PRACTICES OF KNOWLEDGE MANAGEMENT: ANALYSIS IN COMPANIES LOCATED IN BRAZIL

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ABSTRACT

The knowledge management practices are taking place to secure the precious asset gathered by the companies to keep the competitiveness in the market. The objective of this research is to conduct a case study within the companies located in a multi-sector complex condominium to identify which, amongst them, apply knowledge management (KM) practices and recognize them as a tool to improve retention capacity, usage and knowledge sharing. The base for this study were knowledge management practices and criteria defined by the Organization for Economic Cooperation and Development (OECD). A questionnaire pool developed by OECD, in order to evaluate KM practices used by companies, such as Communication, Tutoring and Training, Politics and Strategy, Capture and Knowledge, was used as a research tool for this study. An important fact that needs to be mentioned and makes this study worthwhile is that the practices of KM in business lies on the fact that 55% of the global wealth comes from knowledge being responsible for most gains of productivity in organizations. This study came to the conclusion that the companies used as an object of research make use of at least one of the KM practices elected by OECD. Regardless of the field in which they are inserted, the main reason why they use those practices is because they benefit and improve management. The results demonstrate that those companies utilize KM practices in order to increase competitiveness, performance and client’s satisfaction. As well as the study proposed by OECD (2003), this research recognized the sharing, creation, generation and maintenance of knowledge as important tools to guarantee competitive advantage and the productivity of the companies located in industrial condominium surveyed.

Key words: Practices of knowledge management; Knowledge management in Brazil; Competitive advantage.

INTRODUCTION

The knowledge management (KM) is the field in growing trend, which was merged, according Bukowitz (1999), from the amalgamation of several fields of knowledge, among them can be highlighted: human resources, information management, change management, brand management and reputation, communication. The author stated that, the KM “represents the effort to repair previous prejudices and the safety policy against the loss of the organizational memory of the future”.
It is possible to consider that the KM, from the ideas of Bukowitz (1999), Stewart (2001) and Dalkir (2005), is the strategy of retrieval of intellectual assets. Stewart, prefacing Dalkir (2005), considered that “the best manner to retrieve the knowledge of value is to identify intellectual assets, then to guarantee that the legacy produced be stored in such manner that facilitate the possible recuperation and reutilization.

For this survey, the definition of KM adopted was that stated by the Organization for the Cooperation of the Economic Development (OCDE). These ideas corroborate with Drucker (1993), when he states that “the great gains of productivity will arise from the improvement of the KM”. This survey investigates among companies located in the “Multi-sectorial Enterprise Condominium Perini Business Park (MECPBP)” in Joinville, Santa Catarina, which use the practices of knowledge management elected by the OECD and, among them, which present the evidence that the use of these practices shown the efficacy.

This work starts with the principle that all companies generate knowledge and use it in proper manner to attend their needs. To Dalkir (2005), “is necessary that the knowledge flows among individuals [...] and return to the organization in the form of learning and better practices”, then can have the knowledge organization in which the collaborators “talk” and know what happen within the organization as a whole.

During the survey, was possible to notice in the routine of the organizations, the identification of some practices of KM, that are utilized daily, as the organizational routines, which are the institutionalized practices of KM. Among these practices, it can highlight the daily planning, development of leaderships and evaluation of performance. Due to the specific nomenclatures, is perceived that several actions of this sector of management are practiced in the way to generate knowledge, innovation and competitive advantage for the organization, however are not identified as the practices of KM.

According OCDE that represents thirty one countries [1] which produce more than half of all wealth of the world, approximately 55% these wealth comes from knowledge. OCDE is involved in the production of data and in the advances of the economic and innovation analysis. From these studies, organized the practices of KM in categories such as: communication; training and tutorial; policy and strategies; capture and acquisition of the knowledge.

The date utilized in the survey was the year 1999, as this was the year when the organization published the first version of the principles of corporate governance. The questionnaire developed by OCDE, in 2001, was utilized as the tool for the survey for this study, which was applied to the companies of the CEPBP. The majority of companies located in the MECPBP are Brazilians, as well as the participants of this survey, with the activities devoted mainly to the service sector.

Authors as Sveiby (2001) and Probst, Raub and Romhardt (2008) state that the intellectual capital is within the persons and the individual capacities of the collaborators of the organization form the base of well succeeded company. Thus the organizations need collaborators that interact and aggregate value.

As the KM generates wealth and increase the competitiveness by means of practices, the exercise of this is paramount to increase the competitiveness advantage in organizations. These wealth in form of knowledge considered productive, can improve the learning and the performance of the organizations. Queried, then, which practices of knowledge management are utilized by companies
located in the MECPBP and recognize in them means to increase the capacity of capture, use and sharing of the knowledge? For that, it was performed the survey of how many companies made use of formal and informal practices of KM, it was noticed that these practices contributed for the process of innovation.

