

**ORGANIZATIONAL CONTEXT AND KNOWLEDGE TRANSFER: THE  
MEDIATING EFFECT OF ORGANIZATIONAL SOCIALIZATION IN  
MALAYSIAN SERVICE ORGANIZATIONS**

**By**

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## **DEDICATION**

**This Thesis is Lovingly Dedicated to:**

**My parent's Md. Abu Bakar Mian and Mrs. Monowara Begum  
And  
Family members for their unselfish sacrifice, encouragement and  
support!!!**

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## LIST OF ABBREVIATION

	Page	
GDP	Gross Domestic Product	5
KM	Knowledge Management	20
ICT	Information and Communication Technology	55
MICCI	Malaysian International Chamber of Commerce and Industry	72

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# PEMINDAHAN PENGETAHUAN DAN KONTEKS ORGANISASI: KESAN PENCELAHAN KE ATAS SOSIALISASI ORGANISASI DALAM INDUSTRI PERKHIDMATAN DI MALAYSIA

## ABSTRAK

Kajian ini dijalankan untuk (a) mengkaji pemindahan pengetahuan dalam industri perkhidmatan di Malaysia dan (b) mengkaji perhubungan di antara konteks organisasi, teknologi maklumat dan komunikasi, sosialisasi organisasi, dan pemindahan ilmu pengetahuan. Konteks organisasi dioperasikan sebagai struktur organisasi dan iklim, di mana pemindahan pengetahuan dibahagikan kepada dua dimensi iaitu pertukaran dan perkongsian pengetahuan. Sosialisasi organisasi dikaji sebagai pencelahan untuk memahami kesannya dalam perhubungan antara konteks organisasi dan pemindahan pengetahuan. Seterusnya, sokongan teknologi maklumat dan komunikasi juga dikaji sebagai penyederhana. Enam hipotesis tentang perhubungan telah diuji. Sampel terdiri daripada 355 buah organisasi perkhidmatan di Malaysia. Sejumlah 355 soal selidik yang mengandungi 59 item telah dihantar kepada organisasi perkhidmatan yang terpilih. Dalam tempoh enam bulan, sejumlah 114 soal selidik diterima dari responden dengan kadar jawapan 32.11%. Sejumlah 107 soal selidik diterima pakai. Ujian chi-square mendapati ketidakwujudan bias di antara responden yang awal dan lambat. Data telah dianalisis dengan menggunakan analisis faktor bagi komponen utama dengan putaran VARIMAX, statistik deskriptif, dan penilaian kebolehpercayaan melalui Cronbach alfa. Hasil analisis regresi hirarki tidak menyokong kesemua hipotesis. Hasil kajian atas kesan langsung mendapati bahawa hanya iklim ada perkaitan dengan sosialisasi organisasi secara positif. Hasil kesan pencelahan mencadangkan

bahawa sosialisasi organisasi adalah penting bagi pemindahan pengetahuan. Namun, hasil analisis regresi hirarki tidak menyokong kesan sokongan teknologi maklumat dan komunikasi ke atas konteks organisasi dan sosialisasi organisasi. Hasil kajian ini akan membantu organisasi perkhidmatan dalam mengambil langkah yang proaktif untuk meningkatkan pemindahan pengetahuan di Malaysia.

# **ORGANIZATIONAL CONTEXT AND KNOWLEDGE TRANSFER: THE MEDIATING EFFECT OF ORGANIZATIONAL SOCIALIZATION IN MALAYSIAN SERVICE ORGANIZATIONS**

## **ABSTRACT**

The purposes of this study were to (a) examine the extent of knowledge transfers in Malaysian service industry, and (b) investigate the relationship between organizational context, information and communication technology, organizational socialization and knowledge transfer. Organizational context was operationalized as organizational structure and climate, whereas knowledge transfer was operationalized in two dimensions namely knowledge conversion and knowledge sharing. Organizational socialization was studied to understand its mediating effect in the relationship between organizational context and knowledge transfer. Furthermore, Information and communication technology was also investigated as moderators. Six broadly hypothesized relationships were tested. The sample comprised of 355 service organizations in Malaysia. A total of 355 questionnaires comprising 59 items were mailed to the selected service organizations. Within six months, 114 questionnaires were received from the participants with a response rate of 32.11%. Only 107 questionnaires were usable. The chi-square test indicated no response bias between early and late respondents. Data collected were analyzed using principal components factor analysis with VARIMAX rotation, descriptive statistics, and reliability assessments using Cronbach alpha. The results from the hierarchical regression analysis provided little to moderate support for the hypotheses. The findings on direct effects revealed that only supportive climate was positively related to organizational socialization. The result shows that organizational

socialization mediates the relationship between organizational context and knowledge transfer. However, results from the hierarchical regression analysis did not provide support for the moderating effect of information and communication technology. The findings of the research study will help service organizations to take more proactive approach to improve knowledge transfer in Malaysia.



