Chapter 1

INTRODUCTION

The world economy has evolved over the last couple of years from a managed economy into an entrepreneurial economy (Audretsch and Thurik, 1997) or commonly referred as knowledge-based economy (OECD,1996). In the knowledge-based economy, knowledge is becoming the primary production factor comparing to the traditional economies, which focused on labour, land, and capital.

Knowledge management had started way back to several decades but in the late 1990s had been refocused to be the main assets of the companies (Bollinger & Smith, 2001). It is the discipline of capturing knowledge-based competencies, storing and diffusing them in order to add value to the organization. Effectively implementing a sound knowledge management and becoming a knowledge-based company is seem as a mandatory condition of success for organization as they enter the era of the knowledge economy. The needs becoming more critical, when the employees left the organization on whatever reasons, because organization core competencies (i.e knowledge of know-how) will seem exodus together with the employees.

Western-based companies for instance DOW Chemical, GlaxoWellcom, Microsoft, HP and BP Armoco had started to implement knowledge management several years ago realizing the importance of knowledge management to their companies (R.L. Chase, 1997). Now, it is time for us to explore the perception of Malaysian's firm manager towards knowledge management in handling their core competencies. At the same time, differences in existence of knowledge management system between domestic and exported oriented companies at operation level will be studied as well in viewing the contribution of these industries towards the nation economies.

1.1 Significant of the Study

If western economies are intensively moving towards knowledge based economy, how about Asian countries such as Malaysia? Malaysia's policy makers have recognized the importance of this, as can been seen in the Eight Malaysia Plan

released recently. Great emphasizes has been placed on knowledge economy as the driving force to increase knowledge utilisation, and equipped people with essential skills in order to raise competitiveness and productivity (News Straits Times, 24 April 2001). Additional, Bank Negara, as the Malaysia's most important financial body had embarked on structured initiatives to transform the Bank into a knowledge-based organisation (Bank Negara Report, 2000, pp. 219-222).

The interesting question we would like to ask is; what is the perception of Malaysian's manager towards this emerging discipline? Are Malaysian firms ahead or just started to recognize its importance in sustaining the firm's strategic competiveness? In general what is the level of achievement of Malaysia's firm in this matter? And how does Malaysian's manager perceive the role information technology can play in knowledge management?

In order to answer these questions, a study needs to be conducted to look at the issues at hand. Uit Beijerse (2000) knowledge management conceptual model, Robert S. Frey (2001) knowledge management lifecycle model, and Jan Duffy (2000) knowledge management process model will be used as a basis for this study. Beijerse model is emphasizing on how to use literature instruments to determine knowledge management process (i.e. knowledge necessity, knowledge availability, knowledge gap, knowledge development, knowledge acquisition, knowledge lock, knowledge sharing, knowledge utilisation and evaluate knowledge) at different level of the organization. Whereas Frey and Duffy's model is describing a similar knowledge management lifecycle in an organization in terms of knowledge capturing, storing, sharing, and disseminating.

It is hope that these models will be able to exploit our understanding towards knowledge domains in organization, marketing, and technology, which were thought to form the core and basis of knowledge management in the firm.

In order to make use of Beijerse's empirical results as a comparison, which is based on 12 units of Dutch companies, similar instruments provided by him will be used in this study in which it will focus in Malaysia context. In addition, concentration will be put into the export and domestic oriented companies, which are located at the Klang

1.2 Purpose of the study

To carry out an exploratory study on knowledge management process in export and domestic oriented companies in Malaysia by using conceptual knowledge management model (Beijerse, 2000) , knowledge management lifecycle (Frey, 2001) and Duffy's (2000) knowledge management process model.

Focus will be based on:

1) What knowledge means and its source to manufacturing or service companies
2) Assess the perception of Malaysian's manager towards knowledge management
3) Assess the perception of role play by managing information technology in knowledge management
4) Survey the use / practice of knowledge management process at operation level by making use of Beijerse's concepts .

1.3 Hypothesis

In this research, the following hypothesis will be tested:

1. Malaysian's manager perceived that knowledge management is mandatory for success

   Null hypothesis: Malaysian's firm manager do not perceived that knowledge management is mandatory for success
2. Managing of information technology is perceived to play a critical role in the success of knowledge management.

