

The relationship between Knowledge Management and Strategic Competence: a quantitative study in Jordanian Insurance Companies

Samer Alhawari¹ and Mufleh Al-Jarrah²

¹ Applied Science Private University, Jordan, Samer.alhawari@yahoo.com

² The World Islamic Sciences & Education University, muflehj@yahoo.com

Abstract. It is generally accepted that due to globalization, competition is becoming more intense and as organizations are now able to or forced to open newer markets with different paradigms, conditions, operating methods and requirements. As a result, many organizations are finding it necessary to re-think their Strategic Competences in order to survive in this new global environment. Although Knowledge Management (KM) process has been around for some time, and has increasingly become an accepted management tool, it is yet to be seen by organizations as a necessary integral part of building strategic competences. The present empirical study is based on a sample of the data collected from seventy seven respondents, drawn randomly from Jordanian Insurance Companies. The results of the survey show that the KM processes have a significant impact on four selected factors of Strategic Competence (Shared Vision, Cooperation, Empowerment, and Innovation). The empirical findings will certainly help both researchers and practitioners in future KM process on strategic competence research. In order to get a better understanding of the KM process on Strategic Competence.

Keywords: Knowledge Management, Knowledge Management process, Strategic Competence

1. Introduction

It is now an indisputable fact that globalization is a reality that has become an integral part of everyday operations and transactions for most organizations in a multiplicity of fields and domains. Technological advances together with political changes over the last twenty years has truly meant that the flow of resources, goods and technologies across the world is almost unrestricted thus presenting international organizations with many new realities and challenges and specifically with regards to competition. Zack (2002) claimed that knowledge asset has an enabling role to play in the formulation of successful strategies and achieving the organizational overall objectives.

More importantly, Jennex (2005) summarized various definitions of KM used by KM researchers to propose that KM success be defined as reusing knowledge to improve organizational effectiveness by providing the appropriate knowledge to those that need it when it is needed. Moreover, it is needed from organizations to respond successfully to competitive environments which can be attained through examining how they can develop leverage knowledge assets and create an additional value (Lin et al 2006).

The search for higher levels of performance, increased efficiencies and new management processes has equally led organizations to look more closely into their core competences. In other words, organizations are having to pay attention to their competitive advantages be it through processes, systems, innovations, values, corporate culture and so on (Alryalat and Alhawari, 2008). To this extent, there is now a whole body of research that gone into great depth in understanding how can Core Competences be deployed or leveraged as management tools.

This paper is organized as follows. In the next section, we review relevant literature; section three proposes the research model and hypotheses, section four is about the research methodology in which we

discuss the design of the questionnaire, sample, data collection, hypotheses analysis and results. The last segment of this paper is our conclusion.

2. Literature Review

2.1. Overview of Knowledge Management

Essentially, KM in organizations is believed to be an integrated process that can help to enhance and expand innovation process (Parikh, 2001). Successful KM can be defined as the creation of management processes and infrastructure to bring together both knowledge and communities in a common ecology that will sustain the creation, utilization and retention of knowledge (Alryalat and Alhawari, 2008).

Knowledge processes can be thought of as a structured coordination for managing knowledge effectively (Gold et al, 2001). Typically, knowledge processes include activities such as creation, sharing, storage, and usage (Alavi and Leidner, 2001). Enablers provide the infrastructure necessary for the organization to increase the efficiency of knowledge processes (Sarvary, 1999). A prerequisite of implementation of KM is to understand and develop the infrastructural elements required to support the acquisition, management, and transfer of tacit and explicit organizational knowledge (Halawi et al., 2005).

2.2. Knowledge Management Process Theories

One KM Process model that was proposed by Lai and Chu (2000) divides KM into a comprehensive theoretical framework that consists of six steps: (a) Initiation, (b) Generation, (c) Modelling, (d) Repository, (e) Distributing and transfer, (f) Use and Retrospect. Also, Alavi and Leidner (2001) suggest that the knowledge process can be divided into four stages: Knowledge Creation, Storage and Retrieval, Transfer, and Applications. Furthermore, Parikh (2001) presents another interesting theory of the KM cycle to channel the Knowledge accumulated from a variety of sources. This cycle contains four processes by which organizations are able to adopt KM. The four processes are: (a) Knowledge Acquisition, (b) Organization, (c) Dissemination and (d) Application. In another model provided by Sunassee and Sewry (2002), they propose a knowledge life cycle of six steps: (a) Creating New Knowledge which includes identifying both new and old existing knowledge; (b) Identify Knowledge relevant to organization, (c) Verifying selected Knowledge, (d) Capturing & Organizing Knowledge, and (e) Disseminating and Using Knowledge and finally (g) Combining new knowledge and re-evaluating assumptions to Create Knowledge. Miltiadis and Pouloudi (2003) propose six phases of KM. These phases are relating value, acquiring, organizing, enabling, reusing, transferring and using. In another study provided by Stollberg et al., (2004) explain the KM as seven processes: Knowledge Identification, Acquisition, Preparation, Allocation, Dissemination, Usage and Maintenance. Lately, Deng and Yu (2006) suggest a KM process that includes five steps: identifying, capturing, selecting, storing and servicing.

