The Articulation of Knowledge Management Strategy in Public Sector Organizations

Asleena Helmi

Swinburne University of Technology
Sarawak, Malaysia
ahelmi@swiburne.edu.my

ABSTRACT

The common de facto of a KM strategy needs to move beyond outlining 'know-how' goals such as 'becoming a knowledge-enabled enterprise' to the realities of 'know-why'. In fact the latter may prove to be more significant as it denotes levels of creativity and innovation which are key drivers to organizational performance. As such, the strategy must identify the key needs and issues within the organization and provide a framework for addressing these. This paper provides an approach in articulating the KM strategy which focused on the significance and impact of value propositions.

Keywords
KM Strategy, KM maturity, Value propositions, Public sector organizations

1.0 INTRODUCTION

From the inceptions of the earliest civilization such as Egypt and Greek, knowledge has always been the key factor in performance and achievement. In short, knowledge provides leverage to both humans and organizations. As such in times of global economic challenges, companies are looking to knowledge management strategy to address the issues of the changing marketplace and sustaining competitive advantage (Robertgson, 2004). Prolific writers of KM such as Sveiby; Davenport; Snowden; Prusak; Wigg and Nonaka gave their own different interpretations and understandings of KM strategy. Sveiby (1999) defined it as the capacity while to Davenport and Prusak (2000) maintained that the rapid change and increasing competition for the dollars, marks, and yen have led firms to seek a sustainable advantage that distinguishes them in their business environments. Despite the different interpretations, knowledge within the business context can be categorized within the spectrum of tacit (implicit) and explicit (codified) knowledge (Nonaka and Takeuchi, 1995). As such, this study posits that the KM strategy is an articulated knowledge in line with organizational objectives and business processes. The American Heritage Dictionary defined the word articulation as the telling of the meanings within, the externalization of these inner meanings into external form. In some sense this parallels the relationship between essence and phenomena in all things whereby knowledge is central to and integral part of an organizations business strategy. This paper presents a framework for the articulation of the KM strategy among public sector organizations in Malaysia and discusses findings based on the evaluation workshop.

2.0 CONCEPTUAL FRAMEWORK

Miles and Huberman (1994) defined a conceptual framework as a visual or written product which explains, either graphically or in narrative form, the main things to be studied, the key factors, concepts, or variables and the presumed relationships among them. Maxwell (2004) argued that conceptual frameworks acts like maps that gives coherence to what one plans to study, and of what is going on with these things or why a tentative theory of the phenomena that you are investigating. By aligning the purpose and framework, other aspects of empirical research such as choice of methodology (survey, interviews, and analysis of existing data, direct observation or focus groups) and type of logical data analysis would be more obvious in the design of the research (Miles et.al, 1994). In order to further anchor knowledge strategy to management guidance and practice, managers require a framework to improve knowledge-based processes and firm performance.

Zack (1999) defined the KM framework as a competitive strategy built around a firm's intellectual resources and capabilities, then actions it may take to manage gaps or surpluses (e.g. recruiting for particular skills, building online documentary repositories, establishing communities of practice, acquiring firms, licensing technologies, etc.).

Figure 1:Firm's strategic knowledge gap (Zack, 1999)

In his theory on competitive advantage, Porter (1981) argued that a firm's strategy follows structure whereas Zack (1999) based on his model (see Figure 1), maintained that a firm's strategy follows organizational knowledge. This study adopts Zack's framework based on two rationales mainly that (i) the KBV theory (Alavi et.al, 2001) which maintains knowledge as a strategic resource for competitive advantage and (ii) evidence from previous studies on GLCs studies (Samsudin et.al, 2006 and Badruddin et.al 2008) that found GLCs capabilities in KM (example: competitive intelligence) which enabled those within the organization to leverage the most service from knowledge and other resources for decision-making and marketing strategies. Quinn (1996) argued that an organization's intellect ought to be integrated to enhance the effectiveness of deploying knowledge strategy within the organizations (Khalil, 2000). This is because having the right amount of strategic resources does not imply organizations having the capability to effective manage knowledge.

