Organizational, individual and technological influences on MNCs’ knowledge transfer - a case study of Gruppo AB

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2019
Acknowledgments

We would like to thank our supervisor Daniella Fjellström for her meaningful help and advice during the full research process, the examiner Maria Fragidou-Malama and all the professors met during this year, for our academic and professional growth. Secondly, we thank our classmates for their feedback during the oppositions but also for being a great team to study and work with. Moreover, we really appreciated the support and encouragement received by our families during the entire journey. Eventually, a special thank you goes to the corporation subject of this study, the owner and the interviewees without which this research would have not been possible.

University of Gävle, June 10, 2019

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___________________________                                 _______________________

C. M. G.                                                      E. T.
Abstract

Title: Organizational, individual and technological influences on MNCs’ knowledge transfer. A case study of Gruppo AB

Level: Master’s Degree in Business Administrations

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Date: 2019-06-10

Aim: to develop and understand which are the elements that influence the conventional and reversed knowledge transfer, how they influence it and the benefits of transferring knowledge within a multinational corporation.

Methods: qualitative research strategy, inductive approach and single case study design. Ten semi-structured interviews were conducted face-to-face and though video-calls. Four interviewees belong to Italian headquarters, three to the Canadian subsidiary and three to the US subsidiary.

Results and conclusions: the research identifies culture, relationship HQ-subsidiary, geographical distance, expatriates, relationship between employees, language difference, trust, transparency, motivation, and technology as the elements influencing conventional and reversed knowledge transfer; the influences these elements exercise on them, and the benefits of knowledge transfer flows.

Suggestions for further research: to replicate the qualitative study with a multi-case study design; to develop a deeper understanding on the relationship between the elements; and to deeper understand how knowledge transfer benefits can influence the MNC’s overall performance and subsidiaries’ performance.

Contribution of the thesis: it contributes with in-depth understanding of the elements influencing conventional and reversed knowledge transfer, their benefits and a theoretical framework; highlights the importance of knowledge transfer for social development; and it provides an understanding of the benefits of knowledge transfer to achieve competitive advantage.

Key Words: knowledge, knowledge transfer, conventional knowledge transfer, reversed knowledge transfer, benefits, influences.
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1 Introduction

This chapter presents the background of the research, the problem discussion and the literature gap identified that drove the authors carry out this study. Additionally, the research aim and questions are stated, followed by the key concepts and thesis layout.

1.1 Background

Globalization has changed the market expanding the range of opportunities (Ozer, Meca & Schwartz, 2019), and encouraging the creation of corporations that cross national borders to access foreign resources (Claver-Cortés, Zaragoza-Sáez, Úbeda-García, Marco-Lajara & Garcia-Lillo, 2018). Intangible resources such as knowledge play a key role in this new international environment creating innovation and increasing corporation’s profits through global learning (Abdullah & Liang, 2013).

Knowledge is widely considered the most important resource that multinational corporations (MNCs) have to reach competitive advantage (Eisenhardt & Santos, 2002; Abdullah & Liang, 2013; Ferraris, Santoro & Bresciani, 2017), since they are able access and internalize knowledge from several countries (Mendes Borini, de Miranda Oliveira, Silveira, de Oliveira Concer, 2012). To reach competitive advantage, MNCs have to involve all the business units in the creation of knowledge (Ferraris, Santoro, & Scuotto, 2018) since each subsidiary presents a different opportunity for the MNC thanks to the uniqueness of the local market (Claver-Cortéz et al., 2018).

Thus, the MNCs’ primary reason of existence is to create, access, and transfer knowledge across borders efficiently and effectively, to reach competitive advantage (Gupta & Govindarajan, 2000; Mendes Borini et al., 2012; Sanchez-Vidal, Sanz-Valle & Barba-Aragon, 2016; Claver-Cortéz et al., 2018). In the other hand, multinational subsidiaries are entities that add value to the MNC in foreign countries since they have access to country-specific advantage (Birkinshaw & Hood, 1998). These semi-autonomous entities are established to seek new resources, new markets or business efficiency (Birkinshaw & Hood, 1998). Additionally, they have entrepreneurial potential to be used in the highly competitive and complex environment (Birkinshaw, Hood & Young, 2005).
The creation, development or acquisition of knowledge can happen at headquarters level of the MNC or at the subsidiary level (Claver-Cortéz et al., 2018), and a consequence knowledge can be transferred with a top-down flow, which means that is generated at the headquarter level and it is shares with the subsidiaries, or bottom-up which means that is created at the subsidiary level and then transferred to the headquarter or other subsidiaries (Giuliani, Gorgoni, Günter & Rabelotti, 2014).

Knowledge collected at the subsidiary level is important for the MNC in order to seize new opportunities in foreign markets, develop products and services, and take corporate decisions (Muralidharan, 1999). Subsidiaries’ specific knowledge come from their level of innovation and embeddedness. Subsidiaries’ strong relationships with local actors and with the headquarter, helps developing new internal innovation and enhances the knowledge transfer process. More specifically, the internal embeddedness allows better support and closeness with the parent company and influences the knowledge transfer process, when external embeddedness enhances subsidiary’s innovation and performance. (Ferraris et al., 2018)

The MNC’s challenge is to find the right mechanism to transfer knowledge from and to the subsidiaries since the process of transferring knowledge includes both inter-organizational and personal dimensions (Sanchez-Vidal et al., 2016). The effectiveness of knowledge transfer flows from headquarters to subsidiaries and reversed, depends on the knowledge itself, the sender capabilities, the receiver receptiveness and the relationship between the two entities (Eisenhardt & Santos, 2002). For this reason, managers have to keep gathering information to define the optimal strategy (Muralidharan, 1999).

1.1. Problem discussion
This research focuses on the internal knowledge transfer of an MNC. The intra-organizational transfer of information includes the exchange between all the units of the MNC located in different countries (Chini, 2004).

The intra-organizational knowledge transfer flow has followed the development of MNC’ subsidiaries management during the years. Until the late nineteen-nineties MNCs use to exercise full control toward their foreign-owned subsidiaries in order to coordinate across
the cultural and geographic distances (Hoffman, 1994). The headquarters shared knowledge and capabilities only one way to the subsidiaries through manuals, or business blueprints, however, they also have internal capabilities developed in the specific environment where they are located (Birkinshaw & Hood, 1998). MNCs used a top-down approach also called conventional knowledge transfer flow, which requires the subsidiary to receive the existing knowledge of the MNC through a control mechanism (Yang, Mudambi & Meyer, 2008).

In the following years, the foreign environment where the subsidiaries are embedded has started to be seen as driver for the MNC’s evolution (Birkinshaw et al., 2005). Therefore, the relationship between the headquarters and subsidiaries developed and the parent companies started encouraging the foreign entities to undertake entrepreneurial activities, and acquire autonomy (Birkinshaw et al., 2005). Subsidiaries grew in size, improved their performance, and developed their own sets of skills that could be used in other markets (Hoffman, 1994). The parent company recognized the value of these entities and started managing them through participation, discussion, and persuasion instead of a controlling and autocratic approach (Godiwalla, 2016). Along with the change in management also the knowledge flow had an inversion. Knowledge started to be transferred bottom-up, also called reverse knowledge transfer, from the foreign entity to the headquarter that would benefit in terms of accessing the subsidiary knowledge, improve its products and services, its networks and global strategy (Yang et al., 2008). The reverse knowledge transfer can also benefit the subsidiary, but since the parent company is less keen to receive knowledge and learn from the foreign entities, sometimes the subsidiaries have to persuade the headquarters about the value of its knowledge (Yang et al., 2008).

In the process of knowledge sharing, both conventional and reversed, it is important that the message arrives to the receiver efficiently and effectively (Chini, 2004). However, the message sent can be transformed during the transferring process or even destroyed by the “noise” that is present in between (Chini, 2004). This noise is generated by a variety of elements that can influence the knowledge transfer process within an MNC and there is a spread interest in the international business literature to understand what are the elements that influence the knowledge transfer process and how they influence it.
For instance, current international business literature highlights how the knowledge flow in a multinational setting can be influenced by geographic and cultural distance between headquarters and its subsidiaries (Hutzschenreuter, Kleindienst, & Lange, 2016), language difference and translations (Harzing & Feely, 2008; Welch & Welch, 2008; Demir & Fjellström, 2012) and the presence of expatriates, appointed from the parent company to the foreign subsidiaries (Chang, Gong & Peng, 2012). Other studies have tried to investigate more elements but in specific contexts. For example, Fjellström, Lui & Caceres (2017) has analyzed the factors influencing the knowledge transfer process during the production reshoring of an MNC, them being culture, language, physical distance and motivation.

A framework of elements influencing knowledge transfer processes within an MNC has not been studied and analyzed yet. Such a framework has only been developed at organizational level, but never applied to or adapted for multinational corporations.

These conceptual frameworks commonly divide the influencing elements in three main categories: organizational influences, individual influences, and technological influences (Reige, 2007; Razmerita, Kirchner & Nielsen, 2016; Abdelwhab, Panneer Selvam, Paris & Gunasekaran, 2019). To be able to adopt this model in an international environment, the framework has to be integrated with the elements that were found influencing MNCs, and a deeper understanding of how these influences are affecting conventional and reversed knowledge process is needed.

