

A Study on the Knowledge Implementation Strategy and its influence on the Knowledge Sharing Attitude among Knowledge Workers and Individual Job Performance

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Abstract: Knowledge is asset that empowers individual and organizations to stay competitive in a borderless business world. For organizations that successfully deploy knowledge sharing and reuse, they have claimed to have observed job performance improvement. Even though the success or failure of KM implementation have been aggressively investigated by researchers, nevertheless, besides factors such as culture, business strategy, size, capacity and needs of organizations, KM strategy may vary depending on the organizations' eco-system. Hence, there is a need to investigate organizations operate in Malaysian to understand influences of KM strategy and its influence to knowledge sharing attitude among knowledge workers in the organizations. And the effect of KM strategy and knowledge sharing attitude on individual job performance. The research subjects are IT related companies in Malaysia that practise knowledge sharing. MSC status companies will be invited to participate. Questionnaire will be sent to these companies to solicit responses. Structural Equation Modelling (SEM) will be adopted as analysis technique to analyze the responses from research subjects that take part. In this research, a selected group of companies in Kuala Lumpur/Selangor/Klang Valley will be interviewed to collect their views for qualitative analysis. Campbell Job Performance Theory will be used in the research to evaluate performance of knowledge workers in organizations. Questionnaire survey will be circulated to knowledge workers to collect their responses. The outcomes of the research provides a better understanding of the relationships between KM implementation strategy, knowledge sharing attitude, and individual job performance of knowledge workers.

Keywords: *Knowledge sharing, individual job performance, KM strategy, KS tools, Community of Practice*

1. Introduction

Research interest on individual job performance has been long investigated by many researchers. However, study on the influence of KM strategy and knowledge sharing attitude on individual job performance has not been found. Investigation on Knowledge Management (KM) implementation strategy or Knowledge strategy and how strategy can affect knowledge sharing attitude among knowledge workers and their individual job performance is an important area of research. Review of related works revealed that study on the knowledge strategy and its influence on knowledge sharing among knowledge workers for organizations operated in Malaysia is a research gap that needs to be addressed. Furthermore, the emergence of Web 2.0 as the preferred platform for knowledge sharing and communication has attracted many organizations to invest time and people resources on it. Furthermore, the use of Web 2.0 systems such as Facebook and Yammer that are easy to use, intuitive graphical interface and short learning curve have always been claimed by many researchers as a preferred knowledge sharing platform that may increase KM successful rate. Factors and strategy for successful KM implementation that help motivating knowledge sharing among knowledge workers is the key that may bring improvement to individual job performance.

2. Literature Review

Related Works: This paper review a number of related research articles which include Knowledge Management System (KMS) implementation strategy (or knowledge strategy), knowledge sharing practices in organizations and individual job performance. Papers on related theories and past research outcomes were discussed. The discussion in this section highlights research gaps that need to be addressed justify the need to carry out the proposed research work.

Knowledge Management Systems Implementation Strategy (or Knowledge Strategy): Knowledge Management System (KMS) Strategy or KMS Implementation Strategy are sometimes refer to as Knowledge Strategy (KS). Zack (1999) described KS as the general approach followed by a firm in order to fill the gap between an organization's current and future intellectual requirements in pursuing competitive advantages. Lloria (2008) stated that holistic KS can be viewed from two different perspectives: a descriptive vision of how companies establish their KS and the results that they obtain; and, a prescriptive approach that focuses on what a company could do for designing and positioning a KS to achieve optimal results in terms of innovation and business performance. On the other hand, Donate & Ignacio (2012) used a holistic and content-based strategy where KS is conceptualized as a managerial instrument that encompasses four dimensions: KM vision, KS objectives, KM tools and KM processes. Research works conducted by Chan and Chau (2005) focused on a Hong Kong company showing that KM effort must be supported by members of the KM implementation team. If fragmented KM activities were implemented in the company, such KM implementation would fail. The KM implementation undertaken by the research subject failed in two (2) years after the implementation effort were put in. Based on their findings, KM frameworks can be divided into two groups: descriptive and prescriptive frameworks. Typically, KM processes (APQC, 2000) consists of seven activities: create, identify, collect, adapt, organize, share and use of knowledge. In their works, it was found that some KM works rely on development of organizational memory or fostering networked communities so that individuals are able to create and share knowledge.