2.2 The Knowledge Value Proposition Strategy (KVPS) Framework

Prusak (2001) argued that KM may become such a natural part of how people organize work that it has become invisible. As such, there may lay internal resources within the company which could be misplaced and even overlooked. In order to tap into these unforeseen potential resources, the creation of knowledge asset portfolios and deploy a knowledge-based view of strategy becomes a necessity especially for large public sector corporations. The new KM strategy framework would ensure that management of enterprises and corporations to be accountable for the contribution of the knowledge assets and compels them to think more strategically about the knowledge assets they will need to capture new opportunities (Housel and Bell, 2001). In this context, core process managers need to identify current and future knowledge gaps or needs for organization. The challenge therein is how to explicate the value of knowledge and one such measure is for organizations to identify its value proposition. In practical terms the KM strategy includes (i) actions that are intended to result in anticipated business outcomes and (ii) actions that emerge as result of the many complex activities undertaken within an organization (Callahan, 2004). It

can be argued that the incorporation of these actions based upon organizational knowledge translate into value propositions such as better customer relations and new ways of working. Value proposition is defined as measures in which KM can increase organizational performance (McManus, Fredericksen, Wilson & Snyder, 2004). For the purposes of articulating the KM strategy for the selected government companies, a Knowledge Value Proposition Strategy (see Figure 2.2) was created and then evaluation via workshop sessions with the participants.
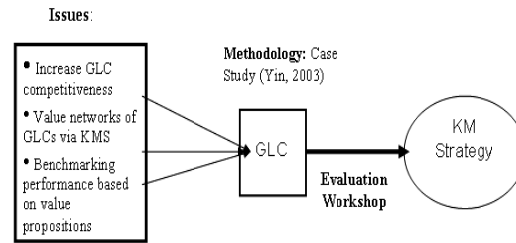

Figure 2: The KVSP Framework

According to Zack (2001), from the context of KM, many executives are struggling to articulate the relationship between their organization's intellectual resources and capabilities, and its competitive strategy because they do not have well-developed strategic models and are uncertain of how to translate the goal of making their organizations more intelligent into a strategic course of action. The basic problem confronting an organization is "to engage in sufficient exploitation to ensure its current viability and, at the same time, to devote enough energy to exploration to ensure its future viability." (Levinthal and March 1993). In other words, organizations such as the government link companies (GLCs) in Malaysia need to articulate KM strategy via the implementation of KM initiatives that support its purpose or mission, strengthen its competitive position, and create stakeholders value (Callahan, 2004). Drawing from the literature review by Levinthal et.al (1993), Zack (1999) and Callahan (2004), it can be deduced that to enhance performance and achieve competitive advantage, the GLCs need to develop knowledge and capabilities in the following three areas namely (i) dynamic capabilities **(DC)** to support its KM initiatives, (ii) interorganizational relations **(IOR)** to identify its internal strength and weaknesses and (iii) value propositions **(KVA)** as to measure the contribution of knowledge**.** The KVPS framework is anchored upon the three key elements of knowledge strategy which are supported by the following theoretical underpinnings. The DC theory focused on KM strategy to companies having the capabilities as the ability to integrate, build, and reconfigure internal and external competencies to address rapidly-changing environments (Teece, Pisano and Shuen, 1997). Abou-Zeid (2003) argued that to deploy a knowledge strategy, the firm must undergo a significant

reconfiguration of the process and values responsive to strategic intent to achieve the dynamic capabilities realized through knowledge integration. Secondly, under the IOR theory, Lazzarini and Zenger (2002) argued that interorganizational relations as the degree of commitment that supports an exchange relationship for the transfer of goods, services, or information. Many inter-organizational partnerships proceed without explicit attention to the processes by which the stakeholders interact frequently and yet undermining the critical role of process in ensuring successful collaboration (Gray, 2007).

With the KVPS framework, the IOR factor was focused on the aspects of socio-technological tools which support knowledge flow and exchange within the GLCs. While the value propositions was explained in terms of the application of the KVA (knowledge value added) organizational performance measure approach (Housel and Bell, 2001). The KVA approach is theorized on the context that *knowledge and value are proportionate.* Hence the KVA analysis produces a return-on-knowledge (ROK) ratio to estimate the value added by given knowledge assets regardless of where they are located (Housel et.al, 2001). In this context, the allocation of revenue is proportionate to the value added by the knowledge and cost involved in utilizing the knowledge. By tracking the conversion of knowledge into value while measuring its bottom-line impacts enables managers to increase productivity of these critical assets.

