the same amount of time was spent in prospecting activities carried out by the 9 unit managers and 5 financial planners as compared to 4 management team. The possible explanation for this outcome is because unit manager and financial planners tasks are almost the same in developing clients relationship activities through prospecting and client's servicing as well as delivering presentation.

Just as knowledge workers have well-built analytical skills in risk management and investments market, the study also found about the industry critical important knowledge as perceived by the respondents. Figures 4.2.1.3 below illustrates the critical important knowledge as perceived by respondents based on the nature of their jobs.

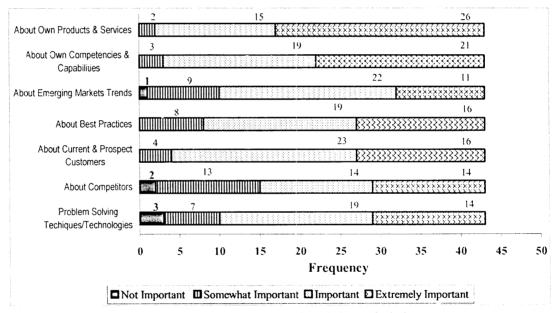


Figure 4.2.1.3: The importance knowledge to the industry

The above figure suggests that almost all seven critical industry knowledge was perceived as important and extremely important from the respondents' point of view. The majority or 41 (95%) of the respondents marked knowledge about their own products and services are as important and extremely important for them as to excel in the industry compared to 40 (93%) of the respondents who marked knowledge about their own competencies and capabilities as important and extremely important to compete in the insurance industry. However, the figure indicates a small numbers

of respondents noted some knowledge as not important to them such as problem solving techniques/ technologies and about competitors.

4.3 The communications networks and knowledge system used in the insurance business.

The second objective of this study was to investigate the communication networks and knowledge system used in the insurance company. There were twelve characteristics of technology and knowledge tools used for enhancing organizations knowledge based system in this study. Respondents were asked to mark as many tools that were applicable to their working environment in the respective insurance companies.

Figure 4.3.1 below shows the descriptive statistics of these knowledge based tools familiars to the respondent's experience as well as their respective companies.

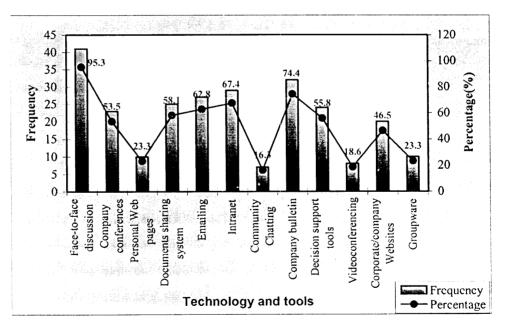


Figure 4.3.1: Technology and tools for enhancing organizations knowledge based system

In addition to Figure 4.3.1, there were two main tools, namely face-to-face discussion forum (95.3%) and company's bulletin (74.4%) that have been widely

used for enhancing theirs organizational knowledge system. Whilst, about 67.4% respondents were familiar with Intranet as forms of searching industrial knowledge needs, 63% preferred emailing, 58% preferred document sharing as compared to only a small portion of 19% who are experienced in videoconferencing techniques as a knowledge capturing system.

In term of decision tools, about 56% of the respondents utilized certain statistical and accounting software such Investment Links Software (ILS) and WSIS for counting or estimating client's alternatives policies payable premium. Moreover, 54% of the respondents used to capture knowledge by attending their internal company conference, annually organized by the 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, built up knowledge networks via partnership and reasonable outsourcing of certain critical business technologies based solutions. The figure also reveals that a proportion of 23% of the respondents who had connected via groupware and this characterized the internal networks system of the insurance companies.

Additionally, the figure also indicates the characteristics of the basic knowledge networks that appeared within the insurance companies. Previous literature about definitions of knowledge networks indeed justified the twofold views of networks as well placed in knowledge systems because the knowledge capture system and databases existed via hyperlinks approach within groupware and Intranet which were described as the internal and corporate networks throughout the companies. Groupware, for instances provided a vehicle for any financial organizations to remain flexible and able to reduce services lead time, yet support the externals salespersons in providing more customers focused strategy because groupware was able to provide employees with greater information.



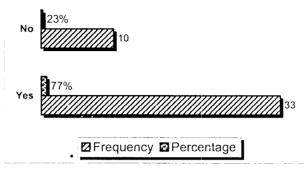


Figure 4.3.2: Intranet networks

Figure 4.3.2 signifies the existing Intranet networks within the respondent's respective companies. According to the figure, 77% of the respondents stated that their companies had Intranet availability, which formed a source of internal and corporate networks among various hierarchies and agencies units throughout the companies. However, 23% of the respondents declared that theirs companies did not have Intranet accessibility. Therefore, Figure 4.3.3 and Figure 4.3.4 below exhibits the components of Internet accessibility among respondents both at home and at office.

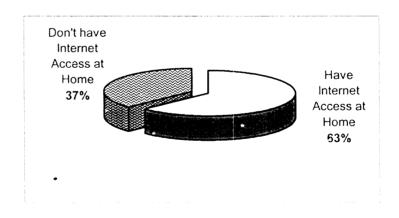


Figure 4.3.3: Internet accessibility at home

Figure 4.3.3 exhibits the percentage of respondent's Internet accessibility at home. More than half (63%) of the respondents had personal computers at home and had Internet access. While only 37% of them didn't have Internet access. The

fundamental part of this finding suggests the implementation of managing personal knowledge at home as well as encouraged the possibility of building up personal client's databases among the knowledge workers in the insurance industry.

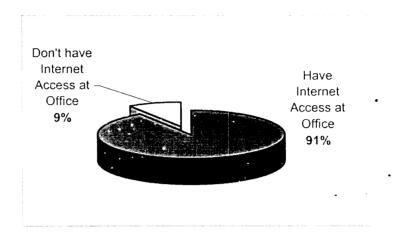


Figure 4.3.4: Internet accessibility at office

Moreover, another form of external knowledge capture system also has been traced via the organizational help desks Internet connections as implied by Figure 4.3.4. Based on the figure, the majority of 91% of the respondents had Internet accesses at office, and this gives an indication of the significant of the major external networks within the insurance companies in the study. Only 9% of the overall respondents indicated no Internet access at their organizational level. Hence, the results indeed suggest the probability of globally connected networks among the respondents, which allowed them to form a variety web-based channel of networks such as community of best practices and emailing environment.

