



INTERCULTURAL KNOWLEDGE TRANSFER: PROCESSES ANALYSIS OF A MULTINATIONAL COMPANY

TRANSFERÊNCIA INTERCULTURAL DE CONHECIMENTO - ANÁLISE DOS PROCESSOS DE UMA EMPRESA MULTINACIONAL

TRANSFERENCIA DE CONOCIMIENTO INTERCULTURAL – ANÁLISIS DE LOS PROCESOS DE UNA EMPRESA MULTINACIONAL

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ABSTRACT

This study analyzes the process of organizational knowledge transfer between subsidiaries of the same multinational company, operating in different countries. The research method used was a single case study; the company studied being an American multinational installed in Brazil for more than 30 years. In-depth interviews were conducted with managers from different areas with frequent contact with units abroad. As a result, it was found that the multinational corporation studied, despite having a good performance, has some aspects to improve when it comes to knowledge management, although it has a robust structure to support this process. Some hindering factors in the intercultural transfer of organizational knowledge are identified, including the difficulty due to the large amount of information to be managed, an “arrogance” by developed countries, and the lack of knowledge of who are the people in possession of knowledge that you are seeking.

Keywords: Intercultural Knowledge Transfer; Management Knowledge; Multinational Companies.

RESUMO

O estudo analisa o processo de transferência de conhecimento organizacional entre subsidiárias de uma mesma multinacional, presente em diferentes países. O método de pesquisa utilizado foi o estudo de caso, em uma companhia norte-americana instalada no Brasil há mais de 30 anos. Foram realizadas entrevistas em profundidade com gestores de diferentes áreas com contato frequente com unidades no exterior. Como resultado, verificou-se que a corporação multinacional estudada, apesar de apresentar bons desempenhos, possui aspectos a aperfeiçoar no que tange à gestão do conhecimento, ainda que tenha uma estrutura robusta para sustentar esse processo. Alguns dificultadores na transferência intercultural de conhecimento organizacional são identificados, incluindo a dificuldade devido à grande quantidade de informações a ser gerenciada, uma eventual “prepotência” por parte de países desenvolvidos e o desconhecimento de quem são as pessoas detentoras do conhecimento que se está buscando.

Palavras-chave: Transferência Intercultural de Conhecimento; Gestão do Conhecimento; Empresas Multinacionais.

RESUMEN

El presente estudio analiza el proceso de transferencia de conocimiento de la organización entre filiales de la misma multinacional, que opera en diferentes países. El método de investigación utilizado fue un estudio de caso en una multinacional americana instalada en Brasil hace más de 30 años. Las entrevistas en profundidad se realizaron con los gerentes de las diferentes áreas que tienen contacto frecuente con unidades en el extranjero. Como resultado, se encontró que la empresa multinacional tiene aspectos a mejorar en lo que respecta a la gestión del conocimiento, sin embargo, tiene una estructura robusta para apoyar este proceso. Algunos complicando la transferencia intercultural de conocimientos de la organización están identificados, incluyendo la dificultad debido a la gran cantidad de información a gestionar, cualquier "arrogancia" por parte de los países desarrollados y la falta de personas que son los titulares de los conocimientos que se está buscando.

Palabras clave: Transferencia de Conocimiento Intercultural; Gestión del Conocimiento; Empresas Multinacionales.

1 INTRODUCTION

The globalization era, based on the market dominion, means a new phase of modern capitalism (BRUNET; BELZUNEGUI, 1999) and involves changes in social, economic, political, geographical, historical, cultural, linguistic orders among others (IANNI, 1999). The change that the globalization process promotes is reflected in the business world aspects, especially in multinational companies – complex organizations that operate in an interconnected way in different geographic environments (QUINTANILLA, 2002).

The increasing expansion of multinationals generates new management demands, such as the ability to operate through units spread across the continents. The international corporations need to understand and position themselves ahead of the new context, realizing the diversity in which they operate and take advantage of this environment. In the past, the main form of markets' wealth was material. Today, however, the economy based on financial resources has been superseded by the information age. Thus, in modern times the wealth becomes the product of knowledge (STEWART, 1998).

Therefore, taking advantage of the diverse context in which they operate and their size, organizational knowledge management - a procedure in which organizations capture knowledge, transfer it and make it useful - can actually be a source of competitive advantage in organizations (BARTLETT; GHOSHAL, 2003; DICKMANN; MULLER-CAMEN; KELLIHER, 2009; NOBEL; BIRKINSHAW, 1998).

