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The Impact of Organisational Size on the Implementation of Knowledge Sharing Practices in Quantity Surveying Firms in Malaysia

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Abstract

Knowledge management (KM) is increasingly seen as a key factor for organisational success in the information era and in the knowledge economy. Knowledge sharing in organisations is an important aspect of knowledge management. There is an on-going debate as to the impact that organisational size have on the implementation of knowledge sharing initiatives in organisational contexts. Much of this debate takes place in different industrial settings, with very little in the construction industry sector. Similarly, there are little or no empirical studies conducted in this regard in Quantity Surveying Firm. Quantity Surveying Firms are, arguably, knowledge-intensive in nature, and currently face intense local and global competition in the current business environment. This paper seeks to explore the extent to which organisational size impacts on the implementation of knowledge sharing in Quantity Surveying Firms in Malaysia. Data based on both review of external literature and from pilot questionnaires completed by quantity surveying firms in Malaysia were analysed and provide the basis for conclusions and recommendations. The paper also observed that there are many constructs and measures of organisational size which needs due cognisance in understanding the different and complex ways in which organisational size may impact on the implementation of knowledge sharing practices and initiatives.

Keywords: knowledge management, knowledge sharing, quantity surveying

1. Introduction

Size is an important variable that affects organisational aspects. Some studies mentioned that the size of organisations and functional areas influences the effectiveness of knowledge-sharing activities in and between business functions (e.g. Connelly and Kelloway, 2003; Sveiby and Simons, 2002). Size is defined as the size of workforce (i.e the number of employees), has influenced the flow of knowledge inside the organisation. The impact of size on group dynamics has been well explored in the social sciences literature, the discussion of organizational size has received less attention in management (Stoel, 2002). Employees in smaller firms are more flexible than employees of larger organizations in terms of making cultural shifts, but they perceive various cultural aspects the same way (Ismail, 2005).

Lee and Xia (2006), stated that prior research has examined the impact of organizational size on information technology innovation adoption but the results appeared to be mixed and inconsistent because of the influence of other unaccounted variables. However S

2. Quantity Surveyor (Qs) and Knowledge Management (Km)

Quantity surveying has increased expectation by client because of the service offered and this coupled with greater competition both internally (from the same profession) and externally (from the globalisation) has resulted in a challenge to their professional status. To meet these challenges QS needs to enhance their professionalism and status in order that practitioners can maintain a competitive advantage. Knowledge is a key feature of the surveyor's portfolio and therefore effective knowledge management skills can help to improve their expertise. Practitioners learn from experience and this is a continuing process. In any organisation junior members draw on the experience of seniors as part of their learning experience and to some degree that learning flow can be reversed. What is required is some means by which that learning experience, together with intuitive 'knowledge', can be 'captured' and disseminated to colleagues within the same organisation.

Knowledge management (KM) is a systematic management approach to identify and capture the 'knowledge assets' of a firm so that they can be fully exploited and protected as a source of competitive advantage (Scarborough & Swan 1999).

BSP² 2003 (cited in Davis *et. al.*, (2007) argues that KM does not only increase the profitability of the organisation but also reduces mistakes and waste of resources. Companies are realising that their competitive edge is mostly the brainpower or intellectual capital of their employees and management.

Loberman (2002) stated that a, “*corporate architecture*” needs to be in QS firm to facilitate learning and to create knowledge sharing and dissemination mechanisms across the organisation and that the capture and systemisation of knowledge is a prerequisite to being a learning organisation. The growing number of organisations utilising intranets and ‘lessons learned’ databases gives some indication of the perceived value of knowledge management systems. However Newell (2004) found that where transfer of learning had occurred, it had depended far more on social networks and process of dialogue than on ICT.

These finding coincide with the view of Nonaka (1991) in that the key to organisations gleaning greater knowledge is through facilitating:

- the sharing of tacit knowledge through socialisation
- the collation of discreet pieces of explicit knowledge to create new knowledge
- the conversion of tacit knowledge into explicit knowledge i.e. externalising what individuals know
- the conversion of explicit knowledge to tacit knowledge, i.e. internalising explicit knowledge.

2.1 Knowledge Sharing (KS)

Knowledge sharing (KS) is one of the knowledge management process (Ryu *et al.*, 2003) and also the main component in knowledge management systems (Alavi and Leidner 2001).It is a process between individuals (Ryu *et al.*, 2003) and increases when it is shared (Halal E.,1997). Sharing knowledge between colleagues improves the economical benefits a firm can realise from the knowledge of their employees. This is true especially for professional service firms (Huang, 1998 p.582).

According to (Al-Hawamdeh, 2003) KS is one of the important activities in knowledge management. In a broader perspective, KS refers to any type of knowledge including explicit knowledge or information, ‘*know-how*’ and ‘*know-who*’, and tacit knowledge in the forms of skill and competency. To share or disseminate knowledge is related to how individuals provide a right knowledge to right person at the right time (Larsson and Ohlin, 2002). KS involves the network to understand what others know (Wiig, 1999).

