

# Views and Ways on Improving Knowledge Sharing of the Malaysian Public Sector

S. R. Kathiravelu\*,1,a, N. N. Abu Mansor1,b and T. Ramayah2,c

<sup>1</sup>University Teknologi Malaysia, 81310 Johor, Malaysia. <sup>2</sup>Universiti Sains Malaysia, 11800 Penang, Malaysia. <sup>a,\*</sup>sunitarega@yahoo.com, <sup>b</sup>nurnaha@utm.my, <sup>c</sup>ramayah@gmail.com

Abstract – Knowledge is Power - one of the most important sayings that demonstrate an individual's growth and development to the highest level. Therefore, the goal of presenting this paper is to be able to impart an in-depth understanding pertaining to various notions about knowledge sharing (KS) presented in different institutions and also to raise some recommendations on how to improve knowledge sharing in Malaysia. Moreover, the content of this paper is geared on exploring insights in the Malaysian perspective of KS specifically in the public sector along with illustrating certain ways of effectively enhancing KS in a particular organization. The information that is presented in this paper were collected from various related literatures gathered from books, academic journals and articles. Findings from several literatures revealed that most public sector employees are reluctant to shared their knowledge as well as best practices, and this is regarded as the ultimate factors that leads to poor quality and inefficient in the service delivery. Through the useful highlights in this paper, it would provide beneficial information on contributing factor to enhance successful KS, not only the Malaysian public sector but also to other countries with similar public sector settings and culture. Copyright © 2015 Penerbit Akademia Baru - All rights reserved.

**Keywords:** Knowledge Sharing, Knowledge Management, Intellectual Asset, Continuous Learning, Education, Public Sector

# 1.0 INTRODUCTION

Knowledge is an important facet of a person's life because as complex as the word is, its implication is indeed overwhelming. As stated above, a knowledgeable person can defy ignorance and be able to attain and maintain power. Knowledge is not simply about being able to comprehend rather it is a procedure of continuous learning, knowing a lot close to anything and everything and being able to learn from experience. Hence, a truly knowledgeable person share what he/she knows in society to improve oneself and be able to produce new thoughts and potential learning interaction. Consequently, communion of knowledge can lead to wider opportunities for development and sustainable growth.

The advent of technology in the later portion of the 21st century provided the required boost for faster and more reliable ways of improving the different perspectives on how to effectively share knowledge amongst employees in a particular society. Multinational sectors are being perceived as the cubicle culture that tends to concur with the notion of aspect to face get-together are the best ways to share knowledge outside and within a particular



organisation. According to some research, some people like the thought of lunch meetings being centred on a single idea, as long as the air is kept informal while others agree that another way is to have the facilitator control or limit the topic by presenting an approximation for the first five to ten minutes under consideration.

Hence, with the increasing identification of how knowledge has become a strategic source for all organizations and establishments, the "public sector had often been less disposed to explore its benefits" [3]. Despite these perceptions, the public sector in the contemporary society have just started out to admit and embrace the concept of KS and its management. Moreover, the knowledge management (KM) concept has long been acknowledged by most public institutions and KM initiatives were often incorporated into government tasks [31]. Malaysian government sectors are known to be knowledge intensives due to the fact that KM was introduced in the country in the year 1991 by their former Prime Minister, Tun Mahathir Mohamad because of a vision of wanting to transform their economy into one that is knowledge-based [29]. Nonetheless, empirical evidence has pointed out that organizations in Malaysia have yet to manage their basis of knowledge [38] and stressed that the public sector, especially in Malaysia is still not ready to extensively embark on KS initiatives [41] in order to be a knowledge-based society. Thus this paper will further concentrate on related literatures in the factors that moves KM and KS in Malaysia, and its ways of ameliorating it. Thus, this would be an interesting gap of this paper as it highlights essential ways from various literatures on improving KS and adapting them in the Malaysian culture to enhance quality service of the public sector. Therefore, this paper will focus on two specific research objectives:

- 1) To explore the recommended ways on how the Malaysian public sectors can improve and oppose the barriers that impedes knowledge sharing within the organization.
- 2) To discuss the possible perspectives to implement effective strategies in promoting knowledge sharing of the Malaysian public sectors within the organization.

Therefore, it is the aim of this paper is to explore various perspectives and ways of improving KS in the public sectors in Malaysia as it has been noted that public sector organizations in the country should be able to develop effective means and strategies. By enhancing their strengths and the ability to overcome barriers that hinders effective KS, the public service would be able to create a participative and collaborative environment geared towards successful KS. This paper will focus on exploring various perspectives and ways of KS implementation within the public sectors of Malaysia in the context of the identified barriers. Moreover, it is also the objective of this paper to consider different theories presented by several prominent authors and be able to utilize them to offer arguments and justifications in the effort to seek responses to the research objectives presented in this paper.

# 1.1 Knowledge Management

The concept of KM is defined as the process of applying a systematic approach to capturing, structuring, managing and disseminating knowledge throughout an organization to allow its employees to work faster, reuse best practices, and reduces costly rework from project to project. KM is most often characterized through an approach called the 'pack rat' wherein its content is: save it, it may prove useful sometime in the hereafter. The resolutions provided for KM are proven to be effectual and successful and is best for capturing, storing and distributing knowledge that has been rendered explicit -- particular lessons learned from experiences and best drills. According to McGraw and Harrison Biggs [24], it is a surprising mixture of schemes, instruments and techniques, some of which are nothing new under the



sun: storytelling, peer-to-peer mentoring and learning from mistakes have all precedents in education, training and artificial intelligence practices.

