

KNOWLEDGE SHARING INITIATIVES IN QUANTITY SURVEYING FIRMS IN MALAYSIA: PROMOTING, INHIBITING AND CHALLENGE FACTORS

Fadhilah Mohd Nor¹, Othman Mohamed² and Charles Egbu³

^{1,3} School of the Built Environment, University of Salford, The Crescent, Salford, M5 4WT, UK.

² Faculty of the Built Environment, University of Malaya, 50603 Kuala Lumpur, Malaysia.

Knowledge sharing in an organisation is often regarded as the act of making knowledge available to others within the organisation. It is also seen as the process by which knowledge held by an individual is converted into a medium that can be understood, absorbed, and used by other individuals. Knowledge sharing is important as it provides a link between the individual and the organisation, by 'moving' knowledge that resides within individuals to the organisational level, where it is converted into economic and competitive value for the organisation. This degree of importance attached to knowledge sharing is heightened in a knowledge economy, where knowledge is seen as a valuable resource for innovation and for gaining competitive advantage. However, increasing evidence points to a paucity of research that has investigated the nature of the different approaches to improving the effectiveness of knowledge sharing initiatives, and the appropriate organisational factors at play for knowledge sharing to be fully exploited, and the benefits gained by Quantity Surveying (QS) firms in Malaysia. This paper is based on a survey conducted among 282 respondents and interviews with 20 interviewees in 13 QS firms in Malaysia to explore and document promoting factors, inhibiting factors and challenges that organisation face with regard to knowledge sharing. The findings show that there are promoting factors associated with the effective at knowledge sharing initiatives: business strategy; organisational resources; reward; organisational culture and organisational infrastructure. Inhibiting factors are time constraint, lack of adequate resources for KM development; lack of communication skills and social network; lack of knowledge about KM and attitude of staffs. The main challenges pertain to KM strategy, training, business strategy, adequate resources and organisational culture.

Keywords: knowledge management, knowledge sharing, Malaysia, QS organisation.

INTRODUCTION

Drucker (1993) mentioned that knowledge is the most important strategic resource in organisations. Knowledge has to be managed in ways to make sure that the implementation and sharing of the knowledge is accomplished. Another important issue is the usage of knowledge, which ideally, must be captured, shared and used. Methods on how to capture valuable knowledge will depend on the type of knowledge, tacit or explicit. Knowledge exists at multiple levels within organisations. De Long and Fahey (2000) divided this into individual, group, and organisational levels. Roos and von Krogh (1992) added the levels of departments and divisions. People are very important in organisations to leverage knowledge because it is people,

¹ f.mohdnor@edu.salford.ac.uk

who actually can create, share, and use the knowledge. Leveraging knowledge is only possible when people can share the knowledge they have and can build on the knowledge of others. Knowledge sharing is the act of making knowledge available to others within the organisation. Stewart (1997) emphasized that knowledge is an important factor in organizations, and in the last decade it has been considered as the primary source of competitive advantage and (Nonaka and Takeuchi, 1995) accented that knowledge is a critical resource to the long-term sustainability and successfulness of the organizations. Grover and Davenport (2001) noted that the knowledge has to be learned and understood about how it was created, shared, and used in organizations while Drucker (1993) was of the view that the processes to facilitate the creation, sharing, and leveraging of individual and collective knowledge were needed. Managing knowledge in organizations requires managing several processes of knowledge (Ruggles, 1998) such as creation, storage, sharing, and evaluation of knowledge. Among those processes, sharing is crucial for knowledge-based organizations as it is very much a sign for the atmosphere of social interactions in the organizations. It requires individuals to share what they know. The interesting characteristic of knowledge is that its value grows when shared (Bhirud *et al.*, 2005). In practice, the lack of knowledge sharing has proven to be a major barrier to the effective management of knowledge in organizations (Hendriks, 1999; Davenport and Prusak, 1998). Knowledge sharing provides a link between the individual and the organisation by moving the knowledge that resides within individuals to the organisational level, where it is converted into economic and competitive value for the organisation (Hendriks, 1999). Davenport (1997) defined sharing as a voluntary act and distinguished it from reporting. Reporting involves the exchange of information based on some routines or structured formats whilst sharing implies a conscious act by an individual who participates in the knowledge exchange even though there is no compulsion to do so.

