

# FACTORS AFFECTING KNOWLEDGE SHARING IN PUBLIC ORGANIZATIONS IN MALAYSIA

Mohd Bakhari Ismail<sup>a</sup> and Zawiyah Mohammad Yusof<sup>b</sup>

Faculty of Technology and Information Science  
Universiti Kebangsaan Malaysia  
43600 Bangi, Selangor  
Tel: +603-89269837, +603-89216759 Fax: +603-89256732  
<sup>a</sup> [bukhisma@yahoo.co.uk](mailto:bukhisma@yahoo.co.uk), <sup>b</sup> [zmy@ftsm.ukm.my](mailto:zmy@ftsm.ukm.my)

## ABSTRACT

*Knowledge sharing is an inevitable activity that underpins the business of knowledge management. It is a crucial activity since knowledge bears no value if it is not distributed and shared. However, the question of whether knowledge sharing does really exist in public organizations and factors affecting the practice are yet to be known. This paper reviews other research in the area in order to determine factors that affect knowledge sharing in the public sector in Malaysia. Synthesizing from the literature, this paper proposes a theoretical framework that takes into consideration the individual, organizational and technological dimensions that might affect knowledge sharing in Malaysia public sector.*

## Keywords

*Knowledge sharing, public organizations, Malaysia*

## 1.0 INTRODUCTION

Public sector efficiency and effectiveness have always been important issues in many countries including Malaysia (Ali, 2006). In the Ninth Malaysia Plan (9<sup>th</sup>MP) report (2006), statistics by the Public Complaints Bureau (PCB) of Malaysia showed that from the year 2000 until 2005 “On average, 50 per cent of complaints received by the PCB were on the failures or delays in attending or responding to the needs of customers”. The failures and delays are caused by many factors. One of the factors identified is lack of information and knowledge sharing between government agencies (9<sup>th</sup>MP 2006).

According to Wigg (1999), knowledge management can play an important role to increase public service delivery. However, knowledge sharing may not happen if employees are not willing to share their knowledge and expertise. Sharing knowledge is something difficult to an individual (Davenport & Prusak, 1998) and normally people may not share knowledge unless it is useful and beneficial to them (Ryu, Hee & Han, 2003). Hence, this paper reviews existing research and proposes a theoretical framework of factors that influence knowledge sharing in public sectors.

## 2.0 KNOWLEDGE MANAGEMENT AND KNOWLEDGE SHARING

Knowledge management is a fast growing discipline with a lot of ideas yet to be tested, issues to resolve, and a lot of learning have to be discovered (Beckman, 1999). According to Al-Hawamdeh (2003), there are five important dimensions in knowledge management activities:

- Knowledge capture;
- Knowledge creation;
- Knowledge use (leverage);
- Knowledge sharing; and
- Knowledge retention.

Knowledge sharing is an important dimension in knowledge management (Al-Hawamdeh, 2003). It is a process between individuals (Ryu et al., 2003) which cannot be seen directly nor observe (Lee, 1989). According to Al-Hawamdeh (2003), knowledge sharing in broader perspective refers to the communication of all types of knowledge including explicit knowledge (information, know-how and know-who) and tacit knowledge (skills and competency). Senge (1990) stresses that to share knowledge does not mean giving something to someone, or getting something from someone. Knowledge sharing happens when an individual is really interested to help others to develop a new capability for action (Senge, 1990). Thus, knowledge sharing refers to the willingness of individuals in an organization to share whatever they have or create (Gibbert & Krause, 2002).

### 2.1 Definition of knowledge sharing

Knowledge sharing is also known as knowledge transfer which means sharing knowledge between individuals and groups in an enterprise (Disterer, 2001). According to Lee & Al-Hawamdeh (2002) knowledge sharing is a deliberate act that make knowledge reusable by other people through knowledge transfer. Van den Hooff, Elving, Meeuwse & Dumoulin (2003) define knowledge sharing as a process where individuals exchange knowledge (tacit or explicit) and together create a new knowledge. Yang (2004) asserts knowledge sharing as a dissemination of information and knowledge to the entire organization or department.

In this paper, knowledge sharing is defined as a process that involves individuals in public sector to share knowledge (tacit or explicit) for the purpose to increase performance and public service delivery.