Furthermore, Internet usage among the respondents shows a fundamental web-based learning and knowledge acquirement abilities existed among the various insurance personnel. The Internet usage were regrouped into four e-commerce characteristics, vie mainly relevant and in common to insurance business activities. Components of the e-commerce can be best described as (1) accessibility of current skills aimed to identify the gap and retain the talent. (2) any experience of doing transactions via the company websites, (3) used Internet to put in place a customer care programme that aimed sensing customer needs and (4) used Internet to examine current market

demand of industry products and then aligned the analysis to the new manner of doing business. A detailed figure of the description between the respondents on Internet usage is shown in Figure 4.3.5 below.

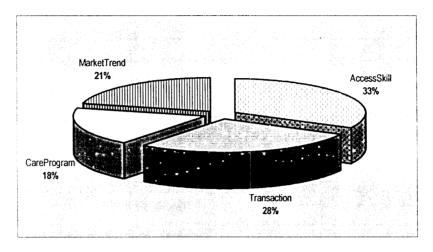


Figure 4.3.5: Respondents Internet usage

Figure 4.3.5 indicates the proportions of Internet usage among the respondents. From the pie chart, 33% of the respondents used Internet to access current skills such as acquired insurances professional development program via The Malaysian Insurance Institute websites (http://www.insurance.com.my), or getting informed via email for life agents development program pertaining to agents' examinations via Life Insurance Associations of Malaysia (http://www.liam.com.my). About 28% used the Internet to do transactions on websites. While 21% analyzed market demand and stored the information for individuals investments needs. Only 18% of the respondents used Internet to build up a customer care programme via clients' databases and communicated with clients' via personal web-page, and community chatting for exchange of ideas and common interest.

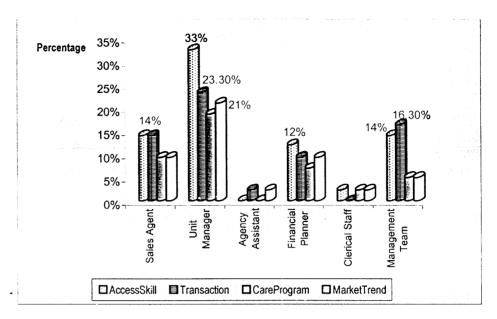


Figure: 4.3.6: Internet usage based on position

On the other hand, Figure 4.3.6 above presents the percentages of Internet usage among the respondents based on their positions. Based on the figure, 33% of unit managers used Internet to access current skills, identify the gap or weaknesses and acquired knowledge. 23% of them conducted transaction via company websites and such activities included submitting cases or policies claims information. Only 21% of the unit managers used the Internet to examine current market investment demand and aligned the market trend to fix with the new knowledge based economic needs.

In addition, the figure shows the management team category of knowledge workers with a different approach of using Internet. A proportion or about 16% of the management team gained experience doing transactions via company websites, whereas 12% of this category of knowledge workers used Internet in accessing current managerial skills, identify the gap and acquire current skills to be used in daily administrative and professionals development activities. This is true among training and human resources managers as well as unit managers and agency leaders because they required responsible knowledge workers especially in hiring and selecting insurance people for the companies' managerial and sales force employees.

4.4 Learning organization adaptations of insurance business.

In order to answer the third objective of the study, the dimensions of the learning organizations elements were regrouped into three indicators known as organizational learning culture, collaboration of knowledge sharing and human resources development as well training components of the respective companies. Table 4.4.1 below demonstrates the intercorrelation coefficients between the three indicators.

Table 4.4.1: Intercorrelations matrix between three learning organization dimensions

Coefficient Correlations				
Dimensions	Learning culture	Knowledge collaboration	HRD & Training	
Learning culture	1.00	•		
Knowledge collaboration	0.85**	1.00		
HRD & Training	0.76**	0.78**	1.00	

**p<0.01

In addition to Table 4.4.1, there is statistical indication to explain significant intercorrelations that exist between the three dimensions of organizational learning carried out within the insurance industry at a significant level of p<0.01. As indicated, organizational learning culture variables have strong linkage with positive coefficient correlation 0.85 to organizational collaboration system. This means that the insurance companies in this study had high organizational learning culture. On the other hand, the organizational learning culture also exhibited positive correlation coefficient of 0.76 to organizational human resources development and training activities applied within the insurance companies. Thus, it suggests that the organizational human resources development and training program indeed influenced the organizational learning culture within the knowledge based business environment. Another important point is that organizational collaboration system also have positive correlations of 0.78 towards organizational human resources development and training activities throughout the insurance business.

In accordance to the third objective of the study, the positive and significant intercorrelations coefficients of the three organizational learning variables exhibit the existence of knowledge sharing, acquisitions and dissemination of explicit and tacit knowledge among the respondents in the study.

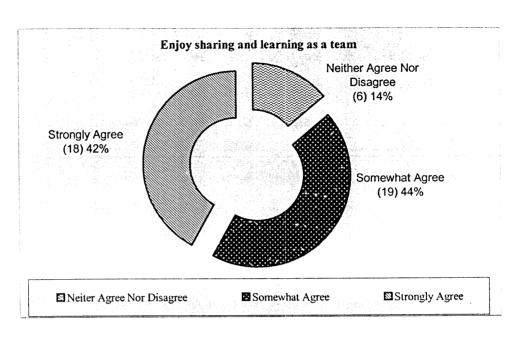


Figure 4.4.1: The descriptive perceived opinions on team learning environment

Figure 4.4.1 above exhibits the respondent's perceived experience in a knowledge collaboration environment. About 86% (37) of the respondents voted somewhat agree as enjoying in the sharing and learning as a team. Whilst 14% (6) respondents voted as neutral on the subject of enjoying working in the collaborative environment. Additionally, three interviewees did made significant remarks as most of the insurance products were highly flexible, such the case of the emergence of SARS related products recently launched by certain insurers. This indicates the possibility of industry's innovations strategy being connected to customers' creative solutions. In many cases, this situation will require the insurance personnel to form coordination teams projected to specific tasks such as promotion or aggressive marketing.