KM makes use of a variety of techniques from knowledge-based system design such as structured knowledge acquisition strategies from subject matters. Due to its broad perspective, it is difficult for KM to be defined because at one point, it encompasses everything that has something to do with knowledge. Moreover, KM is narrowly characterized as an information technology system that dispenses organizational knowledge. Therefore, as a rejoinder, KM can be considered as both of these and a consensus that KM is highly multidisciplinary in its field.

Finally, creating and transferring knowledge in various organizations is recognized as crucial factors in the competitiveness and success of the firms [37]. In fact, several organizations nowadays have attempted to try numerous ways of setting and effectively implementing knowledge management, even in the public sectors.

The compiled literature shown in the Table 1 is a survey of the concepts of KM, its complexity, definitions and various perceptions about the subject topic. KM can be comprehended as a process or activity catered with a solid vision of team effort and collaboration that takes into account the knowledge transfer to be of help to individuals seeking to be acquainted with fresh and refreshing opportunities to tone up their continuous learning initiatives.

**Knowledge Management Concepts** Author Systematic Arora, 2011; Riege & Lindsay, 2006; Kumar & Rose, 2012; Gagne, 2009; Wickramasinghe & Widyaratne, 2012; O'Dell & Hubert, 2011 Informal McGraw, Harrison & Biggs, 1999; Syed-Ikhsan & Rowland, 2004; Shariffudin, et.al., Diverse 2007; Ipe, 2003;O'Dell & Hubert, 2011; Mihai, 2009; Tsui, 2006; Ali, 2005; Al-Owaihan, 2008; Hendriks, 1999; Ling, 2011; Discovered Abili, Thani, Mokhtarian & Rashidi, 2011; Mihai, 2009; O'Dell & Hubert, 2011; Levin, Shared Cross, Abrams, & Lesser, 2002; Ling, 2011; Wickramasinghe & Widyaratne, 2012;

 Table 1: Concepts of Knowledge Management

#### 2.0 LITERATURE REVIEW

This section of the study will present discussions about the works of other authors that offer various literatures about the same subject and be able to confer how their studies are relevant



to this research. This literature review is being presented in order to provide a better understanding about the subject matter and be able to promote awareness about KS and how it is being utilized and perceived in different organizations within the public sector in Malaysia. Moreover, this review of related literature aims to serve as a secondary research by evaluating and assessing the findings of the researches of other authors in order to support the objectives of this study. Hence, this literature review aims to examine and discuss what KS is, how KS is being presented and implemented in the public sectors in Malaysia such as the different factors that impact KS and various theories in the context of KS.

# 2.1 Knowledge Sharing

Sharing of knowledge among individuals is essential in different organizations across the globe because it allows generation of new ideas, innovation and creativity and open up new opportunities for the business through socialization and the development of highly skilled workers. KS is a one of the processes in KM and can be defined as passing on certain knowledge such as best practices, positive experiences and learning abilities from one individual to another within an organization to promote cooperation and collaboration towards task and goal accomplishment [27].

KS is being implemented by several organizations because of its long-term effect in a business' performance, growth and competitiveness. Hence, as asserted by [8], "It is important for organisations to make sure tacit knowledge is retained within the organisation through the development of proper KS practices." Thus, in a broader perspective, KS can be described as the willingness of individuals to share and impart various learning, techniques and strategies amongst one another in order to create and enable new ideas, knowledge and opportunities so as to achieve mutual benefits. In line with this, Azhar [4] mentioned that "KS provides individual with opportunity to enhance their skills and performance by working together while improving the organizational productivity, efficiency, quality and innovation in achieving the business success."

In addition, several organizations have been focusing on creating effective channels and social network of KS due to it has been noted as being the foundation of acquiring competitive advantage in the achievement of success and development [4]. Hence, in the public sectors including non-profit organizations and government agencies, KS is being perceived as a way to enhance continuous performance and improve customer satisfaction. Therefore, the Malaysian government has been establishing ways of effective implementation of KS particularly to the activities in the public sector so as to ensure a knowledge-based environment which can lead to superior and quality service delivery for customers and the people within the community [4].

# 2.2 Factors Impacting Knowledge Sharing

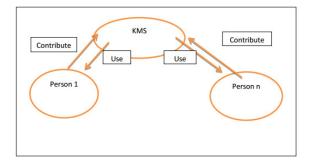
There are only limited studies that have been conducted pertaining to the factors impacting KS in public sector organizations in Malaysia [27]. Based on the study of the same authors, the table below shows the summary of the few factors that have been derived from literatures from past studies. Noor and Salim (2011) stressed that these few factors are identified as individual factors, organizational factors and technology factor.



