Knowledge Management: A Rewarding Challenge for SME’s?

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INNOVATION AND COMPETITIVENESS

In contemporary knowledge-based society, where organizational environment is changing at a rapid pace, information and knowledge to promote innovation are the keys to competitiveness and success.

This was recognised in the conclusions of the Lisbon European Summit [Lisbon ... 2000], which were then extended in the Barcelona European Summit [Barcelona ... 2002]. The latter stated that the state of the goals of Europe is to attain a “competitive knowledge-based society” based on education and training systems, adapting quickly to the “demands of the knowledge society and the needs for an improved level of quality of employment”. Furthermore, every citizen must be equipped with the skills needed to live and work in this rich information environment. These goals would be attained, for instance, by improving the “mastery of basic skills, development of digital literacy and lifelong learning” [Barcelona ... 2002:18-20]. The same concerns are expressed in the UNICE Benchmarking Report 2000 [UNICE, 2000].

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The emergence of interest for Knowledge Management (KM) lies in the confluence of many factors and aspects, which bring all branches of knowledge to the fore including historical, intellectual/philosophical, economic, technological and cultural areas [Despres and Chauvel, 2000:4]. Little, Quintas and Ray [2002] state that the interest for knowledge, as an area of research and practice in the field of management, has its origins in the convergence of different perspectives including information management, organizational learning, strategic management, management of innovation, and the measurement and management of intangible assets. Thus, KM emerges as a pluri- and interdisciplinary area.

Furthermore, Davenport and Cronin [2000] consider that KM is being used differently across different domains with each claiming that its partial understanding represents a definitive articulation of the concept. These domains are library and information systems (LIS), process engineering (PE) and organizational theory (OT). To the LIS, KM is seen as management of know-how, which corresponds to the “coding and classification of recorded material (content) embedded in artefacts, structures, systems and repositories”, without trying to understand how business value is perceived and created. In process engineering, KM is perceived as the discovery and extraction of value when existing processes are analysed. This “process approach does not do justice to the application of individual competencies, skills, talents, thoughts, ideas, intuitions, commitments, motivations and imaginations, in short, the realm of tacit knowledge”. None of these perspectives takes into consideration the knowledge that cannot be codified, or tacit knowledge. Nevertheless, there is a growing recognition that the “knowledge of experts is an accumulation of experience – a kind of residue of their actions, thinking, and conversations – that remains a dynamic part of their ongoing experience” [Wenger et al., 2002:9]. Knowledge is simultaneously tacit and explicit and its creation is the result of the interaction between them. It is in this context that the third domain emerges, where KM is perceived as a capacity, which allows organizations to develop, to innovate and to be more competitive. Thus, in the perspective of OT, KM is not the management of resources but of the context where knowledge is used. It is argued that to achieve sustainability, firms should focus on methods to build knowledge as well as providing a stimulating organizational culture, as these are the crucial and differentiating factors, difficult to imitate by competitors [Pfeffer, 2002].

Examples of large corporations implementing KM initiatives proliferate in the specialised and professional literature. Among these, one finds Ford Motor Company, Chevron, Texas Instruments, Canadian Centre for Management Development, Health Canada [Bonitis, 2002], Microsoft, Coca-Cola, Merck, Intel, Skandia [Snyder and Pierce, 2002].

Taking into account that the large majority of firms worldwide are small and medium ones (SME’s) [EUROSTAT, 2002], why is it that the literature does not offer as many references to applications of KM in this sector? Is KM of any relevance to SME’s? If so, are their KM needs analogous to those of large corporations?

One could argue that the solution to KM lies in the training and preparation of a particular kind of worker – the knowledge worker. However, it should be recognised that the biggest contributors to GNP in Europe are the SME’s, who cannot afford the resources to formally “compartmentalize the information gathering and use functions, nor do they have the resources to develop the infrastructure necessary to access and use the information” [Rosenberg, 2002:2]. It is argued that these competencies should be developed by all employees, regardless of the dimension of the enterprise in which they are working in. We believe that educational institutions should prepare professionals able to contribute to and manage knowledge across the organisation. Moreover, information literacy must be part of the “skill set of almost every employee who works with information” in a business [Rosenberg, 2002:3]. Furthermore, firms should provide training opportunities to their employees to enhance their KM skills and foster an environment where knowledge is created and disseminated through the organization [Zack, 2002].