However, cultural, language and legislation differences, among many others, can represent difficulties for the knowledge transfer in the international scenario. When the knowledge management process is not properly conducted or not performed at all, multinational companies lose the opportunity to differentiate themselves. One of the critical components to improving the quality of multinational companies is the capacity of taking advantage of all available information - both internal and external. This is a challenge due to the enormous flow of information that companies are facing every day, loaded with their implicit multiculturalism (ALBESCU; WRESTLING; PARASCHIV, 2009).

In this context, the present study analyzes the process of organizational knowledge transfer between subsidiaries of the same multinational company, operating in several countries. Thus, the research question guiding the study is: how does the process of knowledge transfer of a multinational company occur among its headquarter and its subsidiaries?

In this line of research, some studies have been developed, such as research done by De Long and Fahey (2000), Gonzalo (2005), Lilleoere and Hansen (2011), McDermott (1999), McDermott and O'Dell (2001),

Sun and Scott (2005); Szulanski (1996). Research focused on the international knowledge transfer was also the focus of some papers, including Cunha, Yokomizo and Capellini (2009), researchers Ferreira, Li and Serra (2010) and even Inkpen (2008). However, much remains to be explored in the literature with reference to this subject, especially in Latin America.

2 THE MANAGEMENT OF ORGANIZATIONAL KNOWLEDGE

There are different perspectives in the literature to define the concept of knowledge management. There are tendencies that treat the theme focused on innovation processes, including authors such as Cohen and Levinthal (1990), Maldonado, Santos and Santos (2010), commonly addressed in production areas. There is another academic aspect that directly relates knowledge management with information systems, such as Turban, Mclean and Wetherbe (2004) and Slack, Chambers and Johnston (2009), that is widely used in the information technology field.

Another perspective, widely spread and adopted in this study, doesn't focus on innovation processes nor information systems, despite being part of the process of knowledge management; it considers information systems only as resources that enable knowledge management, and the innovation being only a part of this process. Therefore, knowledge management implies something greater than the capacity of the company's innovation and information technology resources. In that sense, for Nonaka and Takeuchi (1997), the term refers to how the stock of knowledge management in an organization flows over time. Thus, managing knowledge implies a continuous flow of organizational knowledge throughout the company.

Based on this perspective, there is a relative consensus in the literature to define knowledge management as a process which occurs by the capture, transfer and application of organizational knowledge (ALBESCU; WRESTLING; PARASCHIV, 2009; ARGOTE; INGRAM, 2000; CLARI; POPADIUK, 2010; CUNHA; YOKOMIZO; CAPELLINI, 2009; DARR; KURTZBERG, 2000; INKPEN, 2008; DAVENPORT; PRUSAK, 1998; HOLDEN, 2001; INKPEN, 2008; LIM; AHMED; ZAIRI, 1999; MOITRA; KUMAR, 2007; NAREH, 2008; NISSEN, 2007, NONAKA; TAKEUCHI, 1997; PERRIN; ROLLAND; STANLEY, 2007; RIEGE, 2007; WIJK; JANSEN; LYLES, 2008).

Knowledge management involves: 1) individuals, 2) tools and technologies of the organization, 3) the work of the organization and their interrelationships, and 4) various networks formed by the combination of individuals, tools, and work (ARGOTE; INGRAM, 2000). Albescu, Advocates and Paraschiv (2009) emphasize that knowledge management is the interaction and communication of tacit knowledge, implicit, informal and unstructured (human experience, understanding the human mind) with explicit knowledge, structured and formalized (documents, databases, etc.). According to these authors, knowledge management is developed through a heterogeneous network, with technical, human, material and social components.

Therefore, knowledge management refers to the adoption of management practices that can enable the identification, capture, transfer and application of knowledge that occurs through people, processes and resources and the organization. Managing knowledge represents a major opportunity to improve the quality standards of organizations, enabling them to obtain substantial savings, significant improvement in the use of all available resources and therefore to gain a competitive advantage over competitors (ALBESCU; WRESTLING; PARASCHIV, 2009).

For over a decade the topic of knowledge transfer has been under discussion by researchers. Their definitions are diverse, but mostly converge in order to treat the knowledge transfer as a process that occurs between individuals or the organization part to another, with its subsequent implementation. The adopted term "transfer", and not "dissemination" to Szulanski (1996), is justified because the "movement of knowledge within the organization is a distinct experience, not a gradual process of dissemination, and depends on the characteristics of each involved "(p. 28). Therefore, this is the term mostly adopted in scientific articles on this subject.