Author	Factors that impacts Knowledge Sharing in the Public Sectors
Noor and Salim (2011)	Culture
[27]	Technology
	Leadership
	Management System
	Incentive
Kathiravelu et.al (2013) [15]	Demographic Factors
	Organizational Influences
	Rewards
	Technology
	Commitment

**Table 2:** Summary of Factors of that Impact Knowledge Sharing

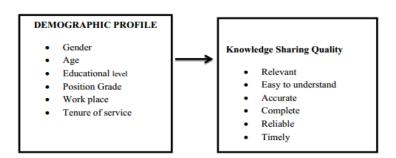
Kathiravelu, Abu Mansor and Kenny [15] has asserted that KS as a part of KM System (KMS) can be considered as a framework that focuses on storing information which can be used in the future. Furthermore, the authors argued that an individual makes two decisions during utilization of KMS – "1) contributing knowledge and 2) using knowledge".



**Figure 1:** The Model Knowledge [15]

#### 2.2.1 Demographic Factors

One of the factors that impact KS amongst the organization's workforces are the demographic facets such as age, gender, ethnicity, job position and educational background among others such that these can influence the willingness and/or reluctance of individuals to share knowledge and best practices with others [15].



**Figure 2:** Relationship of Demographic profile with Knowledge Sharing [15]



However, according to the study of the same authors, there has been no definite evidence to support that demographic factors indeed affect KS in the public sector organizations in Malaysia.

## 2.2.2 Organizational Influences

Influences within the organization starts with the culture that encourages employees to share values, adopt changes and KS that leads to innovation, trust and learning [15]. Organizational culture according to the same authors plays a vital role in creating KM and positive attitudes that promotes a good working relationship between the employers and the employees. Hence, in the culture where KS is present, individuals are more likely to share their thoughts and exchange information since they feel it is something that is normal and not forced against their will.

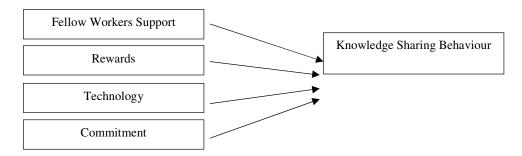


Figure 3: Organizational Influences

# 2.2.3 Technology

In today's world of technological advancement, more and more companies are integrating technology in promoting effective strategic schemes in order to deliver excellent customer service. Hence, technological advancement is also being used by organizations to promote a positive knowledge sharing culture such that employees can share their best practices in accordance to their expertise and bring about new ideas that can be accessible to everyone within the same organization [15]. Through the incorporation of information technology (IT), companies are able to implement a 'knowledge sharing technology' so as to improve knowledge sharing practices within the company.

## 3.0 THEORIES IN KNOWLEDGE SHARING

In order to understanding how the behaviours of individuals are being influenced in the context of sharing knowledge within an organization, few theories will be discussed in relation to KS. These theories are expected to present some perspectives towards KS improvement in the public sectors in Malaysia.

#### 3.1 Theory of Reasoned Action

The most commonly used theory in the KM and KS field is the Theory of Reasoned Action (TRA) as it acts as the base on understanding one' behavioural intention. The theory suggest that a behavioural intention of a person depends on the attitude about the subjective norms



and behaviour. TRA works best when it is applied to a behaviour that is within a person's conscious locus of control [32].

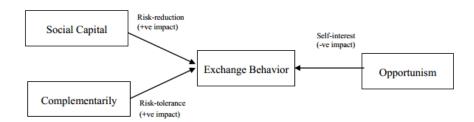
#### 3.2 Theory of Planned Behaviour

According to [8], the Theory of Planned Behaviour (TPB) proposes that a certain individual's behaviour is influenced by intention, which is the extension from the TRA. Therefore, whether the individual decides to act in a particular way or not corresponds to the intention of why he/she decided to do something or not. Hence, behaviour can be attributed to the attitude of an individual's beliefs and thinking that compels him/her to act in a certain way. The choice of knowledge sharing is based on how favourable or harmful its effect or consequence is to the employees. Thus, Goh and Sandhu [8] argued that "the higher the attitude towards knowledge sharing the higher the intention to share knowledge."

Furthermore, it has also been stressed by [8] that KS can be influenced by the subjective norm such that an individual's willingness or reluctance to share knowledge can be motivated by the amount of peer pressure that is present within the work environment. For example, an employee will be expected to have an increased in salary will respond to KS if the perception within the work environment about it is to be recognized by their management.

## 3.3 Social Exchange Theory

It has been asserted by [4] that "KS practices involves the changing of human behaviour" hence, the social exchange theory was developed in order to promote focus on motivation and good working relationships. In the study of [4], it has been noted that employees tend to engage in KS when they perceive that a greater reward will be acquired. Hence, [4] stressed that "the maintenance behaviour of people in social exchange is based on rational self-interest, trust, loyalty as well as commitment shows in personal characteristics and interaction process between individual and team members in both social and organizational context."



**Figure 4:** Social Exchange Theory Framework [4]

#### 4.0 Knowledge Management and Knowledge Sharing in Malaysia

KM and KS in the context of organizational environment can be described as learning which is embedded in the heads of employees through sharing, understanding and expressing positive work behaviours and experiences within the members. If knowledge is not disseminated effectively in the organization, it can easily be lost once the employee leave the company [8]. Thus, KS when implemented successfully can become a potent tool in enhancing and improving the lives of people as well as the company.



In an article by Noor and Salim [27], the said authors argued that their research shows that most people are indeed reluctant to share. According to the authors, "KS involve not only our knowledge, but a process of giving and receiving of knowledge with others" [27]. Hence, if individuals within an organization are reluctant to share best practices, then KS will not be possible.