The main purpose of this paper is to provide insight, based on the data collection from the survey and interviews, into knowledge sharing initiatives in QS Firms. It highlights the main factors that could be seen to promote and inhibit the knowledge sharing initiatives within Quantity Surveying Firms and the challenges organisations face with regard to knowledge sharing.

KNOWLEDGE AND QUANTITY SURVEYING (QS) FIRMS

According to Carr-Saunders (1966), a profession may perhaps be defined as an occupation based upon specialized intellectual study and training, the purpose of which is to supply a skilled service or advice to others for a definite fee or salary. Similarly, QS firms are knowledge-intensive organizations that provide expert advice and professional knowledge to clients (Løwendahl, 2000). The organisational assets, arguably, reside in the experience and knowledge of staff, rather than in plant and equipment. There are four essential characteristics of QS firms (Fong and Choi, 2009).

1. Knowledge-intensive nature
2. Advisory nature
3. Competence governed by institutions
4. Code of conduct

1. Knowledge-intensive nature

A higher educational qualification is an element required by professions (Lowendahl, 2000). This is reflected in the common belief in the industry that a body of knowledge

originates from academic study and practical training in QS firms. Quantity surveyors' skills and expertise are thus the talent of quantity surveying firms and also contribute highly to firms' reputation. As a result, practitioners in these firms are associated with impressive academic backgrounds, supported by either accreditation of professional status from professional institutes or academic achievement in recognized academic institutions.

2. Advisory nature

It is claimed that altruistic and specialized services to clients are the core services of professionals (Becher, 1999). Quantity surveying firms in Malaysia are mostly private practices that seek to offer consultancy to clients in construction projects. The scope of their services is stretching beyond the traditional framework to suit clients' ever-increasing demand. There are basic services and additional services (Abdullah and Haron, 2007) that quantity surveying firms offer in order to adapt to different clients and business scenarios. Hence, the quality of situation-specific decisions (Bots and Bruijin, 2002) is a useful indicator to reflect the competence of a professional organization. To discharge their professional duties, quantity surveyors have to apply their knowledge and expertise to provide impartial and objective advice and analysis to clients. The quality of their decisions depends to a large extent on the appropriate exercise of their expert discretion and professional judgment in relation to cost control and contract administration for construction projects. As a result, with clients' needs well communicated between clients' representatives and quantity surveyors in advance, clients generally receive an excellent professional service from quantity surveyors (Fong and Choi, 2009).

3. Competence governed by institutions

It is essential for a professional service that a governing professional body is established to maintain the competence, and to control the standards of conduct of the profession (Bennion, 1969). Therefore, the title of 'chartered member' is taken as recognition of professional competence. The competence of professionally qualified quantity surveyors in Malaysia is well established and regulated by the professional institution, The Board of Quantity Surveyors Malaysia (BQSM). Although many practitioners claim to be quantity surveyors, the title of chartered quantity surveyor is only awarded to those who have passed the professional competence test set by the appropriate institutions. Clients, therefore, have some assurance of the standard of the intangible service they are purchasing under this system.

4. Code of professional conduct

Quantity surveyors are often involved in managing confidential information, such as tender sums submitted by contractors in construction projects and payments to contractors for work done on site. They have to be fully aware of, and abide by, provisions in the standards of conduct and professional ethics. The Quantity Surveyors Act 1967 (Quantity Surveyors (amendment) Rule, 2004) highlighted that only registered quantity surveyors are permitted to practice as consulting quantity surveyors by the Board. Similarly, the qualification of practitioners in quantity surveying firms is well controlled and recorded under the registers of the institution. Quantity surveying firms offer cost and contractual expertise to clients. The heavy reliance on the expertise and knowledge of staff sets a standard for outsiders to imitate. Freidson (1994) described these kinds of professional services as esoteric services.