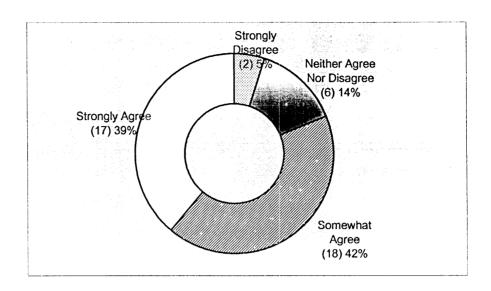


Figure 4.4.2: Openness in learning organizations activities

Figure 4.4.2 above reveals another aspect of Senge's (1990) idea of the culture of openness further requirement of successful learning organization implementations. About 42% of the respondents somewhat agreed on the statement that their companies were flexible, open to new ideas and rapidly stimulate creativity with the aim of remain competitive. About 39% of the respondents strongly agreed that their companies were flexible and open to new ideas and recognized the innovations as creative ways to getting things done. Only 14% didn't have any opinion with regards the openness of the learning culture as well the other 5% marked that the open culture never exist in their companies business environment. The finding suggests that the existence of the soft-side of knowledge management which embedded learning activities within the learning culture itself as important and not only based on technological advancement. For instance, one interviewee characterized her organizational openness as to extent of the benchmarking of learning activities compared to other organizations in certain critical areas such getting abreast with the activities of The Malaysian Insurance Institute.

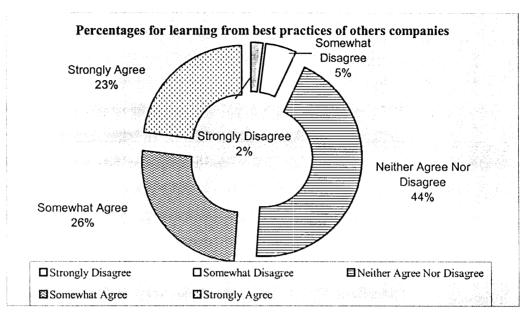


Figure 4.4.3: Percentage of learning from best practices of others companies in critical areas

Figure 4.4.3 indicates that a majority 49% respondents voted both somewhat agree and strongly agree with the idea of learning from best practices of other companies in certain critical areas. This significantly highlighted the existence of openness of learning in organizational culture within the insurances companies in this study. However, 44% respondents showed neither agree nor disagree with the statement and a small percentage of 7% respondents marked somewhat disagree and strongly disagree.

4.5 The overall dimensions of knowledge management practices in the insurance industry.

Objective four of the study was aimed specifically to describe the overall dimensions of knowledge management practices that had been carried out by the insurance companies. The findings from the first objective answered the research question as to what extent the knowledge workers appeared as part of the human resources component in the eleven insurances companies in the study.

Based on the earlier definitions and characteristics of knowledge workers in the literatures, this study found that the group of knowledge workers in the insurance industry could best be categorized into three groups specifically known by their positions and years of experience in the insurance business as well as their qualifications. These group of knowledge workers comprised unit managers, financial planners and management team as the selection criteria for these categories of workers were not only determined by their qualification and experience, but also the higher performance evaluations. The interview sessions with three insurance personnel who entitled themselves as business development manager and human resource managers of the insurance companies had highlighted the fundamental aspect of the knowledge workers components in insurance companies. The interviews revealed that the respondents in these three categories had to carry out high performance evaluations, such as the size of payable premium for new cases submitted per month and be strictly selective in leadership ability. Also, they ought to have strong analytical skill, in addition to being highly effectives in persuasion ability and enjoy in meeting people, especially strangers.

Whereas the second objective of the study was to determine the high percentage of availability and accessibility of information and telecommunications networks and knowledge system used in the insurance business. For that reason, the actual relations between respondents' personal experience evidently was traced by carrying out the regressions analysis as supported by Senge's (1990) arguments of individuals learned best from personal experience. However, the main obstacle was that organization was unable to capture and store such tacit experience in the decision making process.

Table 4.5.1: Regression analysis model for knowledge networks and knowledge systems towards

• personal knowledge management experience

Variables Entered	Personal knowl	edge management experience		
	Unstandardized Coefficients	Standardized Coefficients	t	Sig.
	(B)	(Beta)		
(Constant)	2.082		6.725	.000
Knowledge networks	.108	.153	.982	.332
Knowledge	.421	.618**	3.967	.000
Systems				
F value	23.663**			.000
R^2	.542			
Adjusted R ²	.519		**P<	0.05

In table 4.5.1, the R² value shows that up to 54.2% of the variances in personal knowledge management experience among the respondents can be explained by the two components of the respondents knowledge networks and knowledge system usage experiences. Moreover, both predictors in the regression coefficient (B and Beta) show that the two variables have significant positive relationships towards personal knowledge management experience. However, the standardized regression coefficient suggested that knowledge systems contributes significantly higher of .618 to the regression equation when considered the effect of the two predictors. Conversely, the model indeed point out knowledge networks which were perceived as the corporate internal as well external networks only represent small regression coefficients of .153 with an insignificant influences at the alpha level of 0.05 and the smaller t-value at .989 towards the personal knowledge management experience. Thus, the results recommend the innovative knowledge based captures and storage systems will help insurance companies to foster its employees in managing their tacit knowledge personally.

Furthermore, the three learning organizations dimensions indeed have significant impact towards personal knowledge management practices among the respondents. Table 4.5.2 below shows the regression model of organizational learning culture, organizational collaborations system and HRD and training impact on personal knowledge management experience.

Table 4.5.2: Regression analysis model for the three learning organizations dimensions towards personal knowledge management experience

Variables Entered	Personal knowl	edge management experience		
	Unstandardized Coefficients (B)	Standardized Coefficients (Beta)	t	Sig.
(Constant)	1.924		5.303	.000
LO culture	036	049	220	.827
LO collaborations	.358	.469**	2.043	.048
LO HRD &	.233	.331**	1.771	.084
training				
F value	13.462**			.000
R^2	.509			
Adjusted R ²	.471			

^{**}p<0.05

The F ratio of 13.462 has a significant level at p<0.05 and provides on an insight into the three learning organization dimensions predictors that have the relationship respondents experience in managing their personal knowledge. Based on the table, learning organization collaboration system appears to be the significant bigger contributions with standardized regression coefficients of Beta=.469 at the alpha level 0.05, while human resources development and training positively contribute smaller portion of .331 at the same alpha level. However, learning culture have a negative relationship in terms of contribution towards the respondents personal managing knowledge experience and shows an insignificant predictors to the regression equations. Perhaps the fundamental explanations lie in the form of respondents perceptions of losing power when leveraging heavily in built up learning culture. Another reason can be captured from Figure 4.5.1 below, which shows the biggest difficulties faced by insurances companies in managing their respective company knowledge.