With the proposal to measure the practices of KM in companies of most varied sectors of the economy, in partnership with some member countries, defined some criteria with basis in which is possible to identify if one company make the use of determined practices of KM; how long; what reasons to which adopt the practice; which are the sources of motivation for the development of these practices and the benefits and consequences of the practices adopted.

The criteria defined by OCDE, the organization, with the partnership with the Division of Science, Innovation and Electronic Information of Statistics of Canada, guided for building the questionnaire that had its pilot project of application in the year 2001 in the countries such as Canada, Germany, France and Denmark. From this application, the questionnaire was revised and improved, and the version of the work was the questionnaire adopted by this survey. Based in the results obtained by the organizations in these countries, it was considered that the application of the same tools in enterprise’s condominium, acting in several sectors of the economy, implies in relevant data for the proposed survey.

The tool was organized to evaluate the use of twenty three practices of KM is complemented with questions on the incentives of the organization for the utilization of these practices, the results, responsibilities, reasons for the use, investments among others. These questionnaires allow survey of the companies of sectors and varied fields, on the exercise of the practices of KM, as well as its efficacy. The practices are organized by categories such as: communication; training and tutorial; policy and strategies; capture and acquisition of the knowledge.

With the purpose to defend the idea of that the KM is actually one of best practices to be utilized by companies, the study was based in renowned authors in the field of KM. From the application of the questionnaire, was possible to identify which are the practices of KM exerted by companies of the condominium, how are utilized and which results identified, beyond being performed the comparison with companies participants of the pilot survey forerun by OCDE.

**METHODOLOGY**

For this survey, 72 companies of small, medium and large sizes of several sectors of the economy were identified, located in the MECPBP between January and June 2011. It can be highlighted companies from France (Allflex), Switzerland (Bühler), Geman (Brenntag), Italy (Cisa) and Brazilian (Wetzel). Among these, 58 companies accepted to participate in this survey. Among them, 53 companies considered as participants returned the questionnaire. They represent 91% of the total of companies surveyed, and 100% of the universe of the study utilized for the analysis of the results. Among the participating companies, 58% answered by e-mail and 42% by the visit to the companies.

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1 [1] Member countries of the OCDE: Australia, Austria, Belgium, Canada, Chile, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Island, Ireland, Israel, Italy, Japan, Korea, Luxemburg, Mexico, Holland, New Zealand, Norway, Poland, Portugal, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Turkey, United Kingdom (England) and the United States of America. (OECD, 2011). 1
The data processing of the results obtained by the application of the questionnaire forecasted the analysis of each question from the information supplied by all companies.

**STRUCTURE OF COMPANIES SURVEYED**

It was possible to identify similarity among companies surveyed over the structure of the job. Most of them, 63% have the multiple work places, 22% are of international companies and 15% were involved in the process of acquisition or united in last three years. It was identified that the majority of companies were of small sizes with less than 100 collaborators, not presenting the activity abroad.

As the majority of companies surveyed, 71%, not present collaborators acting abroad, is possible to state that in this survey, companies are predominantly Brazilians. Thus, from the results obtained, is possible to obtain the feature of the Brazilian companies acting in several sectors of economy regarding to the practices of KM.

**PRACTICES OF THE KNOWLEDGE MANAGEMENT IDENTIFIED IN BRAZIL**

It was possible to identify in this survey, that the companies of the MECPBP utilize at least one of the practices of KM described in the questionnaire, which implies in exercising any systematic activity related with the capture and the share of the knowledge by the organization (OCDE, 2003). The companies motivate workers to transfer the knowledge, as well as make the use of training to aid collaborator to acquire, representing 77.4% of the companies surveyed. In this sense, agree with Thiel (2002) when the author stands that “the motivation and the willingness of share of knowledge together with the culture, are basic elements for any initiative of KM in one organization”.

The means utilized by companies to acquire knowledge also deserve highlight in this survey. Companies utilize more internet to acquire knowledge, than printed sources of survey, regardless if they are public or private. Identified these data, is possible to state that with the evolution of the Information Technology and Communication (ITCs), the market was obliged to adequate for the new reality, finding the way to benefit and profit with new information available to keep in the market (Davenport, Prusak, 2000).