It is significantly important to understand what are the elements that influence the conventional and reversed knowledge transfer; and how these elements influence the knowledge sharing. On top of it, it is well understood from the literature that the ultimate goal in the study of knowledge transfers is the benefit that could be achieved by the MNC. Knowledge transfer has shown its positive effect on creating a position of competitive advantage for the entities part of the MNC (Claver-Cortéz et al., 2018). Subsidiaries are in a strategic position where they can easily combine knowledge from internal and external environments (Ferraris et al., 2017; Ferraris et al., 2018). Therefore, corporate managers need to allocate more resources to incentive the knowledge transfer and subsidiaries managers need to be more active in the process (Ferraris, Santoro & Dezi,
2017). Efforts from both parties would positively impact on the MNC innovation performance (Ferraris, et al., 2017).

1.2. Gaps in the theory
In the last two decades, researchers have started shifting their attention from the conventional knowledge transfer (top-down) from headquarter to subsidiaries, to the reversed knowledge transfer (bottom-up) from subsidiaries to headquarters (Kogut & Mello, 2017; Ferraris et al., 2017; Giuliani et al., 2014). Kogut & Mello (2017)’s literature review provides an understanding of the reversed knowledge transfer process in MNCs and its process components, and the authors call for further research on this topic. Specifically, the authors call for the need of case studies since most researches carried out in this area are quantitative (Kogut & Mello, 2017) and for an understanding of the impact that knowledge transfer have in MNCs. Similarly, Doz (2011) also asks for an increase in qualitative researches in international business literature. On top of it, other researchers investigate the factors that can affect knowledge transfer but only in an organization (Razmerita, et al. 2016; Abdelwhab et al., 2019) or in specific MNCs’ contexts such as reshoring (Fjellström, et al., 2017). Or they explore the influence that only one or two factors at the time have on the knowledge transfer in MNCs, such as geographic and cultural distance (Hutzschenreuter et al., 2016), language (Harzing & Feely, 2008; Welch & Welch, 2008) and the presence of expatriates (Chang et al., 2012).

1.3. Aim and Research Question
In order to fill the gaps identified in the literature, the aims of this research are to analyze the main elements that influence the knowledge transfer in the MNC environment, how these influences are exercised on conventional and reversed knowledge transfer, and the benefits of the knowledge transfer flows.

Research questions:
The research questions are the following

- What are the elements that influence knowledge transfer?
- How can they influence the knowledge transfer flows within an MNC?
- How can knowledge transfer benefit the subsidiary and the parent company?
To carry out this study we selected an Italian MNC currently operating in 18 different countries, operating in the cogeneration industry. The focus of this research is on the knowledge transfer process between the North American subsidiaries and the Italian headquarters.

1.4. Key concepts

**AB**: is the acronym for Gruppo AB, which is the name of the multinational corporation subject of this study. AB stands for Angelo Baronchelli, founder and current owner of the MNC.

**Knowledge**: information and know-how “which can be transmitted without loss of integrity once the syntactical rules required for deciphering it are known” (Kogut & Zander, 1992, p.386).

**Knowledge transfer**: "process in which an organization re-creates a complex, causally ambiguous set of routines in new settings and keeps the routines functioning." (Yang et al., 2008, p.884).

1.5. Layout of the research

The structure of the research is as follows: Chapter 1 introduced the background, discussed the problem and identified research gaps and aims. Chapter 2 shows the theoretical background built on knowledge transfer, its flows and various elements that could be responsible of influencing this process. Chapter 3 shows the research methods used including strategy, design, approach, data collection process and data analysis. Chapter 4 introduces the MNC which is object of the research and the results of the interviews. Chapter 5 introduces the analyses to the empirical data collected. Chapter 6 shows conclusions, contributions, limitations and further directions of the research.
2 Theoretical Framework

In this chapter, the theoretical background built on existing literature provides an understanding of the phenomenon of investigation. At first, it explains the approach used for the study, then outlines definitions of knowledge and knowledge transfer. It explores various concepts that could influence the knowledge transfer process at organizational level, individual level and technological level.

2.1 Knowledge-based theory

The knowledge-based view (KBV) sees knowledge as the most important resource that a MNC has (Eisenhardt & Santor, 2002). This knowledge approach to business analyzes “how organizations create, acquire, apply, protect and transfer knowledge” in the international context (Cabrera-Suárez, De Saá-Pérez, García-Almeida, 2001, p. 39).

This approach has various streams of interests such as knowledge sourcing, internal knowledge transfer, external knowledge transfer, and knowledge integration (Eisenhardt & Santor, 2002). The KBV stream of interest adopted in this research is the internal knowledge transfer, which is the flow of knowledge that occurs within an MNC. This implies that for the transfer to happen the sender and the receiver maintain continuous and direct contact (Cabrera-Suárex et al., 2001). Additionally, the knowledge flows are influenced by inter-organizational, personal dimensions and technological dimension (Razmerita, et al., 2016; Abdelwhab, et al., 2019).

2.2 Definition of knowledge

The meaning of knowledge has been investigated since classical Greece and its philosophers but yet no agreement has been reached on a common definition (Nonaka, 1994; Grant, 1996a; Kakabadse, Kakabadse & Kouzmin, 2003). Several researchers and practitioners have given their contribution in explaining the concept, and Table 1 summarizes some of these definitions.

One of the most famous definition in the literature is the one given by Nonaka (1994) of a “justified true belief” (p.15) due to its versatility and magnitude of meanings.
### Table 1 - Definition of knowledge

<table>
<thead>
<tr>
<th>Year</th>
<th>Authors</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992</td>
<td>Kogut &amp; Zander</td>
<td>Knowledge can be distinguished in two concepts: “information” and “know-how” “…which can be transmitted without loss of integrity once the syntactical rules required for deciphering it are known”. Know-how &quot;is a description of what defines current practice inside a firm.&quot; (p.386)</td>
</tr>
<tr>
<td>1994</td>
<td>Nonaka</td>
<td>Knowledge is defined as the &quot;justified true belief&quot; (p.15). More in detail it is the &quot;dynamic human process of justifying personal belief as part of an aspiration for the truth&quot; (p.15).</td>
</tr>
<tr>
<td>1996 (a)</td>
<td>Grant</td>
<td>The author adopts as a concept of knowledge &quot;that which is known&quot; (p.110) and contributed to the theory adding characteristics of knowledge important for management: transferability, appropriability and aggregation.</td>
</tr>
<tr>
<td>1996 (b)</td>
<td>Grant</td>
<td>Knowledge is seen as an important source of competitive advantage &quot;stored within individual organizational members&quot; and &quot;depends upon the ability of the firm to access and harness the specialized knowledge of its members&quot;. (p.380)</td>
</tr>
<tr>
<td>2001</td>
<td>Alavi &amp; Leinder</td>
<td>&quot;Knowledge is information possessed in the mind of individuals: it is personalized information (which may or may not be new, unique, useful, or accurate) related to facts, procedures, concepts, interpretations, ideas, observations, and judgments&quot;. (p.109)</td>
</tr>
<tr>
<td>2001</td>
<td>Tsoukas &amp; Vladimirou</td>
<td>&quot;Knowledge is the individual ability to draw distinctions within a collective domain of action, based on an appreciation of context or theory, or both&quot;. (p.979)</td>
</tr>
<tr>
<td>2003</td>
<td>Kakabadse, Kakabadse &amp; Kouzmin</td>
<td>&quot;The concept of knowledge implies development and growth as, at each stage of knowledge dimensions, there are activities that one must perform in order to release the knowledge dimension&quot; (p.77). The authors developed a knowledge flow which includes the following dimensions: data, information, realization, reflection/action, wisdom.</td>
</tr>
<tr>
<td>2011</td>
<td>Fjellström</td>
<td>&quot;Knowledge is what adds value for the individual in a specific context&quot; (p.6)</td>
</tr>
<tr>
<td>2017</td>
<td>Zagzebski</td>
<td>The definition adopts is &quot;knowledge is cognitive contact with reality arising out of the acts of intellectual virtuc.&quot; (p.109). Additionally, &quot;knowledge is generally not reached through a single at, but through a combination of acts of one's own, as well as through the acts of others and cooperating circumstances&quot;. (p.109)</td>
</tr>
</tbody>
</table>

Source: own construction

As shown in Table 1, the literature presents holistic definitions of knowledge in the researches of Zagzebski (2017), Kakabadse et al, (2003), Tsoukas & Vladimirou (2001), Grant (1996a; 1996b) and Nonaka (1994), and more practical applications of the definition in the researches of Alavi & Leinder (2001), and Kogut & Zander (1992). An
important distinction given is also the presence of two types of knowledge: explicit and tacit (Nonaka, 1994). Explicit knowledge "is transmittable in formal, systematic language" and tacit knowledge "makes it hard to formalize and communicate" and it's "deeply rooted in action, commitment, and involvement in a specific context." (Nonaka, 1994, p.16).

For the purpose of this research the practical definition of Kogut & Zander (1992) is adopted: knowledge is information and know-how “which can be transmitted without loss of integrity once the syntactical rules required for deciphering it are known” (p.386).

