

GENERATION AND REVERSE KNOWLEDGE TRANSFER IN MULTINATIONAL COMPANIES

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Abstract. Current organizations recognize the importance of knowledge as a strategic asset of the company for the adjustment of the changeable conditions of the environment that can guarantee survival in time. Additionally, the generation of organizational knowledge is identified as a collective building process that contributes to the generation of the competitive advantage of companies. In multinational companies, the knowledge management is not limited only to the internal dynamics that contribute to its creation and formalization; it is necessary to analyze the knowledge transfer between the headquarters and its subsidiaries in different countries for the enrichment of the know-how of the mark. In this paper we present a set of factors to take into account for the transfer of new knowledge generated toward the headquarters of the multinationals presenting the benefits that the multinational company could achieve.

Keywords: Knowledge Management, organizational learning knowledge transfer, human capital, multinational enterprise.

1. INTRODUCTION

The current competitive environment in which organizations operate is characterized by globalization and offers of goods and services. In this context, we recognize the importance of knowledge management as a significant driver of competitive advantage, because it faces the constant changes organizations face and the increase in the volume of information that must be managed. [1].

In these knowledge-based economies, the human capital of the organization becomes very important, as they are individuals who contribute their individual knowledge and skills for the creation of know-how.

Therefore, this motivates conducting studies, analyzes and research related to strategies such as: a) selection of personnel, b) plans and training programs, c) individual performance management, among others.

On the other hand, there are studies that examine the importance of building spaces for knowledge socialization, such as organizational laboratories [3]. Such importance is due to the knowledge in which employees are supported is tacit (knowledge in action) [2].

In the case of multinational companies that opt for a transnational strategy (build subsidiaries or branches in different countries of the world), are forced to simultaneously achieve overall efficiency. Furthermore, the adaptation to the local environment and the exchange of knowledge between the headquarters and its centers are key aspects in knowledge management.

This states that knowledge management is not limited to the internal dynamics of organizations, but also to the mechanisms of interaction and knowledge transfer to increase their intellectual capital.

This article focuses on the review of internal factors that favor the generation of knowledge in an organization.

The structure of the article comprises: in Section 2, the definition of theoretical concepts that support the work frame of reference; in Section 3 the knowledge-generating factors, identified from the literature review, and in Section 4 the overall conclusions.

2. THEORETICAL FRAMEWORK

The following defines the theoretical concepts that support the work frame of reference.

2.1 Knowledge Management

It is defined as the identification of categories of knowledge needed to support the overall business strategy, evaluation of the current state of knowledge of the organization and the ongoing transformation of their knowledge base, eliminating what is known as knowledge gaps [4].

A formal definition of knowledge management is associated with the set of processes that allow use knowledge as a key to add and create value [5]. There are researchers who include not only the processes of creation, acquisition and transfer of knowledge, but a reflection of this new knowledge in organizational behavior [6].

2.2 Learning and Organizational Change

The learning scheme of an organization is usually based on two approaches [8]:

- **Strategic Learning:** It is motivated by environmental changes, such as decreased demand, mergers or rise of emerging companies. In this context it is necessary for the organization to identify the gap between the skills required in the current employees and skills to redefine its training programs. Furthermore, it is necessary to reevaluate the selection strategies of the human talent to increase the know-how of the company.

- **Continuous local learning:** In this context, knowledge often occurs within the areas, without the intervention of strategic management. Employees learn through experience and exchange of ideas among colleagues. It is known as organizational learning and provides a level of autonomy in the workplace. It is characterized by a slow pace and that may conflict with the organization's strategic initiatives.

2.3 Knowledge Transfer in Multinational Corporations

Multinationals are considered as integrating institutions of knowledge [9]. They are defined as social communities whose knowledge production has competitive advantage for its ability to integrate, combine and generate new knowledge.

There are three knowledge transfer schemes: 1) direct transfer: when knowledge flows from headquarters to subsidiaries, 2) lateral transfer: knowledge transfer occurs between subsidiaries and 3) reverse transfer: the direction in flowing new knowledge is from the subsidiary to the headquarters. The latter scheme facilitates "learning from the periphery".