Malaysia is a country that is known in rebuilding and restructuring their economy from being agricultural based to industrial based as they endeavour to cope with the demands brought about by the challenges of the 21s century evolution [15]. Former Prime Minister Tun D. Mahathir was the one who first communicated the importance of knowledge in Malaysia in the year 1991. Mahathir had a visual sensation of one day transforming Malaysia's economy "towards a knowledge-based economy" which was further supported by the recent Prime Minister, Najib Razak, by addressing the needed tools to improve the service delivery of the public sectors in the country [27]. Therefore, Razak proposed the adaptation of KM to initiate the said campaign, which was held by the Malaysian Administrative Modernization and Planning Unit (MAMPU). MAMPU's response to the said campaign was to initiate the implementation of KM in the public sectors through the development of the "knowledge bank" structure within the said sector utilizing the ICT framework [27].

Several initiatives and endeavours since then are being utilized to assure efficient execution of KM inside the public sectors and government agencies as a reply to the "K-based economy master plan (KEMP)" that was first presented in the year 2002 as an effort to establish and make a more developed Malaysia as a nation that promotes world-class public service deliveries based on knowledge, innovation and sustainability [4]. Furthermore, the Malaysian government has established supporting agencies such as "The National Information Technology Agenda (NITA) and the Multimedia Super Corridor (MSC)" in an attempt to raise the competitive advantage of the governing bodies in Malaysia so as to be capable to make do with the challenges brought about by the emergence of globalization and technological progress of the 21st century. The intention of the Malaysian government in establishing such agencies is to lay stress on the significance of ICT in the development of effective KS strategies to create and establish a knowledge-based economy and improve service delivery and customer relationship in the public service sector [4].

Whilst KS is beneficial to the various organizations in Malaysia, particularly in the public sector, there are still some barriers to effective implementation of KS – the reluctance of certain individuals to cooperate, share knowledge and best practices with their colleagues. According to [4], a report by 'The Ninth Malaysian Plan (2006)' has indicated that "lack of information and KS" has been identified within the public sector and government agencies which is ultimately leading to poor quality and inefficient service delivery. Hence, it has been asserted that the quality of service delivery in the public sector as compared to that of the private sector can be measured as inadequate.

KS is being acknowledged as being an important element in the survival of organizations as well as to promote competitive advantage. Amidst the mindset of conserving its cultural heritage, the Malaysian government maintains its drive to accentuate the creation of noble parts and the fostering of Islamic values to be able to create a track that leads to excellence in innovation. As brought up by some researchers, the Islamic Work Ethic (IWE) persuades and promotes searching of knowledge to be a means of developing oneself and at the same time stabilize the effort of accomplishing spiritual tranquillity and wealth creation. It is worth



noting that aside from this drive, the spirit of discovery and KS can considerably add to the consistencies of the IWE course.

Nevertheless, it can be reasoned that the credibility and influence in the aspect of education among the Malaysian Administrative executives can be attributed to dealing with the significance of work principles regarding Islam wherein it can demonstrate various new discoveries, in as much as the object of such theories include the facilitation of the process of invention. Starting in 2002, it is evident that the employees in the government and public sectors are required to undergo compulsory courses or trainings in an effort of boosting their competences and other employment-related capabilities while they enlist in the tradition of lifetime learning. Additionally, the Malaysian Remunerative System gives emphasis to positive values and work competencies as the key factor that allows the sectors in the government to develop their performance and efficacy. In fact, there were already substantial investments seen more likely in the human resource development side wherein employees are reminded and informed that their knowledge and work competencies are to be evaluated by the organizational authorities [18].

Granted that this instance, tends to be a customary view, reality states that this can somehow boost the employees work culture and KS behaviours which correspondingly can lead to various novel knowledge base services or merchandise. Matching with the policy and counsel of the government of Malaysia, the known urgency for the government employees in the public sector organizations to crucially embark on KS, implementation of innovation standards and work values and KM implementation are just as timely [18].

In a survey led by Syed-Ihksan and Rowland [37] about KM in the public system in Malaysia, it presented some of the subjects pertaining to sharing. The findings suggested that the indication of tacit and explicit knowledge or knowledge assets in the organization has a direct influence on the performance of knowledge transfer. Sharing culture is a central entity for whatever establishment that purports to implement strategies in KM. It showcased KM as a drill that could be the most influential strategy in managing intellectual assets within the public organizations in Malaysia in the near future. The K-based Economy Strategic Master Plan (KESMP), introduced at the end of the year 2002 proved that the government is serious in transforming Malaysia into a Knowledge-based economy.

## 4.1 Common Factors Affecting KS in the Public Sectors of Malaysia

#### i) Individual Factor

KS can be affected by individual factors such as personality, culture, awareness, lack of confidence, fear of loss of power, and lack of social networking and most importantly, job satisfaction. People need to be made aware of the importance and benefits of KS in order for them to contribute and be part of the first step. If people are unaware about the true purpose of KS, then it can potentially affect their decision of wanting to be left out of it. Moreover, personality also affects KS because it defines the person and if the person is confident that he/she is knowledgeable then he/she will not have any problems participating in KS activities. Lastly, employees who are gratified with their jobs, promote an environment of sharing in an attempt to see and possibly exceed expected team performances [7,13].