Szulanski (1996) describes in depth how the knowledge transfer process works. According to the author, there are four stages for it to occur: the initiation, the implementation, the ramp-up (increase of performance in a given process) and the integration. The initiation covers all the stages that lead to the transfer decision. At this moment in the organization a necessity and a potential solution to it coexist, in another words, the knowledge and the need for this knowledge. This discovery of this need causes the search for finding solutions, guiding the search for knowledge. The later stage, the implementation, occurs when resources flow between the source and receiver. At this moment there is the establishment of social ties between the parties, and knowledge transfer is usually adapted to fit present needs. The third stage, called ramp-up by the author, starts when the receiver begins to use the knowledge transferred. At that time, the receiver usually uses the new knowledge ineffectively at first, but gradually improves its performance. The final stage, the integration, occurs when the receiver reaches satisfactory levels of performance with the knowledge transferred, which gradually becomes routine.

Davenport and Prusak (1998) emphasize that knowledge transfer involves two actions: the transmission, sending or presenting knowledge to a potential receptor, and its absorption. Therefore, if knowledge is not transmitted and absorbed, it was not transferred. However, several authors in this area, that published after the nineties, add that there is only knowledge transfer when the receptor undergoes its influence (ARGOTE; INGRAM, 2000; PERRIN; ROLLAND; STANLEY, 2007; WIJK; JANSEN; LYLES, 2008) or the receptor applies this knowledge (DARR; KURTZBERG, 2000; INKPEN, 2008; NAREH, 2008; RIEGE, 2007).

Barachini (2009) states that only information can be disseminated and exchanged, not the knowledge. However, technology is actually just an enabler for information transfer. When information is transferred, it is the ability to act on it that makes knowledge (LIM; AHMED; ZAIRI, 1999). So when it comes to influence caused and application of knowledge caused by a receptor (ARGOTE; INGRAM, 2000; DARR; KURTZBERG, 2000; INKPEN, 2008; NAREH, 2008; PERRIN; ROLLAND; STANLEY, 2007; RIEGE, 2007; WIJK; JANSEN; LYLES, 2008) its use is assumed, validating the term knowledge transfer. Therefore, this study adopts this nomenclature, and not information transfer. It similarly assumes that the transfer process involves the knowledge of its movement to the receptor, with its subsequent application.

Knowledge transfer can occur between different levels: product or process, units of the same organization and between organizations with franchise relationships, the same chain or professional networks, as well as independent organizations (RIEGE, 2007). In the present research, the work focuses on knowledge transfer between different units of the same organization.

Previous studies have shown that the organizational knowledge transfer can occur in several ways: by movement of personnel, training, communication and interpersonal relations, observation, transfer of goods and services, patents, scientific publications, presentations and interactions between suppliers and consumers

(INKPEN, 2008). Regarding its operation, Easterby-Smith, Lyles and Tsang (2008) draw attention to the fact that knowledge transfer is a complex phenomenon and that in practice it is not easy to be successful.

Each type of organizational knowledge demands different forms of transfer (CUNHA; YOKOMIZO; CAPELLINI, 2009) and it can be hard - when it comes to explicit knowledge - and soft - when related to tacit knowledge (DAVENPORT; PRUSAK, 1998). The hard knowledge is related to that which is supported by information technology and communication. Since it's more formal and systematic, it is transmitted more easily from a distance, as it doesn't require personal contact between sender and receptor (CUNHA; YOKOMIZO; CAPELLINI, 2009). Now, the transfer of tacit knowledge demands some kind of interaction between sender and receptor in the same space and time, which makes it more difficult in international relations. Inkpen (2008) argues that when knowledge is highly tacit, it's difficult to transfer it without the movement of personnel. In the management of international knowledge, beyond the transfer of tacit knowledge through the expatriation, the technology allows other forms of transmission through the use of synchronous interaction tools (when the communication between sender and receptor occurs simultaneously), such as audio and videoconferencing.

Therefore, it is concluded that the knowledge transfer process can take place in two ways: 1) when it's stored in a database, whether or not of a technological nature, and is subsequently accessed by its receptors, and 2) when the transfer is performed through the relationship between individual-individual, going through personal contacts or support of information technology resources.