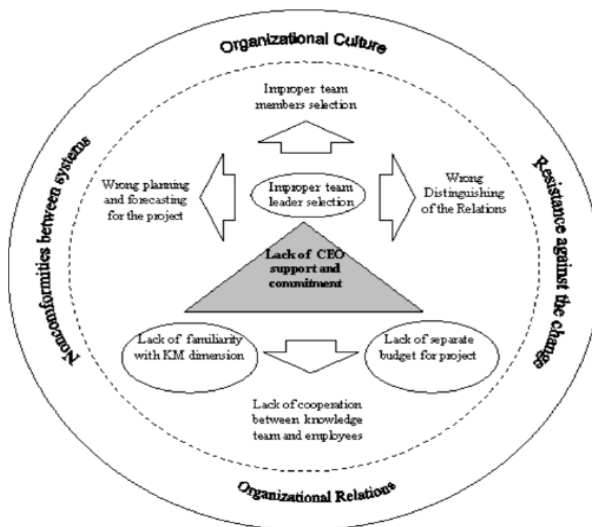
Figure 1: KM findings and lessons learned

KM Focus	Initiatives in 2001	Results in 2003
Strategic ❖ To determine knowledge gaps.	❖ Identified core knowledge that led to business success.	❖ Unrealistic aims → created fallacies. "All the best in HS" to direct KM development. ❖ Volatile support → undermined the KM climate.
Organizational ❖ To establish knowledge-friendly culture.	❖ Shared knowledge in various social and informal gatherings.	❖ Unframed socialization → created more confusion or negative perceptions. ❖ Ineffective human resources policy to retain knowledge workers → swifter loss of knowledge.
Instrumental ❖ To acquire and stimulate knowledge creation.	❖ Acquired knowledge in departmental handbook and rewarded knowledge sharing behaviors.	❖ Unlimited definitions or views of sources of knowledge → left individual knowledge untapped. ❖ Emphasized monetary rewards to stimulate contributions → created self-defeating mechanism and unfriendly team culture. ❖ Perceived IT as cutting-edge solution → led to undue investment on technology.
Output ❖ To evaluate and audit KM development.	❖ Conducted periodical reviews and measured organizational performance.	❖ Reviewed infrequently → created pitfalls to learning from mistakes, then moved ahead. ❖ Predisposed on efficiency and profitability → overwhelmed short-term benefits to exploit existing knowledge.

In this study, the authors showed that KM activities carried out in the organization were fragmented and not supported by members which resulted in failure of KM implementation. Based on this failure case, four lessons learned are identified for improving KM performance. The findings and lessons learned are illustrated in Figure 1. Peyman et al. (2005) acknowledged the importance of KM and organizational knowledge. The authors presented interesting findings in their investigation work. The failure factors of the research case study were analyzed. It was found that very little understanding on KM is one of the main factors that fail the project. Lack of direct support from the management was also another factor that results in the KM failure. Due to lack of understanding on KM by the management and the project team, this effectively drives the KM initiative to failure. The selection of project leader did not examine her expertise in KM project management and her expertise about KM put the KM project in jeopardy. Hence the KM project failed within a very short time. Member of the KM project team are not competent is another factor contributing to the failure of the KM project. They have very little knowledge on the scale and the complexities of the project. In addition, the number of member in the project team is not enough. Member of the team are also not very familiar with the organization and their relationships with others in the company are not able to help them to resolve crisis of the project. The member of the team are also lack of members of higher rank of authorities to have enough

strength to maneuver in the organization. Bad planning and inaccurate project schedule are other failure factors that cause the project taking longer than its initial project duration. The KM project rides on the existing budget which was supposed to be for another project. It does not have enough budget to obtain resources to move on. Lack of cooperation between employees and KM team is another factor that failed the project. Issues such as lack of suitable infrastructure, lack of transparent support of management and employees, organizational culture and management of resistance the change. The key areas of focus and related failure factors have been summarized and illustrated in Figure 2.

Figure 2: Failure factors of KMS (Peyman et al., 2005)



In Malhotra's work (2004), he identified two issues that cause KM failure:

- inputs such as data, information technology and best practices are not moderated by variables such as commitment, creativity, and innovation for the design of business model;
- the achievement and strategic knowledge deployment are issues that usually not examined and studied.