   Null hypothesis: Managing of information technology is not perceived to play a critical role in success of knowledge management.
3. There is difference in knowledge management process between export and domestic oriented firm at operational level

   Null hypothesis: There is no difference in knowledge management process between export and domestic oriented firms at operational level.

1.4 Scope of the study

The survey will focus on 20 units of export or domestic oriented small and medium sized firms, which are most innovative in leveraging their knowledge into products and service (manufacturing and service), which are located at Klang Valley. The size of the firm will be based on Beijerse research works. In Beijerse 's research, firm size of 550 number of employees had been selected in which this is not complied to Malaysian standard of small and medium sized industries's (SMI) classification [1].

1.5 Research Methodology

In this research, random sampling method had been adopted and the targeted respondents will be the firm's manager. Due to time constraint, small sample size will be used in this study i.e. 20 unit of export or domestic oriented companies, which are located at Klang valley. Data will be collected mainly from primary source and partially from secondary data, which will be used for comparison purpose later. The primary data will be collected through self-administrated questionnaires, with semi-structured question. Pilot test will be carried out to ensure internal consistency and reliability. Using Cronbach's alpha will carry out the reliability analysis. Statistical Package of Social Science (SPSS) version 8.0 software programme will be used to analyze the data collected from the questionnaires.

1.6 Limitation of the study

The limitations of the study are as follows:

a) This study uses a small sample size; therefore results of the study can not be used to generalize manager's perception.
b) Selection of companies as the sampling units are based on the firm size only (i.e. less than 300 employees which are not complied to Malaysian small and medium sized industries(SMI) standard). In the Malaysia context, SMI is classified as

- Under Malaysia Industrial Development Authority (MIDA) not more than RM 2.5 million paid up capital and less than 75 employees only, (Malaysia International Trade and Industrial report, 1998/1999) and
- Under Department of Statistic (DOS), not more than RM 25 million annual sales turn over and 150 employees only (Malaysia International Trade and Industrial report, 1998/1999)

c) There is no official classification for export and non-export oriented company.

d) There are only six instruments used in the questionnaires (section IV) to collect data for hypothesis No 3, which compared to Beijerse (2000) research of 108 of instruments.

1.7 Organization of the report

Chapter 1 described knowledge management introductory in brief, which follow by the significant and purpose of the study. Moreover, scope of the study also being highlighted as well as the limitation of the study. The mentioned study will be supported by the relevant literatures and all will be captured under the subtitle of literature review.

The background and problem to be studied will be elaborated in details in Chapter 2, in which data development for this study will be structured as well. Chapter 3 will focus on the statistical analysis of the response rate and the out come of the data. Based on the data collection, analysis of measure, testing of the hypothesis and summary of result will be performed. Finally, the last chapter will concentrated on the summary, conclusion, recommendation of further research will be included as well.

1.8 Literature review

1.8.1 Knowledge economy

i) Emerging of knowledge economy

The world economy has evolved over the last couple of years from a managed economy into an entrepreneurial economy (Audretsch and Thurik, 1997) or commonly referred as knowledge-based economy (OECD, 1996). In the knowledge-based economy, knowledge is becoming the primary production factor comparing to the traditional economies, which focused on labour, land, and capital. Knowledge economy also means a value–driven economy in which companies provide knowledge-intensive products or services that enhance; market value; value to society, thereby enhancing the overall intangible value (KPMG, 1998). According to Davenport and Prusak (1998), multiple factors have led to the current "knowledge boom". New global competiveness is one of the driving force in which a rapidly globalizing economy unified by improved communication and transportation gives consumers an unprecedented choice of goods and services and an endless cavalcade of new and better offerings from global companies; rapid change of technology; increasingly sophisticated consumers towards quality, value, service, innovation have led firms to seek a sustainable advantage distinguishes them in their business environment. Therefore companies will differentiate themselves on the basis of what they know and knowledge-based activities of developing products and process are becoming the primary internal functions of the firms. Therefore, that is no doubt that we have entered the knowledge economy era.

ii) The development of the knowledge based economy

In classical economic theories, economic growth was explained only by the growth of the world population (the quantity of labor power) and the technological development (the quality of labour power), knowledge was seen as external to the economic process (Beijerse, 1999). According to the firm resource-based theory, it recognizes that knowledge as a new reproducible production factor, which leads to the point of view that knowledge and technology will add value to economic processes, and

it states that technology (i.e. knowledge) is the most important driver in economic growth (EIM, 1993).