Being one of the primary processes of knowledge management, knowledge transfer is a complex phenomenon that occurs continuously in organizations, whether it's managed or not (DAVENPORT; PRUSAK, 1998). Although several studies argue that knowledge transfer is key to competitive advantage and growth of an organization, little is known about how to transfer knowledge within and across organizational boundaries (INKPEN, 2008). Literature offers little evidence about the success of actions that managers might consider to reduce the barriers to knowledge transfer within and between units of multinational companies (RIEGE, 2007).

Several factors interfere with the actions of knowledge transfer in organizations and often they are not visible. Aspects related to the individual, organization, technology and the very nature of knowledge may determine the success or failure of the organizational knowledge transfer.

Szulanski (1996) discusses four aspects that complicate the knowledge transfer: the characteristics of the transferred knowledge, the source, the receptor and the context in which the transfer occurs. The table below summarizes the main ideas of the author, addressing the focus of the transfer, the possible hinderances of each perspective their description.

Table 1 – Factors hindering the knowledge transfer

Focus	Hindering	Description
Knowledge Transfer	Causal ambiguity	Refers to the difficulty of reapplication of a capacity within the organization, without full understanding of the reasons for success or failure of reapplication.
	Lack of proof of knowledge	Lack of evidence that demonstrates the usefulness of the knowledge, leading to the adoption of the transfer by receptors.
Source of Knowledge	Lack of motivation	Lack of motivation by the holder of knowledge, either by losing their "property", a position of privilege or superiority, not being recognized for it, or not wanting to spend the time or resources for knowledge transfer.
	Not being seen as reliable	When the holder of knowledge is not seen as reliable, there is resistance to the knowledge transfer.
Receiver of Knowledge	Lack of motivation	Reluctance in accepting knowledge from outside, leading to ill will, passivity, simulated acceptance, sabotage or outright rejection of adopting and using the new knowledge.
	Lack of absorptive capacity	According to Cohen and Levinthal (1990, p 128) the absorptive capacity refers to the "ability of a firm to recognize the value of external information, assimilate it and apply it for commercial purposes", still according to the authors, being critical to its ability to innovate. In this case, the receptor would be unable to operate external knowledge sources.
	Lack of capacity retention	Reflects the difficulty of the receptor to institutionalize the use of new knowledge.
Context	Organizational unproductive context	A situation that does not favor or even inhibits the transfer of knowledge.
	Difficult Relationships	This situation is intensified especially when the knowledge transfer involves tacit components, requiring multiple individual contacts.

Source: Elaborated by the authors based on Szulanski (1996).

Riege (2005) discusses the hindering of the knowledge transfer from three perspectives: the perspective of the individual, of the organization and of the technology. From an individual perspective, barriers in knowledge transfer are related to the lack of the ability of communication and disabled networks, differences in national culture, overvalued status of jobs and lack of time and confidence. From an organizational perspective, the author states that the barriers are related to economic viability, infrastructure and resources, accessibility of formal and informal meeting space and the physical environment of the company. From a technology perspective, Riege (2005) states that the barriers seem to be correlated to aspects such as unwillingness to use applications, unrealistic expectations of systems and information technology, and the difficulty to build, integrate and modify technology-based systems.

Moitra and Kumar (2007) found that several companies, despite having knowledge management programs, were not clear about what knowledge they wanted to manage and why. As a result, their knowledge management systems were nothing more than sophisticated document repositories, containing an infinite amount of knowledge. The knowledge transfer requires an environment geared towards sharing, which is strongly influenced by management attitude and the beliefs of the organization (MOITRA AND KUMAR, 2007).

The complexities and challenges of managing knowledge become particularly elevated when this task goes beyond geographical borders. Besides the quantitative measures of economic environment that can be taken of any routine analysis available and integrated, the major difficulty is to evaluate the political, legal, social and technological, not to mention cultural differences - the most hidden part of the foreign environment on the creation of common knowledge (ALBESCU; PUGNA; PARASCHIV, 2009).

Nissen (2007) states that multinational organizations are involved at different levels of intercultural interaction, and some differences may prevent the flow of knowledge. In this sense, the sets of norms and beliefs that are based on a monocultural scenario – which lead to the institutional regularity and predictability in this context – can become sources of conflict and uncertainty in multicultural contexts, which directly impacts on knowledge management. Holden (2001) reinforces that in the context of global business the knowledge management is, in fact, an intercultural activity, and that it should be promoted and continually refine the intercultural collaborative learning.