# ii) Organizational Factors

KS and KM can also be impressed by organizational elements such as cultural environment, social organization, rewards and recognition, lack of leadership, inappropriate reward system, lack of sharing opportunities and employment process. If the management does not provide effective task delegation, certain complications and issues can be expected to grow with regard to KS and management. Moreover, employees are being motivated and influenced to share best practices if they are in a safe working environment wherein culture and values are being practiced accordingly. Also, if employees are being recognized and rewarded for a job well done, such incentives can influence and motivate employees to contribute to KS practices [7,13].

## iii) Technological Factors

According to [13], KS can be affected by the organizations' readiness to provide the needed technology in order to promote KS. In Malaysia, tools and systems are often being employed in the public sectors and employees are constantly busy in front of their computers. Inappropriate information technology and lack of training will be factors hindering successful implementation [7] therefore, if KS can be permitted to be transmitted electronically, then the promotion of KS and KM can be facilitated through e-learning, e-mails and other ICT tools.

# 4.2 Way to Improve KM and KS in Malaysia

Improving KS and management in the public sectors in Malaysia will continuously remain a challenge. Such notion is initiated with the complexity of KS processes in organizations, while being value laden and power-driven in organizations as well [12]. Moreover, empirical evidence have underscored different factors acting upon KS that are categorized as (1) individual factors (personality, culture, awareness, lack of confidence, fear of loss of power, and lack of social networking and job satisfaction); (2) organizational factors (cultural environment, social organization, rewards and recognition, lack of leadership, inappropriate reward system, lack of sharing opportunities and employment process); and (3) technological factors (inappropriate information technology/ IT organizations and lack of training).

With these, efforts underscoring the improvement of KS in both private and public organizations should as well be focused on these dimensions. However, there are certain aspects that need to be considered such as the culture and environment of an organization as well as other factors that are unique to individuals such as behaviour and preferences. For instance, some researchers found various effective factors in organizational KS as depicted by the following:

- Circumstances revolving KS is rather desirable;
- Age, educational level, field of study, organizational position and work experiences of the human resources in an organization do not influence KS;
- A positive relationship occurs between KS and the human factors like commitment and trust;
- There is a negative relationship between KS and structural factors such as centralization, complexity and officialism;
- A positive relation appears among KS, creative and supportive culture that includes the elements of cultural factors;
- There is a negative connection between KS and bureaucratic culture;



• The deterrent factors in KS like bureaucratic culture and structural factors "have no meaningful difference in ranks, notwithstanding, in the facilitating factors (human factors, commitment and confidence), organizational culture (creative, advanced and supportive culture), the creative and innovative culture has the highest rank and after that, other ranks are concerned to trust, supportive culture and dedication".

The discussion below will further explain the factors that can enhance KS and a more effective KM strategy in the public sector of Malaysia; ICT, trust, communication and interpersonal relations and reward and recognition.

# 4.2.1 Use of ICT and other forms of Technology

Several studies have instigated the role of technology in influencing KS and management in organizations. This has underpinned the role of technology for the application of KS in organizations. However, using technology and ICT should be rendered with caution. [22] suggests further study in using online communication tools for KS, in order to identify if organizations can replace face-to-face interaction. It is also important for human motivation to be studied within the context of KS. This will serve as an essential step in order to understand how KS can be managed, as ICT is not only the most prominent instrument in the KS and its management [10].

Furthermore, the focus of Intellectual Capital Management (ICM) is fostered in the field of business administration and the area of an organization's business values referred as intellectual capital or assets. Some researchers identify intellectual capital as "organized knowledge that can be used to produce wealth". While some of these assets are more visible, some of the undocumented ones are consisted majorly of know-how, know-why, experience, and expertise that tends to reside within the head of one of the employees. It is characterized by less content because the information is filtered and judged and only the best are being inventoried. It tends to be more representative of the real thinking of individuals because of its focus on actionable knowledge and know-how. In effect, the outcome is less costly endeavour and a focus on learning rather than building systems.

There are actually three approaches involved in the use of ICT to enhance KM namely Adoption, Diffusion and Domestication Approaches [30]. Rogers Diffusion of Innovation theory [33] argues that media and interpersonal contacts provide information that influences a person's opinion and judgement. The characteristics of innovation which may include compatibility, complexity, relative advantages and attempts have an impact on the likelihood of acceptance and adoption, and also on the rate at which innovation process develops. Lastly, Rogers emphasized that the degree of interpersonal influence an early adopter possesses within the innovation decision-process will affect the dissemination of the innovation of others.

The second approach is Adoption. It suggests that when a user is presented with a new technology, a number of factors influence their decision regarding how and when they will use it. Adoption includes the perceived usefulness, ease of use, external variables and intention/attitudes of users, however, other factors such as personal control, economic factors, outside influence from suppliers, customers and competitors are not considered.

Lastly, the domestication approach focuses on the process in which technology becomes an integral part of everyday habits and conceptual context distinctions are applied to new



phenomenon. Pedersen [30] added that there are three important distinctions including work and leisure context, end-users that belong or do not belong to a demographic group; and the private and public context.

