International Journal of Economics and Finance



Vol. 1, No. 1 February 2009

Tacit Knowledge Sharing and SMEs' Organizational Performance

Rohana Ngah Faculty of Business Management Universiti Teknologi MARA

ohor Campus, KM 12, Jalan Muar, 85200 Segamat, Johor DT, Malaysia.

Tel: 60-16-206-5765 E-mail: rohanangah@johor.uitm.edu.my

Kamaruzaman Jusoff (Corresponding author)
Yale University
School of Forestry & Environmental Studies
205 Prospect St, New Haven, CT 06511-2104, USA

Tel: 203-676-7761 E-mail: jusoff.kamaruzaman@yale.edu

Abstract

Tacit knowledge (TK) exists in every corner of SME, in its structure and relationship especially in its people. Even though knowledge management will benefit SME as they are rich of tacit knowledge but lacking in expertise, financial capital and infrastructure, knowledge management (KM) is almost impossible for Small and Medium Enterprise (SME) currently. Since SME have efficient and informal communication network, knowledge sharing is essential especially in an organization with scarce resources. Therefore, in the wake of knowledge-based economy, tacit knowledge sharing is the best tool for SME in enhancing competence and organizational performance which suit its needs and background. Tacit knowledge sharing is still at infancy especially in SME.

Keywords: Tacit knowledge sharing, Organizational performance, Small and medium enterprises

1. Introduction

More than 99% of total business establishments in Malaysia are from SME (SME Annual Report 2006). SMEs have different structure and they develop different pattern of behavior especially in adapting to the environment (Hashim, 2007). Even though, SMEs operate in almost all industries, they are different in scope and importance (Hashim, 2007). This difference varies from industry to industry and also from country to country. In Malaysia, SMEs are largely found in four broad economic segments, namely, manufacturing, services, basic materials producers and Agriculture (Hashim, 2007). Even though SME are considered a backbone of industrial development in Malaysia (Ndubisi & Salleh, 2006), SME contribution to the economy is still relatively small (SME Annual Report 2006). As Malaysian government has made development of SMEs a high priority area, full supports is given to SME to enhance their performance in Ninth Malaysia Plan and Third Industrial Master plan which offers a platform for financial capital, training, information, policies and strategies. In 2004, National SME Development Council, which consist of 10 members, has been set up to further develop and sustain the growth of the SMEs sector in the national economy (Hashim, 2007). The efforts are to improving the infrastructure for developing SMEs, building the capacity and capability of SMEs and enhancing SMEs access to financing.

Recently, researchers and practitioners alike have been increasingly advocating knowledge sharing as essential process of the knowledge economy. Knowledge sharing would lead to knowledge accumulation, knowledge dissemination and knowledge acquisition. While there are debates on the importance between explicit and tacit knowledge, sharing this knowledge is ultimately very crucial in the organization. However, the last few decades, there has been an increasing interest in the tacit dimension of knowledge (Pathirage et al., 2007) but yet still considered to be relatively unexplored and not fully understood (Zack, 1999) compared to work on explicit knowledge (Leonard & Sensiper, 1998, Holtshouse, 1998, Pathirage et al., 2007). Nonaka & Takeuchi (1998) argue that tacit knowledge is the one that create competitive advantage for the companies. The nature of knowledge in SMEs is almost all in tacit nature (Cohen & Kaimnekais, 2007). Nonaka & Takeuchi (1995) suggest that the flow from tacit to explicit knowledge would benefit the organization. According to Wong & Radcliffe (2000), tacit knowledge in SMEs is difficult to turn into explicit therefore sharing this tacit knowledge is the best to help improving SMEs' performance particularly when tacit knowledge

sharing would takes place during socialization and in an informal ways where SME have efficient and informal communication network (Egbu et al, 2005). The cost of knowledge management either IT or human resources are costly (Choi & Lee, 2003; Du et al, 2005). Therefore most of small and medium-sized firms cannot afford to have or adopt knowledge management system (McAdam & McCreedy, 1999; Kuan and Aspinwall, 2004). However, knowledge sharing cost is bearable for SMEs (Du et al, 2003). Tacit knowledge exists profusely in SMEs and tacit knowledge sharing is prevalent in SMEs through face-to-face meeting and brainstorming. As SMEs is superior in internal networking and efficient in communication, knowledge sharing is very rampant (Desouza & Awazu, 2006). Knowledge is the means for SMEs to overcome poor business environment and change the complex business environment to be manageable (Kim, 2002). The purpose of this paper is to highlights the gap of tacit knowledge sharing in Small and Medium Entreprises.