Knowledge is thus seen as a company's key asset as Toffler and Toffler (1993) put it:

" *The real value of companies like Compaq or Kodak, Hitachi or Siemens, depends more on the ideas, insight and information in the heads of their employees and in the data banks and patents these companies control on the trucks, assembly line, and other physical assets they may have. Thus capital itself is now increasingly based on intangibles."*

Thus, it is importance for us to explore the extend of impact of knowledge economy development to Malaysian's firm.

iii) The important of knowledge management in knowledge based economy

Over the past decade, globalization and technology have combined to change forever the manufacturing environment. In the words of management guru Peter Drucker (Drucker, 1993)

" Economic growth... can only come from a very sharp and continuing increase in the productivity of the one resource in which the developed countries still have an edge: the productivity of knowledge work and of knowledge workers "

Knowledge management and related strategy concepts are promoted as important and necessary components for organisations to survive and maintain their competitive advantage. It has become necessary for managers and executive to address knowledge management (Goodman and Chinowsky, 1997). Organizations are beginning to recognize that technology based competitive advantages are transient and that the only sustainable competitive advantage they have are their employees (Black and Synan, 1997). Knowledge had become a critical factor for an organisation's survival (Lim, 1999, Martesson, 2000). Writers like Peter Senge (1990), Peter Drucker (1993), Alvin and Heidi Toffler (1993), Ikujiro Nonaka and Hirotaka Takeuchi (1995) all emphazises the importance of dealing intelligently with knowledge. In order to deal with these changes, one way of doing it is through the management of knowledge (Drucker, 1993, Beijerse, 1999).

iv) The Importance of managing knowledge in developing countries

Western economics had become more and more knowledge-intensive which can been seen in OEDC report (1996); OEDC estimated that 50 percent of the GNP of the largest OEDC countries is knowledge-based. If this had happened to western countries; then what will happen to developing countries such as Malaysia?

To maintain its competitiveness in the global market, Malaysian's firms have to be realized its importance and know-how to leverage their core competencies and wisely manage it (i.e intellectual capital and technology) in order to add value into their products or services. According to Klaff *et al.*, (1996) organization in knowledge-based economy has to deal with such matters as:

- An increasing complexity of products and processes;
- A growing reservoir of relevant knowledge, both technical and non-technical;
- Increasing competition in an economy with shorter product life cycles, in which case learning processes have to be quicker

Therefore, there is an urgent need to explore, study, and determine the gap between Malaysia and western countries in these matters.

1.8.2 Knowledge Management

i) What is knowledge?

Definition of knowledge

Before trying to manage, we have to first to understand the meaning of knowledge. Knowledge is not equal to data and information but stems from data. Data serve as the essential nucleus, which when combined yield meaningful information. It is this combination that makes information, which can be either stored or transmitted in different ways whereas, technology is the enabler in this equation (Lynn, 1998). Lim (1999) elaborates the relation of data, information and knowledge as in Fig 1.

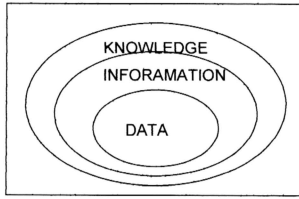

Fig 1. The data information knowledge ripple (Lim, 1999)

McDermott (1999) provided the six characteristics of knowledge that distinguish it from information:

1. Knowledge is a human act
2. Knowledge is the residue of thing
3. Knowledge is created in the present moment
4. Knowledge belongs to communities
5. Knowledge circulates through communities in many ways
6. New knowledge is created at the boundaries of old

Other researcher defined knowledge as the intellectual capital of a firm, it originates in human beings; a computer can not create it and knowledge does not diminish in values (Civi, 2000). Indeed, knowledge will only be meaningful to an organization in the context of a process or capacity to act as suggests by Sveiby (1997), i.e the importance of knowledge can be evidence by its association with actions; and its source can be found in a combination of information, social interaction, and contextual situations, which affect the knowledge accumulation process at an individual level.