3.0 THE GOVERNMENT LINK COMPANIES (GLCS)

The GLCs are defined as companies that have a primary commercial objective and in which the Malaysian Government has a direct controlling stake (Putrajaya Committee, 2005). The research was conducted based on the study population of only 4 GLCs in Malaysia on the selection basis that they are leaders of the industry and have all already carried out a KM strategy and its effect is apparent and recognized by the industry (PCG, 2005). The 4 GLCs include companies from the industries of construction; plantations; manufacturing and communications. The unit of analysis is the organization per se. These companies range from providing end-products and trading of knowledge commodities in the form of ideas**,** experiences and consultancies. Many of the GLCs despite showing value domestically may be lagging in certain areas from a regional and global benchmarking standpoint. In terms of the total return to shareholders of public listed, the GLCs are behind overall market performance by 21 percent over the past five years (GLCT, 2005). The transformation of the GLCs to a higher level of global performance is needed as they account for high public investment and resource. As

such , the GLCs like all other public sector organizations need to develop 'context' by not simply adhering to standard industry best practices but rather develop their own practices incorporating organizational knowledge and work values (Snowden, 2007).

3.1 Research Methodology
The study was conducted using a mix-mode method of quantitative and qualitative (Yin, 1994) approach. Yin (1994) argued that the generalization of results, from either single or multiple designs, is made to theory and not to populations. Thus the selection of cases must be done so as to maximize what can be learned in the period of time available for the study (Dube and Pare, 2003). In their study, Badruddin et.al (2008) focused on the development of autopoiesis theory, (Krogh & Roos, 1995; Mingers, 1995). The autopoiesis theory explains the nature of living (as opposed to non-living) entities and because the theory is a general systems theory companies can be regarded as living systems that reproduce themselves and their own strategic components and boundary elements and in a continuous manner (Maula, 2000). However this study was conducted from a positivist philosophical view with an objective viewpoint to study the phenomena and explain the processes occurring in a local context (Miles et. al, 1994) - mainly to explain how the GLCs can articulate KM strategies to achieve competitive advantage. The evaluation workshop was conducted with a total of 32 participants from the 4 GLCs, ranging equally from top and middle management. In testing the framework, the participants were required to respond to the questions on knowledge strategy and performance measurements being practiced in their respective companies. The top management participants were amongst others, the Chief Knowledge Officer (CKO) and Chief Information Officer (CIO). In each organization these senior executives deal mainly with the administration and planning of the KM initiatives. While the middle management group includes the managers and front-line employees who are involved in company daily operations and business transactions. As such, they are more adapt in giving insights into key performance indicators that would contribute to knowledge value added (KVA) approach**.**

4.0 FINDINGS

The evaluation workshop started with a presentation of the outline of the KVPS framework, a workshop brief and manual consisting of tasks list with supporting diagrams and guidelines. Participants were divided into group's eight teams with four people while the researcher team members as facilitators. The workshop was divided into two sessions. In session 1, the participants were given

templates to develop business improvement strategy. Whereas for session 2, the participants discussed on the types of KM performance measures based on key performance indicators (KPI). Each group was required to choose a business problem based on a knowledge dimension and structure the problem using a template provided by the KVPS framework. At the end of the workshop a group discussions was held to identify key issues emerging in session 1. In session 2, the participants had to reflect on evaluating performance measures and identify KPIs which links KM initiatives to competitive strategies. The participants were also given evaluation questionnaire and rate statements (Likert 5 point-scale) with which they agreed or disagreed and provide suggestions for improving the framework.

4.1 Evaluation and Feedback

The preceding paragraphs discuss the feedback from the evaluation workshop. Thus the results of the evaluation questionnaire are shown in Figures 3 and 4. The questionnaire used a rating scale from 1 (strongly disagree) to 5(strongly agree). Figure 4 is the summary of the average ratings for Session 1 of the framework.
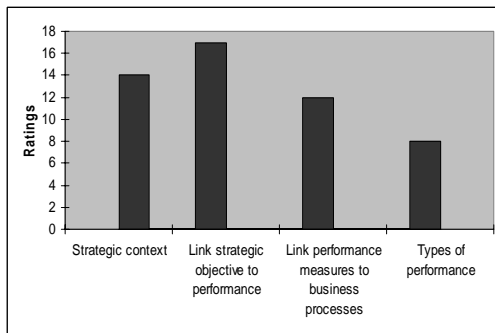

Figure 3: Average ratings of key components in Session1

In general, all of the participants strongly agreed that the framework allows an organization to be able to put its KM/business problems into a strategic context. However, it was also found that the need to align the strategic objectives of an organization to performance measures was the main contention for the companies as the ratings was higher compared to need to relate performance measures to the business processes. It was also discovered that there is certain level of ambiguity in identifying the types of performance with its average rating at 4.00 is not as high as the other components (see Fig. 3). One participant commented that "we lacked the understanding as to how best categorize our levels of KM strategy".