Many factors influence its culture, including religion, training and education, economy, structure, history and climate (MARQUARDT; BERGER; LOAN, 2004). The organizational culture reflects national culture, which manifests itself in common mentality, values and shared norms (SEMLER; DE LEON, 1996). Management strategies, structures and styles that are adequate in a given cultural environment might not be adequate in another (BOHLANDER; SNELL; SHERMAN, 2003). Even the best companies and well-intentioned individuals can find difficulties in cultural aspects (MENDENHALL et al., 2003).

These elements are extensively explored in literature as the source of impact in the transfer of organizational knowledge, shown by various authors, such as Lamproulis (2007), Li and Scullion (2006), Magnier-Watanabe and Senoo (2010), Nissen (2007), Sackmann and Friesl (2007) and Small and Sage (2006). In this way, it can be understand how the organizational knowledge transfer is deeply affected by the culture of the country.

3 THE RESEARCH METHOD

We adopted the method of case study for the research, pointed out by Yin (2005) as a research strategy that addresses the logic of planning, the techniques of data collection and the analysis of specific approaches.

Due to the company's request, its name had to be kept secret. Thus, the fictitious name of *Adam Smith* is given to describe the company. The choice of this nomenclature was motivated by the fact that it has some similarities with the original name of the company, not mentioned here, of course, to preserve its confidentiality.

The organization studied was founded in the United States in the nineteenth century. It's one of the world's largest manufacturers of equipment related to the agricultural sector, while also addressing other market niches. The company has 55,000 employees around the world, with about 60 production units. Its factories are spread across 17 different countries including: USA, Mexico, Canada, Argentina, Brazil, Germany, Sweden, Russia, South Africa, India, China and New Zealand. These countries show the continents on which the company is present, showing its internationalization.

The company's worldwide turnover was 32 billion dollars in 2011, generating an operating profit of 4.5 billion dollars this year. In 2009 and 2010, respectively, its turnover was at a level of 23 and 26 billion dollars, while its operating profit was 1.6 and 3.4 billion dollars in the same years. According to the 2011 annual report

the company's global trends are supporting its good performance and promising future prospects. This would include the raise in the planet's population and increased global prosperity, especially in Brazil, Russia, China and India.

In the nineties it began to manufacture products with its brand in Brazil. Also in the nineties, the organization opened a new factory in the Midwest region of the country, and in 2005, it expanded its production capacity with a new factory installed in the south of the country - a subsidiary that is held in this survey, whose fictitious name adopted in this work is *Edinburgh* (also avoiding the identification of the business). In 2006, the company centralized its operations in Brazil and South America through an office located in Porto Alegre, a city in southern of Brazil. According to company data, among their strategies in Brazil is the exceptional performance in its operations and its teamwork aligned high performance.

The subsidiary in which the research was performed, the unit of *Edinburgh*, has a building area of 68 thousand square meters, set in 96 acres belonging to the company. The factory location was chosen due to its location in the metropolitan area, availability of skilled labor in the city, good opportunity of suppliers and good position in terms of logistics. The subsidiary has approximately 650 employees, approximately 60 whom are women.

Data collection was conducted from October to December 2011, through different techniques. Among primary data obtained by the researcher, a direct observation of the researcher and the semi-structured interviews were carried out. The analysis of secondary data, from indirect sources, was performed by external and internal documents of the organization researched, including the company's annual report, internal reports and various presentations.

The interviewees were selected with the main criterion being frequent contact with people or areas of subsidiaries located abroad, or with colleagues at the headquarters, located in the United States. Additionally, it was requested of the company that the interviewees were from different areas, providing an insight of different perspectives of their work. At least one person from the information technology area and a person of Human Resources were also asked to participate in the survey - areas often highlighted by the literature as responsible for knowledge management in organizations.

The professionals participating in the research have an accelerated pace of work, characteristic of this type of organization. The interviews were scheduled in advance, but eventually were transferred or canceled due to setbacks. They lasted from 40 minutes to two hours, varying with the availability of professionals and the natural depletion of the subject.

As shown by Charmaz (2000), the sample size is given as the time when the answers start to repeat, indicating the saturation of the subject. With similar reasoning, Slongo and Rossi (1998) state that the homogeneity of the answers can determine the number of interviewees. Following these criteria mentioned by the authors, a total of eight interviews were performed at moment when the answers were already homogeneous and repeating themselves.