According to Beijerse (2000), knowledge involves thinking with information and is characterized by information, a capacity and attitude as illustrated in Fig. 2. He also stressed that knowledge is the result of multitude of factors: experience, skills, culture, character, personality, feeling, etc. The elaboration of information, capacity, and attitude as provided in Table 1.

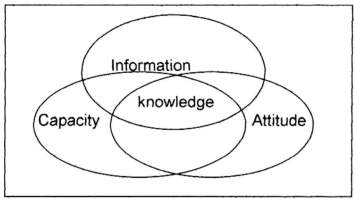

Fig 2: Three facets of knowledge (Beijerse,2000)

Information	Capacity	Attitude
• Knowledge is an amount of information that is necessary to function and achieve. • It is easily accessible within organization and accessible for everyone	• To make information from data and to transform it into useful and meaningful information	• Makes people when to think, interpret and act • To stimulate people's curiosity and inclination to innovate

Table 1: Explanation of information, capacity and attitude according to Beijerse's (2000) definition

As a conclusion of above literatures, we can see that Beijerse's description of knowledge concepts covers the widest perspective of knowledge dimensions i.e. information, capacity and attitude. Therefore, Beijerse's concept of knowledge will be used in this study.

Type of knowledge

Knowledge can be conceptualized as tacit knowledge and explicit knowledge (Gupta, Iyer& Aronson, 2000). Polangi (1966) first distinguish between tacit and explicit knowledge. Nonaka and Takeuchi (1995) pointed out the often overlooked asset of companies are intangible like insights, intuitions, hunches, gut feelings, values, images, metaphors, and analogies. Tacit knowledge is usually in the domain of subjective,

cognitive and experiential learning, whereas explicit knowledge deals with more objective, rational, and technical knowledge (data, policies, procedures, software, documents, etc). In this study, emphasizing of explicit knowledge will be focused rather than tacit knowledge in which a view of manager perception towards this will be explored.

Creation and Conversion of knowledge

For organizational point of view; creation and conversion of knowledge is more important to them. Nonaka and Takeuchi (1995) had established a dynamic model of knowledge creation (Figure 3). In this model, they explained a critical assumption that human knowledge is created and expanded through social interaction between tacit knowledge and explicit knowledge. The name of this interaction is "knowledge conversion" and their belief is that explicit and tacit knowledge is not totally different.

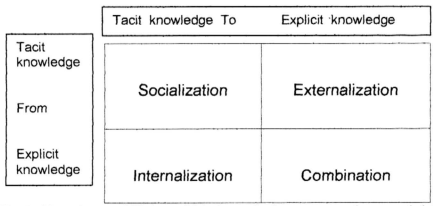

Fig 3. Nonaka and Takeuchi 's knowledge conversion model (1995)

Organization are now beginning to recognize and are developing specific methodologies to convert tacit knowledge into explicit knowledge that can be codified, captured, stored, transmitted, used and be acted on by others. This powerful concept has fueled the development of knowledge management methodologies, tools and applications (Gupta, Iyer& Aronson, 2000). Lang (2001) urged that knowledge is both produced and held collectively rather than individually, therefore it must be created, converted, shared, disseminated, and utilised by the organization members. Other research such as Gore (1999) described that; organizational knowledge, which is

created within the organization by means of information and social interaction, provides potential for development. This form of knowledge is at the heart of the knowledge management. Based on Nonaka and Takeuchi concepts, exploration on how Malayisan's firm managers deal with knowledge creation and conversion will be studied as well.

ii) What is knowledge management and why it is important?

There had been a lot of knowledge management definitions being defined by several researchers; some had been listed as; knowledge management is a business process. It is the process through which firms create and use their institutional or collective knowledge (Civi, 2000); Wiig, (1993) had stated the definition as: " knowledge management is the management of corporate knowledge that can improve a range of organizational performance characteristics by enabling an enterprise to be more intelligent acting".