THE CREATION OF A KNOWLEDGE AND INFORMATION ECONOMY: THE PORTUGUESE SCENARIO CONCERNING SME’S

Taking into consideration the importance recognised by the European Union concerning KM, being aware that knowledge and its management is at the confluence of some disciplines and can be approached by several perspectives, we have undertaken our research, acknowledging the goals and strategies drawn up by the Portuguese government, in order to help Portugal move towards a knowledge driven society. In the following paragraphs, the results of this research are outlined. A search of the Portuguese official sites (Programa do XV Governo - The Programme of the XVth Government of Portugal – http://www.portugal.gov.pt; Sociedade da Informação em Portugal - Information Society in Portugal – http://www.si.mct.pt; Instituto de Apoio às Pequenas e Médias Empresas e ao Investimento - IAPMEI – Portuguese Institute for SME – http://www.iapmei.pt) shows that the main Portuguese concerns regarding the development of the Information Society are:
An analysis of the political aims set out in that Programme, reveals that the interpretation of the knowledge driven society outlined in the European Summits is mostly a technological one. Concerns are still linked to the development of infrastructures, bandwidth, access cost to the Internet, equipment in schools and numbers of domestic computers.

Specifically, regarding Internet use by the SME’s, one can see that, although a commission named Unidade da Missão Inovação e Conhecimento (Mission towards the Knowledge and Innovation Society) has been created (www.si.mct.pt), its strategies and measures that will be taken in order to accomplish its goals are not yet clear (and available) to the public. On the other hand, the IAPMEI aims to promote the creation of packages that include electronic business, social security, the generalization of the electronic transfer of data between enterprises and public administration, stimulation for the creation of web sites, the creation of support centres, the development of e-commerce, the regulation of digital signature and the dissemination of its use.

In the six areas of study every contribution to KM, described above, is based on technology. We agree that technology is, also, briefly, introduced by presenting some approaches as mutually exclusive.

Despite this scenario, which has a rather technological focus, we claim that there is scope, within the current Programme of Government, for the modernization of the SME’s sector, through a Knowledge Management approach. In order that the alteration will have a lasting effect, it needs to be grounded in managers that are aware of the importance of knowledge management principles in managing knowledge intensive firms and in knowledge workers that are urgently needed to achieve the innovation and competitiveness that will enable the country’s economy to converge with other EU partners.

The idea that organisational knowledge can be stored, retrieved and collected. As Karreman [2002] points out “organisational (collective) memory is socially constructed, culturally maintained and dispersed, and as indeed is indicated by the concept of knowledge management – a possible target for managerial efforts”; within organizational knowledge, “Competitive Intelligence” (CI) is also referred to as competitor intelligence, business intelligence or environment scanning. It covers numerous sectors of intelligence (e.g. competitor, technology, product/service, environment, economy) [Fahey, 1999] and its goal is to stimulate the organization’s creativeness, innovativeness and willingness to change. “Social intelligence”, which is the process by which a society, organization or individual scans the environment, interprets what is there and constructs versions of events that may afford competitive advantage [Cronin and Davenport, 1993:8], falls also within Organizational Knowledge.

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In the six areas of study every contribution to KM, described above, is based on technology. We agree that technology is, also, briefly, introduced by presenting some approaches as mutually exclusive. These are only illustrative and, by no means, an extensive list of what has to be addressed:

i) Knowledge resources – the knowledge manager should be able to understand how information and knowledge resources – e.g., databases, web-based and other information and knowledge resources, usually available through library and information services - are created, organised, accessed and retrieved to enable him/her to fully exploit all the information that is being made available, both internally and externally, to the organization.

ii) KM systems (KMS) – these are seen as the enabling technologies for an effective and efficient KM. These tools and systems can be categorized as (1) basic functionalities (support communication, storing, exchanging, search and retrieval of data and documents, discussion among groups and organizational processes); (2) interactive KMS (support codification, search and retrieval); (3) interactive KMS (support KM processes), and (4) bridging KMS (providing contextualized knowledge repositories) [Maier, 2002:20].

iii) Organizational knowledge – the notion that while individuals learn something also do groups and organizations has gained wide acceptance in the last decade [Bood 1998:210; Nahapiet and Goshal, 2002], together with the...
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