# CHAPTER 1

## INTRODUCTION

### 1.0 Introduction

The rapid changes in the business environment, the new set of economic activities, industry structures, and trading relations are now called as the global knowledge economy. Today's organizations need the ability to identify, locate, and deliver information and knowledge to the point of valuable application. It is transforming existing industries and facilitating the emergence of new ones. The competition level in the business arena is never more competitive than at any time in the history of business. In this rapidly changing business environment, every organization faces the challenge for survival.

The emergence of knowledge era is an integral part of the global economy. According to Nonaka (1991), in an economy where the only certainty is uncertainty, the one sure source of lasting competitive advantage is knowledge. When markets shift, technologies proliferate, competitors multiply, and products become obsolete almost overnight, successful companies are those that consistently create new knowledge, and disseminate it widely throughout the organization. Henceforth organizations quickly embody it in new technology and products. Knowledge has become the key economic resource and the dominating factor of competitive advantage (Darroch, 2005, Drucker, 1995).

The knowledge based view of the firm suggests that knowledge helps organization to achieve sustainable competitive advantage, increase effectiveness and competitiveness, increase innovation and creativity, and

reduce risk and cost (Abell & Oxbrow, 2001). From this point of view, organizations should manage the knowledge appropriately. Organizational knowledge is generated and disseminated through collaboration, interactions, and relations among individuals, groups or units. Organizations often acquire knowledge through document or in a computerized form, the routines, or in hiring new human resources personnel. Research on the knowledge-based view of the firm also suggests that social network facilitates the creation of new knowledge within organizations (Kogut & Zander, 1992).

Two types of knowledge have been identified: tacit and explicit (Nonaka, 1994). Tacit knowledge is personal knowledge embedded in individual experiences. Individuals have a wealth of tacit knowledge that they may or may not share with other organizational members. This knowledge exchange may occur in one to one, one to many, or many-to-many interactions. Traditionally, same place or same time face-to-face meetings have been the medium for exchange (Junnarkar & Brown, 1997). Tacit knowledge is difficult to transfer and share because it is personal and context-specific (Rynes, Bartunek, & Daft, 2001). However, explicit knowledge, which is formal knowledge, can be transferred and shared easily. Explicit knowledge can be stored on paper, audio or videotape, or computer disks. Organizational knowledge can be created through the process of knowledge conversion from tacit and explicit knowledge (Song, 2002). Hence, both types of knowledge are important for organizations to be competitive globally.

Knowledge also can be seen as the most valuable asset for the firms competing in the global information-intensive economies (Demarest, 1997). The velocity of change and the dynamic nature of the new market place have created incentive among many companies to consolidate and reconcile their knowledge assets. This knowledge is creating value that is sustainable over time (Gold, Malhotra, & Segars, 2001). Hence, to remain competitive, organizations must create, capture, harvest, share, and apply their organization knowledge (Zack, 1999).

Individuals enrich their knowledge by acquiring and transforming available information either from inside the organization or from outside of the organization (Fahey & Prusak, 1998). Knowledge transfer occurs when this knowledge is diffused from the individual to individual or to a group. Tacit knowledge cannot be easily shared with others, but the explicit knowledge can be shared easily because explicit knowledge can be easily found either by individuals or group, as it is readily available in the organization. As for tacit knowledge, the organization needs to create a favorable situation (e.g., meeting, on the job training), which allows the employees to share the knowledge that they have gained over the years (Droege & Hoobler, 2003; Junnarkar & Brown, 1997).

Knowledge can be transferred through the processes of socialization, collaboration, education, and learning. It may be purposefully transferred, or it may occur as an outcome of other activities (Roberts, 2000). Information and communication technology in the organization also plays an important supportive role in the knowledge transfer process (Junnarkar & Brown, 1997)

because Information and communication technology makes an organization more conducive to knowledge transfer. Previous research such as Syed-Omar and Rowland (2004) and Fuch (2004) on knowledge management shows that organizational structure, culture, climate, organizational socialization, and information technology play important roles in knowledge transfer. Knowledge transfer is one of the crucial issues for today's organizations, especially for knowledge intensive organizations, such as the service industry.