Among the practices less utilized by participating companies of this survey, it was identified the practices related to tutorial, systems of values and culture for promotion and sharing for obtaining knowledge by means of public research institutions. Only 34% of companies use these strategies of KM. These characteristics can be harnessed the fact as the top manager of the organization not being involved with the issue, as observed by as Nonaka and Takeuchi (1995) and Sveiby (2001). They state that to have this change in the organizational culture and have the success in the implementation of one project of KM, is necessary that the top manager be involved.
Table 1: Practices of knowledge management identified by the participating companies

<table>
<thead>
<tr>
<th>Knowledge management practices OCDE</th>
<th>Practices in use before 1999 (%)</th>
<th>Practices in use from 1999 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Communication</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Database updating</td>
<td>17</td>
<td>52.8</td>
</tr>
<tr>
<td>Preparation of written documents</td>
<td>13.2</td>
<td>64.2</td>
</tr>
<tr>
<td>Facility of collaborative work</td>
<td>5.7</td>
<td>56.6</td>
</tr>
<tr>
<td><strong>Training and Tutorial</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supply of formal training</td>
<td>20.8</td>
<td>47.2</td>
</tr>
<tr>
<td>Supply of informal training</td>
<td>22.6</td>
<td>52.8</td>
</tr>
<tr>
<td>Utilization of formal tutorial practices</td>
<td>17</td>
<td>34</td>
</tr>
<tr>
<td>Motivation for knowledge transfer</td>
<td>28.3</td>
<td>49.1</td>
</tr>
<tr>
<td>Incentive to continue education</td>
<td>22.6</td>
<td>43.4</td>
</tr>
<tr>
<td>External training</td>
<td>26.4</td>
<td>52.8</td>
</tr>
<tr>
<td><strong>Policies and strategies</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Has policy or documented strategy on KM</td>
<td>13.2</td>
<td>20.8</td>
</tr>
<tr>
<td>Value system a or culture to promote share of knowledge</td>
<td>11.3</td>
<td>41.5</td>
</tr>
<tr>
<td>Utilize partnership or strategic alliances to acquire knowledge</td>
<td>17</td>
<td>41.5</td>
</tr>
<tr>
<td><strong>Capture and acquisition of knowledge</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Utilize other source of information</td>
<td>18.9</td>
<td>49.1</td>
</tr>
<tr>
<td>Utilize knowledge obtained from public research institutions</td>
<td>7.5</td>
<td>26.4</td>
</tr>
<tr>
<td>Dedicate resources to obtain external knowledge</td>
<td>18.9</td>
<td>35.8</td>
</tr>
<tr>
<td>Utilize the internet to obtain external knowledge</td>
<td>13.2</td>
<td>79.2</td>
</tr>
<tr>
<td>Motivate workers to participate in teams of projects with external experts</td>
<td>15.1</td>
<td>45.3</td>
</tr>
</tbody>
</table>

Source: Data from the survey (2011)

Was possible to notice, by the data presented in the Table 1, that there is certain “blockade of companies in the presence of new forms of management”, which confirm what was reported in the studies of Leuch (2006). The duplicity of documents, lost information and loss of the organizational memory are also linked to KM. Thus, as observed in the study of the OCDE, the companies of the MECPBP, also consider that the preparation of written documents, as manuals, learned lessons and good practices of joint work, help companies to develop and keep its organizational memory.
Trainings also were the practices identified as steady in the companies surveyed, being considered of fundamental importance. The training mentioned brings together formal and informal training, being external trainings are utilized by 79.2% of them. During the application of the questionnaire, some participating companies reported the existence of an exclusive physical space to perform training of collaborators within the company, as well as the specific budget for this issue.

The education also was identified as the practice inherent of companies, as well as the motivation of workers. Was possible to identify that when motivate the transference of knowledge among workers, companies valorize the competence of workers for work with tangible goods. This vision of incentive to the continued education is important for companies to renew and update the knowledge utilized in the organization that presents more focus in the production rather than in the knowledge (Moraes, 2010).

It was possible to identify that more than 50% of companies surveyed utilize partnership or strategic alliances to acquire knowledge. The use of value system or culture to promote the sharing of knowledge also is inherent to companies. In counterpart, 45.3% of companies surveyed still do not have policies or documented strategy on KM. It is interesting that, the company as well as the collaborators know, to attend the ideas of Pereira (2002), the “available sources (internal and external), wherever is possible to effectively acquire the knowledge”. Linked the statement of the author, consider important, that the knowledge be treated, when emerge the needs, be possible to locate and utilized quickly with efficacy.