RESEARCH METHODOLOGY

The research on which this paper is based was conducted between 15th November 2010 and January 2011. The research employed a combination of interviews and survey methods. Twenty (20) interviews were conducted among 13 QS firms to reveal contextually rich description about the nature of knowledge sharing in these firms. Small, medium and large QS firms were targeted. The definition adopted for QS firms is based on the size of employees (central bank of Malaysia, 2005). The small QS firm is between 5- 19 employees, the medium QS firm is between 20 – 50 employees and the large QS firm has more than 50 employees. The interviewees were senior QS, QS and junior QS. To supplement these findings, postal questionnaires were distributed to 918 quantity surveyors in QS firms in Malaysia. Two hundred and eighty two (282) usable questionnaires were received. The interviews were analysed using NVIVO software package, which assisted in establishing relationships between variables. The postal questionnaires were analysed statistically using the SPSS software package version 19.0.

FINDINGS

Promoting Factors for Knowledge Sharing Initiatives

Table 17: Factors for Promoting Knowledge Sharing Initiatives in QS Firms in Malaysia

Descriptive Statistics		
	N	Mean
promote Business Strategy	282	1.26
promote Adequate Resources (financial, time, people)	282	1.30
promote Reward and Incentive	282	1.33
promote Organisational Culture	282	1.34
promote Organisational Infrastructure (team, relationship and network etc)	282	1.39
promote Senior Management Support	282	1.44
promote KM Strategy	282	1.57
promote Training and education	282	1.65
promote Organisational Structure	282	1.66
promote Knowledge mapping	282	1.72
Valid N (listwise)	282	

The scale: 1 (Promote to a very high extent) 2 (Promote to a high extent) 3 (Promote to a low extent) 4 (Does not promote)

From the table 1, it is evident that the factors that are noted to promote knowledge sharing initiatives the most in QS firm in Malaysia are: the business strategy, adequate resources and reward and incentive. These are closely followed by organisational culture and organisational infrastructure. According to Mintzberg (1994), a strategy is a plan or something equivalent to a direction, a guide or course of action into the future, and a path to get from here to there. Business strategy is important to provide a framework for decision making (Boseman and Phatak, 1989). Without such strategy knowledge management may be approached in a haphazard manner without any restrictions (Carillo *et al.*, 2000). A strategy for implementing knowledge sharing within an organisation should set out clear goals and how these are to be achieved within a specified timeframe.

Adequate resources (financial, time and people) are essential for successful KM implementation (Robinson *et al.*, 2005). Financial support is inevitably required if an investment in a technological system is to be made. Human resources are needed to coordinate and manage the implementation of knowledge sharing initiatives as well as to take up knowledge related roles. Organisations have to free up time for their

employees to perform KM activities such as knowledge sharing as well as providing time and opportunities for people to learn (Martensson, 2000).

Reward and incentive also act as promoting factors for knowledge sharing initiatives. Rewards and incentives contribute to KM by shaping individual and group behaviours. Rewards for knowledge sharing are, *inter alia*, economic reward, reciprocity benefit, knowledge self-efficacy, the enjoyment derived from helping others and image (Sanghani, 2009). Rewards and incentives are defined as situational conditions which can motivate employees in the organisation to perform certain tasks with the expectation of receiving something in return. Although there are those who see rewards and incentive to be crucial to knowledge sharing, Gupta and Govindarajan (2000) have argued that tangible rewards alone are not sufficient to motivate knowledge sharing among individuals. In some cases formal rewards may be perceived as demeaning by professionals who are motivated by a sense of involvement and contribution (McDermott and O'Dell, 2001). Senior management support is ranked in the middle in terms of their mean values. Senior management support and leadership is vital for KM implementation (Robinson *et al.*, 2005). Liebowitz (2000) mentioned that without senior management commitment and involvement, KM cannot be carried out successfully.