Whereas Beijerse (1999) had defined it in the following;

" Knowledge management is achieving organizational goals through the strategy-driven motivation and facilitation of (knowledge) workers to develop; enhance and use their capability to interpret data and information (by using available sources of information, experience, skills, culture, character, personality, feeling, etc); through a process of giving meaning to these data and information."

Knowledge management is not limited to tracking existing knowledge but it is intended to promote and support the creation of new knowledge, thus contributing to innovation, an essential ingredient in business success (Duffy, 2000). Duffy had stressed the knowledge management process as illustrated in Fig 3.

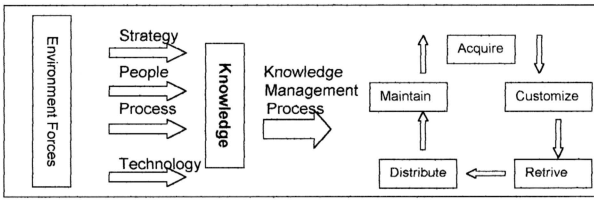

Fig 4. Knowledge management process (Duffy,2000)

Beijerse's knowledge management definition had adequately and widely described the concepts compared to other writers and the ultimate goals of adopting it as the impact of emergence of knowledge economy. Thus, in this study, Beijerse's knowledge management definition will be used as the thinking ground. Therefore, it is worth for managers to know the entire knowledge management process, which will take places in their organizations.

The success of businesses in an increasingly competitive marketplace depends critically on the quality of knowledge, which organizations apply to their key business processes. Many well-known writers have stressed the importance of knowledge as a vital resource of the company. Drucker (1993) argues that in the modern economy, knowledge is the most important resource, more important than labour, capital and land. Indeed, it is the only meaningful resource today. Toffler (1990) is of the same opinion, but he also draws attention to the role of knowledge as the source of rapid growth for economies. Quinn (1992) suggests that knowledge is the new power base of the modern corporation and the value of most products and services depends primarily on how 'knowledge-based intangibles' can be developed. He believes that management of this is a crucial issue, a people who can undertake knowledge management will be the key to future success. Drucker (1993) suggested that one of the most important challenges for every organization in the knowledge society is to build systematic practices for managing knowledge.

Knowledge management is necessary for companies because what worked yesterday may or may not worked tomorrow. To remain aligned with the dynamically changing needs of the business environment, organization need to continuously assess their internal theories of business for on going effectiveness. Not only this, knowledge need to be managed when corporation focused on creating customer value; changed of management structures; employees retirement; or a change in strategic direction. This had caused lost of knowledge when the employees left the organization and some may need to exploit the organization core knowledge in order to satisfy the valuable customer. Based on above literatures, assessments of Malaysian's managers will be measured towards awareness and importance of its to their organizations.

1.8.3 Knowledge-based organization and knowledge worker

In knowledge companies, knowledge is more easily transferred and made accessible to workers throughout the organizations. When employees have access to organizational knowledge, they can understand their environment and give it meaning. They can find new and better ways to perform, work together, breakdown barriers, share a vision, fills gaps of knowledge, increase productivity, satisfy customer and ultimately compete.

In the knowledge world there are two types of information enterprises: (Civi, 2000)

1. Knowledge-intensive; and
2. Knowledge-creating

Knowledge-intensive companies will "produce" information products such as Bloomberg; that provided financial information's and computer software companies. Knowledge-creating companies are dedicated to innovate, creativity and delivering customised products to their customer. Generally, they are small, highly flexible firms of knowledge "professionals" working on a one to one basis with the client. Consultancies are the best example of the knowledge-creating companies. According to R.S. Frey (2001), knowledge companies will undergo core knowledge management activities as represent in Fig. 4.