The service industry is different from the manufacturing industry because of the peculiar characteristics such as intangible nature of the output, greater participation of customers in the production process, and a higher degree of simultaneity of production and consumption (Cowan, Luc Soete, & Tchervonnaya, 2001). These peculiarities of services emphasize the importance of knowledge and therefore affect knowledge transfer, in particular with regard to: (a) the nature of innovative activity (less formal R & D, a central role of information and communication technologies, and difficulties of intellectual property protection); (b) the degree of consumers' involvement in the delivery of service such as knowledge intensive services; (c) sources of consumer information about services (Cowan et al., 2001). Service organizations need to upgrade or transfer knowledge faster than other organizations in order to be competitive in the market. The following section discusses the importance of the service industry in Malaysia.

## **1.1 The Importance of the Service Industry in Malaysia**

In the Malaysian Economic Report 1999/2000 (1999) the service industry includes electricity, gas, water, transport, storage, communications, wholesale and retail trade, hotels and restaurants, finances, insurance, real estate and business services, government services, community, social and personal services, private non-profit services to households, and domestic services of households. For the purpose of this study the above industries will be used as a basis for service industry.

The service industry is a major contributor to the Malaysian economy and its role is getting more and more important. For example, in the year 2000, the service industry contributed 52.7 percent of the Gross Domestic Product (GDP) of Malaysia and increased to 53.4 percent in the year 2002. It is estimated that the service industry will contribute 65 percent of the GDP in the year 2007 (The Star, 2006). In terms of employment, the service industry is the largest employer in the Malaysian economy. The total employment by the service industry in the year 2000 was 48 percent of the total employment in Malaysia and the figure increased to 57.3 percent in the year 2004 (Economic Report, 2005).

Service industry plays a major role in Malaysian economy and it is more knowledge intensive compared to other industries (Cowan et al., 2001). Although manufacturing and services have specific features related to the inputs into the production process, the nature of the process itself and the resulting output demand more knowledge intensive for services. In

manufacturing the output is tangible, consumer's participation in manufacturing process is limited and time lags between production and consumption are lengthy. Whereas in service industries the output is intangible, consumers often participate actively in the service delivery process and high degree of simultaneity in production and consumption that requires service provider to be more innovative and creative (Gaither & Frazier, 2001). In this type of situation, individual or organizational knowledge especially tacit knowledge plays a crucial role. Furthermore, service industry is more human intensive than manufacturing industry. As far as service industry is concerned, most of the task is performed by human whereas the manufacturing industry is technology intensive and the tasks are well defined and individuals can perform the task independently.

Manufacturing industry need less human interaction, as technology plays a major role to finish the task but service industry need more interaction because human needs to perform most of the task. In manufacturing industry, most of the knowledge being used is explicit which is easily available in organizations but service industry needs more tacit knowledge, which needs more socialization to transfer (Scott, Green, Stephanie, & Robert, 2003).

From the discussion above it shows that knowledge transfer is important for service organizations and service organizations play such a pivotal role in Malaysian economy. The Malaysian economy is also moving towards the knowledge-based economy. In these circumstances, it is worthwhile to conduct a study to investigate factors that influence knowledge transfer in Malaysian service organizations.

## 1.2 Problem Statement

Most of the organizational knowledge is held in the minds of employees and it is difficult to tap and transfer this knowledge (Kotylar & Saks, 2001). Knowledge can be transferred purposefully, or it may occur as an outcome of other activities. Socialization, collaboration, education, learning, and technology can play an important role in the knowledge transfer process (Buckman, 1998; Junnarkar & Brown, 1997; Roberts, 2000; Zack, 1999). Knowledge is important for service organizations in the context of the new economy, because it takes place under considerable uncertainty resulting from constantly and sometimes radically changing scientific and technological realities. The level of knowledge required to manage successfully many of the modern industries is very high that even competitors choose to collaborate (Cowan et al., 2001).