2.3 Definition of knowledge transfer

As shown in Table 2 below, knowledge transfer is sometimes seen as a frequent event (Easterby-Smith et al., 2008), a specific experience (Szulanski, 1996), or more often it is seen as a process (Yang et al., 2008; Welch & Welch, 2008; Tang et al., 2010). In this research we also adopt the view of knowledge transfer as a process, and we refer to knowledge transfer using the practical definition of Yang et al., (2008):

"Knowledge transfer is a process in which an organization re-creates a complex, causally ambiguous set of routines in new settings and keeps the routines functioning. These routines appear in the form of know-how, R&D capabilities, managerial techniques, and so on." (p.884).

Knowledge can be transferred more or less effectively depending on the absorptive capacity of the individuals employed in the organization (Lane, Koka & Pathak, 2006). A high absorptive capacity results to give the corporation a higher level of innovation and improving performance, since knowledge is not simply received, but also transformed and applied for business purposes (Tsai, 2001). Absorptive capacity of an individual depends on his capabilities of identifying the knowledge, assimilating it, and exploiting it (Lane, et al., 2006).
Table 2 - Definitions of knowledge transfer

<table>
<thead>
<tr>
<th>Year</th>
<th>Authors</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>Szulanski</td>
<td>Knowledge transfer is &quot;...seen as dyadic exchanges of organizational knowledge between a source and a recipient unit in which the identity of the recipient matters.&quot; (p.28)</td>
</tr>
<tr>
<td>2000</td>
<td>Argote &amp; Ingram</td>
<td>&quot;Knowledge transfer in organizations is the process through which one unit (e.g., group, department, or division) is affected by the experience of another.&quot; (p.151)</td>
</tr>
<tr>
<td>2008</td>
<td>Yang, Mudambi &amp; Meyer</td>
<td>&quot;Knowledge transfer is a process in which an organization re-creates a complex, causally ambiguous set of routines in new settings and keeps the routines functioning. These routines appear in the form of know-how, R&amp;D capabilities, managerial techniques, and so on.&quot; (p.884)</td>
</tr>
<tr>
<td>2008</td>
<td>Welch &amp; Welch</td>
<td>&quot;Knowledge transfer is said to occur when knowledge is disseminated or diffused, that is communicated from one entity to another. For knowledge to be transferred there must be some form of articulation, making the knowledge explicit.&quot; (p.343)</td>
</tr>
<tr>
<td>2008</td>
<td>Easterby-Smith, Lyles &amp; Tsang</td>
<td>&quot;Knowledge transfer, defined here as an event through which one organization learns from the experience of another, has thus become an important research area within the broader domain of organizational learning and knowledge management&quot;. (P.677)</td>
</tr>
<tr>
<td>2010</td>
<td>Tang, Mu &amp; MacLachlan</td>
<td>&quot;Knowledge transfer is typically an iterative process between knowledge receivers and knowledge senders. The flow of knowledge from an originator to recipients amasses a pool of external knowledge that is related to the knowledge sender’s competency to cause the knowledge receivers to understand and grasp the transferred knowledge.&quot; (p.1587)</td>
</tr>
<tr>
<td>2017</td>
<td>Ishihara &amp; Zolkiewski</td>
<td>&quot;...the knowledge transfer process between the headquarters and subsidiaries is a key success factor because if the headquarters try to impose their standardized strategy on a subsidiary without enough knowledge about the local market of that subsidiary’s host country, such a strategy might not fit the local market and the results might be problematic.&quot; (p.822)</td>
</tr>
</tbody>
</table>

Source: own construction

2.4 Conventional and reversed knowledge flows

Knowledge within an MNC can be transferred using a top-down approach from the headquarters to the subsidiaries, called conventional knowledge transfer, or they can be transferred bottom-up from the subsidiaries to the headquarters, called reverse knowledge transfer (Yang et al., 2008).
In the conventional knowledge flow, headquarters send their existing know-how and processes to the subsidiaries, requiring them to adopt the knowledge and replicate it (Yang et al., 2008). In case of existing knowledge of this kind at the subsidiary’s level, it will be replaced by the information sent by the parent company (Yang et al., 2008). The type of knowledge the headquarter send to its subsidiary are usually referred to future plans, budget approval, pricing, promotion, product development, product policy, human resources policies and training material and courses (Aydin & Terpstra, 1981). The headquarters expertise shared with subsidiaries is meant to enhances the foreign entities’ performance (Aydin & Terpstra, 1981).

In the reversed knowledge transfer, subsidiaries share with their headquarters local knowledge and networks, coordination strategies for the local market, locally edited processes (Yang et al., 2008). Additionally, subsidiaries also share information about product adaptation to fit it best to the local markets (Aydin & Terpstra, 1981). In fact, despite the product and development hub is based in the headquarters, subsidiaries share important information to improve and develop the product (Håkanson & Nobel, 2000). However, in presence of existing knowledge at the headquarters’ level, the subsidiary has to convince the headquarters that it can be beneficial, and to adopt it (Yang et al., 2008).

2.5 Benefits of knowledge transfer

Knowledge transfer is the practical process of sharing knowledge and experience within the MNC. Knowledge can improve the interactions of people, tools, and tasks which provides the basis for competitive advantage in MNCs and sharing it is essential for a MNCs to achieve success. (Argote & Ingram, 2000)

An effective knowledge transfer process enables the MNCs to transfer the tacit knowledge. Whereas, the characteristic of the tacit knowledge is hard to copy by competitors. Therefore, obtaining an efficient way of transfer knowledge is a tool that improving innovation capability of MNCs. (Tamer Cavusgil, Calantone & Zhao, 2003).

The knowledge transfer enables the employees to work together efficiently. which constitutes the indispensable basis of efficient management. Therefore, MNC’s managers are driven to maximize the motivation of knowledge exchange among the employees (Martín Cruz, Martín Pérez & Trevilla Cantero, 2009).
2.6 Influences on the knowledge transfer process in an MNC

A comprehensive framework of all the elements that could influence the knowledge transfer process has only been developed at organizational level. The studies of Reige (2007), Razmerita et al. (2016) and Abdelwhab, et al. (2019) have identified three main categories of factors that influence the knowledge transfer process: Organizational elements such as company culture, individual elements such as trust and motivation, and technological elements. In order to adapt their model to apply it to a MNC international environment there are other elements to be considered in the model such as the relationship between headquarters and subsidiaries (Easterby-Smith et al., 2008), geographic and cultural distance (Hutzschenreuter et al., 2016), the presence of expatriates (Chang et al., 2012), language (Harzing & Feely, 2008; Welch & Welch, 2008), transparency (Berente, Vandenbosch & Aubert, 2009).

2.7 Organizational factors

All organizational factors can be seen as various manifestations of internal and external elements that might influence the knowledge transfer process in the MNCs. The organizational factors have been divided into four elements which are culture, relationship HQ-Subsidiary, geographical distance, and expatriates.

2.7.1 Culture

Culture refers to the set of values, beliefs, customs and rules held by a specific group of people (Wild & Wild, 2016) and it can influence the way knowledge is interpreted and shared (Bhagat, Kedia, Harverston & Triandis, 2002).

An international recognized way to understand national cultural differences is provided by Hofstede, Hofstede & Minkov (2010) with six main dimensions of cultures. ‘Power distance’ refers to the way power is distributed in a society and how subordinates accept unequal distribution. ‘Individualism/collectivism’ refers to societies in which the members have loose ties (individualism) or are part of a cohesive group (collectivism). ‘Masculinity/femininity’ distinguish between more masculine societies: determined, tough, and oriented toward material achievements; and more feminine societies: tender, softer and caring about quality of life. ‘Uncertainty avoidance’ is the extent to which individuals are comfortable with uncertain events. ‘Long term/short term’ orientation describes individuals that are more or less prudent and aware of the future.
‘Indulgence/restraint’ concerns cultures that find gratification in natural human traits (indulgent) or in strict social norms (restrained). (Hofstede et al., 2010)

The different national cultures in an MNC were found to influence the knowledge transfer. For example, individualistic cultures see knowledge as independent pieces belonging to their context, and information is more likely sent and received explicitly. On the other hand, more collectivistic cultures see knowledge as systemic information and are more likely to be transferred and received tacitly. (Bhagat, et al., 2002)

To facilitate knowledge transfer in an international context, MNCs managers are driven to create a cultural alignment between national cultures, by creating a unified corporate culture (Boh & Yun Xu, 2013). Various studies address the importance of managers and personnel which is adaptable and can cooperate with different cultures. (Wild & Wild, 2016; Boh & Yun Xu, 2013; Demir & Fjellström, 2012). Being open to diversity and culturally dynamic narrows the cultural distance (Wild & Wild, 2016) and positively affects the knowledge transfer impacting on the communication style used. (Boh & Yun Xu, 2013). Therefore, managers should adopt different ways of communication to reach different interlocutors. Their experience helps to address people in the most effective way depending on their cultural background and experiences (Demir & Fjellström, 2012). Communication will eventually enhance the knowledge transfer between the headquarters and subsidiaries (Demir & Fjellström, 2012; Godiwalla, 2016).