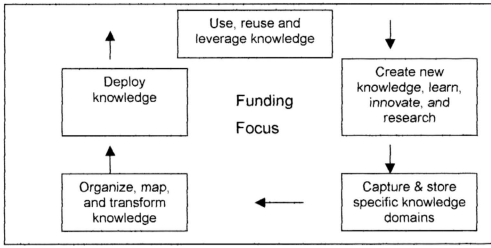

Fig 5. Knowledge management lifecycle (Frey, 2001)

The term "knowledge worker" has meant different thing to different people. According to C.D. Winslow (1998), knowledge worker has been defined as "someone who interprets and applies information to create and provide value-adding solutions and to make informed recommendations". The creation of value-adding solutions is a crucial role for a knowledge worker. As described by Rittel & Webber (1973), knowledge worker deals with wicked problem, in contrast to "procedural" worker whom deals with problems amenable to automation. The wicked problems have following characteristics; they can not easily defined; limits to stopping rules are not clear; they require complex judgment about the level of abstraction for problem definition in any particular case; they have strong ethical, political, or professional dimensions; they have no right or wrong solutions; they have no given solutions, and they have no objective measure for success (Rittel & Webber, 1973). Kidd (1994) argues that knowledge workers use information opportunistically in diverse, non-standardized ways that are dependent on contexts so that it remains uncategorized.

Frey's knowledge management process's model (2001) had been adopted due to its diagram had clearly explained the essence of the knowledge management process in enabling the companies to acquire, customize, retrieve, distribute and maintain the knowledge as employee knowledge, customer knowledge, supplier knowledge and organizational knowledge in which these knowledge is vital for the business survival.

Moreover, the coverage of knowledge-based organization and knowledge worker literatures is to let Malaysian's managers to understand its natures towards the world of knowledge-based business environments.

1.8.4 Beijerse 's conceptual knowledge management model (2000)

As the result of widely used Beijerse's definations, concepts and empirical results in the literature review, it is necessity to understand his knowledge management model as describes as follows:

I) Building blocks for the model

a) Strategy and mission

The first building block is the fact that the management process is strategy-driven. In terms of knowledge management, the strategy should result in some sort of knowledge policy. Besides strategy, a mission statement should be distinguished. Ideally, the mission statement leads to a shared vision (Ackoff, 1987) or a collective ambition (Weggeman, 1997)

b) Organization

A second important building block is the organization, which is seen here as an instrument in knowledge management. Organization consists of the element strategy, structure, culture, and style of management, personnel, and system. An important part of the structure is the knowledge infrastructure. A knowledge infrastructure is the sum of those organizational structures and guidelines, as well as technical and non-technical expedients, of which the organization has disposal. These structures, guidelines and expedients support and facilitate the learning process within the organization. With them, the goals of the organization are to be reached in the most efficient way (Van Heijst and Kruizinga, 1998)

c) Instruments: knowledge creation and learning

The instruments used to manage the tacit and explicit knowledge form the third building block in knowledge management. Beijerse have chosen to classify the instruments according to the interaction between tacit and explicit knowledge on one

hand, and the processes in the knowledge value chain on the other hand. The overall ideas are illustrated as Table 2.

	Socialize	Externalize	Combine	Internalize
Determining Knowledge gap				
Developing/ buying knowledge				
Knowledge sharing				
Evaluating knowledge				

Table 2: Chart of knowledge management instrument

In the Table 2 matrix, items listed in the horizontal axis are the result from Nonaka and Takeuchi's knowledge conversion model whereas the vertical axis is describing the entire knowledge management process which would taken place in an organization. According to Beijerse, items from vertical axis had formed the core knowledge production ground and it happened at every organization level i.e strategical, tactical, and operational.

II) Beijerse's model

Combination of the above building blocks, Beijerse had come out a conceptual knowledge management model as illustrated in Fig 5. The meaning of core knowledge productive is referring to the nine knowledge management streams and it is applied to three organization level i.e strategic, tactical and operational level.

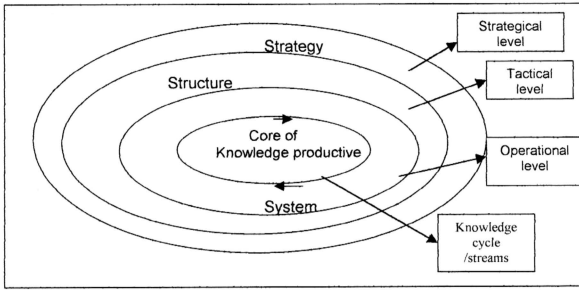

Fig. 6. Beijerse conceptual knowledge management model (2000)

III) Knowledge streams/cycle in the model

According to Beijerse's model, there are nine possible knowledge streams within the organization that are important to the management or the entrepreneur to think about in order to structurally manages this process [2]. There are;

1. Determine the knowledge necessary
2. Determine the knowledge available
3. Determine the knowledge gap
4. Knowledge development
5. Knowledge acquisition
6. Knowledge lock
7. Knowledge sharing
8. Knowledge utilisation
9. Evaluate (utilised) knowledge

These knowledge streams had formed the core knowledge management process at the heart of the model. The knowledge cycle will be illustrated in details shown in Fig 6.