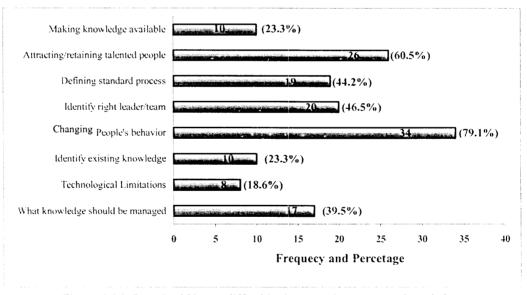


Figure 4.5.1: Perceived biggest difficulties in managing company knowledge

As showed in above figure, about 79% respondents pointed that changing people's behavior as the major barrier of managing their company knowledge. While 61% of the respondents remarked attracting and retaining talented people as the other biggest difficulty of managing organizational knowledge. These two factors tend to justify the need to overcome the barriers in implementing knowledge management practices

within the insurance companies. However, 47% of the respondents refer to the need of proper leaderships in knowledge management practices. Some 44% of the respondents mentioned about the difficulties in defining standard process for acquiring organizational knowledge because the vagueness of knowledge definitions and classifications.

On the other hand, the overall independent variables of the Earl's (1994) knowledge management model indicates the basic understanding of learning organizational culture components as exhibits by Figure 4.5.2 below.

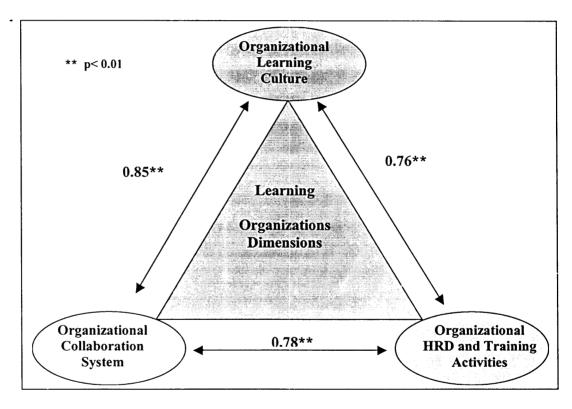


Figure 4.5.2: Intercorrelations of learning organizations dimensions

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 learning organizations activities within the companies. Based on the above figure, the learning culture was placed at the top of the triangle as this component of the learning organizations raised the biggest challenges and

issues among the respondents. In order to build up the learning culture, the other two elements stand as the supporting enablers in the sharing and disseminating of knowledge flow. However, the figure suggested that the organizational collaboration systems functions as the fundamental system that help insurance companies to facilitate the knowledge-sharing environment. Human resource development and training on the other hand, provides a significant impact of the learning collaboration system. This concludes that the learning organizations dimensions have a positive intercorrelation at p<0.01.

In conclusion, the regression analysis of the overall independent variables did indicate the significant relationship between organizational knowledge system, knowledge networks and learning organizations activities towards respondents personal knowledge management experience. The study also include the respondents' beliefs as the extent of their understanding of knowledge management working environment.

Table 4.5.2: Regression analysis model for the overall independents variables towards personal knowledge management experience

Variables Entered	Personal knowle	edge management experience		
	Unstandardized Coefficients (B)	Standardized Coefficients (Beta)	t	Sig.
(Constant)	5.00		1.84	.073
Personal beliefs	.736	.818**	8.09	.000
KM networks	.223	.315**	3.04	.004
KM system	022	032	23	.819
LO activities	057	073	56	.579
F value	49.41**			.000
R^2	.839			
Adjusted R ²	.822			

^{**}P<0.05

Table 4.5.2 indicates the regression analysis of the four independent variables in the knowledge management model towards respondents' personal knowledge management experience. The R² value of 0.839 indicates that 84% of the variances in cited personal knowledge management experience can be explained by the four predictors of the model. The standardized regression coefficient of (Beta=.818, p<0.05) suggested that personal beliefs as the most biggest variable that contributed to the experience of managing personal knowledge while knowledge networks

appeared to be second contributing variable towards personal managing knowledge experience (Beta=.315, p<0.05). However, knowledge system and learning organization indeed had a negative impact on respondents' personal knowledge management. Thus, the two variables are not significantly representing the regressions model equation. The results suggest that insurance companies knowledge management practices slightly depended on two main variables, namely personal beliefs and knowledge networks acquired within the company.

CHAPTER 5 DISCUSSION AND RECOMMENDATION

5.0 Introduction

This section summarized the findings from the analysis of respective variables in the Earl's (1994) knowledge management model and discuss the concerning issues based on previous literatures. Generally, the study has involved certain scopes of knowledge management practices of the insurance companies. The discussion remains at the level of describing and defining certain terms of knowledge management practices based upon Earl's (1994) knowledge management model.

5.1 Linking knowledge workers and organizational learning

The descriptive components of the respondents' demographic variables in term of respondent's qualifications and working business experience as well as their positions have indicated that approximately 37.2% of the respondents were knowledge workers in the insurance industry. These respondents had combinations of specific knowledge gain from the long experience in the insurance business and managed to be in the current position based on their relevant qualifications which were extremely valuable to the insurance sector. Moreover, in term of positions, about 33 of the respondents in the study was knowledge workers, which have entitled them to occupy various position as unit managers, management team and financial planners and 31.6% were already involved in the insurances business for the period of 7 to more than 15 years. Furthermore, Allee (1997) who viewed the knowledge workers based on their competencies of manipulating and sorting working knowledge and information has helped to describe knowledge workers in terms of respondents' experience and activities.

In term of knowledge workers activities, there are indications that 83.7% of respondents spent most of the time in client' servicing activities, 65.1% respondents spent their times in meeting and professional discussions sessions as well 58.1%

respondents spent their times in training new agents and or managerial development training. However, since the majority of 41 (95%) the respondents perceived knowledge about their own products and services as important, it was extremely important for them to excel in the industry. In fact, the internal human resources and training activities were mostly done to meet the objective to gain their own competencies and capabilities (93%).

Interestingly, the findings from the information of the corporate websites reviews indicated that major insurer such American International Assurance (AIA) believe that building human resource is the key to future success. For instance, the insurer has carried out annually intensive professional development by enforcing regular continuous training commitment and education program like AIA's in-house training programs namely FAST (Fast Agents Success Training), Quest, AMTP I/II (Agency Management Training Program) for its agents and managerial workers. The programs have allied with the Life Insurance Marketing and Research Association (LIMRA) of the USA, which provide the insurer with updated training materials. Another interesting finding is the integrated learning program that was designed to assist agents in pursuing the demanding professional qualifications such as CLU (Chartered of Life Underwriters), ChFC (Chartered Financial Consultant), FLMI (Fellow of Life Management Institute), and LUTC (Life Underwriters Training Course).