2.7.2 Relationship Headquarters-Subsidiary

The relationships between Headquarter and its subsidiary is considered a barrier to knowledge transfer (Easterby-Smith et al., 2008). The unstable relationship is more likely to be found between headquarters and foreign subsidiaries than two units in the same entity (Easterby-Smith et al., 2008)

There is a set of dimensions that can be used to analyze the relationship between business units and their parent company, depending on which it is possible to identify the level of the relationship (Godiwalla, 2016). Among these dimensions, there is, for instance, the level of interdependence of the two entities, the cultural differences, power distribution and the degree of autonomy of the business unit (Godiwalla, 2016).
Additionally, a good relationship between headquarters and subsidiaries’ managers can positively influence the quality and quantity of information shared between the two entities (Abdullah & Liang, 2013). Another way to effectively deliver a message is through continuous interaction between individuals of the two entities, that helps improving personal relationships and help managers developing a deeper understanding of each other's cultures (Godiwalla, 2016).

### 2.7.3 Geographical distance

The geographical dispersion of MNCs activities distinguishes them from domestic corporations (Harzing & Norrderhaven, 2006). Spatial distance is expected to limit knowledge transfer effectiveness and efficiency, since it prevents the employees to work together in harmony and partnering (Ambos & Ambos, 2009). In fact, face-to-face communication, was found to lower misunderstandings, narrow cultural and language differences, create more interpersonal relationships between colleagues, delays clarifications, prevent the creation of interpersonal relationships between individuals and expedite clarifications (Fjellström et al., 2017).

Headquarters might not only be less likely to interact with its subsidiaries when the spatial distance increase, but it will face many obstacles once interaction is started. For instance, long transmission channels, different time zones, cost, and intricacy of knowledge search and communication which will negatively impact the effectiveness of knowledge transfer. (Ambos & Ambos, 2009)

### 2.7.4 Expatriates

Expatriates are defined as “employees of business organizations, who are sent overseas on a temporary basis to complete a time-based task or accomplish an organizational goal” (Harrison, Shaffer & Bhaskar-Shrinivas, 2004, p. 203). The main purposes of the expatriation are: to simplify control and coordination between the headquarters and subsidiaries, and to enable MNCs to achieve global integration across their subsidiaries. Additionally, expatriated are expected to assimilate complementary knowledge while transferring information between subsidiaries and headquarters. (Minbaeva & Michailova, 2004)
MNCs depend heavily on expatriation for an effective knowledge transfer. In fact, expatriates are allocated to foreign subsidiaries by the MNCs they belong to as a communication mechanism to transfer knowledge between the headquarters and subsidiaries (Chang, et al., 2012).

Bonache & Brewster (2001), indicate the importance of expatriates to transfer tacit knowledge from the headquarters to subsidiaries and vice-versa. Since tacit knowledge is generated from employees’ experience, skills, and involvement in specific contexts (Nonaka, 1994) is hard to formalize it, codify it and communicate it through the usual channels. Therefore, MNCs rely on expatriates as a tool to transfer knowledge between MNC’s entities. (Bonache & Brewster, 2001)

2.8 Individual elements
The employees are their most valuable asset. The literature review on individual factor has been divided into four elements: language, trust, measures of transparency and motivation.

2.8.1 Language
Language is a mental model that despite being directly connected to culture is analyzed individually for its importance (Welch & Welch, 2008). Language is a mean of communication and represents an essential tool to exchange of knowledge (Welch & Welch, 2008). For communication to happen, two parties need to share a common language (Harzing & Feely, 2008). The creation of MNCs’ subsidiaries all over the world increases the exposition to different languages, representing a great barrier to communication (Harzing & Feely, 2008). Hedlund (1999) stated that the medium of communication needs to be shared between headquarters and subsidiaries in order to transfer and exchange knowledge. Therefore, to overcome the language barrier MNCs started recruiting personnel proficient in English language (usually the common language), and creating language training courses (Welch & Welch, 2008).

Knowledge transfer requires a regular interaction between the parent company and its subsidiaries for the development of a unique language or code (Kogut & Zander, 1992). Language competence can give employees more or less power (Welch & Welch, 2008). This position of power is used constructively when employees facilitate knowledge
transfer within the MNC (Kogut & Zander, 1992) or they could retain the knowledge acquired and obstacle for the knowledge transfer process (Welch & Welch, 2008).

2.8.2 Trust
The concept of trust is used widely in the international business literature (Li, 2005). The perspective of trust within the MNC is considered as a confident expectation and goodwill of a focal (Li, 2005). In corporate environment, trust refers to how willing an employee is to accept a risk, based on his positive outcome expectation of another employee’s behaviour (Mayer, Davis & Schoorman, 1995). It occurs when one partner has confidence in exchanging the information with a reliability and integrity partner (Li, 2005).

Interdependence exists when people work together, therefore people depend on each other in a various way and they have to trust each other in order to complete tasks (Mayer, et al., 1995). Trust was found to be the most important factor to reach effective knowledge transfer since it increases the employee’s commitment to share and explain their expertise (Boh & Yun Xu, 2013). A factor that plays a very important role in the development of trust is language (Harzing & Feely, 2008). Communication issues due to language barrier can generate misunderstandings and frustration in the local management that will end up withholding information from them (Harzing & Feely, 2008).

2.8.3 Transparency
Transparency refers to the significance level that information passed from one task in a process to another can be understood. Berente et al. (2009) stated that the terms understandability and consistency can be used to refer to transparency. Transparency is disclosing unique information to the recipient and absorbing this information from the recipient. (Yih-Tong Sun & Scott, 2005). The most common issue brought from the lack of transparency is not having sufficient criteria to evaluate knowledge (Sumelius, Björkman, Ehrnrooth, Mäkelä & Smale, 2014). Transparency can be enhanced through the translation of several languages or adaptation a standardization approach for transferring information. (Berente, et al., 2009).

2.8.4 Motivation
Knowledge transfer is shown to be affected by the employees’ motivation to share the knowledge with each other (Huang, Chiu & Lu, 2013). Employees motivation is
explained in the energy and time invested to share knowledge among them (Noorderhaven & Harzing, 2009). In the literature, several aspects are shown to promote or discourage employees motivation to share the knowledge (Huang et al., 2013). HR practices have significant impact on the employee's motivation to share knowledge (Huang et al, 2013). For instance, rewards and incentives play a very important role in the employee's motivation to transfer knowledge (Argote, McEvily & Reagans, 2003). Without a reward system in place in the MNC, or other HR practices that focus on motivating them, is more likely to fail in reaching effective knowledge transfer (Argote et al., 2003; Huang et al., 2013).

2.9 Technological elements
Technology gives the company the ability to the extent its strategies to support the knowledge transfer process. The level of effectiveness of technology is still depending on the individual's characteristics such as experience, values, and motivation. (Albino, Garavelli & Gorgoglione, 2004)

Information and communication technologies (ICTs) have a high opportunity to improve knowledge transfer by collecting and storing data on repositories, where it can be easily accessed by the employees. However, ICTs are not fully understood in terms of the real value of supporting knowledge. ICT application used by most of the organization is limited and it more suitable for the information process than to knowledge management. (Albino, et al., 2004)

Furthermore, technology is less sensitive to general differences between entities in an MNC. It is more flexible to be applied immediately within an organization with a little or no adaptation. While management knowledge is complicated since it's restricted with the cultural boundary and context-specific. (Wang, Tong & Koh, 2004)

2.10 Conceptual framework
The conceptual framework in Figure 1, below, is built following the theoretical framework. The model illustrates the two knowledge flows explained in the literature, conventional and reversed knowledge transfer (Yang et al., 2008). In the middle, the authors show the elements that are perceived to exercise influences on the two knowledge flows. As organizational elements the literature review shows: culture, (Hofstede et al.,
2010; Wild & Wild, 2016), relationship between headquarters and subsidiaries (Easterby-Smith et al., 2008; Godiwalla, 2016), geographical distance (Anbos & Ambos, 2009; Fjellström et al., 2017) and presence of expatriates (Minbaeva & Michailova, 2004; Chang et al., 2012). The individual elements identified in the literature are language (Welch & Welch, 2008; Harzing & Feely, 2008), trust (Li, 2005; Boh & Yun Xu, 2013), transparency (Berente et al., 2009; Sumelius, et al. 2014) and motivation (Argote et al., 2003; Huang et al., 2013). Eventually, technology as ITC systems is pointed out as a technological factor (Albino, et al., 2004; Wang, et al., 2004)

Figure 1 - Conceptual framework
3 Research Methods

The following chapter introduces the research methods use for the empirical data collection and analysis process. It is divided in the following subsections: research strategy, research design, research approach, data collection, own reflections, data analysis, interviewees, trustworthiness and ethics.

3.1 Research strategy

Researches can be carried out using the application of two main strategies: qualitative strategy and quantitative strategy (Bryman & Bell, 2015). Qualitative strategy is meant to explore in depth the phenomenon of interest through the collection of data that can explain its peculiarities and are not limited to certain concept categories (Hyde, 2000). The best use of a qualitative strategy is to collect extensive information on a new (or specific) phenomenon or to apply theories grounded in the literature to a real-life case (Bryman & Bell, 2015). Qualitative data are verbal and visual, and they can be collected in a static or dynamic way (Bansal, Smith & Vaara, 2018). The richness of these data requires the researchers to interpret them in order to synthetize them and organize them in text (Bansal et al., 2018). Quantitative data numerical and it is collected through a great sample of interest (Bansal et al., 2018).