Traditionally, the transfer of knowledge in multinationals uses the direct transfer scheme. In this type of scheme the headquarters coordinates and has control over dispersed units because it makes the decision about the knowledge given to the subsidiaries.

But multinationals also see from this initial transfer that subsidiaries can generate new knowledge useful to adapt to their local environment and contribute to the preservation of competitive advantage for the organization, because of the "distributed innovation networks" [10].

3. FACTORS TO FACILITATE THE GENERATION AND TRANSFER OF KNOWLEDGE

Below are the main findings of previous work reviewed in the framework of this study in order to identify a set of internal factors that facilitate the generation of knowledge in an organization, identifying the characteristics that must have the headquarters for the knowledge transferred from the subsidiary will generate profit and contribute to the growth of the know-how of the firm.

3.1 Promotion of social spaces of knowledge

In Mulholland's work [8] arises spaces to promote exchange of knowledge and ideas, as a catalyst for the creation of internal knowledge, in particular, presents

communities of practice as one of the most used mechanisms which has yielded better results, which refer to groups of individuals who work, learn and socialize together to develop shared knowledge as a result of participation.

Additionally, Hsu [11] presents communities of practice as essential elements for the development of skills by building joint solutions from socialization problems.

From the *promotion of social spaces of knowledge* we can identify the first factor:

Factor 1: The formation of communities of practice contributes to the generation of organizational knowledge.

3.2 Software tools to support the dissemination of knowledge.

Software tools such as intranet, knowledge portals, yellow pages of expert and general collaborative tools such as communication software (e-mail, video conferencing, instant messaging), promote efficient knowledge sharing among members of the organization. In particular, these tools facilitate the exchange of knowledge between virtual teams due to geographical separation, as often happens in projects of multinational companies in their subsidiaries [12].

In the case of Google, [13] they emphasize in the use of technology to coordinate the activities of employees promoting the ongoing exchange of ideas and information among all members of the company following the widespread community model in university context characterized by the use of common resources such as databases, programming languages, Intranet "MOMA" among others.

Moreover Mulholland [8] presents the experience of implementing an information system to support project tracking methodology in an engineering company in the UK. Initially this took place only as a strategic initiative with the aim of improving the productivity of teams, but as the latter was not taken into account in its definition, they encountered resistance in addition to their daily work. For this reason it was necessary to interview 12 groups of the organization to understand why the system was easy to use and field work was conducted through semi-structured interviews to assess the full methodology proposed by the tool, and they concluded that many of everyday procedures were automated and they collected a number of improvements implemented in the second version of the system to adapt it to the local context of the engineers.

From the *software tools to support the dissemination of knowledge* we can identify the second and third factors:

Factor 2: The use of software tools for the storage and dissemination of knowledge facilitates the exchange of information between individuals and contribute to building reusable work methodologies.

Factor 3: Strategic initiatives are needed to lead the organization to necessary changes for its adaptation to the context, but they must be combined with the participation of the teams in its definition, dissemination and implementation for easy assimilation by all members of the organization.

3.3 Organizational human capital

Human capital refers to the knowledge, skills and abilities of employees that generate differences in performance of the organization. In fact, the literature recognizes the importance of human capital for obtaining positive outlets for innovation and organizational capacity development in changing environments. This is evident in the work of Hsu [11] which verifies the hypothesis that human capital is positively related to organizational performance through a study of 256 organizations in Taiwan in 2004.

Precisely because it is one of the most important assets of the organization is necessary to promote their development through organizational strategies and management practices to enhance their skills and abilities as well as knowledge sharing due to its influence on value creation activities.