Among the interviewees, most are supervisors (six), one is a senior designer and one is a manager. The areas involved in the interviews are: Product Testing Laboratory, Quality Systems, Information Systems, Logistics, Construction and Utilities, Manufacturing, Product Engineering and Human Resources.

With the consent of the interviewees, the interviews were recorded and later transcribed. The assessment of these data was done using content analysis. According to Bardin (1977) and Vergara (2006), this

analysis technique of communication is a tool for systematic description of message content and inference of knowledge involved.

While reading the material, the categories of analysis were defined carried out by means of a mixed grid. According to Vergara (2006), the categories of analysis are defined in a preliminary way, categories related to the object of study, but assuming the inclusion, exclusion and subdivision of categories during the analysis process. Therefore, the categories of analysis were defined as follows: (i) lack of personal contact; and (ii) difficulties with language and cultural aspects. The results of these three categories are shown in the results of the analysis section, below.

4 ANALYSIS OF KNOWLEDGE TRANSFER PROCESSES BETWEEN SUBSIDIARIES OF A MULTINATIONAL COMPANY

There is an environment for knowledge transfer in the organization studied, so that this process is part of everyday life and proves to be internalized by employees. It happens to both request knowledge from, as well as issue knowledge to other units, as evidenced by the reports below.

We are encouraged to perform knowledge transfer. [...] I think that's something that's already in everyone's blood. Asking a question of someone out there is like to asking someone here in the factory. I'd say it's okay; the structure is already globalized (Interviewee 4).

There is a favorable climate for knowledge transfer. Yes, for sure. Both to receive as well as to give. Because we have some experience here that serves as a reference out there. So this is a bilateral knowledge transfer (INTERVIEWEE 7).

Although there is this cooperative environment for the knowledge transfer, it doesn't always occur spontaneously, as evidenced by the end of the previous report – provided when requested. The first interviewee claims that “There is cooperation, but it's not a very spontaneous thing ... It happens as needed”. In the same way, Interviewee 5 states that "something like 'here people, I found a gold mine!' hardly happens. Usually the guy who's making the first contact, he's in need of something”.

Although the reason for the sharing of knowledge occurring "on demand" was not mentioned by the interviewees, it's assumed that this must occur mainly due to the function of routines and the amount of responsibilities of the company's employees, not prioritizing this behavior spontaneously. Additionally, the systems and the company's tools allow the subsidiary to identify the best performance in accordance with the process, facilitating the flow of knowledge.

Moreover, a favorable environment for the knowledge transfer may vary according to the area and unit. Although there is a willingness to share knowledge with units from other countries, the report below illustrates this shortcoming.

This is closely linked to the department. Each department works one way. [...] The maintenance area works in a way, the area of materials works in the other, the product engineering works in another way. [...] While sectors are well aligned, like the logistics department, materials, product engineering, have sectors that are not fully aligned. So, the organizational climate for knowledge transfer varies. There are places in which it is very favorable, and others in which it isn't. (INTERVIEWEE 5).

Even with the exception made in relation to some areas, it can be concluded that overall, there is a favorable environment for knowledge transfer in the organization studied. This feature seems to be part of company culture.

Despite the organizational knowledge transfer between countries being a widespread practice in the organization studied, several factors inhibit this process. Below we discuss the hindering factors identified in this study.

4.1 Lack of personal contact

The lack of personal contact was identified as a major hinderance to the knowledge transfer between countries. Interviewees emphasize the gains achieved through face-to-face meetings and even knowing the physical working environment of other units. The following reports show these perceptions.

When people know each other they are more open to relationships. I am able to talk to him, he knows how I do things here, he saw the perimeter. I've been there, I also know. So when we talk, I know what he has and he knows what I have (INTERVIEWEE 1).

Interviewees emphasize how important face-to-face contact is, easing the professional relationship. Personal contact has a much greater force than that which happens through other means. E-mail, for example, without a previous personal contact, can often be ineffective.

Even with all the technology provided by the company, it was emphasized that this type of communication is irreplaceable.

The fact that we interact outside, this transfer, I think that some tools have helped us a lot. The videoconferencing, WebEx ... But often we know that the effectiveness of being face-to-face with the person is not the same (INTERVIEWEE 8).

What we could have are more face-to-face meetings ... It seems even that it is a step behind with all this technology that we have there. [...] I think I might like more face-to-face better at this point. Making things more personal and less virtual. [...] It's kind of ... Taking a step back from these computing resources. [...] A bit contradictory, huh. Distance? You don't have more distance. Computers, cellular phone, and other things. But physical contact, face-to-face, nothing can replace it (INTERVIEWEE 3).

