

Knowledge Management Practices in SME. Case study in Basque Country SME

Alvarez Meaza, I¹, Cilleruelo Carrasco E¹, Zamanillo Elguezabal I¹,
Zarrabeitia Bilbao E¹

Abstract In a competitive market like the current one, knowledge and its management have become the best partner to generate competitive advantages in small and medium enterprises. It is important for country economic development that SMEs, as main source of wealth, manage their intangible resources to continue creating value, both business and social, and get to be leader in an international and competitive market, in order to gain advantages to present difficult situation due to financial crisis. Therefore, this research study analyzes what the current situation of Knowledge Management in Basque Country SMEs is. More specifically, the use of Knowledge Management practices and strategies for capture explicit and tacit knowledge have been studied in depth, in order to identify what practices and knowledge capture strategies are the most frequent and what activity sector and size of SME, by number of employees, are using them more intensely.

Keywords: knowledge, knowledge management, SME, practices, tacit and explicit knowledge

1.1 Introduction

New Economy, Globalization, Knowledge Society, Innovation and Knowledge Management, among others, are concepts that are in use nowadays in business management and society in general. In fact, what it lays behind these terms is the search for alternatives to make progress on management of organizations, mainly

¹ Izaskun Alvarez Meaza (✉); Ernesto Cilleruelo Carrasco; Ibon Zamanillo Elguezabal; Enara Zarrabeitia Bilbao
Departamento de Organización de Empresas. Escuela Superior de Ingeniería de Bilbao,
C/ Alameda Urquijo s/n, 48013 Bilbao, Spain
e-mail: izaskun.alvarez@ehu.es

oriented to improve business competitiveness in a constantly changing environment and more and more demanding.

In this new organizational context and the need for searching solutions that allow organizations adapt to environment to survive, knowledge management was born in ninety nineties, strengthen existing knowledge and create new knowledge. Moreover, its success in organizations is linked to development and implementation of knowledge infrastructures: persons, organizational and technological systems (Sáiz et al. 2011).

The adoption of Knowledge Management practices can be considered as an essential step for the integration of organizations in the knowledge based economy.

According to a study made by OCDE (OCDE 2003), knowledge management practices used by organizations are different in number and type depending on the enterprise size. That's why it can be suggested that fostering these practices has to be done in considering the size of organization that implements them. Furthermore, the use of these practices is directly related to innovation. This suggests that knowledge management is part of a successful, creative, innovate and productive enterprise, regardless of its size.

In today's economy, SME have a very important weight and have become an essential source of entrepreneurship, employment and innovation. In the Basque Country, SME are the main source of wealth and employment of its industry, specifically, 99.82% of companies are SMEs. The SME are increasingly threatened by the emergence of competitors from emerging economy countries. Therefore, SME need to improve their products and services, that is, increase their added value, which implies the development of a unique selling point resource that allows to overcome in global market. In this way, SME emphasize the competitive advantage of their products and services with regarding to competitors. Knowledge or "know how" becomes the intangible resource that marks a competitive advantage and that makes necessary a consistent way of managing it.

This paper will describe the current situation of the Knowledge Management practices in the Basque SME. To do so, the use of Knowledge Management Practices in SME has been thoroughly analyzed.

1.2 Knowledge and its management in organizations

We are in a knowledge-based economy, characterized by turning knowledge into one of the main assets involved in economic exchanges and one of the key variables in the organizational structure and culture of organizations (Pérez-Montero 2008). The reasons why knowledge becomes "THE" resource rather than "A" resource (Drucker 1991) in post-industrial age are mainly technological and economic. On one hand, the development of information technologies has allowed access and management of larger amounts of information. On the other hand, globalization of markets and its current critical situation has provoked that the or-

organizations adopt structural changes and create strategic alliances between different organizations to better adapt to ongoing changes that take place in its economic and social environment (Sánchez, Cilleruelo 2000).