Regarding to the culture or systems of values to promote the sharing of the knowledge, “bank of innovations” are utilized by the companies of the MECPBP to stimulate the creativity of the workers, besides to aid the company in the development of products and services. For Davenport and Prusak (2000), projects related to KM must be anchored in the cultural base of the company. For that, the practices must be aligned with the mission, the vision of the future and the organizational strategies (Batista et al., 2005). By means of this survey, is possible to conclude that companies of the MECPBP received significant contribution of the practices of KM. Despite the companies presented more focus in the production than in the KM, These surveys show that its practices are utilized as the fundamental tools for the innovation and competitiveness.

It was possible to identify, in conclusion, that companies surveyed utilize practices that consider the practices of KM and were not described in the questionnaire applied. Among them, can be cited information bulletins; routine meetings; daily meeting of safety; development of leaderships; feedback; evaluation of performance; personal goals; goals of training (E-learning), and programs of innovation.

**MOTIVATION OF THE BRAZILIAN COMPANIES TO ADOPT KM PRACTICES**

The main reason described by companies of the MECPBP to use the practices is the aid to managers to bring to focus the attention in fundamental information. This is the main factor that motivate and that make to consider important the reason to utilize. This result can be justified by the requirement of the modern management for the decision taking be done with maximum of updated information, exact, reliable and legible, as the information and knowledge are the key of the productivity and the competitiveness.
From an external perspective, innovation management is driven by different knowledge-intensive organizations (KIOs) that build knowledge as their primary value-adding process. They can be defined as organizations where employees with a high degree of knowledge are critical to the primary function of the organization. They have relatively little financial capital but instead have as main assets the knowledge and competence of their personnel (Kipping and Engwall, 2002). As more critical points identified by companies, highlight the loss of knowledge due to the leave of workers, the protection of strategic knowledge and the increase of acceptance of companies by innovation. They highlighted that the duplicity of documents is still the issue that require attention, and relate this problem the great turnover of workers, besides the lack of structured policy of management in the organization. It is important to point out that, as stated by Choo (2006), in the present world, the information “is the intrinsic component of almost all that the organization makes”.

The category of Information Management (IM) broach the management of all informational environment of the organization, with the function to manage what is outside of individual, structuring and directing useful information for the needs of each client/user. In counterpart, the KM manages what is intrinsic to individual that depend of the IM for the absorption of the knowledge to have significance and utility (Davenport, 1994).

The incentive to the groups of workers to act in all functions, targeting all have knowledge of all activities related to the company, have the access to the knowledge of all activities with the same level of information was the issue of highlight also mentioned by the companies of the MECPBP. These sharing of the knowledge among collaborators, as stated by (Di Milia and Birdi, 2010; Sung and Choi, 2012) increase the capacity of the collaborators to access and absorb knowledge relevant and distributed by all segments of organization, aiming to reinforce the innovation. Such knowledge sharing effectively enhances the capability of employees to access and absorb relevant knowledge distributed throughout varied segments of an organization, which should enhance organizational innovation (Di Milia and Birdi, 2010; Sung and Choi, 2012). Then, the collaborators can transfer the knowledge and experience to other departments of the company, besides to develop and acquire, also, new knowledge (Choo, 2006).

Is possible to justify the motives mentioned by companies as the way for the improvement of quality of products and services, increase of satisfaction of the clients, innovation, increase of the productivity and, consequently, increase of the revenues and the performance related to the competition (Batista, et al., 2005).

Two important points seem to arise from this account. Firstly, “collaboration” is key in knowledge creation and sharing, in other words, collaboration within and across organizations and paying attention to “helping knowledge workers network” (Stewart, 2001). Secondly, in contrast to traditional management philosophy where subordinates are instruments of their superiors, in modern times, managers increasingly find it more effective to stimulate subordinates to voluntarily transfer their experiences and talent to the organization. In other words, facilitating and mentoring leadership styles, rather than power-based management and leadership styles, are proven to positively facilitate knowledge sharing and value creation (Roth, 2003; Yang, 2007).

Results obtained show that the practices that involve activities of training are considered more important by the surveyed companies (52.8%), but the stimulus of the manager to share the knowledge (50.9%) and the increase of the acceptance for innovations (47.2%) are practices that
also deserve relevance due to the level of importance identified by companies. According to this survey, despite small discrepancy, the acceptance of innovation, in the category of Human Resources, mainly by the workers, is considered as practice in more critical state among companies surveyed.

RESULTS IDENTIFIED IN THE COMPANIES AND RESPONSIBILITIES ON THE PRACTICES ADOPTED

The practices of KM were identified as fundamental to increase of competitiveness advantage of the organizations by the companies surveyed. Regarding the exercise of these practices, was possible to notice that, in majority, 92% of companies do not present developed policy or culture of KM, but consider its practices important for the use, capture and sharing of the knowledge.