The authors have analysis and developed a conceptual model of KM process on organization performance starting with the (Knowledge Identification, Knowledge Acquisition, Knowledge Storage, Knowledge Distribution, Knowledge Application) based on a thorough investigation of various models presented in KM literature. Many of the models described above are broad enough to provide a complete analysis of the knowledge flow in the organization.

2.3. Overview of Strategic Competence

As companies begin to develop competence in managing internal knowledge and applying it towards achieving organizational goals, they are setting their sights on new sources of knowledge that are not necessarily found within the boundaries of the firm. For example, customer KM comprises the processes that are concerned with the identification, acquisition, and utilization of knowledge from beyond a firm's external boundary in order to create value for an organization. Companies can utilize this knowledge in many different forms of organizational improvement and change, but it is especially valuable for innovation and the new product development function. Competence is defined with two aspects: (1) competencies must align with business strategy; (2) competencies need to be generated through more than one mechanism, such as buy, build, borrow, bounce, and bind (Ulrich 1998). Strategic competencies are determined by four

competencies (1) Shared vision (2) Cooperation (3) Empowerment (4) Innovation (Croteau and Raymond, 2004).

2.4. The Relationship between Knowledge Management and Strategic Competence

Organizational performance may be defined as the degree to which companies achieved their business objectives (Elenkov, 2002). It may be measured in terms of organizational learning, profitability, or other financial benefits in KM (Davenport, 1999); (Simonin(1997). There is a general recognition among academics that KM is a cross-functional and multifaceted discipline. A variety of components make up KM and the understanding of their interaction is important; a holistic view is very useful (Ndlela, 2001). This relationship is also explained by the use of the knowledge chain model proposed by (Holsapple and Singh, 2001). This model suggests that leadership establish enabling conditions for achieving organizational outcome through the KM activities such as acquisition, generation, internalization, and externalization. It means that knowledge enablers (leadership) affect organizational outcome through knowledge processes. A direct relationship between knowledge processes and organizational performance is not explored yet.

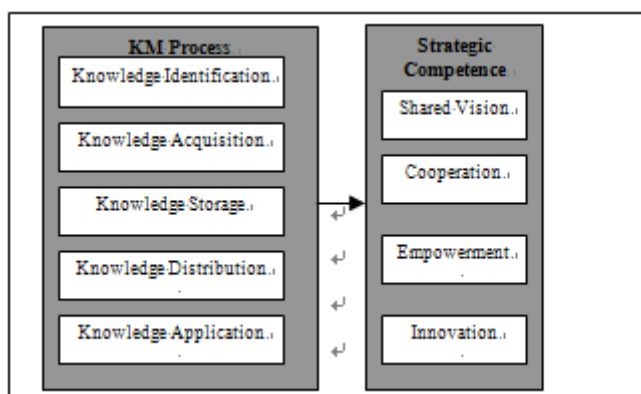
Adopting the RBV, IS researcher identified various if related resources that serve as potential sources of competitive advantage (Bharadwaj,2000); (Santhanam, R. and E. Hartono,2003); (Bose,2002) Describes the various technical elements required for KM and provides a technological framework for KM capability.

Several authors have argued for a Knowledge-Based View (KBV) of the firm as a specialized case of RBV (Conner, 1991). KBV presents firms as social communities with the primary role of integrating the specialist knowledge resident in individuals into goods and services, so that organizational capabilities are the manifestation of this knowledge integration (Grant, 1991). Knowledge shapes the firm's core competences (Prahalad and Hamel, 1990) and therefore determines value creation. Furthermore, tacit knowledge, social knowledge, and complex knowledge are difficult to imitate (Helfat and Raubitschek, 2000). Hence, competences based on these types of knowledge cannot be easily duplicated by competitors, and strategies based on these competences are likely to lead to sustainable competitive advantage.

3. Research Model and Hypothesis

This section presents new model to describe the combination between KM process (Knowledge Identification, Knowledge generation, Knowledge storage, Knowledge Distribution, Knowledge Application and Strategic competence (Shared Vision, Cooperation, Empowerment, Innovation) see model 1.