In order to gain a large amount of insight and reach an in-depth understanding of the knowledge transfer flows and their influences, we chose to focus on a qualitative strategy. The first reason is the explorative nature of our research, on the organizational processes of corporations which provides an open door on managers in action (Doz, 2011). Additionally, qualitative analysis allows the researcher to explore various aspects, without focusing too much on one single process or theory, and to encourage researchers to a constant comparison of reality with the theories (Doz, 2011). Eventually, choosing a qualitative strategy, we also answer the call of Kogut & Mello (2017) to deeply investigate the knowledge transfer process collecting extensive details.

3.2 Research design

A qualitative study can be carried out using several types of research designs, such as experimental, cross-sectional, longitudinal, case study and comparative (Bryman & Bell, 2015). Case studies designs are considered appropriate when investigating a new
phenomenon, because of their adaptability to complex situations and to the extensive amount of insights researchers can collect with it (Baxter & Jack, 2008). Due to the novelty of this research, and due to the need of an extensive amount of data on the influences of the knowledge transfer process, a qualitative, single case study is the most appropriate method to be used. Yin (2009) suggests that case studies are appropriate in presence of exploratory purposes, shown by research questions starting with “how” or “why” such as in our research. Additionally, a single case study is considered appropriate in the presence of a critical case to confirm, discuss or expand the theory, extreme case in presence of a rare sample, or revelatory case when a new phenomenon becomes accessible for investigation (Yin, 2009).

The increasing usage of this case study design showed faults of this case-study design, such as lack of rigour and difficulty in generalization of the study can be overcome, and high validity can be obtained with the development of a solid methodology and structured process (Baškarada, 2014). Methodology and a process guideline can help the researchers with the collection of relevant material in the most effective and efficient way, improving the quality of the finding and the replicability opportunity of the study (Baškarada, 2014).

We chose to carry out our research on Gruppo AB as an example of multinational corporation where to investigate the phenomenon of knowledge transfer for multiple reasons. Gruppo AB is an Italian based MNC, leader in the cogeneration industry. The MNC was established in 1981 but has only recently started it internationalization with the establishment of a subsidiary in Spain in 2007 and the acquisition of a second subsidiary in 2010 in Poland. Afterwards the MNC gave a lot of attention to the international expansion, reaching today presence in 18 different countries. The recent and rapid expansion across borders of Gruppo AB makes it a very interesting and appropriate case of study. It is of great interest of the authors and probably beneficial for the literature to see how Group AB manages the knowledge transfer process within the headquarters and its subsidiaries. The MNE is fully introduced in Chapter 4. Empirical Data.

3.3 Research approach
The two types of research approaches to the acquisition of new knowledge are deductive and inductive (Bryman & Bell, 2015). The main purpose of a deductive approach is to test existing theories, and this is why it is usually associated with a quantitative strategy.
(Woiceshyn & Daellenbach, 2018). In the other hand inductive approach creates the basis on which researchers can build new theories and it is most frequently associated with qualitative analysis (Woiceshyn & Daellenbach, 2018). Its primary goal is to generate new themes and findings based on the raw data collected without the restriction of existing theories (Thomas, 2006). Inductive approach is found to be appropriate for this research, since the authors are keen to contribute to the literature with new findings and concepts, and to develop a conceptual framework thanks to the themes collected with this case study (Thomas, 2006). Additionally, the fact that inductive theory is “grounded” in the data collected, allows the researchers to have a more open minded and to welcome with an open mind the interviewees perspective (Strauss & Corbin, 2007).

3.4 Data collection
For the scope of this research we collected secondary and primary data. Secondary data are information retrieved from instruments such as newspapers, websites, and database when primary data are information collected by the authors through surveys and interviews.

3.4.1 Primary data collected
Primary data can be collected sending surveys to a chosen sample, conducting interviews, or through observation of a phenomenon (Walliman, 2011). The research interview is seen as one of the most important methods of data collection in qualitative studies (Qu & Dumay, 2011) and the combined presence with it and observation is the most advisable to obtain a wider range and a higher quality of the data (Walliman, 2011). Interviews “is the art of questioning and interpreting the answers” and it is great method to learn about a third party’s environment and experience (Qu & Dumay, 2011, p.243). The interviews have been to be conducted face-to-face at the headquarter premises and through Skype Video-call for the respondents from the subsidiaries, using semi-structured method of interviewing.

A common approach for primary data collection in qualitative studies is to conduct interviews using a semi-structured guideline (DiCicco-Bloom & Crabtree, 2006). The open dialogue created with open questions that characterize semi-structured interviews allows the researchers to collect a rich amount of information (DiCicco-Bloom & Crabtree, 2006). The final aim of this interview method is to create a deep involvement
in the situation of both interviewee and interviewer to allow a wide disclosure of data and gain important insights (Qu & Dumay, 2011). We created interviews guideline in advance in order to touch all main aspects of the phenomenon under investigation (Qu & Dumay, 2011). We prepared two set of interviews: one to be addressed to the respondents who belong to the headquarters, and a second one to be addressed to the respondent who belongs to the subsidiaries. Both interviews guidelines are available in Appendix 1 and Appendix 2. The content and questions could be adapted during the interviews depending on the respondent, the situation or in case more clarity was required (Qu & Dumay, 2011).

3.4.2 Secondary data collected

Secondary data allow the researchers to better understand the primary data that they are going to collect and to evaluate the quality and reliability of the primary data (Walliman, 2011). They can be retrieved from newspapers, journals, magazines, or from the web that have already been collected and organized and interpreted by a third party (Walliman, 2011). The secondary data about the MNC and the industry in which the MNC operates were collected through using Google Scholar, the AB Cogeneration World website, Hofstede’s Insight website, commercials brochures received at the headquarters premises during the visit on April 3rd and other company information available on the MNC’s intranet, which we were granted access. For what concerns the theoretical framework it was built with peer-reviewed articles retrieved from Google Scholar and other journals database such as Emerald, Academic Search and EBSCO.

3.4.3 Research steps carried out

While we were creating the interview guide, we started contacting the company and the possible interviewees. The first contact was made with the Human Resources department, in order to understand if we could proceed and if there were any internal regulation, we should have been aware about. Then the possible interviewees were identified, with the aim of reaching out to the several departments within the MNC. An email was sent to the chiefs of the following departments: Accounting Finance and Controlling, Legal, Marketing, Project Management, Purchasing and Service and Maintenance. The sales department was left out on purpose for what is considered the local specificity of the function and what is believed to be a different coordinating organization. The email was meant to ask for permission to interview them directly and or someone of their team in the headquarters or in the foreign companies. Permission was granted from each of them.
Interviewees identified from headquarters are all managers and directors that have frequent contact with the North American entities, both for a direct line of reporting or managing daily activities together with foreign entities. Interviewees from the North American subsidiaries are a mix of managerial and non-managerial positions in order to possibly cover different perspectives. Among the interviewees identified, ten agreed to participate to the interviews, divided as follows: four interviewees from the headquarters, three interviewees from the Canadian subsidiary and three interviewees from the American subsidiary. The number of interviewees, along with the blend of managerial and not-managerial levels was considered adequate for the development of this study and to reach a very satisfactory amount of data on the knowledge transfer process within the MNC.

Once we completed the interview guideline and confirmed it with our supervisor, an email was addressed to all the possible interviewees asking their availability for a face-to-face meeting or a Skype call. We indicated April 3rd, 2019 as interview date for the employees from the headquarters in order to schedule a flight to the headquarters in Italy on that date. For what concerns the North American subsidiaries we asked the interviewees to suggest us the best time for a Skype call in the Week 15, 2019 from April 8th to April 14th.

a) Face-to-face interviews
The interviewee’s familiarity with the location of interview such as own office or house is considered to be beneficial in terms of quality and quantity of details given (Jacobsen, 2002). For this reason, we decided conduct face-to-face the interviews with employees located at the headquarter premises in Orzinuovi, Italy. On top of it, the managing director of the Canadian entity informed us that he was at the headquarters for the week, therefore we took the opportunity to interview him as well. Following in Table 3 the interviews scheduled on April 3rd. The interviews scheduled had to be adjusted due to unexpected meetings or calls of the interviewees during the day. Among the interviewees the MNC’s Chief Financial Officer asked to re-schedule the interview to April 5th, which it was granted but conducted by only one of the authors; the North American Service Area Manager was also unavailable due to a business trip.
<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Interviewee</th>
<th>Company within AB</th>
<th>Language</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019-04-03</td>
<td>09.45-10.45 (CET)</td>
<td>Legal Director</td>
<td>Headquarters</td>
<td>ENG</td>
</tr>
<tr>
<td>2019-04-03</td>
<td>11.00-12.00 (CET)</td>
<td>Managing Director</td>
<td>CA Subsidiary</td>
<td>ENG</td>
</tr>
<tr>
<td>2019-04-03</td>
<td>13.45-14.45 (CET)</td>
<td>Administration and Accounting Manager</td>
<td>Headquarters</td>
<td>ENG</td>
</tr>
<tr>
<td>2019-04-03</td>
<td>15.00-16.00 (CET)</td>
<td>Chief Financial Officer (CFO)</td>
<td>Headquarters</td>
<td>ENG</td>
</tr>
</tbody>
</table>

Source: own construction

All five interviews were recorded after the permission was granted by the respondents. We confirmed that the interview recording, and transcript was going to be used only for the research purposes, and a copy of the final research was going to be sent to each of them after completion. All the respondent seemed very comfortable during the interviews, probably due to their relationship with one of the authors. Also, it was acknowledged that they seem to disclose more “basic” information when the unfamiliar author was asking questions, probably since they did not assume him to know this information. The interview recording allowed us to pay more attention to the interviewee and better interact with him since we were not focused on taking notes. Afterwards the recording was used to transcribe the entire interview conducted and allowed us not to miss any detail since we could stop it, pause it and rewind it, as suggested by Lo Iacono, Symonds & Brown (2016).