## 2.2 The Importance of Knowledge Sharing

Knowledge sharing is human act and is considered critical to organizations (Ives, Torrey & Gordon, 2000). Knowledge that is created in human mind, in general has a little value to the enterprise unless it is shared (Small & Sage, 2006). The biggest value of knowledge that can be achieved in an organization is when it is shared because it can to increase job performance and facilitate new knowledge creation (Cohen, 1990). According to Zhang, Li & Shi (2005), sharing knowledge in organization serve four benefits:

- i) Increase intellectual capital structure in the organizations;
- ii) Change individual competitiveness into organizational competitiveness, minimize organizational dependency on individual and reduce the possibility of lost of employee because of changing place of work;
- iii) Change organizational competitiveness into individual competitiveness in which individual can gain knowledge from organizational repository. This will increase individual competitiveness;
- iv) The cost to gather knowledge in organization will be reduced compare to those available in the market

## 3.0 KNOWLEDGE SHARING IN PUBLIC SECTOR

Public organizations seem to give attention on the importance of knowledge management in drafting policies and enhance service delivery (Thomas, 2005). However, there is little study both on knowledge management and knowledge sharing in such a sector (McAdam & Reid, 2000). This could be due to the status of public sector as non-profit organizations (Syed Ikhsan & Rowland, 2004). For non-profit organizations, knowledge sharing has its limitation. It is seen relevant to areas such as to continuously increase performance, other than to increase customer and employee satisfaction (Pan & Scarbrough, 1999).

Although several studies on knowledge management has been carried out, but studies pertaining to knowledge sharing in public organization particularly in Malaysia is at scarce (Syed Ikhsan & Rowland, 2004). Among the studies carried out on knowledge management in public organizations elsewhere are a study by Liebowitz & Chen (2003), a study on knowledge management initiatives by Shields, Holden, & Schmith (2000) and a study on knowledge management practice particularly on decision making and situation handling by Wiig (2002). Studies on knowledge management in public sector in Malaysia are carried out by Quin, Yusoff & Hamdan (2005) on public

sector readiness in implementing knowledge management and by Salleh & Syed Ahmad (2005) on knowledge management in local authorities. Whereas studies focusing on knowledge sharing in public organizations with particular attention on Malaysia are a study by Syed Ikhsan & Rowland (2004) on knowledge performance transfer in a ministry; a study by Supar, Ibrahim, Mohamed, Yahya & Abdul (2005) on factors affecting knowledge sharing in three selected higher institution and its impact on performance; and a study by Ahmad, Sharom & Abdullah (2006) on knowledge sharing in public sectors from business process management perspectives.

## 4.0 FACTORS AFFECTING KNOWLEDGE SHARING IN PUBLIC SECTORS

Based on Orlikowski (1992) model of technology and a study by Van den Brink (2003), three dimensions are proposed as the key factors in knowledge sharing: individual, organization and technology. This is because in order for organizations to fully leverage their knowledge-based assets, they must first understand factors that affect knowledge sharing at individual level (Sharrat & Usoro, 2003). Furthermore, knowledge sharing takes place in the organization (Van den Brink, 2003) and to facilitate the knowledge sharing process, information and communication technology play an important role (Van den Brink, 2003).

### 4.1 Individual factors

Four components of individual dimension were included in the study: awareness (Lee & Al-Hawamdeh, 2002), trust (Sharratt & Usoro, 2003), personality (Awad & Ghaziri, 2004) and job satisfaction (Engstrom, 2003).

Unawareness represents the first phase of knowledge sharing initiative in organizations without knowledge sharing process in place (Van den Brink, 2003). The awareness about the important of knowledge sharing is considered as an attitude that every employee should have including the top management (Van den Brink, 2003). In this study, awareness is defined as the degree to which an employee aware of the importance of knowledge sharing and benefits he/her could gain from the sharing. Thus, the following hypothesis is proposed:

*H<sub>1</sub>: Awareness of the importance of knowledge sharing is positively related to knowledge sharing practice.*

Knowledge sharing is facilitated by reciprocal and trust amongst members in a community (Scarbrough & Swan, 2001). Trust is described as an expression of confidence between several parties during whatever exchange, which means confidence that does not harm or risk through other parties' action, or confidence that is not exploited by any party (Jones & George, 1998). So, trust is the key to knowledge transfer (Davenport & Prusak, 1998). In this study, trust is defined as the degree to which a member believes that the community is knowledgeable and

competent (Sharratt & Usoro, 2003). Thus, the following hypothesis is proposed:

*H<sub>2</sub>: Trust is positively related to knowledge sharing practice.*

According to Awad & Ghaziri (2004), personality is one of the impediments of knowledge sharing and employees who are extroverts, self confidence, feel secured have more tendency to share their experience and knowledge compared to those who are introverts, self-centred of security conscious. An individual personality can be characterized through his values, attitude, mood and emotion (Van den Brink 2003). In this study, personality is defined as employee's attitude whether extrovert, confident and feel secure to share knowledge compare to those who are introvert, self-centred and cautious (Awad & Ghaziri, 2004). Thus, the following hypothesis is proposed:

*H<sub>3</sub>: Extrovert personality is positively related to knowledge sharing practice.*