Knowledge mapping and organisational structure are ranked lowest in terms of their mean values. There are several possible explanations for this result. One of the reasons may be that organisational structures in some QS firms are more centralised, stratified and formalised. O'Dell and Grayson (1998) have suggested that organisational structures should be designed to promote flexibility as a means of encouraging sharing and collaboration within and across organisational boundaries and supply chain. For Knowledge mapping, it is plausible that some QS firms have not provided the requisite ICT to facilitate an efficient and effective knowledge conversion process and to increase the speed and ease of access to critical knowledge assets even after the identification of 'who' has 'what' knowledge, 'when', and 'where' has been established.

Inhibiting Factors for Knowledge Sharing Initiatives

There are many other barriers to the successful implementation of knowledge sharing initiatives in QS firms. According to Disterer (2003), cultural aspects like an employee's social barriers are critical for knowledge sharing. The time it takes for staff to accept the concept of sharing knowledge (CPN, 2000 cited in Carrillo *et al.*, 2000) can also act as a barrier.

The findings from the interviews with 20 interviewees revealed that inhibiting factors for knowledge sharing are time constraint; inadequate resources for KM development; lack of communication skill and social network; lack of knowledge about KM and attitude of staff. Most of the QS firms in Malaysia are SMEs (central bank of Malaysia 2005). Generally, SMEs are often lacking of available time for KM (Egbu *et al.*, 2005). 15 out of the 20 interviewees noted that lack of awareness and understanding about KM, especially for junior QS; reluctance to use IT systems due to lack of familiarity and experience are inhibiting factors. Eight out of the twenty (20) interviewees noted that their practices are already good enough and individuals are unwilling to share their own knowledge. Also, five (5) of the 20 interviewees are of the view that the strictness of regulation, which they have to work around, is seen as one of the inhibiting factors for knowledge sharing.

Challenges Associated With Knowledge Sharing Initiatives

Table 2: Challenges that organisation face with regard to Knowledge Sharing

Descriptive Statistics	N	Mean
challenge in KM Strategy supported by IT and Non IT	282	1.36
challenge Training and education	282	1.40
challenge in Business Strategy	282	1.42
challenge in Adequate resources	282	1.46
challenge in Organisational Culture	282	1.48
challenge in Senior Management Support	282	1.56
challenge in Reward	282	1.65
challenge Organisational Structure	282	1.73
challenge in Organisational Infrastructure	282	1.83
challenge Knowledge mapping	282	1.94
Valid N (listwise)	282	

The scale: 1 (Very challenging) 2 (Challenging) 3 (Fairly challenging) 4 (Not challenging)

According to Egbu *et al.*, (2005) storing of knowledge is seen as a challenge for SMEs. Furthermore, converting tacit knowledge into explicit knowledge and sharing such knowledge is crucial in an organisation with scarce resources like QS firms in Malaysia. From the interviews, it is revealed that the telephone, the internet, intranet, IT-based database, teleconferencing, knowledge-based expert system and groupware are the main IT tools which support knowledge sharing. Face to face meeting, mentoring and coaching, project summaries, document and report formal and in-house training, standard work manual, brainstorming and story-telling are the non-IT approaches that support knowledge sharing. Table 2 shows that the very challenging factors that organisation face with regard to knowledge sharing are: putting in place a KM strategy; training and education and business strategy. These are closely followed by dealing with the provision of adequate resources; and addressing issues around organisational culture. A possible explanation for some of the results may be the general lack of adequate resources in QS firms. Another explanation is to do with lack of requisite leadership needed for KM implementation. Also, where an owner/manager is the main driver for knowledge sharing, decision making can be focused and centred at the top management level creating a major challenge in some organisations. In addition some of the owner/managers of micro and small firms lack requisite managerial skills and competences (Haksever, 1996). Some also have little formal training, and required skills for effective business management.