2. Nature of tacit knowledge

Knowledge lies in human minds and exists only if there is a human mind to the knowing (Widen-Wulff & Suomi, 2007). There are three dimensions of knowledge: width, depth and tacitness (Nooteboom, 1993). Knowledge can be created by intentional and resource-consuming efforts (Du et al, 2007). The neglect of the tacit knowledge based on people and ideas has undoubtedly reduced the corporate market place's capability for true innovation and sustainable competitiveness (Gamble and Blackwell, 2001). Knowledge is a resource or stock in the organization (Coulson-Thomas, 2003) that exist along the organization. Knowledge is valuable, rare, not easy to substitute and difficult to imitate, making it a competitive advantage for the organization. A firm cannot have the same knowledge as the others' because different firms have different human and knowledge resources (Kim, 2002). No organization can have a total same knowledge. Tacit knowledge is one of strength that organization has that is more difficult to transfer or copy (Nooteboom, 1993). In the resource-based theory, Hisrich et al (2008) further highlight that in order for firms to create its unique resources which are rare, valuable and non-immitigable; it has to exploit its internal knowledge. Thorpe et al (2005) stress that performance in SME is related to the ability of entrepreneurs and managers in integrate their knowledge of markets such as customers, suppliers, and stakeholders. Most of literature on knowledge in SMEs adopts Barney's RBT (1991).

Knowledge is classified into two types as tacit and explicit by Polanyi (1966, p.135 – 146). Explicit knowledge is the type of knowledge that can be easily documented and shaped (Choi and Lee, 2003). It can be created, written down, transferred and followed among the organizational units verbally or through computer programs, patents, diagrams and information technologies (Keskin, 2005; Choi & Lee, 2003). Tacit knowledge is what embedded in the mind (Choi & Lee, 2003), can be expressed through ability applications; is transferred in form of learning by doing and learning by watching. Based on Polanyi (1966), all knowledge has tacit dimensions. It can be completely tacit, semiconscious or unconscious knowledge held in people's heads and bodies (Leonard and Sensiper 1998) Tacit knowledge can be classified into two dimensions: technical and cognitive (Pathirage et al, 2007). Technical encompasses information and expertise in relation to "know-how" while cognitive consists of mental models, beliefs and values. Tacit knowing embodied in physical skills resides in the body's muscles, nerves and reflexes and is learned through practice. And tacit knowledge also embodied in cognitive skills (Leonard & Sensiper 1998). While explicit ready to be explored, tacit knowledge is difficult to be extracted without the consent of the knowledge owner. Tacit knowledge and explicit knowledge complete each other and they are important components of knowledge management approaches in organizations (Beijerse, 1999). Keskin (2005) found that tacit knowledge, explicit knowledge and performance are closely related especially when the external environment is hostile. The great virtue of tacit knowledge is that it is automatic, requiring little or no time or thought (Stewart, 2000). Stewart (2000) holistic emphasize that tacit knowledge tends to be local as well as stubborn because it not found in manuals, books, databases or files. It is oral. It is created and shared around water cooler or over coffee break. Tacit knowledge spreads when people meet and tell stories. As tacit knowledge remains hidden, unspoken and tacit, this knowledge can either knowledge embodied in people and social networks or knowledge embedded in the processes and products that people create (Horvath, 2007). Effective KM requires a symbiosis between explicit and tacit knowledge in line with technology and human resource processes (Choi and Lee, 2003). Almost all studies of knowledge management emphasize on knowledge flow.

Knowledge must be continuously circle and flow in the organization. As long there is a stock of knowledge, during any period of time, there is a flow of knowledge (Stewart, 2000). Making knowledge available to others and capturing a new knowledge as well has been described by Nonaka (1991) as spiral of knowledge. Nonaka & Takeuchi (1995) examine the concept in terms of a knowledge spiral encompassing four basic patterns of interaction between tacit and explicit knowledge: socialization, externalization, combination and internalization. There is no specific definition of this spiral knowledge but the main idea of the spiral is the sharing of knowledge of an individual and share it with others and eventually acquire a new knowledge which is simply knowledge sharing. According to Nonaka & Takeuchi (1995), tacit knowledge need to be convert into explicit in order to make it useful. And the process is through socialization and informal. However, Leonard & Sensiper (1998) pointed out that knowledge not necessarily needs to be explicit in utilizing it. Knowledge can remained tacit but collective tacit knowledge to lead to creativity and innovation (Leonard & Sensiper 1998).