Another key issue was the level of KM readiness among the companies. As seen in Fig.4, the ratings of 4.00 is not as high as compared to other aspects

namely KM impact on business performance at 5.00. Another indicator to reflect the issue was the low levels of readiness in conducting knowledge audit at ratings of 2.00. The overall consensus from the participants was that organizational readiness is not only a very significant factor to consider prior to implementing a KM strategy, but the accompanying checklist provided was useful in identifying the barriers and enables to KM.

However, it was suggested that in dealing with some of the issues arising to be knowledge centric is important for senior management to be involved especially for key strategic issues. It was also discovered that the levels of measuring efficiency was at higher ratings than measuring effectiveness. Among the reasons cited by the participants was that the companies were still using the financial KPIs rather than non-financial KPIs as performance measures. Other aspects such as technological capabilities were fairly high as each company had developed its own KMS to capture, store and facilitate knowledge sharing and exchange.
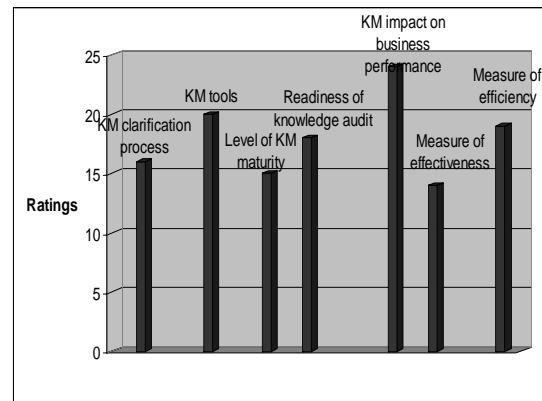

Figure 4: The average ratings of the key component in Session 2.

However the participants expressed concerns in the KM clarification process as in general there was no creation of a KM department with the exception of one company within the communications sector. During the group discussions, it was found that identifying the context of value propositions was useful in measuring the levels of effectiveness. From the 4 GLCs, the value propositions were identified in four context namely human capital; customer relationship; operational excellence and product development. It can be argued that the each value proposition illustrates the company's core competencies to achieve competitive advantage. Although the workshop was based on structuring hypothetical business problems, it was acknowledged that the KVA approach could be more easily implemented in a company set up were real data is widely available. As such, all the participants showed high interest in using and conceptualizing the KVA method.

5.0 CONCLUSIONS

Porter (2001) maintained that essentially –"having a strategy is a matter of discipline. It requires a strong focus on profitability rather than just growth, an ability to define a unique value proposition and a willingness to make tough trade-offs in choosing what not to do". In line with Porter's view, the KVPS is a generic framework applicable to other sectors as well as it a structured framework designed for developing a KM evaluation strategy as part enhancing business improvement. Thus the framework postulates that to achieve competitive advantage, the two measures of performance proposed to determine the effectiveness (ROK) and efficiency (ROI) of KM initiatives does not only ensure that appropriate initiatives are selected but also enables the ranking of KM initiatives in terms of level of impact on business performance. In retrospective of the three main elements of KM strategy, the findings of the study supports that firstly the companies had incorporated DC whereby in Session 1, the knowledge dimension of the companies business problem was identified and developed specific KM initiatives to address the business problem. Secondly in Session 2, the selection of appropriate tools were identified (e.g: KMS and mentorship) with a socio-technological focus which reflected elements of IOR. Lastly, the identification of possible relationships between KM initiatives and performance measures and show how they relate to the strategic objectives (KVA) to support the KM process(es) identified in a strategic context. Overall it was agreed that the framework does help in providing some structure in the evaluation of organizational performance. However there were issues raised about how the framework could be introduced to senior management and the level of details of a KM implementation plan to be provided to senior executives. The solution perhaps lies in creating a KM department with the purpose to cultivating higher levels of KM readiness and solidarity in its implementation. In conclusion, it can be said that the findings of the study supported the contention that the GLCs KM strategy was articulated based on organizational knowledge rather than vice versa.

