

FACTORS AFFECTING KNOWLEDGE SHARING IN PUBLIC ORGANIZATIONS IN MALAYSIA

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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 (9thMP) 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 (9thMP 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:

H₁: 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:

H₂: 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:

H₃: 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:

H₄: 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:

H₅: 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:

H₆: 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:

H₇: 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:

H₈: 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:

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.

REFERENCES

- Ahmad, H., Sharom, N. & Abdullah, C. S. (2006). Knowledge Sharing Behaviour in the public sector: the business process management perspectives. *Proceedings of the Knowledge management conference & exhibition*, 435-439.
- Al-Hawamdeh, S. (2003). *Knowledge management cultivating knowledge professionals*. Oxford: Chandos Publishing.
- Ali, J. (2006). *Mengurus sumber manusia*. Kuala Lumpur: Dewan Bahasa dan Pustaka.
- Andreassen, T.W. (1994). Satisfaction, loyalty and reputation as indicators of customer orientation in the public sector. *International Journal of Public Sector Management* 7 (2),16-34.
- Arora, R. (2002). Implementing KM- a balances score card approach. *Journal of Knowledge Management* 6 (3), 240-249.
- Awad, E. M. & Ghaziri, H.M. (2004). *Knowledge management*. New Jersey: Pearson Education Inc.
- Bartol, K.M. & Srivastava, A. (2002). Encouraging knowledge sharing: The role of organizational reward systems. *Journal of Leadership and Organization Studies* 9 (1), 64-76.
- Beckman, T. J. (1999). The current state of knowledge management, in *Knowledge management handbook*, New York: CRC Press.
- Bock, G.W., Zmud, R.W., Kim, Y-G. & Lee, J-N (2005). Behavioral intention formation in knowledge sharing: Examining the Roles of Extrinsic Motivators, Social-Psychological Forces, and Organizational Climate. *MIS Quarterly* 29(1), 87-11.
- Buchanan, D. & Huczynski, A. 1997. *Organisational Behaviour : An Introductory Text*: London. Prentice-Hall.
- Chaudhry, A.S. 2005 Knowledge sharing practices in Asian institutions: a multi perspective from Singapore. *Proceedings of the 71th IFLA General Conference and Council*. Available at <http://www.ifla.org/IV/ifla71/papers/066e-Chaudhry.pdf> [23 June 2007].
- Chiu, C.M., Hsu, M. H. & Wang, E.T.G. (2006). Understanding knowledge sharing in virtual communities: An integration of social capital and social cognitive theories. *Decision Support Systems* 42(3):1872-1888. <http://www.sciencedirect.com> [23 Ogos 2006]
- Cohen, W. M. & Levinthal, D.A. (1990). Absorptive Capacity: A new perspective on learning and innovation. *Administrative Science Quarterly* 35 No.1 (March), 128-152.
- Cong, X. dan Pandya, K.V. (2003). Issues of knowledge management in the public sector *Electronic Journal of Knowledge Management* 1(2): 25-33. <http://www.ejkm.com> [12 Oktober 2006].
- Davenport, T. H. & Prusak, L. (1998). *Working knowledge: How organizations manage what they know*. Massachusetts: Harvard Business School Press.
- Davenport, T.H. & Prusak, L. (2000). *Working knowledge: How organizations manage what they know*, Boston, Massachusetts: Harvard Business School Press.
- DeLone, W.H. & Mc Lean, E.R (2003). The DeLone and Mc Lean model of information systems success: a ten year update. *Journal of Management Information Systems*, 19(4), 9-30.
- Disterer, G. (2001). Individual and social barriers to knowledge transfer. *Proceedings of the 34th Hawaii International Conference on System Sciences*. Available at <http://csdl2.computer.org/comp/proceedings/hicss/2001/0981/08/09818025.pdf> [12 February 2007]
- Encyclopedia of Management. (2000). Helms, M.M (Ed.). *Encyclopedia of Management*. Farmington Hills: Gale Group.
- Engstrom, T. E. J. (2003). Sharing knowledge through mentoring: . *Performance Improvement* 42(8), 36-42.
- Gibbert, M. & Krause, H. (2002). Practice exchange in a best practice marketplace. in *Knowledge management case book: Siemen Best Practices*. Erlangen, Germany: Publicis Corporate Publishing.
- Ives, W., Torrey, B & Gordon, C. (2000). Knowledge sharing is human behavior, in *Knowledge Management: Classic and Contemporary Works*. Massachusetts Institute of Technology Press
- Jones, G.R. & George, J.M. (1998). The experience and evolution of trust: Implications for cooperation and teamwork. *Academy of management review* 23(3), 531-546.
- Larsson K. J., & Ohlin, L. (2002). Implementing a knowledge sharing initiative – principles for success. Master's thesis. Linkoping Institute of Technology, Sweden.
- Lee, A. S. (1989). A scientific methodology for MIS studies. . *MIS Quarterly* March 13(1), 33-50.