In terms of the practice on meritocracies, as an example, the AIA Financial Planner Program attempt to hire university graduates to joint its Certified Financial Planner (CFP) training session as university graduates were perceived to be comfortable with knowledge. The findings indicated that about 39% respondents strongly agreed that their companies are flexible and open to new ideas and recognized the importance of innovations and creativity in getting things done as compared to 5% who said that the open culture never exists in their companies' business environment. The findings suggest the existing of soft-side of knowledge management which was embedded learning activities within learning culture itself was not only based on technological advancement. For instances, one interviewee characterized her organizational openness as to the extent of benchmarking learning activities from other

organizations in certain critical areas and getting abreast with The Malaysian Insurance Institute activities.

However, activities in the Great Eastern Life Assurance, focused on Senge (1990) idea of teamwork as an important element of knowledge workers. This is in line with the work by Yuck (2000) which was published in its website. The article put forward the role of agencies' leaders or unit managers as a coach and mentor to their team members because in the 21st century knowledge worker best fit when work together as a team. This is the importance of collective mind as individual learns in team learning environment. Therefore, the insurer encouraged its leaders to support the team members in achieving their individual goals and to truly represent the team at teams leaders meetings by ensuring respective team to have entinum effectiveness and efficiency.

Therefore, it was concluded that each insurer had personal knowledge management strategy with different unique needs. But the main findings were that each of these insurance companies understands that knowledge management strategy consisted of the managing company's knowledge resources in order to facilitate and reuse of existing explicit knowledge by utilizing the collaborative technology such as the Internet and Intranet.

5.2 Knowledge network and knowledge system

Generally, knowledge management system and networks function to be representing knowledge in both human-readable and machine-readable forms (White, 2002). Nevertheless, various authors such Tiwana (2001) and Osterle, Fleisch and Alt (2000) had identified the information and telecommunications technology based networks and knowledge systems have been set apart as strong indications of corporate knowledge management instruments to any knowledge-based organizations. Moreover, the work of Osterle, Fleisch and Alt (2000) implied the significant impact relationship between knowledge management enabler technologies to corporate culture because knowledge management tools and networks promoted the knowledge acquisition and the used of explicit knowledge

flow throughout vertical and horizontal communication channel within the organizations.

Based on the findings, face-to-face discussion forum (95.3%) and company's bulletin (74.4%) had been widely used for enhancing respondents organizational knowledge as compare to 67.4% respondents who were familiar with Intranet as forms of searching for industrial knowledge needs, while 63% preferred emailing and 58% preferred document sharing system. In term of decision tools, about 56% of the respondents utilized certain statistical and accounting software such Investment Links Software (ILS) and WSIS for counting or estimates client's alternatives policies payable premium. Moreover, 54% of the respondents used to capture knowledge by attending their internal company conference, which was annually organized by the headquarters. Nevertheless, one training manager had highlighted a significant tool of his company's knowledge acquisitions by annually organizing internal managerial conference as a channel to capture updates on marketing and sales skills, built up knowledge networks via partnership and reasonable outsourcing of certain critical business technologies based solutions.

On the other hand, about 23% respondents had connection via groupware that was also characterized by the internal networks system of the insurance companies. The companies networks and knowledge system tend to be twofold which combined with networks and knowledge systems in one place because the knowledge capture system and databases were in existence via hyperlinks approach within groupware and Intranet. The major supportive view of the combinations ws that insurance companies used the centralized information technology architectures. For example, Coleman and Khanna (1995) who reviewed of networks technologies markets found that groupware and Intranets appeared to share the most preferable corporate and internal network features among various industries. Groupware, for instance, provides a vehicle for any financial organizations to remain flexible and able to reduce services lead time, yet support the externals salespersons in providing more customers focused strategy because groupware was able to provide employees with greater information.

Other example of knowledge system is from the Great Eastern Life Assurance, which trained its agents, focused on delivering specialized, customer-focused and personalized customers' service through an advanced information technology system known as the *Great Eastern Life Marketing System (GEMS)*. The system aimed to provide the best available solutions to cater the individual's financial need and to plan secure future. This system facilitated the companies life departments and maintained the records of policies issues and helped agents to capture right information to targeted customers.

Another interesting finding is that about 77% of the respondents stated that their companies had Intranet availability, which formed a source of internal and corporate networks among various hierarchies and agencies units throughout the companies. The findings likewise, support literatures such as Botkin (1999) who acknowledged that Intranets as the most common form of internal network built by the knowledge business, while Internet mainly acted as most common external networks. The Intranet and Internet technologies helped to describe the opportunity for the insurance companies to be able to link with other financial and risk management professional or professional organizations for collaboration of industrial knowledge. For example, about 33% of the unit managers used Internet to access current skills, identify the gap and retained knowledge and only 21% of the unit managers used Internet to examine current market investment demand and aligned the market trend to fix with the new knowledge based economies needs.

This study also discovered that insurer such AIA have projected an AIA Insurance Center, which is to act as customers personal guidance to Malaysian insurance and financial information as well as promoting its comprehensive portfolio of insurance products and services. The main focus of AIA knowledge network and system aimed to retain the company commitment to customers by educating and empowering the whole people in the industry to be informed about financial decisions. As an established company AIA aimed to build alliances with MSC Status companies in a bid to construct a community catering especially for individuals and corporations within the Multimedia Super Corridor (MSC). The network exclusively seek the relevant technology espouser like electronic commerce, multimedia, and a host of other electronic media and digital tools so that the insurer would be able to facilitate

an online insurance-related transactions, counseling, consulting, and servicing. The linkage with other organizations implied the existing sharing and collaboration learning activities between insurance companies and other external business organization. The AIA MSC Community helped established the standard for a very possible future scenario that would allow insurance and financial services to be more informed about the latest market structure and changing business needs.

On the other hand, Osterle, Fleisch and Alt (2000) commented on how some Zurich-based insurance companies used technology such as the help desks to assist its customers to complete the processes of handling policies claims. Moreover, the case study did reveal the significant advantages of the help desks in helping insurances companies customers services employees to reduce claim costs and increased speed responses to meet customer's enquiries. Therefore, the high percentage of 98% that used help desks suggest that similar functions are also found within the Malaysian insurance companies.

5.3 Overall knowledge management practices in the insurance industry

Findings on the regression analysis of the four independent variables in the knowledge management model towards respondents personal knowledge management experience indicated that about 84% of the variances in cited personal knowledge management experience can be explained by the four predictors, namely knowledge networks, knowledge system, learning organization and personal belief. The outcomes suggested that personal beliefs as the most biggest variable that contributes to the experience of managing personal knowledge among the respondents. Thus, the results recommend that insurance companies knowledge management practices should be slightly depended up on to its employees personal beliefs beside investing seriously in developing company knowledge networks.