3. Tacit knowledge sharing & organization performance

Not much literature review or company includes knowledge sharing as part of its key components as knowledge sharing is considered as difficult to measure (Christensen, 2007). But the bottom line is knowledge sharing is critical to a firm's success (Davenport & Prusak, 1998). The major problems of knowledge sharing are to convince, coerce, direct or otherwise get people within organization to share their information (Gupta et al, 2000). For organization, knowledge sharing is capturing, organizing, reusing and transferring experience-based knowledge that reside within the organization and making that knowledge available to others in the business. The interesting characteristics of knowledge is that its value grows when shared (Bhirud et al, 2005). The question is whether people are unaware of unable to articulate their tacit knowledge? Tacit knowledge sharing can take place at anytime, anywhere in the organization. Wah et al (2005) believe that an individual will only involve in knowledge sharing if such conditions exist, namely opportunities to do so, communication modality, expectation of the benefits of members accrue, expectation of the cost of not sharing knowledge, context compatibility for those who shared, motivation is crucial precondition for knowledge sharing, personal compatibility and liking and opportunism (associated with transaction cost analysis). Riege (2005) suggested that three important elements of knowledge sharing are individual, structure and technology would help organization in encouraging knowledge sharing in the organization. As tacit knowledge is very personal and very valuable, organization should concentrate on utilizing and capitalizing its tacit knowledge sharing. It is argued that the most effective means to transfer valuable tacit knowledge is actually not to codify it but rather to transfer it through an implicit mode (Schenkel & Teigland, 2008).

Tacit knowledge can be either knowledge embodied or knowledge embedded (Horvath, 2007). Embodied knowledge resides in the people minds while knowledge embedded is shown in products, processes or documents. The value of tacit knowledge is only known through its outcomes - innovation and organizational performance. Gold et al (2001) emphasize that knowledge infrastructures such as technology, structure and culture along with knowledge acquisition, conversion, application and protection are essential organizational capabilities for higher organizational performance. They believe that these key infrastructures would enable maximization of social capital. Technology dimensions are part of effective knowledge management include business intelligence, collaboration, distributed learning, knowledge discovery, knowledge mapping, opportunity generation as well as security (Gold et al., 2005) while structure is important to optimize knowledge sharing process within the firm. And the most significant hurdle of knowledge management or knowledge sharing in particular is organizational culture. Shaping culture is the central of firm's ability to manage its knowledge. Husted et al (2005) reveal that extrinsic motivators such as reward (monetary incentives) are related to knowledge exploitation while intrinsic motivators such as self-fulfilling task are related to knowledge exploration. Pathirage et al (2007) highlighted studies by Grant (1996) and Zander and Kogut (1996) that tacit knowledge can be integrated externally through relational networks those span organizational boundaries that are paramount for superior performance. Knowledge sharing leads to higher organizational performance (Du et al, 2007; Widen-Wulff & Suomi, 2003, 2007, Darroch & McNaughton, 2002) especially when knowledge sharing capabilities is combined with organizational resources (Widen-Wulff and Suomi, 2007). Choi & Lee (2002) in Keskin (2005) indicated that applying tacit and explicit oriented strategies is imperative for firm performance by large sized firms in western countries, but scant on firms' performance of SMEs in developing countries. As small businesses may lack performance measurement frameworks, these businesses should start with simple performance measures in their performance measurement framework, as suggested by Keegan et al (1989; 1994) in Ali (2003). Small business should strive for simplicity and keep their performance measurement system focused and simple (Ali, 2003). Ali (2003) had proposed a performance measurement framework that suit SMEs as developed by Neely et al (Ali, 2003) on balanced-scorecard. The expression "small firm" has no single definition, mainly because of the wide diversity of businesses. In the literature, some of the most widely used criteria to delineate a "small business" include size, number of employees, sales volume, asset size and type of customers (Ali, 2003). The size of the businesses and the increasingly competitive market force small and medium enterprises to consider more cost-effective processes than large enterprise must consider. As well, small businesses have to deal with unique operational and limited financial and economic resources (Ali, 2003). The strength of small business lies in greater motivation, better survey of the entirety of a project, tacit knowledge in unique skills, more informal communication along shorter lines, less bureaucracy, greater proximity to the market and to own production (Nooteboom, 1994). In short, in order for SME to perform better in market, they need supportive culture, active knowledge sharing activity and innovation process.

Every organization deal with many issues and SMEs are not exempted. Based on the problems faces by SMEs attempting to sustain their market share and to increase growth, they require strategic and operational planning, management of human resource, decision making related to financial, technical and marketing issues; and performance measurement (Ali, 2003).