All interviews took place at GMT +1, in Orzinuovi, Italy and the interviews all took about one-hour time. The interviews were carried out in English but sometime the question was also re-addressed in Italian to make the respondent more comfortable and to achieve a full understanding of what was asked. Additionally, all the respondents were very talkative and sometimes they freely touched further topics of the interview guideline. Both authors were present for the interviews, except for the CFO’s interview since it had to take place on a different day. The recording was later analysed by both authors together and we do not believe this affected his answers in any way. Before the interviews a visit to the company premises was done, and pictures of the company visit were taken.
b) Skype Video-call interviews

The development of VoIP systems such as Skype allows researchers to carry out interviews with a worldwide extension, in an efficient way and specially in a financially affordable manner (Lo Iacono et al., 2016). Skype interviews are considered an adequate alternative to face-to-face interviews and as qualitatively good and effective (Lo Iacono et al., 2016). After identifying the individuals, we wanted to interview, an email was sent to organize the video-calls through Skype. The Skype interviews were organized with the individuals we identified to be considering Eastern Standard Time (GMT-5) in order to encourage participation of the interviewees. They were all scheduled on Week 15 from April 8th to April 13th. Following, Table 4 shows the Skype interviews scheduled. As for the face-to-face interviews they also have to be adjusted due to daily meeting or unexpected matters.

Table 4 - Skype interviews scheduled

<table>
<thead>
<tr>
<th>Date</th>
<th>Scheduled Time</th>
<th>Interviewee</th>
<th>Company within AB</th>
<th>Language</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019-04-09</td>
<td>10.00-11.00 (EST)</td>
<td>Principal Engineer</td>
<td>US Subsidiary</td>
<td>ENG</td>
</tr>
<tr>
<td>2019-04-09</td>
<td>15.00-16.00 (EST)</td>
<td>Project Manager</td>
<td>CA Subsidiary</td>
<td>ITA</td>
</tr>
<tr>
<td>2019-04-10</td>
<td>10.00-11.00 (EST)</td>
<td>Chief Operating Officer (COO)</td>
<td>US Subsidiary</td>
<td>ITA</td>
</tr>
<tr>
<td>2019-04-13</td>
<td>10.30-11.30 (EST)</td>
<td>Field Service Technician</td>
<td>CA Subsidiary</td>
<td>ENG</td>
</tr>
<tr>
<td>2019-04-12</td>
<td>09.00-10.00 (EST)</td>
<td>Business Developer &amp; Sales Support</td>
<td>US Subsidiary</td>
<td>ENG</td>
</tr>
</tbody>
</table>

Source: own construction

The interviews were mainly conducted in English, except for two expats for which the interview was conducted in Italian. All interviews were recorded after receiving the consent of the interviewees. Eventually, due to technical difficulties the interview with the COO could have not been recorded. However, the authors organized a follow up call with the interviewee to double-check the answers and to further explain some of the points.
3.5 Interviewees

Table 5 below gives an overview of the interviewees that compose the data collection. The interviewees were first given a code according to the companies they belong. “HQ” for headquarters and “SUB” for subsidiary. Then a distinction was made if the participants were in managerial positions or not. Afterwards we indicated the years spent in the MNC, and if the interviewees were expatriates or not. Eventually we indicated the prior international experience that the respondents had prior entering in the company. Low indicates that the subject has never lived abroad before, medium if they have lived abroad for a period of at least six months, and high was given to those participants lived in another country for over a year before moving to the MNC. No additional data were disclosed to guarantee the anonymity of the participants.

<table>
<thead>
<tr>
<th>Code</th>
<th>Position</th>
<th>Years in the MNC</th>
<th>Expatriate</th>
<th>Prior international experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>HQ1</td>
<td>Manager</td>
<td>6</td>
<td>no</td>
<td>Medium</td>
</tr>
<tr>
<td>HQ2</td>
<td>Manager</td>
<td>6</td>
<td>no</td>
<td>Low</td>
</tr>
<tr>
<td>HQ3</td>
<td>Manager</td>
<td>21</td>
<td>no</td>
<td>Low</td>
</tr>
<tr>
<td>HQ4</td>
<td>Non-manager</td>
<td>6</td>
<td>no</td>
<td>Medium</td>
</tr>
<tr>
<td>SUB1</td>
<td>Manager</td>
<td>5</td>
<td>yes</td>
<td>Medium</td>
</tr>
<tr>
<td>SUB2</td>
<td>Manager</td>
<td>5</td>
<td>no</td>
<td>Low</td>
</tr>
<tr>
<td>SUB3</td>
<td>Non-manager</td>
<td>8</td>
<td>yes</td>
<td>High</td>
</tr>
<tr>
<td>SUB4</td>
<td>Manager</td>
<td>5</td>
<td>yes</td>
<td>High</td>
</tr>
<tr>
<td>SUB5</td>
<td>Manager</td>
<td>2</td>
<td>no</td>
<td>Low</td>
</tr>
<tr>
<td>SUB6</td>
<td>Non-manager</td>
<td>3</td>
<td>no</td>
<td>High</td>
</tr>
</tbody>
</table>

Source: own construction

3.6 Own reflections

We think it is relevant to share a few comments on the research process carried out for this study. We believe it was positive that we could carry out five interviews at the headquarters’ premises in Italy. The interviewees seemed very comfortable to carry out the interviews in their offices and keener to disclose many other information for what concerned their job, their current activities, and they introduced us to other employees that stepped in and other the interviewees offices. Despite most of the interviewees were
really busy with work, they dedicated an hour or more of their time to talk to us, and we don’t think this would have happened if we were not physically there.

There has been a delay with everyone’s interview despite we scheduled an exact time with all of them due to unexpected meetings or additional work. However, the delay gave us time to visit the premises and meet and talk to other employees. One of the authors “guided” the other through the premises, both offices and production facility. The two most surprisingly things observed by the author that was new to this company are how overwhelmed the employees looked and how the English level of some employees does not seem suitable for such a big MNC.

It was much more difficult for us to arrange time with interviewees of the Canadian and American subsidiaries. We originally scheduled four interviews for each subsidiary, but we only managed to conduct three interviews each due work overload. Specifically, we had more difficulties with interviewees from the service department, where we only had one respondent out of three scheduled. However, there is to be said that the employees that agreed to participate showed great attitude toward us. Some of them wrote down a few notes before the interview, and we thought it showed commitment. And we would like to point out how grateful we are for one interviewee in specific for which the interview was conducted on video-call from her home since she had just left the hospital a few days before.

Another note we need to point out is related to the transcription process. The interviews with native English speakers took five to six hours to be transcribed and they were the fastest. Interviews conducted in Italian took longer than eight hours to be transcribed, since they had to be first written into Italian text, then translated into English in a way that they did not lose the original meaning. Interviews conducted in English but with Italian mother tongue’s employees were often the toughest to transcribe, especially for the non-Italian author. There were several pauses and very often sentences were structured very “Italian” even if spoken with English words.

Eventually, the process of interviewees identification and contacting was facilitated by the fact that one of the authors has been working for the MNC for six years, which helped
us with knowing the company structure, most employees within the group, and it made follow-ups and reminders less awkward.

3.7 Data analysis
When it comes on qualitative studies, the purpose of data analysis is to understand, discuss and interpret the insights gained through the data collection of both secondary and primary data (Hair Jr., Money, Samouel & Page, 2007). The process of data analysis requires researchers to keep going back and forth to the data collected and to the theoretical framework build, to understand if any new matter arises from the data collected, and to see what the emerging connections among data are (Hair Jr., et al. 2007). To be able to categorize the data, compare and analyze them, we coded the data collected through interviews. Following one of the types of coding suggested by Strauss & Corbin (2007), we decided to adopt the open coding approach which is defined by the authors as the “process of breaking down, examining, comparing conceptualizing and categorizing data” (p.61). The first step was to transcribe in text all the interviews carried out. The interviews were divided evenly between the two authors to proceed transcribing them. The recording helped us in the process of writing all the interviews so we could pause or rewind in case we were unsure of what was said. Once the interviews were all written in text, they have been reviewed by both authors together to overcome any possible misinterpretation. All the data collected were organized in an excel file. Interviewees were given a code depending on the entity they belong to and each interview transcription was assigned an excel tab.