In this turbulent business environment, organizations are facing difficulties to compete in the market. The business level competition is increasing day by day. In order to survive in this turbulent business environment, organizations need to manage knowledge properly because knowledge is the strategic and competitive weapon for the organization (Zack, 1999). Hence knowledge is so important for the organization that there is a need to transfer this organizational knowledge where it is needed because transferred knowledge will help organizations to survive in this competitive business environment (Argote et al., 2000). Transfer of knowledge also contributes significantly to the organizational performance such as improved ability to innovate, rapid commercialization of new services, and responsiveness to market change (Kogut & Zander, 1992).

Literature suggest that most of the organizations give more emphasis on IT based systems as a means for knowledge transfer which is not effective in tacit knowledge transfer (Smith, Blackman & Good, 2003). The earlier debate on knowledge management tended to revolve around information and communication technologies and procedures. Now the attention has been increasingly extended to examining the role of social structures and cultures in promoting or inhibiting knowledge transfer (Bresnen, Edelman, Newell, Scarbrough & Swan, 2003). This raises the question whether knowledge transfer is dependents on social and cultural aspects or technological or procedural mechanisms.

There is little focus in the current literature on organizational context with regards to transfer of knowledge. Organizations need to consider favorable organizational structure and climate to promote knowledge transmission, sharing, conversion and circulation (Rollo, 2002; Syed-Omar & Rowland, 2004; Lee, 2005). Knowledge transfer particularly tacit knowledge is a social exchange process between humans (Nonaka & Konno, 1998). Most organizations have stores of knowledge especially tacit knowledge but they are not able to transfer or codify it properly because of the absence of organizational socialization (Nonaka & Konno, 1998). That is why, organizational socialization is important in any type of knowledge transfer especially tacit knowledge within organizations. Lesser socialization only inhibits opportunities for knowledge transfer in organizations (Rogers, 1995; Smith et al., 2003).



Information and communication technology also plays an important role in knowledge transfer (Kotylar et al., 2001). Previous researchers such as Karlsen et al. (2004) and Syed-Omar et al. (2004) include information technology as independent variables. On the other hand, Lee (2005) and Toh, Jantan and Ramayah (2003) looked at information technology as a moderator in knowledge management activities. But in this research we considered ICT as a moderator in the relationship between organizational context and organizational socialization rather than a predictor variable because of the mix outcome of ICT. Previous researches such as Kazanjian et al. (2000), Islam, Doshi and Islam (2005) and Kotylar and Saks (2001) have tried to establish the necessity of knowledge for innovation, which is the basis of competition today. But they ignored the importance of knowledge transfer. The literature on knowledge transfer is mostly concerned with manufacturing companies in developed countries. There is a dearth of study and empirical research with regard to the knowledge transfer in Malaysian service organizations that must be proactive and competitive in this turbulent business environment. We have limited knowledge and empirical research concerning knowledge transfer issues in Malaysian service organizations.

This research was motivated by these considerations: (i) the dearth of a systematic and empirical research that investigates relationship between organization context (structure and climate) and knowledge transfer in Malaysian service organization. (ii) the dearth of study that comprehensively investigates the mediating effect of organizational socialization on organizational context and knowledge transfer in Malaysian service

organizations and (iii) the dearth of study that investigates the moderating effect of information and communication technology on organizational context and organizational socialization. Although knowledge transfer is important for organizations, the actual transfer of knowledge within organizations still remains a problematic issue for managers (Jacob & Ebrahimpur, 2001).

Therefore, the problem of in this study seeks to address is “What is the relationship between organizational context and knowledge transfer? Do information and communication technology and organizational socialization influence the relationship between organizational context and knowledge transfer?”

### **1.3 Objectives of the Study**

The purpose of the study was to:

- (i) examine the extent of knowledge transfers in the Malaysian service industry.
- (ii) investigate the relationship between organizational context (i.e., organization structure and organization climate), information and communication technology (ICT), organizational socialization and knowledge transfer.

### **1.4 Research Questions**

Based on the above objectives, the questions that were addressed in this study are as follows:

- (i) What is the extent of knowledge transfer in Malaysian service industry?
- (ii) What is the relationship between organizational context (i.e., organization structure and organization climate) and organizational socialization?

(iii) Does the information and communication technology support moderate the relationship between organizational context (i.e., organization structure and organization climate) and organizational socialization?

(iv) Does the organizational socialization mediate the relationship between organizational context and knowledge transfer?

### **1.5 Significance of the Study**

Knowledge is one of the most important assets for today's organizations. It is considered to be a strategic weapon under the present competitive business environment (Zack, 1999). Knowledge based view of firm suggests that knowledge transfer will help organizations to achieve competitive advantage, effectiveness and efficiency, increase innovation and creativity, and reduce risk and cost (Abell & Oxbrow, 2001).