Malhotra (2004) also stressed that adaptation and innovation of business performance outcomes should always be aligned to the ever changing business eco-system. The evolvement of IT and new inputs should also be taken into account to minimize risk of rapid obsolescence of these 'systems'. However, Ambrosio (2000) discovered that coordination between information technology and human resources are more critical. He found that if KM implementation strategy has low profile project, not changing compensation scheme to reward teamwork, building grand database and assuming someone to take lead are common failure factors in any KM implementation projects. Ambrosio (2000), Fontain and Lesser (2002, pp. 2-5) and Malhotra (2004) recognized that as KM efforts and business goals are not aligned, and the creation of large database repository without considering content management strategy contribute to the biggest part of any KM implementation failure. Other failure factors claimed by Fontain and Lesser (2002, pp. 2-5) are failure to understand and connect KM into individual's daily workflow, over emphasis on formal learning in knowledge sharing, island of KM efforts within the organizational boundaries.

For effective KM in SMEs, plenty of works reported by many past researchers also found that SMEs are always lack of (1) systematic KM policies on knowledge monitoring, development, acquisition, locking, sharing, utilisation or evaluation of this organizational assets; (2) policies on tactical level to facilitate development, acquisition and locking of knowledge at the structural level; (3) policies to make the culture that motivate sharing and utilising of knowledge. Another interesting finding pointed out in the paper is on the change management where mindset of these small enterprises is often a major obstacle for new KM implementation. O'Donovan et al. (2006) investigated factors that affect the implementation of KMS in 12 large organizations. They made an attempt to understand links between factors found in their research work. Feedback from KM practitioners has allowed a more refined and extended model of KMS implementation shown in Figure 3.

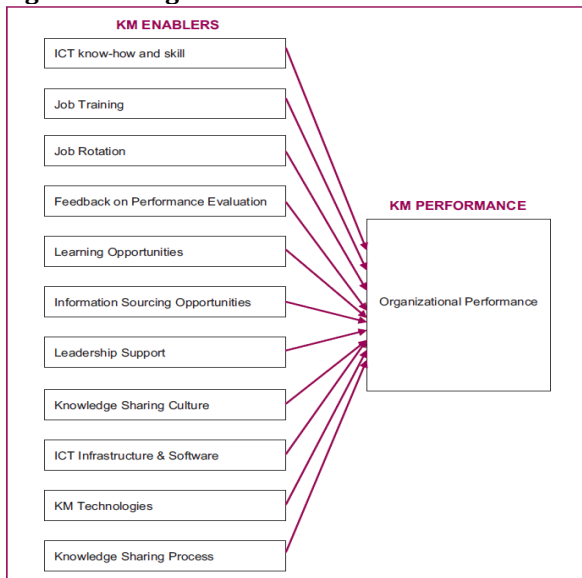
Their findings (Figure 3) are also used as a foundation for better understanding of factors faced by organizations in KM implementation.

Figure 3: KM implementation factors (O'Donovan et. al, 2006)

Checklist of Factors/Companies	A	B	C	D	E	F	G	H	I	J	K	L
Strategic Factors												
Aligning KM with Corporate Strategy	X	X	X	X	X	X	X	X	X	X		X
Defining & Communicating Objectives	X		X	X	X		X	X	X	X		X
Diverse KM Team	X	X	X		X	X	X	X		X	X	X
Taxonomy of Knowledge	X		X				X	X		X		X
KM budget						X	X			X		
Driven by Top/Middle Management	X				X			X				
Top Management Commitment	X	X	X	X	X	X	X	X	X	X	X	X
New Roles & Responsibilities		X	X	X				X				X
Information Technology												
<i>Design</i>												
Ease of Use	X	X	X	X	X	X	X	X	X	X	X	X
Web Technologies					X		X	X				
Accurate & Appropriate Results		X			X		X					X
Security & Openness			X				X		X			
<i>Role of IT Department</i>												
Strong presence throughout	X								X		X	
Evolving	X			X		X	X		X		X	X
Minimal			X	X		X						
User Involvement	X	X	X	X	X	X	X	X	X	X	X	X
Organisational Factors												
<i>Knowledge Sharing Culture</i>												
Type of people											X	X
Team Oriented Culture	X					X			X		X	X
Trust		X						X	X			
User Training		X	X	X	X	X	X	X			X	X
<i>Incentives & Rewards</i>												
Monetary	X		X					X		X		
Non-Monetary	X		X	X	X	X	X		X		X	X
<i>Organisational Structure</i>												
	X	X		X		X						

Chong et al. (2011) adopted an integrated KM framework (Figure 4) to examine constructs such as KM enablers, knowledge sharing process and organizational performance on a set of research hypothesis in their article. The authors use self-reporting questionnaire as the research instrument and multiple regression is used as the analysis technique on the research outputs. The findings of their research concluded that KM enablers and knowledge sharing process have positive influence toward organizational performance.