4. Tacit knowledge sharing in SMEs

The strength of SMEs lies in motivation, good network, tacit knowledge in unique skills, shorter informal communication, less bureaucracy, greater proximity to market and internally which is important to be innovative (Nooteboom, 1993). Tacit knowledge sharing is ubiquitous in informal and without bureaucracy (Egbu et al, 2005).

Informal face-to-face of social interaction is the most effective technique used in the sharing of knowledge in SME whereby Egbu (2005) highlights knowledge in SME is in tacit nature. Individuals who set up SMEs do so because they have knowledge in key areas of competencies and think they can compete using such knowledge (Desouza & Awazu, 2006). In small business, knowledge tend to be shallow (no functional specialists) and tacit. Shallow can be modified by supplementing from external sources while narrow knowledge leads to tacit knowledge on how to run a business (Nooteboom, 1993). According to Davenport and Prusak (2000), network plays an important role in developing knowledge and innovative thinking especially during informal meetings. Most of consulting and service firms have organized their informal networks into formal networks in ensuring that all knowledge is acquired necessarily. Tacit knowledge helps SME to be different from its competitors particularly on their resources as based on resource-based theory (Barney, 1991) which should be valuable, rare, limited and non-imitable. The more tacit knowledge is shared, the harder is the imitation (Leonard & Sensiper 1998). When tacit knowledge is shared and combined to become collective tacit knowledge, it would then lead to creativity and innovation (Leonard & Sensiper 1998). The concept of tacit knowledge is very important in the context of innovation and its diffusion (Nooteboom 1993), explain that tacit knowledge, hard to capture in the term "know-how". Nooteboom (1993) refers tacit knowledge – "know-how" consists partly of technical skills – the kind of informal (Nonaka, 1998), of the small business as craftsmanship. Innovation is a distinction drawn in communication (Pohlmann, 2005) which is the root of knowledge sharing. Tacit knowledge sharing is essential in SME with scarce resources (Egbu et al, 2005).

5. Conclusion

Moving towards knowledge-based economy, SMEs should capitalize its internal knowledge which residing within its employees - tacit knowledge. Sharing this tacit knowledge would help SME to be creative and innovative thus enhancing its performance. The ability of SMEs to innovate and improve continuously has been proved to be related to the employees' skills and knowledge (Nonaka, 1998). Focusing on the internal knowledge – tacit knowledge – and share it in the organization as collective tacit knowledge would lead SME for a better performance especially in producing new products and services. With the impact of globalization, SME has to find their own resources that suit to their environment and their capabilities. Utilizing their very own resource in their people, equip with entrepreneurial orientation of the owners/managers of SME and supports from government, Malaysian SMEs could achieve higher performance thus contribute to the economy.

References

Ali, Imran. (2003). *A performance measurement framework for a small and medium enterprise*. Dissertation PhD. University of Alberta, Canada.

Beijerse, R. P. u. (2000). "Knowledge management in small and medium-sized companies: knowledge management for entrepreneurs." *Journal of Knowledge Management* 4(2): 162-179.

Bhirud, S., Rodrigues, L., & Desai, P. (2005). Knowledge sharing practices in KM: A case study in Indian software subsidiary. *Journal of Knowledge Management Practices.* 2 (2): 83-90

Hisrich, D.R. & M. P.Peters, (2008). Entrepreneurship. Singapore, McGraw-Hill.

Darroch, J. & Mc Naughton, R. (2002). Examining the link between knowledge management practices and types of innovation. *Journal of Intellectual Capital*. 3(3):210-222.

Davenport, T. H. & L. Prusak (2000). Working Knowledge: How organizations manage what they know. Boston, Harvard Business School Press.

Davenport, T.H & Prusak, L. (1998). Working *Knowledge: How Organizations Manage What They Know*. Cambridge , MA: Harvard Business School Press.

Desouza, K.C & Awazu, Y. (2006). Knowledge Management at SMEs: five peculiarities. *Journal of Knowledge Management*. 10(1):32-43.

Du, R, Ai, S., Ren, Y. (2007). Relationship between knowledge sharing and performance: A survey in Xian, China. *Expert Systems with Applications*. .32:38-46.

Egbu .O. C., Hari, S., and Renukappa, H. S. (2005). "Knowledge management for sustainable competitivenss in small and medium surveying practices". *Structural Survey*. 23(1):7-21.

Drucker, F. P. (1986). Innovation and Entrepreneurship. New York, Harper and Row.

Gamble, P.R. and Blackwell, J. (2001). Knowledge Management: A state of the art guide. Kogen Page. London, UK.