Model (1): Relationship between Knowledge Management and Strategic Competence



On the basis of the literature review and conceptual model presented previously, the following hypotheses are proposed for testing in the empirical study of Jordanian Insurance Companies,

- HO-1: There is no significant impact of KM Process on Shared Vision in Jordanian Insurance Companies at level ($\alpha \leq 0.05$).
- HO-2: There is no significant impact of KM Process on Cooperation in Jordanian Insurance Companies at level ($\alpha \leq 0.05$).
- HO-3: There is no significant impact of KM Process on Empowerment in Jordanian Insurance Companies at level ($\alpha \leq 0.05$).

- HO-4: There is no significant impact of KM Process on Innovation in Jordanian Insurance Companies at level ($\alpha \leq 0.05$).

4. Research Methodology

4.1. Sample

A total of (110) questionnaire was initially distributed to targeted the Three Administrative Levels (Top Managers, Head of Section, and Employees) working in the Jordanian Insurance Companies. A total 77 completed questionnaires were returned will be analyzed.

4.2. Data Collection

The structural questionnaire design was applied to develop the survey instrument. The quantitative approach supplied a suitable research data collection strategy, allowing the collection of a large amount of data from a sizeable population in a highly economical way.

4.3. Data Analysis and Result

To ensure the impact of Knowledge Management Process on Strategic Competence in Jordanian Insurance Companies uses the Simple Regression analysis to test each sub-hypothesis. As a following:

Table 1: ANOVA test for KM process and Shared Vision

R	R Square	F Tabulated	F	Sig.
0.704	0.495	4.00	74.623	0.000

From table 1 we observe that there is significant impact of Knowledge management Process on Shared Vision in Jordanian Insurance Companies, The R was (0.704), Whereas the R2 was (0.495) This means the (0.495) of Shared Vision changeabilities resulting from the changeability in Knowledge management process. The F value is 74.623 with a significance equal 0.00, which is less than (0.05). For that reason, there is an effect of KM process on Shared Vision.

Table 2: ANOVA test for KM process and Cooperation

R	R Square	F Tabulated	F	Sig.
0.616	0.379	4.00	46.449	0.000

From table 2 we observe that there is significant impact of Knowledge management Process on Cooperation in Jordanian Insurance Companies, The R was (0.616), Whereas the R2 was (0.379) This means the (0.379) of Cooperation changeabilities resulting from the changeability in Knowledge management process. The F value is 46.449 with a significance equal 0.00, which is less than (0.05). For that reason, there is an effect of KM process on Cooperation.

Table 3: ANOVA test for KM process and Empowerment

R	R Square	F Tabulated	F	Sig.
0.277	0.077	4.00	6.309	0.01

From table 3 we observe that there is significant impact of Knowledge management Process on Empowerment in Jordanian Insurance Companies, The R was (0.277), Whereas the R2 was (0.077) This means the (0.077) of Empowerment changeabilities resulting from the changeability in Knowledge management process. The F value is 6.309 with a significance equal 0.01, which is less than (0.05). For that reason, there is an effect of KM process on Empowerment.

Table 4: ANOVA test for KM process and Innovation

R	R Square	F Tabulated	F	Sig.
0.571	0.326	4.00	36.734	0.01

From table 4 we observe that there is significant impact of Knowledge management Process on Innovation in Jordanian Insurance Companies, The R was (0.571), Whereas the R2 was (0.326) This means the (0.326) of Innovation changeabilities resulting from the changeability in Knowledge management process. The F value is 36.734 with a significance equal 0.01, which is less than (0.05). For that reason, there is an effect of KM process on Innovation.

5. Conclusion

The results of this study show that KM processes have a significant impact on four selected factors of Strategic Competence (Shared Vision, Cooperation, Empowerment, and Innovation). The research has succeeded in proposing a model that enriches current research by offering specification, justification, and empirical validation of a set of interrelationships between important factors. This research describes an integration of KM process and Strategic Competence. Hopefully these findings will shed some light for policy makers allowing them to integrate KM processes and hopefully these findings will shed some light for policy makers allowing them to integrate KM processes and Strategic Competence to keep organizations competitive within the global business environment. Therefore, this paper contributes by providing a clear model for employing KM and Strategic competence as a framework to adapt the hurried changing environment and sustain the organization performance.

6. Acknowledgements

The first author (Dr. Samer Alhawari) is grateful to Applied Science Private University, Amman, Jordan, for the full financial support granted to this research article.