Therefore, data collected were organized in categories of concepts, which are the analytic key to research. Concepts can have different level of abstraction: lower-level concepts and higher-level concepts. Lower-level concepts are analyzed to find individual properties and dimensions and then commonalities are identified or relate lower-level concepts to the higher-level ones. (Strauss & Corbin, 2007) Each interview transcribed was exploited into different concepts. At first the authors marked what was considered to be key concepts of interviews. These concepts were therefore compared between employees to see if there were commonalities as suggested by Strauss & Corbin (2007) and if there were difference in perspectives between the headquarters and subsidiaries interviewees. Then these data were analyzed and grouped under higher-level concepts founded on the research theoretical framework. The data collected were constantly
compared with the literature framework and vice versa (Strauss & Corbin, 2007). This interplay between the two helped us to shape the concepts of the theoretical framework when and where needed. On top of it, the research questions have been adjusted after the data collection and analysis so that they could better cover some interesting areas of the findings.

3.8 Trustworthiness

Trustworthiness is an important concept for the validity and reliability of any research and consists of four criteria: credibility, transferability, dependability and confirmability (Shenton, 2004).

Credibility represents confidence in the truth level of the research finding and it drives the reliability of the research (Shenton, 2004). It is the key to evaluate if the data collected are reliable or were subject to substantial distortion. We have adopted several mechanisms that in order to enhance the credibility of this study: prolonged engagement, persistent observation, triangulation and member check (Korstjens & Moser, 2017). For prolonged engagement, we have started the interview introducing ourselves to all the participants before conducting the interview. This allowed us to create a familiar environment, build trust with the interviewees, and gain more information. Additionally, we had a persistent observation of the respondents during the interviews in order to interpret other details. About triangulation, we have conducted 10 interviews to have multiple primary data sources from both the headquarter for which we have four interviewees, and the North American subsidiaries for which we have six respondents. This helped us to observe different perspectives for the current issue and enhance the accuracy of the result. The last strategy to enhance credibility was member check. We continuously kept in contact with the respondents to enable them to clarify more about some points and correct any wrong interpretations.

Transferability is the ability to apply findings and conclusions of the qualitative research to other contexts and situations (Kuper, Lingard & Levinson, 2008). Results should be applied to other wider population. Since qualitative research are limited to the small number of the participants, environments and current situations, it is hard to approve that the findings are applicable to other populations and situations (Shenton, 2004). To improve and facilitates the transferability we have the used a thick description technique.
to describe the context of the behaviour and experiences which helps to make the finding meaningful to the reader since they are the transferability judgement of our findings according to their own special setting (Korstjens & Moser, 2017).

Dependability evaluates the consistency of a research. In order to prove it, the research methods section should include research design and research implementation, the operationalism of steps undertaken for data collection, and a throughout evaluation of the study (Shenton, 2004). Furthermore, dependability determines stability of the finding over the time, which mean if the research repeated with the same method, participants and situation, similar findings would be obtained (Korstjens & Moser, 2017). In our study, the research strategy, design and approach were shown in detail. Additionally, we widely explained the data collection process and the operationalization in the collection of primary data gained face-to-face or through Skype video-calls and clearly stated sources of secondary data.

Confirmability is the degree to which other researchers can confirm the validity of findings of the research study. In other words, it is the method that confirms that findings and interpretations were drawn from the original data without interference of subjectivity of the authors (Korstjens & Moser, 2017). To increase the confirmability, we have adopted the audit trail strategy which allows any reader to trace transparently findings and analysis process step by step (Shenton, 2004). We have fully described the method that used to gather that primary data and provided all interview transcripts, data organization and display for the analysis. Eventually, We have justified all our interpretations according to the scientific articles and participants' perspectives.

3.9 Ethics statement
Ethics is an important matter that has to be taken into account during the entire research process, since the real beginning (Hair Jr., et al. 2007). There are four main ethical aspects to be respected during the research process. Integrity of the research developed on appropriate methods and literature; justice, in the process of interviewees recruitment, inclusion and exclusion; beneficence to lower research risks; and respect in terms of privacy of the interviewees, confidentiality of the information and cultural sensitiveness (Wallace & Sheldon, 2015). We considered the research ethics since the beginning of our research process, through the full process. The theoretical framework and its concepts
were built on the literature using relevant theories. When it came to data collection, the primary data had been collected from employees that were considered very knowledgeable in the company. Either because they are working in managerial positions or because they have been working for several years in the same field. Furthermore, all sourced data reported in the research have been fully referenced. Eventually, the MNC subject of this case study has given us permission to use its name. However, since some of the interviewees rather not disclose their identity, in the data display and analysis we refer to them as interviewees and code them according to if they belong to headquarters or subsidiaries, without disclosing their personal information or identity, as shown in Table 5.
4 Empirical Data

The following chapter combines the empirical data that the authors have collected through the interviews and the secondary data. It is divided in two main parts. Firstly, it shows general information about Gruppo AB, its subsidiaries and company culture. Secondly, it gathers all the information coming from the interviews.

4.1 Gruppo AB - AB Cogeneration World

Gruppo AB, hereinafter referred to as AB, is an Italian multinational company. Established in 1981 by Angelo Baronchelli, an Italian specialist in the electronics industry. AB is run by its owner and manages the entire manufacturing life-cycle of a cogeneration power plant, covering the following activities: design, manufacturing, installation and maintenance activities. (AB Cogeneration World, 2019, February 10) What made AB famous all over the world is its product Ecomax, a modular turnkey solution of cogeneration power plant. Cogeneration, or combined heat and power (CHP), is a more efficient way of energy production that involves the generation of heat and electricity at the same time, in a single plant, from a fuel source (European Commission, 2013). Among the benefits of cogeneration there are: reduction of CO2 emissions in a short period of time, reduction of energy costs, and other positive environmental impacts (Thorin, Sandberg & Yan, 2015). The applications for Ecomax are Biogas, Greenhouses, Special Gas and Natural Gas (AB Cogeneration World: Company Profile 2019).

The MNC headquarters are in Orzinuovi (BS), Italy. Here are located: the parent company (AB Holding SPA), the production facility and engineering expertise (AB Impianti Srl) and a maintenance hub where the warehouse provides spare parts to all the companies of the group for service activities (AB Service Srl). (AB Cogeneration World, 2019, February 10) The corporation started its internationalization process in 2007 with the establishment of a subsidiary in Spain, followed by the acquisition of a company in Poland and the establishment of a few other subsidiaries in Europe. In 2013, the excellent results of the MNC in the European market encouraged AB to expand overseas establishing its presence in Canada, Brazil, US and recently Mexico. As at today AB group is composed of 23 companies located in 18 different countries and it is soon going to open three new subsidiaries markets.
AB is considered the number one leader for Cogeneration in the Italian Market and it has been working toward consolidating its leader position in at least four other markets. The leadership position worldwide is confirmed by the number of power plants installed by the MNC, which is higher than 1,250 CHP plants as at today and the increasing number of employees, that reached almost 1000. (AB Cogeneration World: Company Profile 2019)

4.2 MNC companies subject of this study
AB is organized in five main business lines that compose the company value chain: Sales and trade market, production, rent, after sales maintenance services and agriculture power generation.

4.2.1 AB headquarters
When referring to the AB headquarters, we refer to the companies located in Orzinuovi, Italy. In Italy AB has established a company for each business line, as shown in the Figure 2 below.

Figure 2 - AB’s business functions

Source: AB’s intranet
All together they aim to coordinate the foreign subsidiaries in the MNC. AB Impianti Srl incorporated in 1996, is in charge of engineering, electrical systems for the industrial and civil sector and power plant manufacture. AB Energy Spa incorporated in 2000 is the company in charge of the sales of cogeneration plants. AB Service Srl established in 2001 to carry out after sales maintenance and services. AB Holding Spa also established in 2001, and it takes care of corporate services. (AB Cogeneration World, 2019, February 10)

4.2.2 North American subsidiaries

AB’s foreign subsidiaries take care of more functions of the value chain. As shown in Figure 2, foreign subsidiaries take care of sales, after sales services and maintenance and leasing of power plants. The biggest subsidiaries in size also include corporate services functions in the foreign entity, such as accounting, purchasing, human resources and project management.

This research focuses on the headquarters and the two North American subsidiaries in Canada and United States. The Canadian subsidiary named EPS AB Energy Canada Ltd. (EPSAB) was acquired in mid 2013 and is located in Guelph, Ontario, Canada. EPSAB carries out sales, service, and maintenance and includes corporate functions such as accounting, project management and purchasing. The US subsidiary is AB Energy USA, LLC (ABEUS), incorporated at the end of 2014 and it located in Denville, New Jersey, USA. The company carries out sales, service and maintenance and includes corporate functions such as project management. ABEUS and EPSAB are also very interconnected, since corporate services such as accounting and purchasing for ABEUS are carried out from EPSAB which is considered the hub for North American corporate functions.