Hooff *et al.* (2003) defines KS as a process where individuals exchange knowledge (tacit and explicit) and collectively create new knowledge. According to Lee and Al-Hawamdeh (2002) KS is ‘*the deliberate act in which knowledge is made reusable through its transfer from one party to another*’. Yang (2004) defines KS as information and knowledge dissemination to entire organization or department. However,

according to Coleman (1999) KS differs from information sharing because knowledge is not easily copied like information. Coleman insists that knowledge still belongs to the owner though it is shared.

2.2 Organisational unit size and knowledge sharing

To encourage the use of KM, the QS firms should be given a clearer concept of KM and more guidelines for its implementation. The exact KM approach relies heavily on the type and size of the organisation (Davis *et. al.*, 2007).

Peter(1994) suggested that no organizational unit should exceed 150 individuals, because this is the point at which a formal structure is required, interpersonal relationships and communication start to break down, and trust diminishes; this decreases knowledge sharing among unit members. Similar observations have also been reported in the management and social sciences literature (Peters, 1994).

Miller 1956 cited in Serenko *et al.*, (2007) noticed that there seems to be some limitation built into us either by learning or by the design of our nervous systems, a limit that keeps our channel capacities in this general range. He contributed to the nascent field of knowledge management by highlighting what appears to be a natural limitation to handle information, a concept he called “channel capacity”.

Dunbar (1992) explored a related concept with Miller about relationship between various primate groups and neocortex size. Dunbar noted that the size of the primate’s neocortex could be used to predict the average size of the social group that characterized specific group of primates and discovered that a group limit of 150 seemed to emerge organically.

Another founder is W.L. Gore & associates the manufacturer of fluoropolymer products, which limits each production facility to a maximum of 150 people. According to Bill Gore, the company founder, “we found again and again that things get clumsy at a hundred and fifty” (Gladwell, 2002, p. 184). In limiting plants to no more than 150 people, Gore was able to eliminate a layer of middle management and engage in KM activities. Gore has created an organizational structure that allows managers to “really know somebody – know their skills, and abilities and passions – what you do, what you like to do, what you are good at” (Gladwell, 2002, p. 190).

Company managers are able to successfully operate intellectual capital assets and use them to create wealth by observing the natural limits of human workers’ social channel capacity (Serenko *et al.*, 2007).

“Transactive memory”, developed by psychologist Wegner D. (1987) is for individuals to assign certain information and memory tasks to one another once close relationships have been established; however, the number of close relationships that can be included in any transitive memory system is limited by the social channel capacity of the actors. As a result, it is suggested that 150 employees is the breaking point

at which Gita's Rule takes place. Gita's rule is a hypothesized relationship between organizational unit size and internal knowledge flows made by Gita Anselm in Serenko *et al.*, (2007).

Large organizations that require the efficient and maximal flow of knowledge across organizational units, should limit the number of individuals in any one unit to 150, and support activities that increase the likelihood that at least one individual with a high degree of public self-consciousness emerges from each unit with a strong reputation for trustworthiness (Serenko *et al.*, 2007). This person can spearhead regular opportunities for these individuals to interact and share their accumulated unit knowledge.

In addition with the organisational unit size, there are other factors that are proposed to be related to the impact of knowledge sharing in the QS firm. They are:

- interpersonal communication
- interpersonal relationship and trust
- connective efficacy
- organisational unit structure
- culture of the work environment

2.3 Interpersonal communication

The table below summarises the approved SME definitions based on number of full-time employees and annual turnover in Malaysia.

Table 1: SME Definitions Based On Number Of Full-Time Employees And Annual Sales Turnover.

<i>sector</i>	<i>Service sector (including ICT)</i>
<i>size</i>	
<i>micro</i>	<i>Full time employees less than 5 or annual sales turnover of less than RM200,000</i>
<i>small</i>	<i>full-time employees of between 5 and 19 or with annual sales turnover of between RM200,000 and less than RM1million</i>

<i>medium</i>	<i>full-time employees of between 20 and 50 or with annual sales turnover of between RM1 million and RM5 million</i>
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Source : Secretariat to National Small and Medium Enterprises Development Council, Bank Negara Malaysia (2005).

Based on the Table 1 above QS firms in Malaysia are categorised in SME because according to Egbu *et al.*, 2005:

'the definition of SMEs is based on the numbers of employees, where organisations with less than 250 employees are considered as SMEs'...

Communication is vital for the development of social intra-organizational networking that forms the foundation for knowledge sharing processes (Al-Alawi *et al.*, 2007). Interpersonal communication can refer to face-to-face, electronic or voice-based and interaction among organizational members. In SMEs' organisation as well as in smaller units, the socialization process occurs naturally because most people work in close proximity of one another; this shortens interpersonal communications channels and enables the flow of information in any direction. Furthermore it may be argued that if no formal KM guidelines are in place, a major part of social interaction may relate to non-organizational aspects. It is often difficult to distinguish between business and non-business topics, especially, in small circles. In addition, such informal interpersonal communications may build long-lasting trusting relationships that in turn facilitate further knowledge flows (Serenko *et al.*, 2007). An empirical study by McAdam and Reid (2001) cited in Egbu *et al.*, (2005) revealed that the SME sector was less advanced, with a mechanistic approach and a lack of investment in KM.