[11] emphasizes that the ICT enables and provides the entire infrastructure and tools to support KM processes within an enterprise. An important consideration is needed to be able to succeed in KM namely assessment and definition of ICT capabilities done properly as it supports and facilitates KM processes such as knowledge capture, storage, retrieval, sharing and collaboration, dissemination and updates in organizations of higher educations. Some researchers indicate that several KM ICT tools and networks were identified to be relevant for developing the proposed framework due to their significance in carrying out KM roles. Collaborative technologies and KM both have significant contributions to make but many organizations have yet to adapt to them both in terms of systematic and strategically implementations. Most of these approaches also have a tendency to focus on tools, good practices and methods, rather than organizational processes based on knowledge needs of users such as incentives, attitudes, language, culture and individual knowledge needs. For KM to be successful, it does not simply depend on documenting, managing, and archiving of generated knowledge, but require further research to ensure that knowledge are contextualized in order for learning to occur [16].

#### 4.2.2 Develop trust between leaders and employees, by leading as an example

In driving change, the Executives are considered to be in the unique position wherein they are expected to initiate the moves. They are in fact, the ones thought of as the first persons in the best spot to identify objectively whether the organization is geared towards the right direction or whether the knowledge is getting in the right hands. KM or the KM professionals are perceived to have the capacity to determine some barriers but the decision on eliminating counterproductive policies aggressively depends on the discretion of the executives. Moreover, a KS culture requires effective management practices in order to be effective [9].

This may engage some practical approach or an involvement of a more deliberate effort like the use of balanced scorecards so that trainings will be tracked. The balanced scorecard "supplemented traditional financial measures with criteria that measured performance from three additional perspectives—those of customers, internal business processes, and learning and growth" [14].

Other approaches include the rewarding of collaborative endeavours over a single performer, the directing of the governmental development function with the aim of enlarging learning opportunities, the recognizing of the human resources function for the purpose of extracting the qualities that employees must have, and the creating of an example that comes from the top by bundling offers with promotions that which regards to attitudinal KS. In fact, KS has been positively associated with the employees' perceptions of KS culture [5]; while top management support as well influenced the level and quality of KS by influencing commitment of employees [20].

Levin, Cross, Abrams, and Lesser (2002) [21] concluded that trust is the missing link and a critical aspect in KS and management in organizations. They have as well highlighted the roles that managers play in the development of trust among the employees in the organization, through the following actions:

• Creating a common understanding on the nature of the business or how it works;



- Demonstrate trust-building behaviours; and
- Bring people together

Apart from these, it is also helpful if additional attention on both the levels of trust and solidarity will be further investigated, so that pre-conditions for KS will be stimulated [22]. This will also allow the development of trust and culture of KS among employees. Organizations should also foster more attention towards the "fit of team members selected for a project team and the types of orientation and socialization programs to be given to instil interpersonal trust as a project team has a finite lifespan" [40].

Trust in the context of KS has also opened issues related with culture and rewards system. In terms of culture, [39] suggested that service providers should consider research evidence and consultation for the development of their professional expertise. They must also dedicate time and resources for KS resources when needed, wherein professional development tools will be incorporated.

#### 4.2.3 Communication and Interpersonal Relations

In the process of change, especially in the 21<sup>st</sup> century, new learning patterns can be adopted all through the organization, which includes ideas. However, certain sharing mechanisms require a trusted and secured environment for people to engage in KS. This could also make them "feel involved in the process of change" [26]. It is therefore essential that KS is constituted in the commendation of personal opinions, ideas and views and be integrated with multiple techniques. Making these and knowledge available would serve as an essential element that would initiate the internal process and influences organizational learning [26].

It is a known knowledge that employees need constant communication for them to be able to participate and understand the KM approaches. It is the kind of communication that has high concerns with what the KM program represents including the behaviours that are necessary being aspired of which they are expected to lead certain messaging on the aspect of organizational output objectives.

In warranting that the communication plan is effectual, one then is advised to use numerous channels to distribute messages and this also entails leveraging external benchmarks and stories for the purpose of creating a convincing case for integration. One must also incorporate collaborative theories towards training the workforces, and on the other hand host KS events so that KM efforts will be branded and energized. As an example, [25] found the way of creating a communication strategy in order to attain the primary goals of reducing cultural negativity upon implementing KM. These strategies focus on "securing maximum buy-in or commitment from the management and employees to support the implementation process" [25].

In an association, one needs to develop messaging that reverberates with the culture of the organization. For instance, Lauring and Selmer [19] found that consistency in English management communication is a dominant factor that has strong relationships with the investigated knowledge sharing and performance variables. This is way dissimilar to the several approaches that tend to alter management system during the last twenty years when the feel and look of the program of change itself was founded on top of the culture of the organization. Besides, one should be advised to be adapting the feel and look of the KM brand to fit one's own structural method.



Koenig and Srikantaiah [17] mentioned that the negative side to of the BPR is downsizing which likely leaves a negative impact of the employees. Good communication and extensive KS are not likely to happen unless there is an atmosphere of trust and some commitment to the employee. From the perspective of KM, the employees are supposed to be the integral part of the intellectual asset of an organization. They stated that trust is one of the most important and crucial social capital within an organization. The prevailing view with downsizing is that employees are treated as commodities which hamper the intellectual assets, or the intellectual capital of the employees and their social capital or trust of the employees which are viewed as important parts of KM.