Among the 8% of companies that have collaborators or specific departments for the practice, is possible to point out companies that have training centers, responsible managers to check the needs of workers, accessible library to all collaborators, information bulletins, program of innovation, bank of ideas, suggestions of improvement and training centers with specialized personnel. It was possible to notice that the companies of the MECPBP identified the increase in the capacity of capture and knowledge from other business, as well as the increase in the adaptation for the new products and services. Among the participant companies, one identified the increase of 7% in the productivity of workers after application of the practices of KM. Was noticed also that they contributed to increase the creation of new products or services demanded by clients.

The innovation, thus, is implicit in the success of these practices, as stated by Dalkir (2005), the capacity of the organization to have an innovative culture is related to the leadership, represented by the manager or directorate, that could be responsible for the building of strong cultures. By means of this survey, identified that the innovation happens in the Brazilian companies and its results are important and meaningful to majority of companies of the MECPBP.

It was possible to notice, that the organizational culture still needs to be worked out in the Brazilian companies. Whereas countries as Denmark, Germany and Canada consider regular creation of organizational cultures for the KM, as the common practice utilized by companies (OCDE, 2003), the Brazilian companies still present focus in the productivity.

INVESTMENTS IN KM IN BRAZIL

The budget forecast for the activities of KM in the organizations is considered by Moraes (2010) as an important step. The dedication of resources for KM is considered delicate, once, according to the author, involve relocation of costs for the organization. Besides the expounded argument, the ratio cost and benefit must be constantly clarified, as the results deriving from the KM and its practices “not always are immediate”.

Despite the organizational culture of the companies of the MECPBP are towards the productivity, the survey showed that in majority, 79%, the companies surveyed consider the sharing of knowledge one important task for the organizational culture. The survey demonstrated that the utilization of resources for the activities related to KM in the companies is linked to the availability of this resource. Companies can use the resources for these practices, but these are not necessarily specified in the budget. Among companies surveyed that presented dedicated budget for the KM, 21%, this resource is destined mainly for incentive for education, as scholarship and training.
The investments to the practices of KM in the Brazilian companies of the MECPBP also are small. Regardless the importance of knowledge for the health running of the company, and admit positive results in the presence of application of practices of KM, the investment in resources to better practices related to this within the company is scarce (OCDE, 2003).

The investment in the intellectual worker, as observed in the practices broached, is fundamental to the company to achieve the success. They are that, according Drucker (2001) put in practice all lessons learned, by means of systematic education. This worker, by means of manual skills and muscles, experiment all that concentrate in his intellect. He is considered, thus, the “fundamental investment and the center of costs of developed economy”.

CONCLUSION

This survey showed that the practices of KM are considered important factor to increase the competitive advantage and the success of the organizations. Companies consider the exercise of the practices of KM relevant and meaningful despite not recognizing as participant in the strategy of KM in the daily life of their activities. The exercise of the practices of KM is linked to the identification of companies due to the advantage that provide for the organizational governance, once the focus is to aid managers to center the attention in key information. As the results more meaningful can be highlighted the practices related that contribute to the innovation, such as the increase of the adaptation in the creation and development of new products and services, as well as the capture and acquisition of knowledge the other business.

Identified the steering of companies to recognize in the practices of KM, the means to increase the capacity to capture, use and share the knowledge. Despite the loss of knowledge due to leave of workers be the critical issue observed, the investments destined to the practices of KM, are linked mainly to the education of the workers. The Brazilian companies exercise the practices of KM aiming the success of the organization, as the plans of incentive of education by means of scholarships. Identified that the lack of the specific budget for KM does not impede companies to relocate existing resources for this issue, albeit, without the identification of the eminent profit due to this practices. Is possible to consider, thus, with the structuring of the practices of KM, this factor can be improved. Notwithstanding, the practices related the motivation and training of workers, aiming the improvement, were identified as more utilized. In majority, the utilization of the practices related to KM in the companies, are exercised from 1999. The results presented in companies located in Brazil also suggest that they make the use of the practices of KM to increase the productivity and the competitiveness.

Is possible to notice, however, that the Brazilian companies, unfortunately, are obsoletes regarding to KM in the organizations, as Canada, Denmark and Germany, presented similar results 10 years ago in the pilot survey applied by OCDE. From the results obtained in this survey, it can be concluded that, if the companies identify their practices of KM, and workout towards these effectively, not as an organizational routine, the results could be meaningfully better. The conscience that these practices are essential for the success of the organization should start, mainly, from top manager, with the change of organizational culture and incentive the workers for the creation of the knowledge in the company.
REFERENCES