- Lee, C.K. & Al-Hawamdeh, S. (2002). Factors impacting knowledge sharing. *Journal of Information and Knowledge Management* 1(1), 49-56.
- Liebowitz, J. & Chen, Y. (2003). Knowledge sharing proficiencies: The key to knowledge management, in *Handbook on knowledge management 1: Knowledge Matter*. Berlin: Springer-Verlag.
- Long, D.D., (1997). Building knowledge-based organization: How culture drive knowledge behaviour. http://www.providersedge.com/docs/km_articles/Building_the_Knowledge-Based_Organization.pdf accessed on 30 August 2007.
- McAdam, R. & Reid, R. (2000). A comparison of public and private sector perception and use of knowledge management. *Journal of European Industrial Training*, 24(6), 317-329.
- McKinney, V., Yoon, K. & Zahedi, F.M. (2002). The measurement of web-customer satisfaction: An expectation and disconfirmation approach. *Information Systems Research* 11(3), 296-315.
- Ninth Malaysian Plan 2006-2010*. (2006). Malaysia. Economic Planning Unit. Kuala Lumpur.
- Olikowski, W.J. (1992). The duality of technology: Rethinking the concept of technology in organizations, *Organization Science* 3(3), 398-427.
- Pan, S. L. & Scarbrough, H. (1999). Knowledge management in practice: An exploratory case study. *Technology Analysis & Strategic Management*, 11(3).
- Quin, T.Y., Yusof, M. & Hamdan, A. R. (2005). Knowledge management readiness in organization: a case of public sector in Malaysia. *Proceedings of the International Conference on Knowledge Management (ICKM)*. Available at http://ickm.upm.edu.my/Parallel%20Session%201/TanYitQuin_KM%20Readiness%20in%20Orgn.doc [28 May 2007].
- Ryu, S., Hee, H. S. & Han, I. (2003). Knowledge sharing behavior of physicians in hospitals. *Expert Systems With Application* 25, 113-122,
- Salleh, K. and Syed Noh, S.A. (2005). Knowledge management in the local authorities – a suitable platform for e-government. *Proceedings of the International Conference on Knowledge Management*, 435-439. Available at http://ickm.upm.edu.my/Parallel%20Session%201/Kalsom%20Salleh%20&%20Syed%20Noh_KM%20in%20the%20Local%20Authorities.doc [5 September 2007]
- Scarbrough, H. & Swan, J (2001). Knowledge communities and innovation. in *Trends in Communication: Special issues on Communities of Practice*. Amsterdam: Boom.
- Senge, P. (1990). *The fifth discipline: the art and practice of the learning organization (1st Ed.)*: Currency Doubleday.
- Sharratt, M. & Usoro, A. (2003). Understanding knowledge-sharing in online communities of practice. *Electronic Journal of Knowledge Management* 1(2), 187-196.
- Shields, R., Holden, T. & Schmidh, R.A. (2000). A critical analysis of knowledge management initiatives in the Canadian public service: the impact of a knowledge – based economy on work in the public service, the virtual of expertise and knowledge- based economy on work in the public service, the virtual of expertise and knowledge. <http://www.carleton.ca/innovation/km-fed.pdf> accessed on 8 September 2006.
- Skyrme, D.J (1997). From information to knowledge management: Are you prepared? <http://www.skyrme.com/pubs/on97full.htm>, accessed on 11 Januari 2007.
- Small, C. T. & Sage, A.P. (2006). Knowledge management and knowledge sharing: A review. *Information Knowledge Systems Management* 5, 153-169.
- Socitm Insight*. 2003. Rediscovering knowledge: an overview of knowledge sharing in the public sector. <http://www.socitm.gov.uk> September 2003 accessed on 23 Januari 2007.
- Supar, N., Ibrahim, A. A., Mohamed, Z.A., Yahya, M & Abdul, M. (2005). Factors affecting knowledge sharing and its effects on performance: a study of three selected higher academic institutions. *Proceedings of the International Conference on Knowledge Management*. http://ickm.upm.edu.my/Parallel%20Session%204/Norizahsupar_Factors%20Affecting%20K-Sharing%20&%20Its%20Effects%20on%20Performance.doc
- Syed Ikhsan & Rowland, F. (2004). Benchmarking knowledge management in a public organisation in Malaysia. *Benchmarking: An International Journal* 11(3), 238-266.
- Thomas, E. J. (2005). *Knowledge management in the public and private sector: a synthetic analysis the contemporary literature*. Master Thesis. School of Information Sciences and Technology, The Pennsylvania State University.
- Van den Brink, P. (2003). *Social, organizational and technological conditions that enable knowledge sharing*. PhD Thesis, Faculty of Technology, Policy and Management, Delft University of Technology. Holland.
- Van den Hooff, B., Elving, W.J.L., Meeuwse, J.M. & Dumoulin, C.M. (2003) Knowledge Sharing in Knowledge Communities, in *Communities and Technologies*. Deventer: Kluwer Academic Publishers.
- Wenger, E. & Synder, W. (2000). Communities of Practice: The Organizational Frontier. *Harvard Business Review*, 78(1), 139-145.

- Wiig, K. M. (1999). Introducing knowledge management into the enterprise, in *Knowledge management handbook*, New York: CRC Press.
- Wiig, K.M. (2002). Knowledge management in public administration. *Journal of Knowledge Management* 6(3), 224-239.
- Yang, J. T. (2004). Job-related knowledge sharing: comparative case studies. *Journal of Knowledge Management* 8(3), 118-126.
- Zhang, L., Li, J., & Shi, Y. (2005). Study on improving efficiency of knowledge sharing in knowledge-intensive organizations. *Proceedings of the First International Workshop on Internet and Network Economy*, 816-625.