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KNOWLEDGE MANAGEMENT MATURITY FROM A STRATEGIC/MANAGERIAL PERSPECTIVE

by

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Thesis summary

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The shift in the strategic role that knowledge plays in business is forcing business managers to actively participate in, if not lead, knowledge management for decision making. Unfortunately there are not enough generic models or even guidelines for incorporating the management of knowledge into business and especially business strategy formulation. This leads to business managers considering knowledge management as being separate from business, leading to an inability to align knowledge management goals with corporate goals.

The goal of the study was therefore to investigate the interdependency between knowledge, knowledge management and business from a managerial/strategic perspective rather than from a technological perspective. This was done to supply practitioners and managers with guidelines for successful institutionalization and management of knowledge.

In order to achieve this goal, research focused on the following objectives:

- Heightening awareness of the critical role knowledge plays as a strategic corporate resource.
- Determining the issues/models/methods and perspectives available, to guide strategists in the quest to efficiently and effectively manage knowledge, within a strategic/managerial perspective.
- The progression of knowledge management maturity from a strategic/managerial perspective.
- Knowledge management's performance in relation to the objectives and measures that determine the overall efficiency and effectiveness of an organization.
- Formulation of guidelines (a knowledge management maturity questionnaire) to aid practitioners and strategists to successfully assess knowledge management maturity.



Finally, to expand the research beyond purely theoretical and/or academic value, i.e. to validate all propositions made in the scholarly review as being valid and applicable in a real world scenario, the knowledge management maturity questionnaire was tested in South African industry. Although not directly supportive of the aim, the knowledge gained from conducting research in industry supply knowledge management practitioners with a baseline of data to benchmark knowledge management maturity upon. The thesis therefore concludes with a summary of the main findings of the knowledge management maturity in 86 South African-based organizations.

In focusing on the evolution of strategy, it was determined that knowledge has played an enabling role in the formulation of strategies. It was proposed that the evolution of strategy will continue not by replacing previous notions, but rather by building knowledgeably upon previous thought. The proposition was made that in order to set the stage for the successful institutionalization of knowledge management, organizations should decide upon issues that are proven to lead to the implementation of a knowledge management culture. In order to ensure uniformity in the institutionalizing of these issues, it was proposed that not only should issues be encapsulated within policy, but also that the strategic management process be used to determine the priority of issues.

In placing knowledge management issues, policies and strategies in a chronological order, a new maturity model was formulated to reflect the progression of knowledge management endeavours from within a strategic/managerial perspective. Differences in opinion with regard to innovation's role as measurement criteria for knowledge management were also critically reviewed. It was found that although numerous authors support a link between knowledge management and innovation, empirical evidence is not supportive. It was argued that the link between knowledge management and innovation is blurred, primarily due to the interdependency between knowledge, strategy and knowledge management. Owing to the complex nature of managing knowledge as a strategic enabler, the argument was proposed that the sum of the input will not equal the output. It was therefore proposed that knowledge management enables strategists to formulate winning strategies. The key to determining the value of knowledge management therefore lies in the extent knowledgeable reasoning leads to organisational growth, profitability and sustainability and not purely within the amount of innovation it sparks.

As mentioned earlier, building on the inductive reasoning followed in the literature review, a questionnaire of six sections, constituting 101 descriptive questions, was developed and used to empirically test the knowledge management maturity of 86 South African-based organizations. With regard to the level of knowledge management maturity reached it was found that Information and Communication Technology (ICT) and Information Management (IM) are fairly well institutionalised within South African industry. A large number of South African organizations still consider ICT, and especially, IM to be knowledge management. Most organizations understand the concepts and issues surrounding knowledge management. Organizations agree on the benefits of knowledge management.



Findings also indicated that there are differences between the scores forwarded for small, medium, large and extra-large organizations. Also, it was found that there are significant differences between the score by the different managerial levels present within organizations. Organizations in general struggle with the successful institutionalization of formal knowledge management endeavours beyond their borders. Not only is there a strong indication that middle management (supported by senior management) hold the key to successful implementation and diffusion of knowledge management, but knowledge management maturity achievements seem to be more dependent on a deliberate, conscious and calculated managerial effort, than on factors such as organizational size, the industry competing within, number of managerial levels present and resources available such as ICT.

The study not only commented on the knowledge management maturity of the 86 South African-based organizations, but also identifies the extent of maturity in South African organizations and industry groupings. It was found those organizations in the construction, building materials and mining sectors, banks and insurance, consulting, auditing, and service delivery and consumer goods and utilities were the leaders regarding knowledge management maturity. Score differences between groupings could mainly be attributed to the consistency of achievement over maturity. It was noted that sector leaders achieved higher than average scores in maturity sections, and in particular regarding the management of ICT and information, the formulation of knowledge management issues, plus policy and strategy.



KNOWLEDGE MANAGEMENT MATURITY FROM A STRATEGIC/MANAGERIAL PERSPECTIVE

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GLOSSARY

1. Definitions

Chief Information Officer (CIO): “The strategic level information and ICT manager who directs information and all ICT systems and personnel while communicating directly with the highest levels of the organisation”.

(Haag, Cummings and Dawkins, 1998:515)

Core Competence: “A capability or skill running through a firm’s business and that once identified, nurtured and deployed, becomes the basis for lasting competitive advantage”.

(Pearce and Robinson, 2000:327)

Effectiveness. “A measure of the extent to which a system achieves its goals; it can be computed by dividing the goals actually achieved by the total of the stated goals”.

(Stair and Reynolds, 2003:663)

Efficiency. “A measure of what is produced divided by what is consumed”.