This study contributes to the theory and practice in knowledge management especially in the area of knowledge transfer. In terms of theoretical significance, this study improves upon existing literature by addressing the importance of organizational socialization to the extent of knowledge transfer particularly in the service sector. From the theoretical point of view, the current study has also demonstrated that social exchange theory (Blau, 1964) could be a pertinent theory in knowledge transfer because this theory viewed knowledge transfer as a social exchange process.

The practical significance of this study lies in its attempt to provide a framework for transfer of knowledge in organizations through organizational socialization

as the present literature lacks of empirical evidence of the importance of organizational socialization in knowledge transfer process. For practicing managers the evidence from this empirical research is useful to develop more proactive approach to achieve higher extent of knowledge transfer because the actual transfer of knowledge within organizations still remains a problematic issue for managers (Jacob et al., 2001).

## **1.6 Definition of Key Terms**

The followings are the definitions of the terms that will be used in this study.

### **Knowledge**

It is defined as the facts, information, understanding and skills that a person has acquired through experience or education (Nonaka & Takeuchi, 1995).

### **Knowledge Management**

Knowledge management is a process that helps organizations to identify, select, organize, disseminate and transfer important information and expertise (Gupta, Iyer & Aronson, 2000).

### **Knowledge transfer**

Knowledge transfer is the process by which knowledge travels from a knowledge holder (a person or organization possessing the knowledge) to a knowledge recipient (a person or organization receiving the knowledge) through one or a greater number of transfer channels (Cowan et al., 2001).

### **Organizational socialization**

Organizational socialization refers to the dynamic interaction process in the organization (Jones, 1986).

## **Organization structure**

Organization structure is defined as the ways in which job tasks are formally segregated, classed, and coordinated. It is also termed as the formal system of task and reporting relationships that controls, coordinates, and motivates employees so that they cooperate and work together to achieve organization's goals (George & Jones, 2000; Robbins, 1990).

**Formalization** refers to the degree to which a codified body of rules and procedures exist to handle decisions and work processes (Hall, 1982).

**Decentralization** is an extension of delegation. It refers to the extent to which decision making power is distributed at all levels of management (Sharma, 1989).

## **Organization climate**

Climate is defined as the perception of formal and informal organizational policies, practices, and procedures (Reichers & Schneider, 1990).

**Supportive climate** refers to the incorporating values such as harmony, openness, friendship, collaboration, encouragement, sociability, personal freedom, and trust (Wallach, 1983).

**Innovative climate** is defined as a situation where employees are inspired for risk taking, results oriented, creative, pressurized, stimulating, challenging, enterprising, and driving (Wallach, 1983).

**Information and communication technology (ICT)** is conceptualized as the availability of the ICT tools which facilitates organizational socialization (Lee, 2005).

## **1.7 Organization of the Thesis**

This thesis is organized into five chapters. Chapter 1 provides an overview of the study such as research problem, objectives of the study, research questions, significance of the study, and definitions of important terms. The literature related to this study is reviewed in the second chapter, which highlights key previous studies related to success of knowledge transfer, organization structure, climate and the information communication technology. Theoretical framework and hypotheses of the study is also included in this chapter.

The third chapter discusses the research design, sampling technique, variable measures, questionnaire design, and the results of the pilot study. Statistical techniques used for inference of this research are explained at the end of chapter three. Chapter four is devoted to the findings of this study. The profile of respondents, goodness of measure, descriptive statistics and the result of hypothesis tests are presented. Last but not least, a short summary of the results of the hypotheses testing is given at the end.

The concluding chapter, chapter five, discusses the findings, implications of the findings, and limitations of the study. Some suggestions regarding areas for future research are also offered.

## **CHAPTER 2**

### **LITERATURE REVIEW**

#### **2.0 Introduction**

This chapter focuses on the literature of knowledge transfer, organizational socialization, organizational contexts, and information and communication technology. The relevant literatures on knowledge and knowledge transfer are discussed as the dependent variable of this study. Subsequently, organizational socialization is discussed as the potential intervening variable. Organization structure and climate are discussed as they are related to the independent variables of this study. This further leads to the discussions on information and communication technology as the potential moderating variable. The current chapter also delineates the theoretical framework of the study. Finally, six broad hypotheses have been formulated to seek evidences that provide answers to the research questions of the study.