An employee should feel satisfied with his daily jobs in order to be in knowledge transfer environment (Engstrom, 2003) Through community of practice, employees share ideas and best practise to increase job satisfaction and overall team performance (*Socitm Insight*, 2003). In this study, job satisfaction is defined as the degree to which an individual satisfy with his/her own daily work. Thus, the following hypothesis is proposed:

*H<sub>4</sub>: Job satisfaction is positively related to knowledge sharing practice.*

#### **4.2 Organizational factors**

In organizational dimension, five variables are suggested: organizational structure (Syed Ikhsan & Rowland, 2004; Sharrat & Usoro, 2003), organizational culture (Syed Ikhsan & Rowland, 2004; Sharrat & Usoro, 2003), rewards and recognitions (Lee & Al-Hawamdeh 2002), work process (Lee & Al-Hawamdeh, 2002) and office layout (Lee & Al-Hawamdeh, 2002).

Organizational structure refers to how people and task in an organization is arranged to ensure the work done (*Encyclopaedia of Management*, 2000). Traditionally, public sector organizational structures are compartmentalized and this complicates the information and knowledge sharing between units and different levels in organizations (Cong & Pandya, 2003). In this study, organizational structure is defined as the number of levels of authority in an organization (Buchanan & Huczynski, 1997; Sharratt & Usoro, 2003) Thus, the following hypothesis is proposed:

*H<sub>5</sub>: Organizational structure is positively related to Knowledge sharing practice.*

Organizational culture is one of the biggest challenges to knowledge sharing (Skyrme, 1997). Organizational culture means beliefs or values that are shared (Van den Brink 2003). Long (1997) explains organizational culture in terms of values, norms and practises. In this study, organizational culture is defined as practices, values and norms that promote sharing culture in an organization (Sharratt & Usoro, 2003; Syed Ikhsan & Rowland, 2004). Thus, the following hypothesis is proposed:

*H<sub>6</sub>: Organizational culture is positively related to knowledge sharing practice.*

Rewards can be in terms of monetary incentives and non monetary incentives (Bartol & Srivastava, 2002). To encourage and create a consistent knowledge sharing, monetary values such as financial rewards, salary increment and the like should be used (Davenport & Prusak, 1998). In this study, reward means financial incentives and recognitions means non financial incentives (Bartol & Srivastava, 2002, Bock et al. 2005; Al-Hawamdeh, 2003). Thus, the following hypothesis is proposed:

*H<sub>7</sub>: Rewards and recognitions are positively related to knowledge sharing practice.*

According to Davenport & Prusak (2000) knowledge management process like knowledge sharing should be included in work process. Therefore, many organizations around the world had and are trying to introduce effective knowledge management in their work process (Chaudhry, 2005). According to Andersson (2000), ones should be capable to contribute knowledge as part of their work process. Larsson & Ohlin (2002) believe that the implementation of knowledge management initiatives (such as knowledge sharing) should be, if possible, integrated into current work process. In this study, work process is defined as the processes and procedures involved when doing a particular job. Thus, the following hypothesis is proposed:

*H<sub>8</sub>: Work process is positively related to knowledge sharing practice.*

Davenport & Prusak (2000) suggested that corporate planner, architects, academics and executives should give consideration and creative thought to the issue of office design which hinder corporate world citizens from working with knowledge. It has becoming more important for them to design offices that can encourage socialization between employees to transfer knowledge (Arora, 2002). Lee & Al-Hawamdeh (2002) question whether office layout encourages social interaction among employee or not. In this study, office layout is defined as the physical design of office layout either open or close can influence knowledge sharing in organization. Open office means workers are seated in cubicles whereas close office means officers have their own rooms. Thus, the following hypothesis is proposed:

*H<sub>5</sub>: Open concept office layout is positively related to knowledge sharing practice.*

### 4.3 Technological factors

Based on Orlikowski model (1992), Van den Brink (2003) defines technology as software and hardware that people in organizations use in order to do their task which means information and communication technology (ICT). The main role of ICT in knowledge sharing is *to connect people with other people or with explicit knowledge* (Van den Brink, 2003). Although real knowledge sharing has little to do with hardware or technology (Wenger & Synder 2000), three variables are considered to be included in the study which are ICT tools (Syed Ikhsan & Rowland, 2004), ICT infrastructure (Syed Ikhsan & Rowland, 2004) and ICT know-how (Syed Ikhsan & Rowland, 2004).