Figure 4: Integrated KM framework

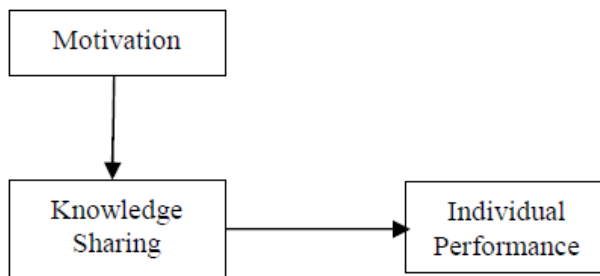


Enablers such as culture, information systems infrastructure, process, organizational structure, and top management leadership are always referred to as KM secondary factors where people governs the success of KM in particular values the corporate and public sectors try to achieve are greatly different. Research findings

highlighted that the proposed model explains 67.7 of the variances in organizational performance outcomes. Significant patterns such as knowledge sharing process such as speed to transfer explicit knowledge and reliable transfer of tacit knowledge has high significant to the performance. It was also found that technological components such as ICT infrastructure, KM technologies and communication technologies are highly significant KM enablers. The leadership support and knowledge sharing culture in the organization are also able to ensure higher degree of KM success. Job rotation has also been found to be positively significant to organizational performance. Two KM enablers, training and learning opportunities, and, performance evaluation and incentives, have been found to be not so significantly related to the performance. The authors concluded that well-planned KM strategy allows a successful KM implementation. In short, knowledge strategy should support business goals and align to the anticipated outcomes desired by organizations. Success factors should be considered in the formulation of knowledge strategy for an organization. The knowledge strategy should carefully crafted base on the culture, capacity, resources and business goals of the organization. Works reviewed provide sufficient evidence there is a close relationship between performance and knowledge strategy. However, the study of knowledge strategy and knowledge sharing practices is not found. This is a research gap to be addressed in this research project.

Knowledge Sharing Practice and Individual Job Performance: Studies on knowledge sharing and individual performance have been investigated in many research works. External factors such as culture, motivation and process are being considered in these studies. The following section review related works conducted by researchers which highlight the research gap as knowledge strategy is considered while investigating knowledge sharing practices and individual performance. Akram1 & Bokhar (2011) investigated an integrated model (Figure 5).that explains individual performance through motivational factors which is able to explain knowledge sharing among employees.

Figure 5: The performance model



Related works reviewed by authors found that the study of individual performance and knowledge sharing carried out by many researchers don't provide a complete picture (Figure 6). Some of the models examine individual performance and knowledge sharing and some study motivational factors and knowledge sharing only. Hence, there is a need to look at an integrated model to provide a more comprehensive understanding on how motivational factors, knowledge sharing and individual performance influence each other.

Figure 6: Related studies by other researchers

Researchers	Motivation	Knowledge Sharing	Individual Performance
Narda R. Quigley (2007)	√	√	
J.H. Erik Andriessen (2006)	√	√	
Rong Du et al (2007)		√	√
M.C. Jones et al. (2006)		√	
Paul Hendriks (1999)	√	√	
Rob Cross, Jonathan N. Cummings (2004)		√	√
M.H. Hsu et al. (2007)	√	√	
William R. King, Peter V. Marks (2008)	√	√	

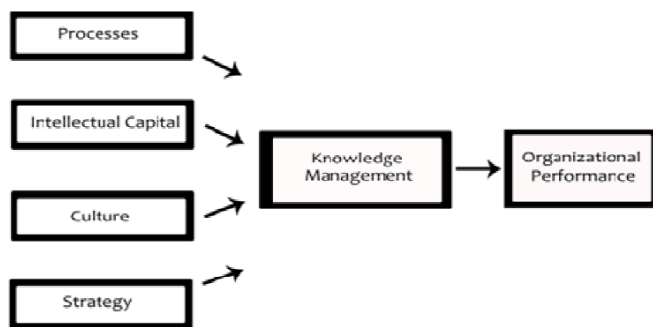
In their study, knowledge sharing is better understood by individual's motivation factors. Their study also found that knowledge sharing and performance improvement is through knowledge utilization. In their study, knowledge transfer among employees requires high individual motivational factors and knowledge sharing has high impact on the individual performance. However, there is a need for an empirical research to understand variables and the instrument should be carefully constructed. Earl (2001) proposed a taxonomy of KM projects strategy according to goals, organizational characters, technologies, behavioral, or economic bias from primary and secondary data sources (Figure 7).