The needed adaption to new scenarios results in a search for new organizational structures and approaches. As result of that change, appears the knowledge-based organizations that change the organizational vision as producer of intangible assets. The management model changes into an organization context which promotes the exchange of knowledge by creating the appropriate environment, abandoning the traditional hierarchical structures and giving flexibility to the organizations. The intangible assets provide organization with added value that allows gaining differentiating from competitors.

The knowledge grows when it is shared, that is, transmission of knowledge makes that its asset value increases. The flow of knowledge resulting from relationships with clients can be more important to success of organization than the flow of goods and money. Clients not only provide economic benefits, but also help with ideas about products, among others; a return between organizations that is a competitive advantage for both sides (Sánchez, Echevarria & Cilleruelo 2005).

Therefore, knowledge management becomes an essential task in organizations that want to be competitive in a globalized market like the current one. But, what is knowledge management?, Knowledge Management is a dynamic process that is intended to create, identify, capture, store and transmit knowledge of an organization, so that it can be converted into value.

1.3. Empirical Study: Using Knowledge Management practices in Basque SMEs. Results.

We will now introduce the developed to analyze the use of knowledge management practices in Basque SMEs.

The studied targeted group is composed of 526 SMEs with headquarters in Basque Country that are associated with any of the following industrial clusters: Machine- Tools, Electrical Appliances, Automotive, Environment, Electronics, Computing and Telecommunications, Energy, Aeronautics and Space, Paper, Audiovisual, Transport and Logistics. The reason why these activities have been selected for this work is that the sectors in which they operate have a high index of industrial production, spend about 60% of expenditure on technological innovation activities and have diversity in terms of their level technology. Moreover, clusters are a key element in competitiveness and have become the backbone of Basque economic structure, that have allowed to encourage the flow of knowledge and innovation and learning, thanks to the geographical concentration of its enterprises activities. Consequently, the company associated with these clusters takes

place in an environment where the flow of knowledge is abundant and gives more importance to knowledge management.

Table 1.1 Data sheet for research

Object of Study	526 SME associated with clusters
Associated Clusters	Machine- Tools, Electrical Appliances, Automotive, Environment, Electronics, Computing and Telecommunications, Energy, Aeronautics and Space, Paper, Audiovisual, Transport and Logistics
Scope	Basque Country
Data of implementation	June - July 2011
Source for elaboration of questionnaire	1. "Measuring Knowledge Management in the Business Sector: First Steps" (OCDE 2003). 2. "Estudio sobre la Gestión del Conocimiento en España 2004" (Tena, Ongallo 2004). FUNDECYT y AENOR

To collect data, the survey was designed with questions about the use of knowledge management practices in order to know what practices are in use or planned to use in the next 24 months. In the questionnaire, on the one hand, there are practices related to communications in the organization in order to share knowledge through them, training and mentoring, policies and strategies in organization, capture and acquisition of knowledge in organization and, on the other hand, there are possible strategies for capturing explicit and tacit knowledge.

The analysis of the results, both quantitative and qualitative, about the use of different knowledge management practices and the use of different strategies to capture explicit and tacit knowledge, can contribute to understand better the use of Knowledge Management practices in different types of companies classified by activity sector and number of employees. This study will guide them through the most used practices and strategies and put necessary corrective resources to knowledge management practice in the company will be carried out with the greatest success.

1.3.1. Using Knowledge Management Practices in Basque Country SMEs

In Table 1.2, obtained results related to use or planned use of Knowledge Management practices in Basque Country SMEs proposed in this study are represented.