(Stair and Reynolds, 2003:663)

Evaluation research. “Implementation evaluation research aims to answer the question of whether an intervention (program, therapy, policy, or strategy), has been properly implemented (process evaluation studies), whether the target group has been adequately covered and whether the intervention was implemented as designed”

(Mouton, 2001:158)

Explicit knowledge: “Structured internal knowledge (explicit knowledge), such as product manuals or research reports”.

(Laudon and Laudon, 2004:316)



Growth: “In this context, the meaning of growth must be broadly defined. Although the product impact market studies have shown that growth in market share is correlated with profitability, other important forms of growth do exist. Growth in the number of markets served, in the variety of products offered, and in the technologies that are used to provide goods and services frequently lead to improvement in a firm’s competitive ability. Growth means change, and proactive change is essential in a dynamic business environment”.

(Pearce and Robinson, 2000:32)

Information Management: “Information management deals with management of resources such as information media, people, information systems and physical facilities that are required if information as content is to play a role on the corporate strategic, organizational, operational and personal levels”.

(Boon, 1990:320)

Information technology: “All forms of technology involved in capturing, manipulating, communicating, presenting and using data - and data transformed into information”.

(Wainright Martin et al., 2005:688)

Implicit knowledge: “Tacit knowledge in the form of mental models can be expressed to a certain degree, even if only in the mind of the individual, makes it expressible knowledge, in other words information.”

(Nonaka and Takeuchi, 1995:63-64)

Innovation. “New products and systems, new technologies and services. In short, everything the outside world perceives as a company’s output”.

(Weyrich, 1998:01)

Knowledge issues: Principles, success factors, elements critical to efficient and effective management of knowledge as proposed by Bater (1999), Zack (1999, 2001), Mitre cited in Taylor Small and Tattalias (2000), Von Krogh, Nonaka, and Aben (2001), Gartner cited in Logan (2001) and Snyman and Kruger (2004).



Knowledge Management: Viewed from a two-dimensional perspective. “The first dimension consists of the activities that are critical to knowledge creation and innovation: knowledge exchange, knowledge capture, knowledge re-use and knowledge internalization. The second dimension consists of those elements that enable or influence knowledge creation activities. These include:

- Strategy – the alignment of corporate and knowledge management strategies.
- Measurement – the measures and metrics captured to determine if knowledge management improvement is occurring or if a benefit is being derived.
- Policy – the written policy or guidance that is provided by the organisation.
- Content - the corporate knowledge base that is captured electronically.
- Process – the processes that knowledge workers use to achieve the organization’s mission and goals.
- Technology – the information technology that facilitates the identification, creation and diffusion of knowledge among organisational elements within and across enterprises, for instance an enterprise portal.
- Culture – the environment and context in which knowledge management processes must occur”.

(Taylor Small and Tatalias, 2000:02)

Knowledge management vs. Information management: Grey explains the difference between KM and IM simply by saying that IM is working with objects such as data or information whereas KM is concerned with working with people. He goes on to state that IM deals exclusively with overt representations such as accuracy, speed, cost, storage and retrieval, whereas KM deals more with implicit symbols such as learning, meaning, understanding and negotiation.

(Grey, 1998)

Knowledge management strategies: Knowledge management strategies define the processes and infrastructure for managing knowledge. “Once a firm identifies



opportunities, threats, strengths and weaknesses related to its 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.) are guided by knowledge management strategies”.

(Zack, 2001: online)

Participatory research: “Studies that involve the subjects of research (research participants) as an integral part of the design. Use mainly qualitative methods in order to gain understanding and insight into life-worlds of research participants”.

(Mouton, 2001:150)

Strategic Knowledge Management Plan. “A set of longer-range goals that document movement towards the knowledge vision and knowledge architecture and the associated major initiatives that must be undertaken to achieve these goals”.

(Snyman and Kruger, 2004:19)

Strategic management: “The set of decisions and actions that results in the formulation and implementation of plans designed to achieve a company’s objectives”.

(Pearce and Robinson, 2005:03)

Tacit Knowledge: “Informal internal knowledge, often called tacit knowledge, which resides in the minds of the individual employees but has not been documented in structured form.”

(Laudon and Laudon, 2004:316)

And,

"Tacit knowledge is hidden knowledge, hidden even from the consciousness of the knower."

(Skyrme and Amidon, 1997:30)



Total Quality Management. “An intense focus on customer satisfaction; on acute measurement of every critical variable in a business’s operation; on continuous improvement of products, services and processes, and on work relationships based on trust and teamwork.”

(Pearce and Robinson, 2005:373)

2. Abbreviations

CIO - Chief Information Officer

KMMAM – Knowledge Management
Maturity Assessment Matrix

CMM - Capacity Maturity Model

KMMAQ - Knowledge Management
Maturity Assessment Questionnaire

DSS - Decision Support Systems.

ERM – Enterprise Resource
Management

KMMM – Knowledge Management
Maturity Model

ERP – Enterprise Resource Planning

KMMRS - Knowledge Management
Maturity Rating System

HR – Human Resource

ICT - Information and Communication
Technology

KM3 – Knowledge Management
Maturity Model

IS – Information System

R&D - Research and Development

IT – Information Technology

SEI - Software Engineering Institute

KM – Knowledge Management

SEI-CMM - Software Engineering
Institute Capacity Maturity Model

KMMA - Knowledge Management
Maturity Assessment

SKMP - Strategic Knowledge
Management Plan



SM – Strategic Management

TQM- Total Quality Management

TPS - Transaction Processing System

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