# 4.2.4 Rewards and Recognition

The best-practice organizations do not consider recognitions and rewards as the Pavlovian technique that was designed to motivate the workforces or the employees to do the sharing. But instead, these best-practice organizations viewed it as the means to recognize the value of sharing knowledge, boost awareness on the significance of teamwork and appreciate the contributions created by the employees. In this way, employee participation is encouraged [36]. The rewards may not necessarily be in the form of cash, but could be movie tickets, conference opportunities and recognition rewards [36]. Moreover, the "rewards system can also be designed in such a way to send strong signals to individuals to share knowledge" [40]. Table 3 summarizes the beneficial ways to enhance KM in the public sector of Malaysia.

**Table 3:** Enhancing Knowledge Management

Author	Enhancement of KM
Ling, 2011; Hendriks, 1999	Use of ICT and technology in order to encourage human values like motivation
O'Dell & Hubert, 2011; Mihai, 2009	Communication and interpersonal relationship
Wickramasinghe & Widyaratne, 2012; O'Dell & Hubert, 2011; Ling, 2011; Mihai, 2009; Tsui, 2006; Levin, Cross, Abrams, & Lesser, 2002	Development of trust between leaders and employees
Wickramasinghe & Widyaratne, 2012; O'Dell & Hubert, 2011	Development of rewards and recognition

The above-mentioned findings are as well found in vast research efforts that mainly seek to improve KM in organizations. These elements were commonly pointed out as the same features that would improve organizations through KS and even KM. For this paper, the enhancement of KM will require an assessment and focus on (1) use of ICT and technology in order to encourage human values like motivation [10,22]; (2) communication and interpersonal relations [26,28]; (3) development of trust between leaders and employees [21,22,26,28,39,40], and (4) development of rewards and recognition [40,28].



#### 5.0 CONCLUSION

Sharing practices, information and knowledge across national and cultural boundaries has become a means to answer crucial global problems. For these issues where the agencies in the government has ever more consolidated with its foreign counterparts, it is on this milieu also that information sharing and transnational knowledge networks grow in importance as mechanisms for teamwork or collaboration.

The contextual disparities among the participants are said to be producing distances in technology, geography, resources, knowledge, relationships, organizational factors, intentions, politics, and culture. These distances are thereby affecting their ability to connect in the interactions and processes that are importantly needed to the performance of the network.

The reviews from this paper could provide useful highlights for the management of the public sector, not only in Malaysia but most importantly in any culture closely to the Malaysian settings. The factors discussed could provide beneficial information on what needs to be focused in enhancing effective KS among public service employees. Management should also pay equal attention and consideration to the impeding factors that could hinder efficient flow of KS activities. Thus, all the mentioned above are the practical contribution of this paper. However, future researchers would be encouraged to also look out at ways on improving KS and KM in the private, through comparison between the Eastern and Western culture as this study was only focused on how it could be practical in the Malaysian way.

Indeed, KM in the public sector requires thorough decisions at all levels. Several important details still requires consideration from top management, and with the appropriate culture and efficient leadership, KM strategy can be implemented successfully which is a crucial need in all public sectors.

#### **REFERENCES**

- [1] D.K. Abili, F.N. Thani, F. Mokhtarian, M.M. Rashidi, The role of effective Factors on Organizational Knowledge Sharing. Procedia Social and Behavioral Sciences 29 (2011) 1701-1706.
- [2] B. Alajmi, Understanding Knowledge-Sharing Behavior: A Theoretical Framework, (2008).
- [3] E. Arora, Knowledge management in public sector. Journal of Arts Science & Commerce 2 (2011) 165-171.
- [4] N.H.B.B. Azhar, Motivation factors on knowledge sharing among public sector organizations in Malaysia. MBA Research Report, (2012).
- [5] C.E. Connelly, E.K. Kelloway, Predictors of employees' perceptions of knowledge sharing cultures. Leadership & Organization Development Journal 24 (2003) 294–301.
- [6] S.S. Dawes, M.A. Gharawi, G.B. Burke, Transnational public sector knowledge networks: Knowledge and information sharing in a multi-dimensional context. Government Information Quarterly 29 (2012) 112-120.