Factors like organisational structure and organisational infrastructure are ranked lowest in terms of their degree of challenge. This result may be explained by the fact that most of QS firms in Malaysia have simple, flatter and less complex structure, which will facilitate change initiatives across the organisation since functional integration both horizontally and vertically is easier to achieve and fewer complications will be encountered. An inspection of table 2 reveals that knowledge mapping was ranked lowest in terms of degree of challenge, and lowest in terms of promoting factor for knowledge sharing, which is rather surprising. Knowledge mapping is the field within KM that aims to optimise the efficient and effective use of the organisation knowledge. According to Davenport and Prusak (1998), developing a knowledge map involves locating important knowledge within the organisation and then publishing some sort of list or picture that shows where to find it. Knowledge maps usually point to people, as well as to documents and database. Perhaps, organisations do not fully appreciate all that is entailed in effective knowledge mapping for organisational benefits. As aforementioned, most of the QS firms in

Malaysia are SMEs, comprising fewer employees compared to large QS firms. According to Axland (1992), this indeed gives them advantage since it is easier to get all the employees together to initiate and implement a change. Furthermore, the employees know each other more intimately and have face-to face contact with one another, so there is a greater possibility that support for KM is obtained more easily.

CONCLUSIONS

Knowledge is a critical factor affecting an organisation's ability to remain competitive in the new global marketplace. Knowledge sharing is the corner-stone of many organisations' knowledge management strategy. Knowledge sharing in an organisation is the act of making knowledge available to others within the organisation. Knowledge sharing can be better understood by examining whether and how knowledge sharing impact on employees' ability, motivation, and opportunity to engage in knowledge sharing initiatives which in turn depend upon the cognitive, relational, and structural social capital. The top five promoting factors to knowledge sharing are business strategy, adequate resources, reward and incentive, organisational culture and organisational infrastructure. In undertaking their roles quantity surveyors face many challenges and inhibit the implementation of knowledge sharing initiatives within QS firms. The top five challenges associated with knowledge sharing are KM strategy, training and education and business strategy, adequate resources and organisational culture. The top five of inhibiting factors are time constraint; lack of adequate resources for KM development; lack of communication skills and social network, lack of knowledge about KM and attitude of staff. The companies that successfully implement knowledge management do not try to change in order to fit in with their knowledge management approach, but they build their knowledge management approach to fit their culture. As a result, there is not one right way to get people to share knowledge but many different ways depending on the values and style of the organisation. Knowledge sharing is now seen as a contributory factor in business improvement.

REFERENCES

- Abdullah, F. and Haron, I. (2007), "Profile of the Quantity Surveying Practice in Malaysia", International Conference on Construction Industry", *Universitas Bung Hatta*, Padang, Indonesia.
- Axland, S.(1992), "Small wonders" ,*Quality progress*, November, 29-34.
- Becher, T. (1999), *Professional Practice: Commitment and Capability in a Changing Environment*, Transaction Publishers, New Brunswick, NJ, USA.
- Bennion, F.A.R. (1969), *Professional Ethics*, Charles Knight, London, UK.
- Bhirud, S., Rodrigues, L., and Desai, P. (2005), "Knowledge Sharing Practices In KM : A Case Study In Indian Software Subsidiary", *Journal of Knowledge Management Practice*, **6**, <http://www.tlinc.com/artic1103.htm> [Date accessed 11 July 2011].
- Boseman, G. and A. Phatak (1989), *Strategic Management – Text and Cases*, John Wiley and Sons, New York, USA.
- Bots, P.W.G. and Bruijn, H.D. (2002), "Effective knowledge management in professional organizations: going by the rules", *Proceedings of the 35th Hawaii International Conference on System Sciences*, IEEE, Hawaii, USA.