#### **2.1 Knowledge**

Knowledge is defined as ideas, facts, concepts, data and techniques, recorded in an individual's memory (Bender & Fish, 2000). Knowledge is also defined as a fluid mix of framed experience, values, contextual information, and expert insight that provides a framework for evaluating and incorporating new experiences and information. It originates and is applied in the mind of knower (Davenport & Prusak, 2000). Knowledge is considered an organized combination of data, assimilated with a set of rules, procedures, and operations learnt through experience and practice (Keskin, 2005). Knowledge is an appreciating asset, as the more it is used, the more effective it becomes in

application. An organization's knowledge is one of its most important resources. In fact, knowledge is also considered an organization's best sustainable source of competitive advantage (Argote & Ingram, 2000; Davenport & Prusak, 2000; Drucker, 1995; Nonaka, 1991).

Knowledge can be classified as advantage knowledge, which can be described as the knowledge that can provide competitive advantage; base knowledge as knowledge that is integral part to an organization, which can provide short-term advantages; and trivial knowledge which has no major impact on the organization. Knowledge also can be viewed as individual versus collection; internal versus external (Terra, 1999). It also involves efforts at various levels namely organizational and individual; strategic and operational; formal and informal (Terra, 1999). To simplify the analysis of knowledge flows, Newman and Conrad (2000) provided a framework and described it in the General Knowledge Model. The model organizes knowledge flows into four primary activity areas: knowledge creation, retention, transfer, and utilization (Figure 2.1).

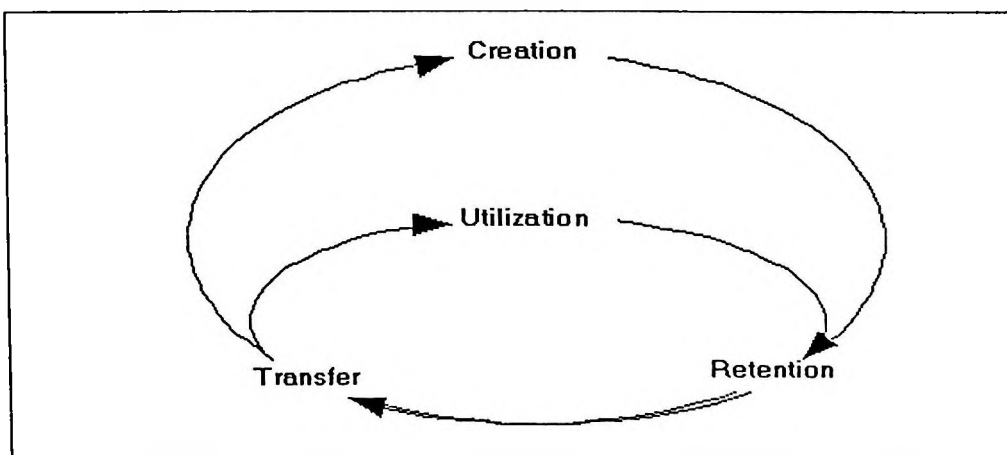


Figure 2.1 The general knowledge model (Source: Adopted from Newman and Conrad, 2000).



Knowledge creation comprises of activities associated with the entry of new knowledge into the system, and includes knowledge development, discovery and capture. Knowledge retention includes all activities that preserve knowledge and allow it to remain in the system once introduced. It also includes those activities that maintain the viability of knowledge within the system. Knowledge transfer refers to activities associated with the flow of knowledge from one party to another. This includes communication, translation, conversion, filtering and rendering. Finally, knowledge utilization includes the activities and events connected with the application of knowledge to business processes (Newman & Conrad, 2000).

Knowledge must be distinguished from data and information. In the literature, researchers often argued about these three phenomena being unique to one another, especially the difference between information and knowledge. Data is raw and has no meaning without any translation or transformation. It simply exists and has no significance beyond its existence. Data becomes valuable only after it is transformed into information for organization to study or synthesize to assist in decision-making or strategic objective (Liebowitz et al., 1998). Data is viewed as the raw material for information, as it has no concept or meaning but information is an organized and categorized data put into context (Roberts, 2000). It has meaning and organizations and can be used to create knowledge. Knowledge is the application and productive use of information. But knowledge is considered as information, which is contextual, relevant and actionable (Hussain, Lucas, & Ali, 2004).