- [7] M. Gagné, A model for knowledge sharing behavior. Human Resource Management 48 (2009) 571-589.
- [8] S.K. Goh, M.S. Sandhu, Knowledge sharing among Malaysian academics: Influence of affective commitment and trust. The Electronic Journal of Knowledge Management 11 (2013) 38-48.
- [9] A. Gupta, V. Govindarajan, Knowledge management's social dimension: Lessons from Nucor Steel. Sloan Management Review 42 (2000) 71-80.
- [10] P. Hendriks, Why share knowledge? The influence of ict on the motivation for knowledge sharing. Knowledge and Process Management 6 (1999) 91-100.
- [11] P.H.J. Hendriks, Many rivers to cross: From ICT to knowledge management systems. Journal of Information Technology 16 (2001) 57-72.
- [12] M. Ipe, Knowledge sharing in organizations: A conceptual framework. Human Resource Development Review 2 (2003) 337-359.
- [13] M.B. Ismail, Z.M. Yusof, Factors affecting knowledge sharing in public organisations in Malaysia. In Knowledge Management International Conference and Exhibitions (KMICe), (2008).
- [14] R.S. Kaplan, D.P. Norton, Using the Balanced Scorecard as a strategic management system. Harvard Business Review (2007) 1-15.
- [15] S.R. Kathiravelu, N.N.A. Mansor, K. Kenny, Factors influencing knowledge sharing behavior (KSB) among employees of public services in Malaysia, International Journal of Academic Research in Economics and Management Sciences 2 (2013) 107-119.
- [16] N. Keijzer, C. Ørnemark, P. Engel, Networking for learning: The human face of knowledge management?. ECDPM Policy Management Brief Maastricht 18 (2006).
- [17] M.D. Koenig, T.K. Srikantaiah, The evolution of knowledge management", in Knowledge Management for the Information Professional, Information Today Inc., Medford, NJ, (2000).
- [18] N. Kumar, R.C. Rose, The impact of knowledge sharing and Islamic work ethic on innovation capability. Cross Cultural Management 19 (2012) 142-165.
- [19] J. Lauring, J. Selmer, Multicultural organizations: common language, knowledge sharing and performance. Personnel Review 40 (2011) 324 343.
- [20] J.-H. Lee, Y.-G. Kim, M.-Y. Kim, Effects of managerial drivers and climate maturity on knowledge-management performance: Empirical validation. Information Resources Management Journal 19 (2006) 48–60.
- [21] D.Z. Levin, R. Cross, L.C. Abrams, E.L. Lesser, Trust and knowledge sharing: A critical combination. Somers, NY: IBM Institute for Knowledge-Based Organizations (2002).
- [22] C.T. Ling, Culture and Trust in Fostering Knowledge-Sharing. The Electronic Journal of Knowledge Management 9 (2011) 328-339.



- [23] Lubiga et.al., Using ICT to enhance Knowledge Management in higher education: A conceptual framework and research agenda. International Journal of Education and Development using Information and Communication Technology 26 (2010) 83-101.
- [24] K. McGraw, K. Harrison-Briggs, Knowledge Acquisition: Principles and Guidelines. Englewood Cliffs, Prentice Hall (1999).
- [25] Y.M. Mei, S.T. Lee, S. Al-Hawamdeh, Formulating a communication strategy for effective knowledge sharing. Journal of Information Science 30 (2004) 12-22.
- [26] A. Mihai, Improving knowledge sharing in an open informal network: Knowledge management in open coffee. Dissertations 26 (2009) 1-22.
- [27] N. Noor, J. Salim, Factors Influencing Employee Knowledge Sharing Capabilities in Electronic Government Agencies in Malaysia, IJCSI International Journal of Computer Science Issues 8 (2011) 106-114.
- [28] C. O'Dell, C. Hubert, Building a Knowledge-Sharing Culture. The Journal for Quality and Participation 34 (2011) 22-26.
- [29] M. Othman, C.O. Egbu, Issues associated with knowledge sharing initiatives in government agencies in Malaysia. In CIB World Conference 2010, School of Built Environment, The University of Salford.
- [30] P.E. Pedersen, (2003). Adoption of mobile Internet services: an exploratory study of mobile commerce early adopters. Retrieved August 11, 2010.
- [31] A. Riege, N. Lindsay, Knowledge management in the public sector: stakeholder partnerships in the public policy development. Journal of Knowledge Management 10 (2006) 24-39.
- [32] T. Ramayah, A.L. Jasmine, J.I. Yeap, An Empirical Inquiry on Knowledge Sharing Among Academicians in Higher Learning Institutions. Minerva: A Review of Science, Learning and Policy 51 (2013) 131-154.
- [33] E.M. Rogers, Diffusion of Innovations, 5th ed., New York, The Free Press, (2003).
- [34] M.S. Sandhu, K.K. Jain, I.U. Ahmad, Knowledge sharing among public sector employees: evidence from Malaysia. International Journal of Public Sector Management 24 (2011) 206-226.
- [35] N.A. Siddiquee, Managing for results: lessons from public management reform in Malaysia. International Journal of Public Sector Management 23 (2010) 38-53.
- [36] M. Sutton, Knowledge citizen's approach to knowledge sharing, rewards and incentive. South African Journal of Information Management 8 (2006) 1-4.
- [37] S.O. Syed-Ikhsan, F. Rowland, Knowledge management in a public organization: A study on the relationship between organizational elements and the performance of knowledge transfer. Journal of Knowledge Management 8 (2004) 95-111.



- [38] S.O. Syed Ikhsan, F. Rowland, Knowledge management in public organisations in Malaysia. Do people really share?, (2007), Available at: http://www.kmtalk.net/article.php?story=200706240101037.
- [39] L. Tsui, A Handbook on Knowledge Sharing: Strategies and Recommendations for Researchers, Policymakers, and Service Providers. Edmonton, Alberta: Community-University Partnership for the Study of Children, Youth, and Families (CUP), (2006).
- [40] V. Wickramasinghe, R. Widyaratne, Effects of interpersonal trust, team leader support, rewards, and knowledge sharing mechanisms on knowledge sharing in project teams. Journal of Information and Knowledge Management Systems 42 (2012) 214-236.
- [41] N.I. Yusof, M.N. Masrek, S.A. Noordin, Determinants of Knowledge Productivity among Administrative and Diplomatic Officers: An Exploratory Study, (2012).