It's interesting that the above testimony was made by an information technology professional. Adding to this point about face-to-face, it was also commented that the knowledge of the physical work environment could also impact on knowledge transfer.

The interviewees also brought the more assertive communication. When we are face to face with the individuals, especially when they're don't speak the native language and have a diferent culture, physical contact can provide better understanding in dialogues, including gestures, as the cultural differences between countries can generate different meanings. According to Bohlander, Snell and Sherman (2003), differences in culture can impact on non-verbal communication, manifesting in situations such as eye contact, the handshake and the touch, "ok" gestures and insults, among others. Still, physical contact would lead to benefits in communication, as evidenced by the interviewee 3: "Talking over the phone, sometimes the person can say 'yes' [...] wishing to say 'no'; if you're face to face you realise for the person's reaction what he wants to say".

Knowing the individuals personally strengthens professional relationships and is an important aspect of knowledge transfer between countries. This process is essentially collaborative (RIEGE, 2005; SCHLEIMER; RIEGE, 2009). Therefore, the greater solidity in relations, provided by direct physical contact, favors the knowledge transfer, as shown by the previous statements.

4.2 Difficulties with the language and cultural aspects

As mentioned previously, the company studied is headquartered on the U.S.A with subsidiaries in several countries. Adding to it, the contact between the company units is continuing. Given the different languages involved in this context, the language and its nuances, such as accent, represent an impediment to knowledge transfer.

Everything on Smith is in English. You receive a procedure from abroad, training from abroad, it is in English. Everything is in English. Just to have an idea the staff meetings are all in English. Here in Brazil. All of them. Why? We have a colleague who is American, a projector manager, who doesn't speak portuguese [...] So these language barriers ... You have to be prepared for that (INTERVIEWEE 8).

According to Crystal (1997), companies are going through a new global process called "bilingualism", in that they all speak the native language and adopt English as the only foreign language. This becomes even stronger because the company researched come from America.

Even with a good command of a non-native language, a greater effort is always demanded and possible loss of information can happen, as the testimony of the employees below corroborates.

I think one difficulty is always the language. Even if the person has a great skill, we always lose information. [...] There is already the ofmatter of what you speak not being not exactly what the person understands speaking the same language. Speaking a different language also has something that is lost (INTERVIEWEE 6).

Some employees interviewed are developing the language gradually. The professional situations end up requiring the improvement of English, as mentioned by Interviewee 2: "Language is a major barrier. Without it we can't proceed. When I came here in the beginning, my English was terrible... But then I started to learn it and to improve it.

Some of the employees surveyed recognize their own limitations in the English language. "Sometimes we still have, depending on the level of people who are involved, difficulty in how structuring the questions and the way to expose and present something" (INTERVIEWEE 2). Similarly, the following report reinforces the limitations of language and the loss that it represents on the knowledge transfer.

I'm not fluent in the English language. But even people who are fluent have some terms, some slang, which is: "you understand?" Or: "How do you say that?" Trying to tell something. Then three, four people stay in a group trying to find that word they don't remember. It seems that when one forgets, everyone forgets. It is collective forgetfulness. [Laughs] So the language is a major barrier (INTERVIEWEE 5).

Given the lack of fluency in English or even the natural difficulties in speaking a not native language, loss of some information becomes inevitable. An example of this occurs in meetings in non-native languages, which reflect a greater difficulty for the knowledge transfer or even knowledge dissipated. "The language makes it harder. Sometimes they are simple things but he does not quite understand the language and doesn't know what I'm asking. It causes information loss. Or just taking longer to understand" (INTERVIEWEE 1). Furthermore, the shame to assume the lack of understanding of the language may further aggravate the situation.

Cultural differences between countries play an important role in knowledge management (KOHLBACHER; KRAHE, 2007). As Weir and Hutchings (2005), the management actions are rooted in a specific cultural context, performing these cultural parametres impacting also on the cultural knowledge

management. Several examples, each of them very specific, were reported by interviewees in order to highlight the cultural aspects that may influence the knowledge transfer between countries.

The Human Resources department of the company promotes training of cultural orientation, as shown later. However, in the situation described, the guidance was punctual and promoted by an industrial area, without involvement of the Human Resources staff. In a later topic, performance possibilities are asked of HR in order to deal with cultural aspects that affect the knowledge transfer in a systemic way.