Figure 7: Taxonomy of KM strategy

SCHOOL ATTRIBUTE	TECHNOCRATIC			ECONOMIC	BEHAVIORAL		
	SYSTEMS	CARTOGRAPHIC	ENGINEERING	COMMERCIAL	ORGANIZATIONAL	SPATIAL	STRATEGIC
FOCUS	Technology	Maps	Processes	Income	Networks	Space	Mindset
AIM	Knowledge Bases	Knowledge Directories	Knowledge Flows	Knowledge Assets	Knowledge Pooling	Knowledge Exchange	Knowledge Capabilities
UNIT	Domain	Enterprise	Activity	Know-how	Communities	Place	Business
EXAMPLE	Xerox Shorko Films	Bain & Co AT&T	HP Frito-Lay	Dow Chemical IBM	BP Amoco Shell	Skandia British Airways	Skandia Unilever
CRITICAL SUCCESS FACTORS	Content Validation Incentives to Provide Content	Culture/Incentives to share Knowledge Networks to Connect People	Knowledge Learning and Information Unrestricted Distribution	Specialist Teams Institutionalized Process	Sociable Culture Knowledge Intermediaries	Design for Purpose Encouragement	Rhetoric Artifacts
PRINCIPAL IT CONTRIBUTION	Knowledge-based Systems	Profiles and Directories on Internet	Shared Databases	Intellectual Asset Register and Processing System	Groupware and Intranets	Access and Representational Tools	Eclectic
"PHILOSOPHY"	Codification	Connectivity	Capability	Commercialization	Collaboration	Contactivity	Consciousness

Earl (2001) presents different schools of practices where the table don't claim one school outperforms another school. Schools are not mutually exclusive however. In their work, they provide a set of guidances for KM implementors as a base to formulate their KM implemenation strategy. In Malhotra (2004) discussion, he pointed out that Bhatti et al. (2011) also emphasized on the importance of culture on knowledge sharing. They focused on the integrative effect of processes, intellectual capital, culture and strategy with cohesion of all stake holders on knowledge management which effects organizational performance. Sharing culture, middle management participation and their inputs are key to success. A proposed model considering process, intellectual capital, culture and strategy (PICS) is disussed in their paper (Figure 8).

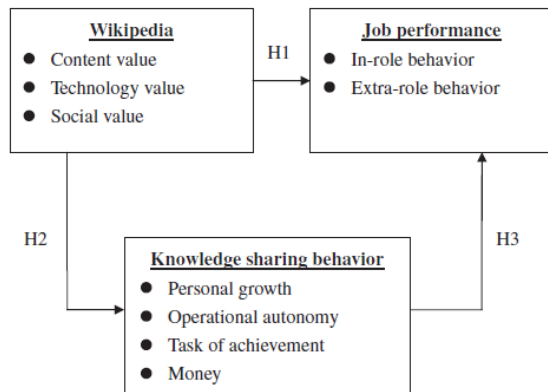
Figure 8: A proposed model (Malhotra, 2004)



Their study looked at knowledge within and outside of the organizations can be shared if proper sharing culture is developed. The sharing culture must allow employees share with ease and share without fear as part of the implementation strategy. Their model will be tested and validated on local service industry. Tseng & Huang (2011) studied the content, technical and social values of Wikipedia on its influence on knowledge sharing and job performance. Their proposed model is illustrated in Figure 9. Their findings showed that Wikipedia has a positive effect on knowledge sharing and job performance. This provides a good guidance to

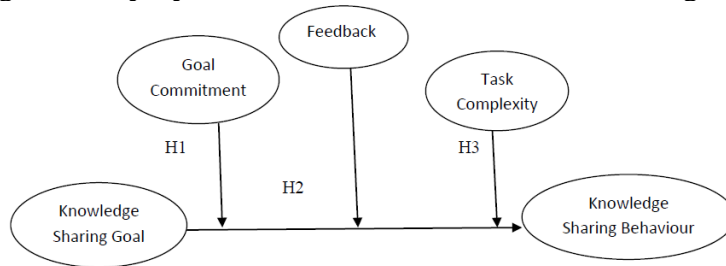
enterprise on the usage of Wikipedia to increase willingness among employees to share knowledge and as a result enhance job performance.