7. References

- [1] Abdullah, R., Selamat, M. H., Sahibudin, S., and Alias, R. A. A Framework for Knowledge Management System Implementation In Collaborative Environment For Higher Learning Institution, *Journal of Knowledge Management Practice*, 2005(6).
- [2] Alryalat H and Alhawari S. Towards Customer Knowledge Relationship Management: Integrating Knowledge Management and Customer Relationship Management Process, *Journal of Information Management (JIKM)*, 2008, 7(3):145-157.
- [3] Alavi M., and Leidner, Dorothy E. Review: Knowledge Management and Knowledge Management System: Conceptual foundations and research issues, *MIS Quarterly journal*, 2001 25(1):107-136.
- [4] Bharadwaj, A, S. A Resource-based Perspective on Information Technology Capability and Firm Performance: An Empirical Investigation, *MIS Quarterly*, 2000 24(1).
- [5] Bose, R. Knowledge Management Capabilities and Infrastructure for E-commerce, *Journal of Computer Information Systems*, 2000, (5).
- [6] Conner, K.R. A Historical Comparison of the Resource-Based Theory and five schools of thought within industrial organization economics: Do We have a new Theory of the firm, *Journal of Management*, 1991, 17(1).
- [7] Croteau , A, and Raymond ,L. Performance Outcomes of strategic and IT Competencies Alignment, *Journal of Information Technology*, 2004, (19):178-190.
- [8] Davenport, T.H. Knowledge management and the broader firm: Strategy, advantage, and performance. In J. Liebowitz (ed.) *Knowledge Management Handbook*. Boca Raton. FL, CRC Press.1999.
- [9] Deng, Q., and Yu, D. An Approach to Integrating Knowledge Management into the Product Development Process, *Journal of Knowledge Management Practice*, 2006, 7(2).

- [10] Elenkov, D.S. Effects of leadership on organizational performance in Russian companies, *Journal of Business Research*, 2002, 55(6).
- [11] Gold, A.H.; Malhotra, A.: and Segars, A.H. Knowledge management: An organizational capabilities perspective, *Journal of Management Information Systems*, 2001, 18(1).
- [12] Grant, R. M. The resource-based theory of competitive advantage: implications for strategy formulation, *California Management Review*, 1991 (33).
- [13] Halawi, L., Aronson J., and McCarthy, R. Resource-Based View of Knowledge Management for Competitive Advantage, *Electronic Journal of Knowledge Management*, 2005 3(2):75-86.
- [14] Holsapple, C.W., and Singh. M. "The knowledge chain model: Activities for competitiveness, *Expert Systems with Applications*, 2001 (20).
- [15] Jennex, M.E. What is KM?, *International Journal of Knowledge Management*, 2001, 1(4).
- [16] Helfat, C. and Raubitschek, R. Product sequencing: co-evolution of knowledge, capabilities and products, *Strategic Management Journal*, 2000 (21).
- [17] Lin, Y., Su, H. Y., and Chien, S. A knowledge-enabled procedure for customer relationship management, *Industrial Marketing Management Journal*, 2006 (35):446-456.
- [18] Lai, H., Chu, T. H. Knowledge Management: A Review of Theoretical Frameworks and Industrial Cases, *Proceedings of the 33rd Hawaii International Conference on System Sciences*, IEEE.2000.
- [19] Miltiadis, D.L., and Pouloudi, A. Project management as a knowledge management prime: the learning infrastructure in knowledge-intensive organizations: projects as knowledge transformations and beyond, *The Learning Organization Journal*, 2003, 10(4):237-250.
- [20] Ndlela, L.T.. and Toit, A.S.A. Establishing a knowledge management program for competitive advantage in an enterprise, *International Journal of Information Management*, 2001, 2(2).
- [21] Prahalad, C. K. and Hamel, G. The core competence of the corporation”, *Harvard Business Review*, 1990(68).
- [22] Parikh M. Knowledge Management Framework for High tech Research and Development, *Engineering Management Journal*, 2001 13(3):27-34.
- [23] Sun, Z., and Gang Gao. HSM: A Hierarchical Spiral Model for Knowledge Management, *In Proceedings the 2nd International Conference on Information Management and Business*, Sydney Australia, 2006.
- [24] Sunasse, N & Sewry, DA . A theoretical framework for knowledge management implementation, *Proceeding of 2002 annual research conference of the South African insiture of computer scientists and information technologists on Enablement through technology, (SAICSIT)*, Port Elizabeth, South Africa, 2002.
- [25] Simonin, B., The importance of collaborative know-how: An empirical test of the learning organization, *Academy of Management Journal*, 1997, 40(5).
- [26] Sarvary, M. Knowledge management and competition in the consulting industry, *California Management Review*, 1999 41(2).
- [27] Stollberg, M., Zhdanova, A. V., and Fensel, D. H-TechSight- A Next Generation Knowledge Management Platform, *Journal of Information and Knowledge management*, 2004, 3(1):47-66.
- [28] Santhanam, R. and E. Hartono. Issues in Linking Information Technology Capability to Firm Performance, *MIS Quarterly*, 2003, 27(1), 2003.
- [29] Ulrich, D. Intellectual capital = competence x commitment, *Sloan Management Review*, 1998, (39).
- [30] Zack, MH. A strategic pretext for knowledge management, *proceeding of the Third European Conference on Organizational Knowledge, Learning and Capabilities*, Athens, Greece, 2002.