- Carillo, P., Anumba, C. and Kamara, J.M. (2000), "Knowledge management strategy for construction: Key IT. And contextual issues", <http://itc.scix.net/data/works/att/w78-2000-155.content.pdf> [Date accessed 11 July 2011].
- Carr-Saunders, A.W. (1966), "Professionalization in historical perspective", in Vollmer, H.M. and Mills, D.L. (Eds), *Professionalization*, Prentice-Hall, Englewood Cliffs, NJ, USA.
- Davenport, T. and Prusak. L. (1998), *Working Knowledge: How Organizations Manage What They Know*, Harvard Business School, Boston, MA., USA.
- Davenport, T. H. (1997), *Information ecology*, Oxford University Press, UK.
- DeLong, D. and Fehey, L. (2000), "Diagnosing cultural barriers to knowledge management", *Academy of management Executive*, **14** (4), 113-127.
- Drucker, P. (1993), *Post-capitalist society*, Harper Business, New York, USA.
- Egbu C.O , Hari S. and Renukappa S.H.(2005), "Knowledge Management For Sustainable Competitiveness In Small And Medium Surveying Practices", *Structural Survey*, **23**(1), 7-21.
- Fong, P.S.W. and Choi, S.K.Y. (2009), "The Processes Of Knowledge Management in Professional Services Firms In The Construction Industry: A Critical Assessment Of Both Theory And Practice", *Journal of Knowledge Management*, **13**(2), 110-126.
- Freidson, E. (1994), *Professionalism Reborn: Theory, Prophecy and Policy*, Polity Press, Cambridge, MA., USA.
- Grover, V. and Davenport, T. H. (2001), "General perspectives on knowledge management: Fostering a research agenda", *Journal of Management Information Systems*, **18**(1), 5-21.
- Gupta, A. K. and Govindarajan, V. (2000), "Knowledge management's social dimension: Lessons from Nucor Steel", *Sloan Management Review*, **42**(1), 71-80.
- Haksever, C. (1996), "Total quality management in the small business environment", *Business Horizons*, **39**(2), 33-40.
- Hendriks, P. (1999), "Why share knowledge? The influence of ICT on the motivation for knowledge sharing", *Knowledge and Process Management*, **6**(2), 91-100.
- Liebowitz, J. (2000), *Building Organisational Intelligence: A Knowledge Management Primer*, Taylor and Francis Ltd., CRC Press, USA.
- Løwendahl, B.H. (2000), *Strategic Management of Professional Service Firms*, Handelshøjskolens Forlag, Copenhagen, Denmark.
- Martensson, M. (2000), "A critical review of knowledge management as a management tool", *Journal of Knowledge Management*, **4**(3), 204-16.
- McDermott, R. and O'Dell, C. (2001), "Overcoming cultural barriers to sharing knowledge", *Journal of Knowledge Management*, **5**(1), 76-85.
- Mintzberg H. (1994), "The Rise and Fall of Strategic Planning", *Harvard Business Review*, January-Feb 1994, 23.
- National SME Development Council (2010), *The central Bank of Malaysia*, <http://www.smeinfo.com.my/pdf/Massa.pdf> [Date accessed 14 July 2011].
- Nonaka, I., and Takeuchi, H. (1995), *The knowledge creating company: How Japanese companies create the dynamics of innovation*, Oxford University Press, New York, USA.

- O'Dell, C. and C. Grayson. (1998), "If Only We Knew What We Know: Identification And Transfer Of Internal Best Practice", *California Management Review*, **40**(3), 154-174.
- Robinson H.S. , Carrillo P.M., Anumba C.J. Al-Ghassani A.M. (2005), "Knowledge management practices in large construction organisations", *Engineering, Construction and Architectural Management*, **12**(5), 431-445.
- Roos, J. and von Krogh, G. (1992), "Figuring out your competence configuration", *European Management Journal*, **10**(4), 422-444.
- Ruggles, R. (1998), "The State of the Notion: Knowledge Management in Practice", *California Management Review*, **40**(3), 80-89.
- Sanghani, P. (2009), "Knowledge management implementation: holistic framework based on Indian study", *Pacific Asia Conference on Information Systems (PACIS)*, <http://www.pacis-net.org/file/2009/%5B83%5DKNOWLEDGE%20MANAGEMENT%20IMPLEMENTATION%20HOLISTIC%20FRAMEWORK%20BASED%20ON%20INDIAN%20STUDY.pdf> [Date accessed 11 July 2011].
- Stewart, T. A. (1997), *Intellectual capital: The new wealth of organizations*, Doubleday Currency, New York, USA.