In general, the respondents perceived experience in a knowledge collaborations environment as a valuable working atmosphere where a majority of them enjoyed sharing and learning as a team. Additionally, three interviewees did made a significant remarked as most of the insurance products were highly flexible, such the

case of the emergence of SARS related products recently launched by certain insurers, had posed the possibility of industry's innovations strategy being connected to customers creative solutions. In many cases, this situations will need the insurances personnel to form a coordination teams projected to specific tasks such promotion or aggressive marketing strategy.

Furthermore, the study also supports the view of Dermott and O'Dell (2001) who have studied about overcoming cultural barriers in implementation of knowledge management. They found that any companies that successfully implemented the knowledge management strategy tend to build their knowledge management approach to fit with the existing organizational cultural. This approach has encouraged people to share many things but still depending on the values and style of the organization. However, this study reveals that about 79% respondents have highlighted that changing people's behavior as the major barrier to be overcome in managing their companies' knowledge. While another 61% of the respondents remarked that attracting and retaining talented people as the other biggest difficulties of managing organizational knowledge. These two factors tend to justify the emergence of culture barriers in implementing knowledge management practices within the insurance companies. Thus, it is suggested that insurance companies create a knowledge sharing culture that is visibly connected between sharing knowledge and practical business goals, problems or results.

On the other hand, the study also found that learning culture is the factor that have limited the extent to which the insurance company has evolved towards becoming a learning organization. Most of the time, the interviewees tend to view on the specific perspectives of learning style, for example, by integrated learning via real work environment among its agents. The type of learning the insurance companies tend to lean and require the trainees to form teamwork. These teams are projected to shape the innovative, creative and useable prospecting strategy or creative way of persuasive skills in delivering selling presentation. In this way, the organizational learning activity in insurance companies will be firmly developed within the organizational culture.

5.4 Recommendation

The primary part of the Earl's (1994) knowledge management model supported the later findings of Earl's (2002) worked in the Canadian pilot survey on the use of 23 knowledge management practices by 407 five sub-sectors of the North American Industry Classifications System. The results of the survey indicate that most firms tend to manage some aspects of their knowledge. However, this study has answered the overall objectives how insurance companies had managed their knowledge assets by attaining the basic part of the human resource capabilities and technologies integrations. Thus, it is suggest that insurance companies would cooperate with outsides organizations in outsourced certain critical knowledge that was relevant to the industry.

Even though the respondents agreed on the crucial area of learning organization as proposed by the work of Senge (1990) especially when links to managing quality in services business such as clients' servicing. However, this belief would lead to the concept of benchmarking activities. Still, insurance companies have to build up a relationship based on trust between management and non-management employees. The study found that there were some evidence of the low degree of trust among the respondents in sharing their knowledge, because the risk of loss of power among management employees.

CHAPTER 6

CONCLUSION

In conclusion, knowledge management practices certainly contributed an organized and planned approach to the insurance companies in encouraging the creation of ideas as well effectively encouraging the learning for the organizations through collaborative learning systems. The results also indicate that insurance companies shared best practices from other organizations, which require the openness of the learning culture especially from acquired knowledge of the past performance and the retention of higher knowledge through the full utilization of the organizational information and communications technologies.

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 asset turn out to be the ability to transfer individual knowledge and know-how business practices such as communication skills and coaching or monitoring sales. These efforts were seen to be parallel with human ability that utilized technology aimed at the achievement of company goals. Therefore, the unique part of managing personnel with individual knowledge as well as organizational knowledge had lead to the combinations of ICTs infrastructures to the right people that will help insurance companies shaped knowledge-based management.

Thus, in order to ensure that successful knowledge management to work well, insurance companies had to build up so-called independent and active learning knowledge workers. 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. 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 results of the study did imply that the majority of respondents were connected internally and externally throughout the companies. 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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³The insurance companies websites:

APPENDIX A The Research Questionnaire

15 APRIL 2003

ATTENTION: BRANCH MANAGERS/ OFFICER IN CHARGE/ MANAGEMENT TEAM/ INSURANCE BROKER/ HEAD OF DEPARTMENT(S)

Dear Sir/Miss/Madam

A SURVEY ON KNOWLEDGE MANAGEMENT PRACTICES: A DESCRIPTIVE STUDY OF INSURANCE INDUSTRY

I am a final semester Master Of Science (Management) student Of Universiti Utara Malaysia doing a research on the <u>Knowledge Management Practices Of The Insurance</u> Industry.

I would like to invite your company to participate in this survey. I would highly appreciate staffs that are occupying various functions such as managers/ agency leaders/ agents/ heads of human resource development and training department/ branch manager in your company to assist me in this research.

Please fill in the attached questionnaire and return it in the enclosed paid envelope before 30th April 2003.

The main objective of this research is to describe and identify the knowledge management practices in the insurance industry. The information provided in this research is strictly confidential and will be reported only in the aggregate for academic purpose.

If you are interested in the finding of the research, or if you have any questions regarding this research, please kindly responses to the email address indicated on the last page of the questionnaire. I will be happy to answer the question(s) and send you an executive summary of this research finding.

Thank you very much for your kind assistance and cooperation.

Yours faithfully,

MINAH JAPANG 82987

Supervisor: Professor Dr. Abdul Rahim Mohd. Saad

School Of Management Universiti Utara Malaysia



Knowledge Management Questionnaire: <u>Graduate School, Universiti Utara Malaysia</u>
PART 1: DEMOGRAPHIC PROFILE OF THE RESPONDENT