However, there are cases in which the differences in culture may also impact positively, as it can spread good practice. The following report shows two dynamics, involving the culture of Brazil and the United States.

I think that sometimes some cultural factors affect a bit. Like making an appointment and arrive late. The perception that my boss [American] has is that the Brazilians, when they are in a manager meeting, everyone always wants to give the last word. Wants to comment more, give more ideas. So the meeting never ends. It affects, you know... The way the Americans have meetings is a lot different from ours. I think it is different... They have an agenda, is "here, here and here and it's over," it is much more formal, "Your time is up, let's go to the next item." Here ... the business is a riot. [Laughs] The meeting starts late and ends later. And so it goes... So these things affects a bit (INTERVIEWEE 2).

At first, this culture shock can cause discomfort, loss or conflict. However, in this situation, if the objectivity of the meeting shows it as more productive, it can be considered a good practice of the organization. Thus, this culture can gradually root itself in contexts outside of their origin, as in Brazil, and to prove positive.

As seen, the cultural aspects show that care must be taken to harmonize their differences. However, as the interviewees' statements show, these aren't insurmountable obstacles. Thus, several actions of the researched company can be taken to reduce the cultural impact generated by the knowledge transfer between countries.

5 FINAL CONSIDERATIONS

This study assesses how the intercultural knowledge transfer between subsidiaries works and identifies hinderances for this process at the company studied. Even a large multinational corporation like the one studied, a holder of significant financial results, has aspects to improve regarding knowledge management, despite its robust structure to support this process.

You can see a better climate for the transfer of organizational knowledge between countries, a practice that is built by employees of the organization studied. Thus, this exercise seems to be part of the culture of the organization, evidenced by the constant benchmarking. For this to occur, several features are used to allow different forms of organizational knowledge transfer within the company studied, involving intranet, its own production systems, visits, communities of practice, forums, software and video conferencing equipment, among others. With all these features, the analyzed company proves to provide a good framework to meet the demands of organizational knowledge transfer between countries, even with some limitations.

Several hinderances were present in the process of knowledge transfer between countries. The scientific periodicals cover many of these identified here, such as language, time zone, device connection problems, budget restrictions and cultural aspects - this largely study focused on journals. However, other aspects weren't found in the literature, including the difficulty due to the large amount of information to be managed,"arrogance" on the part of developed countries, and the lack of knowledge of who are the information holders in the organization.

The ease to access the paradoxically information represents a difficulty for knowledge management. The production and availability of large amounts of information generates a problem: prioritize those that justify being transferred and stored for later use. So with the multitude of information available and the ease of transfer provided by the technological resources of today, knowledge management becomes even more complex.

Scientific periodicals that mentioned "prejudices" about the country issuing or receiving knowledge weren't even found. In this study, more specifically, an "arrogance" coming from a developed country facing a developing country is identified, where receivers or transmitters of knowledge create resistance to transfer it due to "disregard", so to speak, with relation to another country that participates in this process. This finding may not have been previously identified - or at least is not widespread in the literature - probably due to most of the area publications being produced by developed countries, so that the theme explored from the perspective of developing countries is still not as comprehensive.

Still, one of the findings identified as hindering the organizational knowledge transfer between countries regards the fact that employees don't know who the holders of certain knowledge are. While all knowledge produced by the company researched and the number of tools and systems available, the fact that employees often don't know who are the knowledge holders ends up not allowing the receiver to link knowledge with its emitter potential. Or, even when that happens, you lose unnecessary time in finding the connection between these two links, which usually occurs in a non-structured manner.

However, perhaps the greatest discovery of this research lies in the impact of the human aspects of organizational knowledge transfer between countries. Despite all the sophisticated features available in the business - including communications tools, production systems and software, among many others - this research shows that nothing can replace personal contact. The ability to be physically in one place allows people to get to know each other, cultivate relationships and it facilitates the understanding of the context in which knowledge is created and produces bonds that therefore implies commitment and cooperation among people. Of course, not always that contact becomes possible, according to the different costs that require international travel.

In summary, this study demonstrates that organizational knowledge transfer is substantially affected by human relationships, in which face-to-face contact is still incomparable with the use of sophisticated technology available nowadays. The research allowed for the discovery of elements that hinder the process of knowledge transfer, which may serve as a basis for building tools for quantitative evaluation, thus, enabling the extension of the research scope.

Thus, we can conclude that knowledge transfer between countries involving face-to-face contact tends to be more successful.

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