Figure 9: Model proposed by Tseng & Huang (2011)



In their analysis, it was found that Wikipedia has a significant association with the degree of attainment of job performance and knowledge sharing. The results of the analysis also reveal that a significant positive correlation between Wikipedia, job performance and knowledge sharing. If the Wikipedia factors-content, technical and social values are more successful, it can significantly enhance job performance and knowledge sharing. The authors also found that knowledge sharing is significantly associated with the degree of job performance. This implies that if the knowledge sharing factors-personal growth, operational autonomy, and money-are more efficient and effective, they can significantly enhance job performance. Marion et al. (2011) utilized Locke and Latham's Goal Setting Theory to propose a model that explains knowledge sharing behavior among employees in organizations (Figure 10). They emphasize that knowledge exchange is a process of voluntary and it is highly dependent on an individual's willingness. Hence it is important to identify the factors that motivate sharing knowledge behavior among employees.

Figure 10: A proposed model base on Latham's Goal Setting Theory



Authors use Job Design Theory (JDT), Social Cognitive Theory (SCT), and Goal Setting Theory (GST) in the model proposed. They investigated the influence of goal commitment, feedback and task complexity on knowledge sharing behavior through codification. The proposed model aims at enabling organizations to motivate worker effectively and to identify managerial interventions, implications of resources such as human resources and technology, provide guidance on task design as well as managing better knowledge sharing behavior. Other research works reviewed highlight other aspects of knowledge sharing and its influence to job performance whether on the individual or corporate. Peariasamy & Mansor (2008) proposed a framework considering 12 approaches of how to cultivate effective knowledge sharing among employees such as peer assist, training and mentoring, and cross training so that organizations can adopt the framework for their needs. Authors also stressed that popular approach such as rewarding employees for knowledge sharing many develop the behavior of hoarding knowledge among employees which may not be very desirable. Authors also pointed out that on-the-job knowledge sharing can effectively promote job performance improvement among employees. Suhaimi et al. (2005) investigated the status of the KM implementation in Malaysian PIHE and their findings show that KICTSP Methodology can be used as a

systematic description on how KM implementation in Malaysia Public Institution of Higher Education should be carried out. The research work completed by Halawi et al. (2006) identified the relationship between KM and the firms' competitive advantage. The authors used resource-based view approach to fit KM with strategic planning of firms investigated. In their works, two organizations discussed in the paper were all approaching somewhat different problems and are interpreting knowledge management in different ways. Their works provide different views base on resources and capacity of these companies.

Motivations, Problem Statements and Objectives: Many research articles reviewed have clearly shown that a well crafted KM implementation strategy is an important step toward successful knowledge sharing practices among knowledge workers. As knowledge sharing culture in organizations becomes part of the organizational eco-system, it is expected that the intensified knowledge sharing activities would increase job performance among employees. However, to achieve these goals, knowledge implementation strategy must be understood thoroughly. Factors that influence successful KM implementations must be identified. Relationships between different variables identified will be studied and a proposed model will be investigated. With this, it provides strong rationales for such research to be undertaken. The following are the rationales that support the need to carry out the proposed research work.

- Research gap between KM implementations strategy and KM sharing among employees that need to be addressed for organizations operated in Malaysia
- Factors in KM strategy that need to be identified
- The relationships between Knowledge sharing among employees and individual job performance

The problem statements are established base on the fact that papers reviewed show that there is no existing work that investigates the influences of KM implementation strategy (or knowledge strategy) to knowledge sharing practices and individual performance among knowledge workers. The outcomes of this study help to provide fundamental understanding and answer questions in this research. In this research, KM implementation strategy in organizations will be investigated. The relationship between KM implementation strategy and knowledge sharing attitude among knowledge workers are examined. The knowledge sharing tools or systems used by these organizations will be studied. The impact of knowledge strategy and knowledge sharing attitude on the individual performance will be statistically investigated and analyzed.