2.4 Interpersonal relationship and trust

Previous research reveal that the greatest willingness to share knowledge occurs when social relationships are based on emotional attachment, mutual trust, respect and genuine understanding of fellow workers' strengths and capabilities. Trust and reputation are not necessary preconditions of one another. Lucas (2005) differentiates between the concepts of trust and reputation, and how they impact the transfer of best practices and knowledge within an organization. It is possible to trust someone who does not have a particularly good reputation, and it is equally possible to mistrust another person with a stellar reputation. Trust is engendered among individuals who develop relationships based on interactions with colleagues. Trust, then, can be assessed on the basis of personal interaction, and is limited to a specific small group of people; the larger the group, the fewer personal relationships employees have been established that impedes knowledge sharing (Connelly and Kelloway, 2003).

2.5 Connective efficacy

Connective efficacy is measured by the strength of the knowledge contributor-knowledge recipient relationship (Serenko *et al.*, 2007). For example, an employee may believe she possesses vital knowledge that, if properly utilized by several other organisational members, would benefit the entire organisation (i.e. have a high degree of knowledge self-efficacy in QS task). At the same time, this person may feel that once her knowledge is distributed to the organisational unit, it is unlikely to reach those who require it (i.e. have a low degree of connective efficacy), the stronger this belief, the higher the probability of knowledge hoarding. In fact, there is no point contributing knowledge if this is not going to make any difference in organizational performance.

McDermott (1999) provided a good explanation by noting that sharing someone's knowledge involves a person guiding someone else through their thinking or using their insights to help others see their own situation better. Furthermore, the person who shares and distributes knowledge ideally is, or should be, aware of the knowledge purpose, use, needs or gaps of the person receiving the knowledge. This implies that not all employees need to share knowledge, because it would not be re-used or applied (Riege,2005).

2.6 Organizational unit structure

The structure of an organisation or a unit is usually designed to form a horizontal and vertical division of work, activities, and responsibilities; it is a fundamental framework required to enable desired organisational processes and systems (Thomas and Allen, 2006). Traditional organisation structures are usually characterised by complicated layers and lines of responsibility with certain details of information reporting procedures. Nowadays, most managers realise the disadvantages of bureaucratic structures in slowing the processes and raising constraints on information flow. In addition, such procedures often consume great amount of time in order for knowledge to filter through every level. Syed-Ikhsan and Rowland (2004) argued that knowledge sharing prospers with structures that support ease of information flow with fewer boundaries between divisions. Furthermore (Al-Alawi *et al.*, 2007) state that flat, informal, decentralised, and flexible structures that have short communications lines are ideal for knowledge sharing activities. In Malaysia, the structures of QS firms are still based on hierarchical and bureaucratic procedures.

2.7 Culture of the work environment

According to McDermott and O'Dell,(2001) companies that successfully implement knowledge management do not try to change their culture to fit 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, but many different ways depending on the values and style of the organization. De Long & Fahey, (2000) mentioned that organization's culture also shapes the perceptions and behaviours of its

employees. Furthermore organizational culture is increasingly being recognized as a major barrier to effective knowledge creation, sharing, and use.

Cultures are not homogenous across an organization (McDermott & O'Dell, 2001). Within organizations, there are also subcultures that are characterized by a distinct set of values, norms and practices, often resulting in their members valuing knowledge differently from other groups within the same organization (Pentland, 1995). Subcultures and their influence on knowledge sharing add even more complexity to determining those practices and norms that create the right environment to facilitate the sharing of knowledge.

3. Methodology

This paper is part of an on-going PhD research entitled “The impact of effective knowledge sharing initiatives on Quantity Surveying Practices in the Malaysian construction industry”. The PhD research will employ a qualitative research approach. Prior to the actual data collection, a pilot study using structured questionnaire will be conducted on large, medium and small Quantity Surveying practices in Malaysia. A pilot study provides an opportunity to test out some objectives, research questions, and to explore methods (Yin, 1994), allowing any changes or amendments to be made before the main study is conducted. However, this paper is primarily based on a thorough review of relevant literature in the areas of knowledge sharing, organisational culture, and structure from Quantity Surveying Firms' perspectives. The articles reviewed in this paper have come from journals, text books, conference proceedings and websites.

4. Conclusions

This paper has shown that there are many factors to be considered in order to achieve a successful knowledge sharing practices. From the literature this paper has shown the impact of the organisational size on implementing knowledge sharing in QS firm. In addition, there are another factors related such as interpersonal communication, interpersonal relationship and trust, connective efficacy, organisational unit structure and culture of the work environment. It is hoped that the literature in this study would help QS firm to plan better their knowledge sharing phenomenon. Effective knowledge management can help organizations to leverage core knowledge as means of building corporate intelligence, achieving innovation in process and products/services, effective decision-making, and organisational adaptation to the market for creating business value and gaining competitive edge.

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