REFERENCES

Aidemark, J and Sterner, H (2003). A Framework for Strategic Balancing of Knowledge Management Initiatives, *Hawaii International Conference on System Sciences 36th Proceeding*.

Alavi, M and Leidner, D. E. (2001). Review: Knowledge management and knowledge management systems: Conceptual foundations and research issues. *Management Information Systems Quarterly*, 25 (1), pp: 107-136.

Abou-Zeid, E.-S. (2002). A knowledge management reference model. *Journal of Knowledge Management*, 6(5), 486-499.

Binney. M (2001).The Knowledge Management Spectrum– Understanding the KM Landscape, *Journal of Knowledge Management*, 5(1), 33-42.

Callahan. S (2004). *Crafting a Knowledge Strategy, Anecdote.* Pty Ltd, Australia

Debowski, S. (2006). *Knowledge Management*: John Wiley & Sons Australia, Ltd.Government-Link Companies Transformation Programme,

"Section II-Policy Guideline" (2005), *Putrajaya Committee on GLC High Performance (PCG)*, Kuala Lumpur.

Gray.B (2007). *Interveining to Improve Inteorganizational Partnerships*-Chapter 25. Sage Publications.

Housel, T and Bell, A (2001). *Measuring and Managing Knowledge*, McGraw-Hill International Edition, New York.

Khalil, T (2000). *Management of Technology-The Key to Competitiveness and Wealth Creation*, McGraw-Hill International Editions.

Lazzarini. S and Zender. T (2002). The Strength of Churning Ties: A Dynamic Theory of Interorganizational Relationships, *Academy of Management Conference*, Washington.

Levinthal, Daniel A., and James G. March (1993). The Myopia of Learning. *Strategic Management Journal* 14:95-112.

Lendrives.J and Lindon.D (1999). *Mercator: Theorie et Practique du Marketing,* Paris.

Maula, M. (2000). The senses and memory of a firm: Implications of autopoiesis theory for knowledge management. *Journal of Knowledge Management*, 4(2), 157-161.

Noorhayati. M, Bahari. A and Justine.J (2008). Strategy-Based Key Performance Indicators and Firm's Performance: The Experience of Government–Linked Companies in Malaysia. *The International Journal of Knowledge, Culture and Change Management*. 8(2).

Nonaka, I and Takeuchi, H (1995). *The Knowledge-Creating Company*. Oxford University Press, Oxford, New York.

Prusak.L and Davenport.T. (1998). *Working Knowledge - How Organizations Manage What They Know*. Harvard Business School Press, Boston, Massachusetts.

Porter, M (2001). *Strategy and the Internet*. Harvard Business Review, 79(3).

Quinn, J.B, Anderson,P. and Finkelstein, S (1996). Managing Professional Intellect: Making the Most of the Best, *Harvard Business Review*.

Robertson. J (2004). Developing a Knowledge Management Strategy. *KM Column Australia.*

Samsudin Wahab and Abdul Kadir Othman (2006). "Competitive Intelligence Practices by Government Links Companies (GLCs) in Malaysia", *KM International Conference & Exhibition (MICE, 2006) Proceedings*, 11, University Utara Malaysia (UUM).

Sveiby K.E (1992).The Knowledge Company: Strategy Formulation in Knowledge-Intensive Industries. *International Review of Strategic Management*.

Teece, D.J., Gary P. Pisano, and A. Schuen. (1997). Dynamic Capabilities and Strategic Management. *Strategic Management Journal*, *18*(7),509-533.

Toh Hoon Hoon, Ramayah, T and Jantan, M (2006). Knowledge Management- An Exploratory Study on Malaysian Organizations. *The International Journal of Knowledge, Culture and Change Management*, 3.

Wigg.K.M (1999). What future KM users may expect, *Journal of KM*, MCB University Press, 3(2).

Yin, R. (1994). *Case study research: Design and methods* (2nd ed.). Thousand Oaks, CA: Sage Publishing.

Yin. R.K (2003). *Case study research: Design and Methods* (3rd ed.): Sage Publications.

Zack, M.H (1999). Developing a knowledge strategy, *California Management Review*, 41(3), 125-45.

Zack, M.H (2001). *Developing a Knowledge Strategy*. Sage Publications.