Please tick ($\sqrt{}$) the given boxes or write in the space provided that represents your <u>most</u> appropriate answer

appropriate unswer			
1. Are you			
□ Male □	Female		
2. Your age group			
□ Less than 25 year □	26-30 year		□ 31-35 year
□ 36-40 year □	41-45 year		☐ More than 45 year
3. Your Qualification and Ed	ucational I	Level	
□ SRP/PMR □	SPM/SPM	V	□ STPM/Diploma/A Level
□ Bachelor Degree □	Master Deg	gree	-
☐ Professional Qualification (Plea	se Specify):	- 	······································
4. Number of years involved i	in the insu	rance bu	siness
_	1-3 year		□ 4-6 year
□ 7-9 year	10-15 year		□ More than 15 year ·
			•
5. I consider myself to be			
□ Sales Agent □	Unit Mana	_	□ Agency's Assistant
	Clerical Sta		
□ Management Team (Please spectrum)	cify your dep	partment):	
		(3	
6. In general, my agency/depart			
			□ 16-20 people
□ 21-25 people	□ 26-30 peop	ole	□ More than 30
7. Comment imports (man mont	L\		
7. Current income (per mont		11000	D141001 D141500
	RM501-RI		□ RM1001-RM1500
	RM2001-F		□ RM2501-RM3000
□ RM3001-RM3500	□ RM3501-F	RM4000	☐ More than RM4001
0 Tll			
8. Technology Assessment	1 77		Large it Company to the state of the state o
I have my office PC	□ Yes	□ No	I use it for hour/s per day
I have my own home PC	ra Voc		I use it for hour/s per day
i have my own home i e	l res	LI NO	i use it for nouns per day
I have access to the Internet at my	′ □ Yes	□ No	
office		LINO	I use the Internet for an average of
			hour/s everyday both at
I have access to the Internet at	□Yes	□ No	home and office
home	l les	LI NO	
My Office have an Intranet	□ Yes	□ No	☐ Do not know what is Intranet is
	l i cs	□ 1 10	
The use of English in the Internet	D Vac	□ Na	☐ I browse in another language
is no problem to me	□ Yes	□ No	



Knowledge Management Questionnaire: Graduate School, Universiti Utara Malaysia Have you used Internet to access current skills, identify the gap and retain □ Yes them Have you conducted any transactions via the company websites □ No □ Yes Have you used Internet to put in place a customer care programme, sensing □ Yes □ No customer needs Have you used Internet to examine current market demand and align it to the □ Yes □ No new economy needs PART 2: THE CASE FOR MANAGING KNOWLEDGE, PROCESSES AND TOOLS [2.1] Please assign ($\sqrt{\ }$) a level from 1 (not important at all) to 5 **Important** Not At All Extremely (extremely important) according to how much the knowledge important Important Important to you. Use 3 if you think the knowledge somewhat important to you. 1 3 4 5 a. Knowledge about emerging problem solving techniques/ technologies b. Knowledge about competitors c. Knowledge about current and prospect customers \Box d. Knowledge about best practices/ effective process of the tasks e. Knowledge about emerging market trends f. Knowledge about our own competencies and capabilities g. Knowledge about our own products and services [2.2] Please tick ($\sqrt{\ }$) five activities on which you spend the most time □ Marketing Research □ Prospecting □ Calendar Management □ Clients' servicing ☐ Meeting/ Professional Discussion □ Delivering Presentation □ Correspondence/ Communication □ Train new agent/manager/agency assistant □ Attending professional development program □ Project a team coordination for my agency □ Other (Please specify): [2.3] What technology tools that being used for enhancing your organization knowledge? (Tick ($\$) as **many** as applicable to your company) □ Face-to-face discussion forum □ Internal company conferences □ Personal Web pages □ Documents sharing system □ Email □ Intranet

☐ Community chatting room of best practices☐ Decision support tools (WSIS, ILS etc.)

□ Corporate/company Website

☐ Company bulletin/ publications

☐ Groupware (LotusNote etc)

□ Videoconferencing



Knowledge Management Questionnaire: Graduate School, Universiti Utara Malaysia

[2.4] Please assign (\) a level from 1(strongly disagree) to 5 (strongly		Agr	eem	ent	
agree) according to how much you agree with the statement. Use 3 if	4	ngly		Stre	ongly
you don't have an opinion or if the statement doesn't pertain to you.	Disa	igree		agr	ee
	1	2	3	4	5
a. Everyone in our company has access to the corporate network					
b. Databases and intranets are used to store and organize					
important client's information and data]				
c. Our Information Technology and software system are easy to					
use and I can easily find the information when I need it.					
d. Our company used technology to support learning and					
sharing knowledge					
e. Our company actively organize information into knowledge to					
support decision-making					
f. There are meeting places within my company where it is possible to					
engage in informal professional discussions.					
g. Our company involved our prospects in the development of our					
product and services.					
h. There are archives where data, procedures, performance reports are					
on file and can be retrieved at any time					
i. Our company regularly captures uses knowledge obtained from other					
sources such as clients, universities and professional institutions.					

PART 3: THE ORGANIZATIONAL LEARNING ACTIVITIES

[3.1] Please assign $()$ a level from 1(strongly disagree) to 5 (strongly		Agr	eem	ent	
agree) according to how much you agree with the statement. Use 3 if you don't have an opinion or if the statement doesn't pertain to you.		ngly agree			ongly ee
	l	2	3	4	5
a. Our company encourage experience workers to transfer their					
knowledge to new less experience agents/managers					
b. People trust each other, learn from each other and share					
successes and failures with each other.					
c. Leaders and managers actively share their knowledge and					
demonstrate a personal commitment to share their experience.					
d. In my company, people are rewarded for sharing their knowledge					
e. My company is flexible, open to new ideas and stimulates creativity.					
f. We have professional linkages with other branches or organizations.					
g. We have clear plan to transform our target/vision into reality					
h. We clearly understand our clients external and internal					
requirements.					
i. The training we do is actively support by the work environment.					
j. Funds are set aside for the professional development of individual					
manager/agent/employees					A
k. We learn from the best practices of other companies in certain					
critical areas.			_		
1. There are regular department/agency meetings for the purpose of on-					
going reports and discussions.					



Knowledge Management Questionnaire: Graduate School, Universiti Utara Malaysia

PART 4: PERSONAL EXPERIENCE AND BELIEFS

[4.1] Please assign $()$ a level from 1(strongly disagr	ree) to 5 (strongly		Agı	eem	ent	
agree) according to how much you agree with the s you don't have an opinion or if the statement doesn't p		Stro. Disa	ngly gree	*	Stro Agre	ngly ee
	,	1	2	3	4	5
a. I routinely identify, capture and store critical client's oriented information in my client's database/files	action-					
b. I find my work fun						
c. My colleagues readily share their goods ideas with o company more successful.	thers to help our					
d. Sharing knowledge and collaborating with my colleagues/managers/leaders enables me to perform	my job better					
e. I enjoy sharing and learning from others as a team	•					
f. I personally motivated to learn and have the opportu	nity for training					
g. I personally capture "lesson learned" from daily exp	erience					
h. I need knowledge of our industry's best practices ar trends to be successful	nd emerging					
i. Capturing and sharing knowledge significantly imprability to respond to market and customer changes						
j. Capturing and sharing knowledge significantly impro ability to satisfy my clients requirement						
k. Capturing and sharing knowledge significantly have ability to reuse solutions and apply lessons learned	e improved my					
Capturing and sharing knowledge significantly impro- company's employees morale, career opportunities:	-	ū				
PART 5: COMMENTS [5.1] What do you think would be the three (3) bigges your company?	t difficulties in man	aging	g knov	wled	ge in	
☐ Determining what knowledge should be managed	□ Overcoming te		_		nitatic	ns
☐ Identify the company's existing knowledge	□ Changing peop					
☐ Identify the right leader/team for knowledge initiatives	 □ Defining standa acquiring know 	_		s for		
☐ Attracting and retaining talented people ☐ Other (Please specify):	☐ Making knowle	_		ible		
[5.2] What do you think would be the most important insurance business?	elements of a succes	ssful e	emplo	yee	in	
	•					