Knowledge is more than information, because it involves an awareness or understanding gained through experience, familiarity, or learning (Kermally, 2002; Roberts, 2000). Fuchs (2004) argues that knowledge is a manifestation of information in social systems that involves the interpretation, evaluation, and usage of data and can be found in various subsystems of the society. Most researchers categorise organizational knowledge into two types such as explicit knowledge and tacit knowledge (Fahey et al., 1998). But they are more concerned with the distinction between explicit and tacit knowledge. Explicit knowledge can be expressed in words and numbers and shared in the form of data, scientific formulae, specifications and manuals. This kind of knowledge can be readily transmitted between individuals formally and systematically. On the other hand, tacit knowledge is highly personal and hard to formalize and makes it difficult to communicate or share with others. Subjective insights, intuitions fall into this category of knowledge.

Tacit knowledge is deeply rooted in an individual's actions and experience as well as in the ideals, values, or emotions (Nonaka & Konno, 1998). Knowledge is also categorised as core, advanced and innovative knowledge (Zack, 1999). Core knowledge is the minimum scope and level of knowledge required for daily operations, while advanced knowledge enables a firm to be competitively viable, and innovative knowledge is that knowledge that enables a firm to lead its industry and competitors. Whatever is the nature of knowledge, it needs to be captured and transferred in order to achieve organizational effectiveness because this knowledge can be used to produce innovative products and services (Nah, Siau, & Tian, 2005).

Knowledge-based theory of firm has emerged as a theory in explaining the existence of organization and competitive advantage of an organization. The elements of the theory are based on the roles of firms to create, store and apply the knowledge. According to knowledge-based theory of the firm, firms are social communities that specialize in the creation and internal transfer of knowledge (Grant, 1996). The management of firms is then seen as the management of these knowledge resources. Grant (1996) has also used this theory to discuss the inter-firm collaborations that encourages knowledge transfer. The transfer was deemed as technology and know-how exchange. Grant (1996) continues to elaborate that knowledge is a productive resource, which creates value and strategy that will help organization to have a competitive advantage (King, 2006). Furthermore, it will assist organization to react to the competitors' response in a shortest time possible.

Resource based theory has also received attention as an alternative to the traditional product-based view of firm (Blackler, 1996; Wenerfelt, 1995). The resource-based theory perceives the firm as a unique bundle of idiosyncratic resources and capabilities where the management tries to maximize value through the optimal deployment of existing resources and capabilities while developing the firm resource base for the future (Grant, 1996). This resource base helps organization to achieve competitive advantage in the future. Based on the above discussions one cannot deny the fact that knowledge as a resource is an extension of resource based theory of firm. It may be observed from the perspectives of knowledge-based theory and resource based theory that managing knowledge is one of the most important factors in organizational

performance. Managing knowledge is implied for knowledge creation and knowledge deployment in its products/services and process. In both of these activities, transfer of knowledge plays a significant role in the organization where its optimal utilization is imperative.

## **2.2 Knowledge Management**

Knowledge management (KM) is fundamentally the management of corporate knowledge and intellectual assets that can improve a range of organizational performance characteristics and add value by enabling an enterprise to act more intelligently (Gupta et al., 2000). Knowledge management cannot be viewed only in context of advancement in technology but it is more than that as it proves its existence in the entire location of the organizational environment (Newman et al., 2000).

Knowledge management covers a broad range of issues therefore KM is poorly understood by many organizations. People have different opinions about knowledge management. Some refer to it as an emerging discipline (Harris, Bair & Stear, 1998), whereas some others argue that it evolves from expert systems and artificial intelligence (Huynh, 1999; O'Dell et al., 1998). Some management theory researchers view that knowledge is based on individual and organizational competencies such as skills, know-how and know-what (Nonaka & Takeuchi, 1995; Davenport et al., 1998). There are a host of working definitions of KM and embryonic philosophies circulating in the literature. O'Dell and Graysen (1998) defines knowledge management as a conscious strategy of getting the right knowledge to the right people at the right time and helping

people share and put information into action in ways that will strive to improve organizational performance. Whereas Buckman (1998) refers to KM as formalization of and access to, experience, knowledge and expertise that create new capabilities, enable superior performance, encourage innovation and enhance customer value.