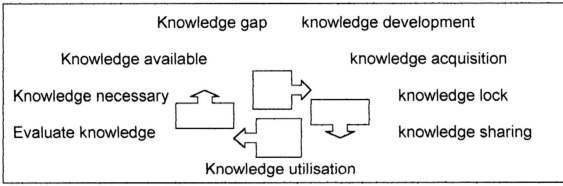

Fig. 7: Knowledge cycle within knowledge management process (Beijerse, 2000)

The knowledge streams/cycle described in above diagram will be used as the basis for the study of difference in knowledge management processes existence which taken place in operational level. The study will focus on the three clusters of knowledge process that mention in the diagram as follows:

- The first cluster: Evaluating knowledge and determining the knowledge gap;
- The second cluster: Acquisition and/ or development of knowledge;
- The third cluster: Knowledge sharing

The qustionnaires designed in the section IV will base on the above three cluster. Two instruments will be used for each cluster follows in sequence.

The Bieijerse's model enabling us to understand the knowledge management process taken place in an organization at all level. In this study, these concepts will be used to asses the difference existence of knowledge management between export oriented and domestic companies at the operational level only.

1.8.5 Importance of Samll and Medium Sized Industries (SMI) to Malaysia Economies

SMI play an important role in the development of the economic structure of most developing countries such as Malaysia. They constitute a dynamic and progressive sector of the economy, particular in the areas of basic need-oriented industries. SMI also stimulate the growth of entrepreneurship and can be adapted to semi-urban or rural

environment where infrastructure has not been fully developed. In additional, it has the advantage to use latest technology without bridging the technology gap.

According to Malaysia International Trade and Industry report (1998/1999), SMI constitutes 91 % of total manufacturing establishments. Just in 1998, SMI had contributed 15.8 % to the total output of the manufacturing sector and 29.9 % total employment of the nation's labour force. In addition, 124 SMI projects with total investments of RM 258.9 million were approved, out of the total figure, 75.23 % is contributes by the domestic investment. Viewing the importance of economic contribution to the country, therefore a necessary study towards its competitiveness in the emerging knowledge economy environment is vital for current and future growth of SMI business. In this study, the knowledge-organization type of SMI will be explored in term of the knowledge management.

1.8.6 Summary of literature review

As to summarize the literature review, it will focus on the impact of knowledge economy emergence to developing countries such as Malaysiai in which knowledge as the critical success factor for companies' competitive advantages and survival.

Knowledge, defined by Beijerse as information, which is necessity to function, and easily accessible by everyone within the organization. In order to make it useful and meaningful, it needs employees to think, interpret and act on it. Moreover, Beijerse's knowledge management definition will be adopted throughout the entire study and the formulation of hypothesises.

Explicit knowledge will be emphasized in this study, especially for the knowledge-based's small and medium sized organizations; insofar, Nonaka and Takeuchi's knowledge conversion model (1995) will be acted as the study background for the knowledge-based organization in creating and expanding knowledge through social interaction among the employees.

In addition, Frey (2001) and Duffy's (2000) knowledge management process / lifecycle models are used to express the entire knowledge management process, which will take place in the organizations in terms of knowledge capturing, storing, utilising,

sharing and disseminating. These will act as the thinking ground to explain the manager's perception towards it.

Detail elaboration of Beijerse's conceptual knowledge management model is aiming to explore and understand the difference existence of knowledge management system between export and domestic oriented companies especially at operational level. The instruments used by him for knowledge management process assessment will be adopted in this study and later on will be used to compare the outcomes of the companies under studying.