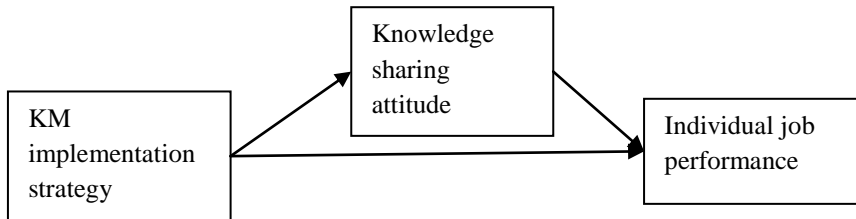
3. Methodology

This research will interview and solicit survey responses from knowledge driven IT organizations. The research subjects are MSC status companies in Kuala Lumpur/Selangor/Klang valley. They are Multimedia Super-corridor (MSC) status companies listed in MSC portal. In order to be able to understand the knowledge strategy of these organizations, the participating organizations must use some forms of knowledge sharing tools or systems such as email, electronic folders, document management systems and collaborative platforms such as Facebook or Twitters in their day-to-day communication with other peers in the organizations. The employees in these organizations must practise knowledge sharing and they are still in the implementation stage of their knowledge strategy. In this research, knowledge workers are defined as employees who specialize in specific domain of expertise where their day-to-day tasks involve problem solving and planning. The research follows a three-stage approaches: review of existing works, interview and questionnaire survey. Research activities will be carried out through Interview and questionnaire survey. Questionnaire will be sent to these companies to solicit responses. Structural Equation Modelling (SEM) will be adopted as analysis technique to analyze the responses from research subjects that take part.

The proposed research model: KM Strategy – Performance Model: The proposed model in Figure 11 – KM Strategy – Performance Model, focuses on three (3) key variables: KM implementation strategy, knowledge sharing attitude and individual job performance, to investigate their relationships in the model. The analysis provides research outcomes that will provide practitioners and researchers a good level of understanding as the basis to ensure resources put into their (future) KM implementation projects may yield higher successful rate. The hypothesis will be rejected or accepted base on the analysis from the measurements produced by SEM. The proposed research model examines the influences of knowledge strategy to individual job performance and knowledge strategy to knowledge sharing practices in

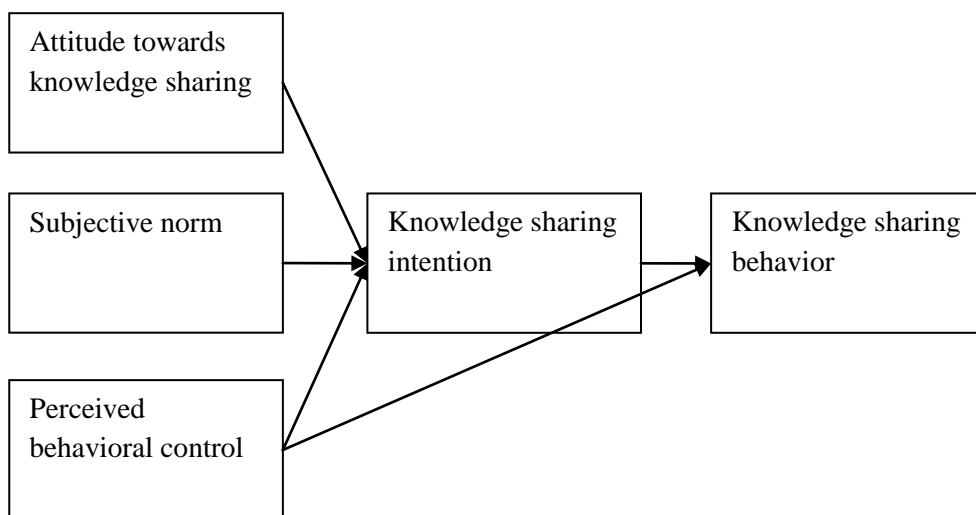
organizations. The influence of knowledge sharing attitude to individual job performance will be studied too. The proposed research model adopts the holistic and content-based approach of strategy suggested by Donate & Ignacio (2012). In the approach suggested by Donate & Ignacio (2012), four dimensions of knowledge strategy are considered: KM vision, KS objectives, KM tools and KM process. The research instrument proposed by Donate & Ignacio (2012) consists of knowledge strategy, knowledge management tools, and implementation support systems. In the knowledge strategy, it looks into KM concepts and KS objectives. As for knowledge management tools, it investigates storage, transfer and application, and protection methods. The implementation support systems study cultural principles and leadership, support based on HR practices, business performance, process innovation and product innovation.