According to Syed Ikhsan & Rowland (2004), effective knowledge management depends on the readiness of employees to share knowledge through computer facilities that can be accessed by all organizational employees. ICT infrastructure is needed to support knowledge creation, knowledge structure, knowledge penetration and knowledge use (Van den Brink, 2003). In this study, ICT infrastructure is defined as an up to date physical ICT infrastructure that helps employee create, share and transfer knowledge in organization (Syed Omar & Rowland, 2004). Thus, the following hypothesis is proposed:

*H<sub>10</sub>: ICT infrastructure is positively related to knowledge sharing practice.*

Smith (2001) states that ICT tools play important role in knowledge management. Anderson & Smith (1998) divided functionalities of ICT tools into five segments which are office applications (such as e-mail, messaging, calendaring and scheduling), groupware (such as discussion databases, application sharing and electronic meeting systems), document systems (such as digital documents), work process systems (such as workflow management systems, process support systems and eforms) analytical systems (such as decision support systems and data warehouse) and knowledge systems (such as portals, e-learning and knowledge sharing). ICT tools that exist in public organizations can help and facilitate employees to share knowledge (Syed Ikhsan & Rowland, 2004). In this study, ICT tools is defined as tools such as e-mail, groupware and computer-based information systems that facilitate knowledge sharing in public organizations (Syed Omar & Rowland 2004). Thus, the following hypothesis is proposed:

*H<sub>11</sub>: ICT tools is positively related to knowledge sharing practice.*

Syed Ikhsan & Rowland (2004) state that sufficient and suitable ICT training to all employees have a positive relationship with knowledge creation and knowledge

transfer. In this study, ICT know-how is defined as the computer literacy of worker in public sector in doing their daily works. Thus, the following hypothesis is proposed:

*H<sub>12</sub>: ICT know-how is positively related to knowledge sharing practice.*

### 4.4 Knowledge sharing practice

Knowledge sharing practice is measured through the quality of knowledge shared. Quality knowledge becomes important attention when a community become mature (Chiu, Hsu & Wang, 2006). Thus, in this study the quality of knowledge shared is measured based on McKinney, Yoon & Zahedi (2002), DeLone & McLean (2003) and Chiu et al. (2006) approach that is relevant, easy to understand, accurate, complete, can be trusted and timely.

### 5.0 PROPOSED THEORETICAL FRAMEWORK

A theoretical framework is developed as presented in Figure 1.

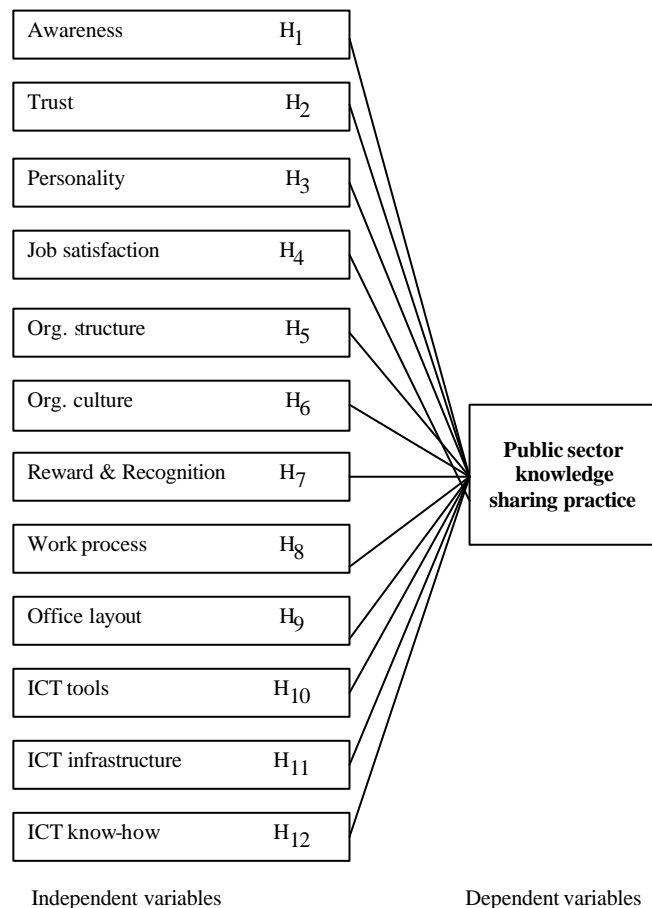


Figure 1. Proposed theoretical framework

### 6.0 CONCLUSION AND FUTURE RESEARCH

The authors advocates that, in order for the public organizations to fully leverage the knowledge of their employees, they must first understand the factors that make their employees share knowledge since knowledge sharing

is an 'unnatural' act. A theoretical framework is proposed for the development of hypotheses based on twelve factors identified which influence the practice of knowledge sharing in public sector. Those factors are categorised into three categories which are individual factors, organizational factors and technological factors. The constructs have been operationally defined based on the scope of the research. The operational definition provides the foundations for empirical testing of the research model in the subsequent phase of the study. Groundwork is laid for a follow up study that will test and validate this model.

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