Table 1.2 Percentage of Basque SME that use or has planned the use of Knowledge Management practices

Knowledge Management Practices	In Use	Plan to use in the next 24 months
Uses knowledge gained from other industrial sources such as industrial associations, competitors, customers and suppliers	95%	0%
Uses internet to obtain external knowledge	95%	5%
Encourages experienced employees to transfer their knowledge to new or less experienced employees	77%	18%
Encourages participation among employees in project teams with external experts and / or multidisciplinary	77%	14%
Provides external training to employees to maintain their current skills, update their skills or improve their competences	68%	14%
Using the knowledge gained from public research institutions, including universities and research centers	68%	9%
Uses partnerships or strategic alliances to acquire/share knowledge	64%	18%
Dedicates resources to identify and obtain external knowledge (technological vigilance)	64%	14%
Having a culture or value system that promotes sharing of knowledge	59%	18%
Encourages workers to continue their education by reimbursing tuition fees for successfully completed work-related courses	55%	9%
Regularly updates databases of best practices, lessons learned or listings of experts	50%	14%
Provides informal training related to knowledge management practices	50%	5%
Preparing written documentation such as lessons learned, training manuals, good work practices, articles for publication, etc. (organizational memory...)	45%	32%
Facilitating collaborative work by projects teams that are physically separated (“virtual teams”)	32%	18%
Provides formal training related to knowledge management practices	27%	14%

Table 1.2 (continued)

Uses formal mentoring practices	23%	18%
Has a written knowledge management policy or strategy	18%	9%

1.3.2. Strategies to capture Explicit and Tacit Knowledge in Basque Country

In Table 1.3 and Table 1.4, frequency of use of different strategies to capture knowledge, both explicit and tacit, proposed in Basque SME study is presented.

Table 1.3 Percentage of Basque SME that use strategies to capture explicit knowledge

Strategies to capture Explicit Knowledge	In use	Plan to use in the next 24 months
Technological files creation (or files network by subject area)	59%	14%
Best practices management	50%	9%
Creation of a repository of frequently asked questions	27%	14%
Best practices benchmarking	27%	23%
Lab books: notes take in a systematic way and manage properly that are obtained from research in the organization	23%	14%
Mind maps: knowledge representation systems	14%	18%

Table 1.4 Percentage of Basque SME that use strategies to capture tacit knowledge

Strategies to capture Tacit Knowledge	In Use	Plan to use in the next 24 months
Socialization: Communities of Practice or other trust scenarios	50%	5%
Review after review: analysis following conclusion of the activity	50%	14%
Weblogs technology	41%	9%
Duplication strategy: create groups to develop a single product or rotation of personnel in different positions	27%	5%

Table 1.4 (continued)

Strategy of metaphor: combination of ideas from the person that has tacit knowledge	23%	9%
Storytelling	18%	9%

1.4. Conclusions

Knowledge Management practices in the Basque Country SMEs are linked to the availability of transfer channels that allow the capture, acquisition and communication of required knowledge and people capable to understand what it knowledge management systems mean.

Aerospace sector is one that makes use of knowledge management practices, leading to the conclusion that pointer-technology industries are more likely to improve their organizational systems implementing systems to manage intangible resources. It is also concluded, that those SME smaller in terms of number of employees (between 1 and 9), develop a more intense use of the Knowledge Management Practices. Therefore, it becomes clear that implementing a knowledge management system does not require a large organizational infrastructure.

The usual strategies to capture explicit knowledge in Basque SMEs are related to document management technology platforms that allow explicit knowledge to be documented and placed in an accessible repository in order to be transmitted. The Aeronautic industry constitutes an example of intensive use of Knowledge Management Practices. But, regarding the analysis based on the size of SME, we can state that bigger companies (between 50 and 249) develop a more intense use of such strategies that require a large technical infrastructure.

Regarding to strategies for capturing tacit knowledge, it can be concluded that the strategies related to activities that enable interaction between people in appropriate contexts and to analytical activities that are performed a posteriori to activity. Analyzing these strategies based on activity sector of the SME, it is highlighted the fact that Aeronautic sector makes the least use of them, different from the case of the studies of the usage of practices and strategies to capture explicit knowledge. It is observed the fact that SMEs with fewer employees (between 1 and 9) are those that make use of knowledge capture techniques related to the interaction of people that do not require large infrastructure.

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