Figure 11: The proposed model



To study knowledge sharing attitude (**Figure 12**), the Theory of Planned Behavior is used as the fundamental model which investigates the knowledge sharing attitude of knowledge workers in a knowledge driven organization. The research model tested by Chennamaneni (2012) is adopted. In her model, psycho-socio-technological determinants are used as external variables to study their influences to attitude towards knowledge sharing. As for subjective norm, the influences of perceived organizational climate is studied. Tools and technology is the external variable that is examined for its influences toward perceived behavioral control. In this research, the basic knowledge sharing model is adopted. The external variables as depicted in the Theory of Planned Behavior are not considered in this model. The external variables will be fed into the basic knowledge sharing model from KM implementation strategy.

Figure 12: The knowledge sharing model

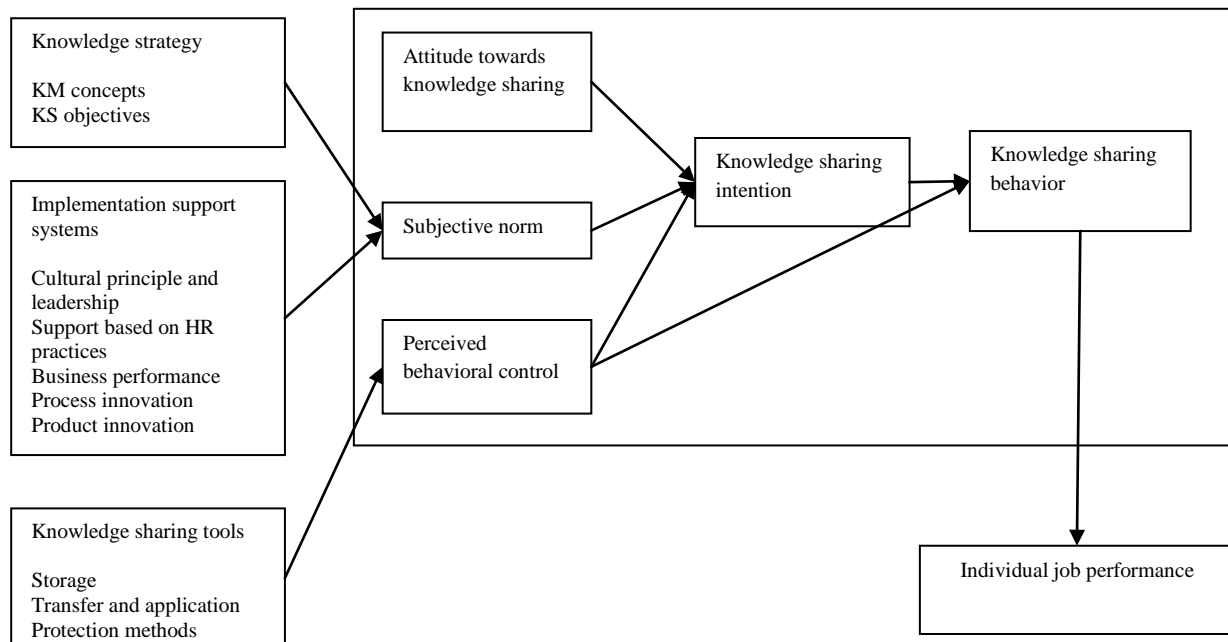


The individual performance impact measure is adopted from Goodhue & Thompson (1995) where they looked at Task-Technology Fit and its effect toward individual performance. In their research, two questions were used to investigate the perceived individual performance impact. These two questions were adopted

and modified to study the individual performance impact resulted from knowledge sharing attitude and knowledge strategy implemented in the organizations.

- The knowledge sharing culture in the company has a large, positive impact on my effectiveness and productivity in my job.
- The knowledge sharing attitude among employees has a large, positive help on my effectiveness and productivity in my job.
- The knowledge sharing tools used in the company has a large, positive help on my effectiveness and productivity in my job.
- The knowledge sharing tools and the IT support are an important and valuable aid to me in the performance of my job.

Figure 13: The KM Strategy – Performance model



The KM Strategy – Performance model illustrated in Figure 13 has been modified by adapting from existing theories and models that have been well proven. The attitude towards knowledge sharing does not have antecedents in the proposed model. As for subjective norm, implementation support systems that include cultural principle and leadership, support based on HR practices, business performance, process innovation and product innovation are antecedents that will be tested on. Knowledge sharing tools that include storage, transfer and application, and protection methods are antecedents for perceived behavioral control.

4. Conclusion and Future Works

The proposed model will be tested on a set of samples in the next phase of the research work. Data solicited from the interview and questionnaire survey will be analysed and analysis will be discussed.

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