Within the proposed management practices for the development of human capital are:

- a. Design of training programs that cover not only the technical and scientific knowledge but also the development of managerial and leadership skills, teamwork, negotiation tools, etc. [10].
- b. Incentive system to promote the socialization of tacit knowledge, to ensure the participation and recidivism by employees. These rewards should not be only individual but also at group level inviting employees to work together to improve the integration and effectiveness of work teams [12].
- c. The Department of Human Development should promote individual performance management where each individual is evaluated according to the fulfillment of its objectives and results achieved, obtaining feedback from their bosses and a pay increase according his performance observed by the organization [10], [12].
- d. Other practices mentioned above as the existence of information systems to support the dissemination of knowledge and the creation of opportunities for interaction among employees contributing to the potentiation of the organization's human capital.

From the *organizational human capital* we can identify the fourth factor:

Factor 4: Administrative practices that aim to enhance organizational human capital directly contribute to creating an enabling environment for the generation of new knowledge in the organization.

3.4 Assessment of knowledge by managers

Some organizations within their value system recognize the importance of knowledge as a driver of competitive advantage, what is reflected in the corporate culture through the promotion of practices to its socialization.

In Hsu's work [11] this is validated through the analysis of the management style of the directors of the 256 Taiwanese companies surveyed, where there is a real assessment of organizational knowledge by the organizations direction, who are more inclined to implement knowledge sharing practices.

From the *assessment of knowledge by managers* we can identify the fifth factor:

Factor 5: The value of knowledge as a key asset of the organization by the direction facilitates the implementation of initiatives aimed at opening opportunities for the creation and sharing of knowledge.

3.5 Reverse knowledge transfer between subsidiary and headquarters in multinational companies

The real benefit that a head office can get from the knowledge generated in a subsidiary and transferred to it basically depends on two factors [10]:

- The strategic role played by the subsidiary within the learning system of the multinational
- The ability for absorbing knowledge from headquarters

3.5.1 Strategic role of the subsidiary

Gupta and Govindarajan [14] propose four strategic roles subsidiaries can play according to their knowledge flows:

- Integrated players: They possess the most valuable resource of knowledge thanks to input and output flows that become them "knowledge marketers" for the headquarters and other subsidiaries with similar cultural contexts.
- Global innovators: They are organizations that analyze the characteristics of the environment and constantly generate knowledge of high value for the firm, which they transfer to the headquarters and nearby subsidiaries.
- Implementers: Those subsidiaries which merely incorporate corporate strategy transferred by headquarters
- Local innovators: Incorporate the knowledge received from the headquarters and adapt it to the local context with the available resources.

In [10] it is verified that the valuable knowledge which a subsidiary receives comes mainly from those who assume the role of integrated and innovative global players, who

foster the exchange of knowledge with headquarters in reverse.

From the *strategic role of the subsidiary* we can identify the sixth factor:

Factor 6: The benefit the headquarters can get, and thus the multinational company, because of the transferred knowledge from subsidiaries, depends on the strategic role that the latter takes in the "knowledge network".

3.5.2 Ability for absorbing knowledge from headquarters

The absorption capacity is defined as the ability to use prior knowledge to recognize the value of new information, assimilate it and apply it to the generation of new knowledge and skills [15].

In the work of Ambos[10] is validated that the greater the absorption capacity of the headquarters is, i.e. the stock of knowledge to recognize the value of new information, the greater the potential benefit obtained by the arrival of new knowledge from subsidiaries.

Finally, from the *ability for absorbing knowledge from headquarters* we can identify the last factor:

Factor 7: The benefit of the headquarters and the multinational in general, the knowledge transferred from its subsidiaries, depends on the absorption capacity of the headquarters.

4. CONCLUSIONS

After obtaining the factors for the generation and transfer of knowledge, we identified that these initiatives contribute to the potentiation of the human capital of the company and hence the collective construction of knowledge, useful to be transferred to the headquarters from subsidiaries enriching the know-how of the multinational enterprise as a whole.

From the factors identified to promote the generation and dissemination of knowledge, we highlight the value of knowledge as a key asset of the company that is built collectively, that attaches great importance to the promotion of teamwork, the potentiation the organization's human talent through the design of systems involving employees toward continuous improvement, the definition of training programs aimed at developing personal skills and individual performance management as a motivating factor for obtaining outstanding results on behalf of the company.

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