I sincerely appreciate your time and cooperation. If you would like to receive summary results from this survey, please kindly responses to mincmini12725@yahoo.com

Thank You Very Much For Your Time.

APPENDIX B List Of Interview Questions



Knowledge Management Questionnaire: Graduate School, Universiti Utara Malaysia

PART 1: DEMOGRAPHIC PROFILE OF THE RESPONDENT

Please tick (\) the given bo	xes or write in the space pi	ovided that represents your	r <u>most</u>	
appropriate answer 1. Gender				
□ Male	□ Female			
E Maic				
2. Your age group				
□ Less than 25 year	□ 26-30 year	□ 31-35 year		
□ 36-40 year	□ 41-45 year	□ More than 45	year	
3. Your Qualification a	nd Educational Level			
•□ SRP/PMR	□ SPM/SPMV	☐ STPM/Diploma/A Le	vel	
□ Bachelor Degree	☐ Master Degree			
4. Do you have profession Yes (Please Specify):	-			
□ No				
	1 12 41 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2			
5. Number of years investigated then I wear	olved in the insurance i □ 1-3 year	□ 4-6 year		
☐ Less than 1 year ☐ 7-9 year	□ 10-15 year	□ More than 15	vear	
Your responsibilities: 7. Technology Assessm				
I have my office PC			□ Yes	□No
I have my own home PC			□ Yes	□ No
I have access to the Interne	t at my office		□ Yes	
I have access to the Interne	•		□ Yes	
			□ Yes	□ No
My Office have an Intrane			\square Yes	□ No
The use of English in the I	nternet is no problem to me	2		
Have you used Internet to them	access current skills, identi	fy the gap and retain	□ Yes	□ №
Have you used Internet to customer needs	put in place a customer car	e programme, sensing	□ Yes	□ No
Have you used Internet to new economy needs	examine current market de	mand and align it to the	□ Yes	□ No



Knowledge Management Questionnaire: Graduate School, Universiti Utara Malaysia PART 2: THE CASE FOR MANAGING KNOWLEDGE, PROCESSES AND TOOLS

[2.1] Please assign ($$) a level from 1 (not impo	ortant at all) to 5		lm	port	ant	
(extremely important) according to how much t	(extremely important) according to how much the knowledge important		At All		Extre Impo	•
to you. Use 3 if you think the knowledge somew	hat important to you.	1	ortant 2	3	4	5
a. Knowledge about emerging problem solving	techniques/ technologies					
b. Knowledge about competitors	-					
c. Knowledge about current and prospect custo						
d. Knowledge about best practices/ effective pro-	ocess of the tasks					
e. Knowledge about emerging market trends						
f. Knowledge about our own competencies and						
g. Knowledge about our own products and serv	ices					
[2.2] Please tick (\(\)) five activities on which	you spend the most time	<u>.</u>				
☐ Marketing Research	□ Prospecting					
□ Calendar Management	☐ Clients' servicing					
☐ Meeting/ Professional Discussion	□ Delivering Presentatio	n				
☐ Correspondence/ Communication	□ Train new agent/mana	ger/a	gency	y ass	istant	
☐ Attending professional development program	□ Project a team coordin	ation	ı for ı	my c	ompa	my
☐ Other (Please specify):						
[2.3] What technology tools that being used (Tick (\sqrt)) as many as applicable to your Face-to-face discussion forum				kno	wled	'ge?
□ Personal Web pages	☐ Documents sharing system	em				
□ Email via Internet access	□ Intranet					
□ Community chatting room of best practices	□ Company bulletin/ publ	icatio	ns			
☐ Decision support tools (WSIS, ILS etc.)	□ Videoconferencing					
□ Corporate/company Website	☐ Groupware (Lotus Note	etc)				
PART 3: COMMENTS						
[3.1] What do you think would be the importa successful employee in insurance busine	288?	lity, l	pehav	vior)	of a	

		. .				



Knowledge Management Questionnaire: Graduate School, Universiti Utara Malaysia

[3.2] Please define knowledge and learning in your o knowledge reflected in your corporate goals?	rganization. To what extent is learning and
[3.3] What do you see as the key knowledge assets in competencies of your organization in terms of 1	hese knowledge assets?
	ional culture? Why and why not?
[3.5] Please tick ($\sqrt{\ }$) any statement that character activities (Tick ($\sqrt{\ }$) as \underline{many} as applicable to	
□ On-the-job training	☐ Learning-by-doing
☐ Job rotation training	☐ Obtain knowledge from customers
☐ Organize seminars with external speakers	☐ Search for best practices
□ Organize brainstorm sessions	☐ Monitor the market environment
 Organize tasks group such assigned to do market research Carry out customer satisfaction research 	 □ Distance Learning via CD-ROM or Internet/Intranet □ Stimulate teambuilding
□ Other (Please specify):	



Knowledge Management Questionnaire: Graduate School, Universiti Utara Malaysia

your company? Determining what knowledge should be managed	□ Overcoming technological limitations
☐ Identify the company's existing knowledge	☐ Changing people's behavior
 □ Identify the right leader/team for knowledge initiatives □ Attracting and retaining talented people 	Defining standard process for acquiring knowledgeMaking knowledge available
□ Other (Please specify):	
[3.7] In your opinion, is it realistic idea of learning fr or collaborating learning with other institutions	com the best practices of other organizations in certain critical area.? Why and why not?
	ges of practices knowledge sharing inside
[3.8] What do you think would be the biggest challen your organization.	

I sincerely appreciate your time and cooperation. Please return your completed questionnaire in the envelope provided. If you would like to receive summary result from this survey, please kindly responses to mineumy12725@yahoo.com. Or you may attach your card together with the filled questionnaire.

Thank You Very Much For Your Time.