Management information system researchers relate knowledge as an object that can be recognized and controlled in computer-based information systems. Different perspective of knowledge view can lead to different KM definitions such as Malhotra (1996) who defines knowledge management as it is the information processing capacity of information technologies, via translation of information into action by means of the creativity and innovations of humans to effect organizational competence and survival in an increasingly unpredictable competitive environment. On the other hand, Bassie (1997) defines KM is the process of creating, capturing and using knowledge to enhance organizational performance. KM is also viewed as the deliberate strategy of getting the right knowledge, to the right place by using the knowledge workers (Hendriks & Vriens, 1999).

In the current literature, there is a lot of confusion between knowledge management and intellectual capital. For example, European Foundation of Quality Management (1997) uses the terms interchangeably but McAdam and McCreedy (1997) argue that knowledge management and intellectual capital are different but related issues. Knowledge management is more detailed and everyday management approach than intellectual capital (Wigg, 1997). Its main

focus is on the facilitating and managing knowledge-related activities such as creation, capture, transformation, and use of knowledge (Blumentritt & Johnston, 1999). Brooking (1997) views knowledge management is the strategy and tactics to manage intellectual capital or human centered assets. In general, knowledge management is a systematic means by which organizations intellectual assets are harvested and shared for benefit of the organization (Hendriks & Vriens, 1999).

KM is considered as a systematic approach rather than individual or disjointed activities. It includes at least the organizational process of capturing, integrating, disseminating and deploying organizational knowledge. Skyrme (1998) views KM as the explicit and systematic management of vital knowledge and its associated process of creation, organization, diffusion, use and exploitation. On the other hand Terra (1999) presents numerous approaches to KM such as mapping and sharing of organizational information. Knowledge management is also viewed as three major categories of knowledge-focused activities that are generating knowledge, organizing knowledge and distributing knowledge (Cummings & Workley, 2001). Wigg (1993) tries to identify the pillars of knowledge management that included creation, manifestations, use and transfer of knowledge (Figure 2.2).

Knowledge Management		
I	II	III
Survey & categories knowledge Analyze knowledge & related activities Elicit, codify, & organize knowledge	Appraise & Evaluate value of knowledge & Knowledge related actions	Synthesize knowledge related activities Handle, use & control knowledge Leverage, distribute & automate knowledge
Knowledge Management Foundation  Broad Understanding of Knowledge  Creation – Manifestations – Use - Transfer		

Figure 2.2. Pillars of knowledge management (Adopted from Wigg, 1993).

On the other hand, Ruggles (1998) identified the following items as integral components of knowledge management such as (i) generating new knowledge, (ii) accessing valuable knowledge from outside sources, (iii) using accessible knowledge in decision-making, (iv) embedding knowledge in processes, products and services, (v) representing knowledge in documents, databases and software, (vi) facilitating knowledge growth through culture and incentives, and (vii) transferring existing knowledge into other parts of the organization.

It is agreed upon by researchers such as Baum and Ingram (1998) and Ladd et al. (2002) that transferring existing knowledge into other parts of the organization plays a vital role towards enhancing the organizational effectiveness. As mentioned earlier knowledge without transfer does not have any meaning, as it does not contribute towards achieving the competitive

advantage. The next section discusses knowledge transfer as it is considered as the dependent variable of the study.

### **2.3 Knowledge Transfer**

Knowledge transfer is an important component of knowledge management but it has received not much attention especially in the field of management (Davenport et al., 2000). Knowledge transfer is not a recent event as it dates back by several decades in the field of psychology. However, the management researchers embarked on this expedition more currently hence in recent literature of management the researches took initiatives to explore the pros and cons of the knowledge transfer (Argote, Ingram, Levine, & Moreland, 2000). A number of the studies conducted on the construct of knowledge transfer as a dependent variable (e.g., Karlsen et al., 2004; Ladd et al., 2002; Syed-Omar & Rowland, 2004). There are also researchers who studied knowledge transfer as mediating variable (e.g., Islam et al., 2005). Broadly, knowledge transfer is the process by which knowledge travels from a knowledge holder (a person or an organization) to a knowledge recipient (a person or an organization) through one or a greater number of transfer channels (Cowan et al., 2001).

Knowledge transfer is also defined as the process of moving useful information from one individual to another in organization (Davenport et al., 2000). On the other hand, Argote and Ingram (2000) claim that knowledge transfer in organizations is the process through which one unit (e.g., group, department, or division) is affected by the experience of another. Transfer of knowledge is a conveyance of knowledge from one place, person, ownership, et cetera to