Gold H. A., Malhotra, A., & Segars, H. A. (2001). Knowledge management: An Organizational Capabilities Perspective. *Journal of Management Information Systems.* 18(1):185-214

Grant R.M. (1996). Toward a knowledge-based theory of the firm. *Strategic Management Journal*. 17(10):100-122.

Gupta, B., Iyer, L., & Aronson, J.E. (2000). Knowledge management: practices and challenges. *Industrial Management and Data Systems*. 100(1):17-21.

Hashim, M. K. (2007). SMEs in Malaysia: A Brief Handbook. Kuala Lumpur, August Publishing Sdn Bhd.

Horvath, J.A. (2007). Working with Tacit Knowledge. IBM Institute For Knowledge Management

Husted, K., Michailova, S., & Minbaeva, D. (2005). *Knowledge sharing and organizational performance: the role of extrinsic and intrinsic motives*. 8th International Human Resource Management Conference, Cairns, Australia, Copenhagen Business School.

Keskin, H. (2005). The relationships between explicit and tacit oriented KM strategy and Firm Performance. *Journal of American Academy of Business*, Cambridge Hollywood 7 (1), pp 169-176

Kuan Y.W & E. Aspinwall. (2004). "Characterizing knowledge management in the small business environment". *Journal of Knowledge Management*. 8(3) pp 44-61.

Lee, H. & Choi, B. (2003). Knowledge Management Enablers, Processes, and Organizational Performance: An Integrative View and Empirical Examination. *Journal of Management Information Systems*. 20 (1):179-228

Leonard, D. & S. Sensiper (1998). The role of tacit knowledge in group innovation.. *California Management Review* 40(3): 112-132.

Man, T. W. Y., Lau, T., & Chan, K.F. (2002). The competitiveness of small and medium enterprises: A conceptualization with focus on entrepreneurial competencies. *Journal of Business Venturing* 17: 123-142.

McAdam, R and McCreedy, T. (2004). Barriers to innovation within small firms in a peripheral location. *International Journal of Entrepreneurial Behavior and Research*. 10(3):206-221.

Nonaka, I. & Takeuchi, H. (1995). The knowledge-creating company: How Japanese Companies Create the Dynamics of Innovation. Oxford University Press. New York, NY.

Nonaka, I. (1998). The knowledge-creating company. Boston, Harvard Business School Press.

Nooteboom, B. (1999). Innovation, learning and industrial organization. *Cambridge Journal of Economics*. . 23(2):127-150.

Pathirage, C. P., D. G. Amaratunga, and Haigh, R. (2007). Tacit knowledge and organizational performance. *Journal of Knowledge Management* 11(1): 115-126.

Pohlmann, M., Gebhardt, H. and Etzkowitz, H. (2005). The Development of Innovation Systems and the Art of Innovation Management – Strategy, Control and the Culture of Innovation.. *Technology Analysis and Strategic Management*. 17(1):1-7.

Polanyi, M. (1966). The Tacit Dimension. Routledge and Kegan Paul Ltd, London.

Riege, A. (2005). Three-dozen knowledge-sharing barriers managers must consider. Journal of Knowledge Management. 9(3):18-35

Schencel, A. & Teigland, R. (2008). Improved organizational performance through communities of practice. *Journal of Knowledge Management*. 12 (1):106-118.

SME Annual Report 2006.

Stewart, T. A. (2000). Intellectual Capital: The new wealth of organizations. London, Nicholas Brealey Publishing

Wah, C.Y., Menkhoff, T., Loh, B., & Evers, H. (2005). Theorizing, Measuring and Predicting Knowledge Sharing Behavior in Organizations – A Social Capital Approach. *Proceedings of the 38th Hawaii International Conference on System Sciences*. Hawaii.

Widen-Wulff, G. & Suomi, R. (2003). Building a Knowledge Sharing Company – Evidence From the Finnish Insurance Industry. *Proceedings of the 36th Hawaii International Conference on System Sciences*.

Widen-Wulff, G. & Suomi, R. (2007). Utilization of Information Resources for Business Success: The Knowledge Sharing Model. *Information Resources Management Journal*. 20(1):46-67

Wong, W.L.P & Racliffe, D.F. (2000). The Tacit Nature of Design Knowledge. Technology Analysis and Strategic Management. 12(4): 493-512

Yang, J. (2007). The impact of knowledge sharing on organizational learning and effectiveness. *Journal of Knowledge Management*. 11(2): 83-90.

Zander, U. & B. Kogut (1995). Knowledge and the speed of the transfer and imitation of organizational capabilities: An empirical test. *Organization Science* 6(1): 76-92.

Zack, M. (1999). Developing a knowledge strategy. California Management Review. 41(3): 125-145.s.