4.3 Knowledge transferred

All the respondent told us that they have daily interactions between headquarters and subsidiaries, usually through phone, emails and less regularly with face-to-face meetings with VoiP systems like Skype or with business trips to one of the AB premises.

There are several knowledge flows exchanged in AB. It can be specific knowledge related to the MNC core business the cogeneration power plants, in terms of sales, project compliance and standards; specificities for service and maintenance; organizational
aspects and procedures that need to be improved or implemented at the subsidiary level, corporate secretarial and accounting compliance, everyday routines.

Headquarters’ interviewees send information such as targets, clear explanation on responsibilities, organizational directions, training and technical support on their department expertise. Our subsidiaries respondents also confirmed the organizational aspect of most of the information received. On top of it the subsidiaries respondents informed us that they also need and receive information concerning the CHP sales and manufacture. For example, such as information required to complete tender applications or other offers, and specificities on CHP plants manufacturing, drawings and status update. Eventually, respondent SUB4 clarifies that there is much more information needed from the headquarters such as financial forecast and budgets, human resources information to better plan the local team, and price lists for cogeneration power plants components and for service and maintenance parts.

Most of the interviewees indicates that the knowledge exchanged from the subsidiaries to the headquarters are concerning local know-how and other information on the foreign entities’ market and other specificities to reach local compliance.

HQ1 for example explains how since she is not a specialized Canadian or American lawyer and so sometimes, she needs inputs from the subsidiaries to reach local compliance. Similar point is touched by interviewees HQ3 that explains the need of compliance in terms of rules, banking system, terminology which has to be the same and how market is structured.

Subsidiaries’ interviewees also all confirmed that most of the information sent to the headquarters and or required from the headquarters are related to the local compliance of the product, and other market-related knowledge. SUB5 and SUB6 shared with us that the main knowledge shared are addressed to “Americanize the product” sharing the local rules and regulations (SUB5) and trying to change the Italian mentality of doing business that “here in America it is inappropriate, and it does not work.” (SUB6). However, they all answer more related to technical aspects such as project compliance and market specificities and requirements. Additionally, to two of the subsidiaries’ interviewees SUB1 and SUB3 are also frequently asked for other information concerning the team they
work with, a general overview of how each department seem to be doing in the subsidiary and so on.

Eventually, from the subsidiary there is an issue that arose. Interviewee SUB4 and SUB6 also commented that sometimes at the subsidiary level there it seems that the information they sent to the headquarters are not read or used by the parent company and in the long run can create miscommunications and frustration feelings.

4.4 Benefits of knowledge transferred

“In every work activity, communication is everything. A company that communicates wins! A firm that does not communicate eventually loses!”. Interviewee SUB4

The interviewees made clear that sharing knowledge is the key to success. First of all, when information circulates naturally it benefits the growth and development of the MNC and improves the business (HQ3, SUB4). A good information flow is needed for better coordination and compliance in the subsidiaries, to reach the company goals (HQ1, HQ2, HQ4, SUB1, SUB5). It is important because everyone belongs to the same group, and the general idea is that people also need to learn and grow and be able to help each other in different parts of the world (SUB3). AB benefits in terms of expertise since the employees in the subsidiaries learn from the headquarters’ past experiences but they also teach them about new processes or product specificities that could be applied to the “home market” or other markets where subsidiaries are present (SUB2, SUB3 and SUB5). It makes the personnel multicultural, bilingual, open to differences and able to operate in multiple markets (SUB4). And eventually it can benefit the business improving margins, company image, branding and performance.

The most complete answer was given to us by interviewee SUB4. He explained that there are benefits in both knowledge transfer flows:

a) Conventional knowledge transfer: “it can make the subsidiary more successful and help it to access and establish in the local market”;

b) Reversed knowledge transfer: “it’s important to make the company grow in multiple contexts, as long as the company is interested in becoming more international”.
4.5 Organizational elements and their influences

4.5.1 Culture

Interviewees of both headquarters and subsidiaries expressed differences between the headquarters’ national culture and the subsidiaries’ national cultures. Additionally, they gave us examples of the corporate culture shared in the MNC.

a) National culture

The interviewees have highlighted three main areas where the Italian culture of the headquarters and the North American culture of the two subsidiaries differs: formalities, problem solving, and balance of work and personal life.

Formalities. HQ4 and HQ1 mentioned that North America has a more practical approach to business, when in Italy it is more bureaucratic, and full of procedures. In the North American subsidiaries, the low uncertainty avoidance facilitates circulation of information at all levels of the organization and influences the communication more informal, direct, practical and straightforward. To the opposite side, in the Italian headquarters high level of uncertainty avoidance makes the culture more bureaucratic and full rules, and as a consequence communication is more formal, rich in details and procedures. (Hofstede’s Insights, 2019, May 25)

Problem solving. Italian interviewees consider themselves more efficient than their North American colleagues, especially when it comes to problem solving and finding “innovative” solutions to work-related issues. The combination of high level of masculinity and fairly high individualism makes them be competitive from an early age and driven to reach success, which makes them more inclined to problem solving. To a lower extent US colleague are also success oriented and inclined to problem solving. On the other hand, since Canadian culture shows a lower level of masculinity which implies that employees have a more assertive behavior and are not willing to challenge each other. (Hofstede’s Insights, 2019, May 25)

Balance of work and personal life. Interviewees HQ3 and HQ2 explained that for Italians do not have a net distinction between working life and private life, differently from their north American colleagues. Due to a lower masculinity than Italy, North American culture tends to have a better work-life balance and a more net distinction between the
two. This is emphasized specially for Canadians that score the lowest on the masculinity dimension. (Hofstede’s Insights, 2019, May 25) Additionally, both SUB1 and HQ4 brought the example on how the work attitude can be different in terms of working hours and tasks management. According to them, an Italian is more willing to stay over the normal working hours to complete his task if needed, when a Canadian will leave after the normal working hours and go back to his uncompleted task the next day.

b) Corporate culture
HQ3 suggests that the cultural aspect is taken care from the recruiting process, in order to select people that “fit best” with the Italian, or better the corporate culture of AB and then grow together. Additionally, AB pays much attention to creating a strong corporate culture. The values of the corporate culture are found in an internal document that is called “the AB Way”. The document reads that AB is committed to create unified culture shared at the headquarters and subsidiaries level based on the following values: working with passion, consider other people’s point of view, growing professionally, helping AB to grow, safeguarding the safety of individuals, upgrading efficiency boosting the company solidity and competing fairly in the market. (AB Cogeneration World: AB Way, 2019)

The AB Way as values were recalled by interviewees HQ2, HQ3 and SUB5. Subsidiaries’ employees believe that they share AB values and company culture at the subsidiary level and interviewee SUB4 added that a more frequent presence from the headquarters in the subsidiaries would help to maintain a shared company culture at subsidiaries’ level.

“For what concerns values, aim and mission however we are all aligned with the group. We all feel we belong to the group. And this is also easily understandable by the frequent business trips of the owner.” (Interviewee SUB2)

“I think how we treat customers, the goals and the morals of the company the values of the company are the same.” (Interviewee SUB5)

According to HQ1 and HQ3 a full imposition or implementation of the parent company culture could be not positive since they the foreign entities would lose their uniqueness and some of their good cultural values, such as a more “practical approach to work” (HQ1). And eventually SUB3 told us that, “if you are the right person then cultural
differences doesn’t matter. [...] I have never had a problem with the culture”. This comment is confirmed by SUB4 which indicated that expats and headquarters’ employees on foreign assignments should be chosen carefully so that they can fit and work with locals.

4.5.2 Relationship between Headquarters and Subsidiary

There is not a common view of the type of relationship that is established between subsidiary and headquarters. There are those who says that the subsidiary is quite autonomous (HQ4 and SUB2), who says from the headquarters have no interest in the subsidiary’s business (SUB2 and SUB4), there is little communication specially with some specific department (SUB1), and it recently seems that the headquarter does not have trust in the subsidiaries management (SUB5). On the other hand, some interviewees such as HQ2, HQ3, HQ4 SUB6 explain that there is a control relationship from the headquarters to the subsidiaries and SUB3 highlights a very positive relationship with the headquarters in terms of timeliness in answers and support.

Interviewee SUB5 explains how him and his team have noticed a change in behaviour from the headquarters toward them, probably for the lack of project sold in the past year. The reaction to the stressful situation is shown in an “over-communication” from their side to the HQ. They send plenty of information to the headquarters, even though they are not needed or un-important, just to show them that they are actually working.

In the other hand, AB has also experienced a “mute” reaction from the North American subsidiaries before due to the control exercised from the headquarters toward the subsidiaries. Interviewee HQ4 gave us the example of the former service area manager of the Canadian entity, that due to the excessive control from the headquarters “put an umbrella above his head” and stop sharing knowledge with the headquarters.

Another interesting aspect was to understand how most of the interviewees value personal relationships between the employees of the parent company and subsidiaries. Interviewee HQ1 suggests that developing good relationships between colleagues of the two entities has a big impact on how things move forward inside the MNC. Following the same line, interviewees HQ4 and SUB5 explains how the information flow increases in presence of
good relationships with colleagues, and how they are also willing to share other type of information such as more confidential or more personal.

### 4.5.3 Geographical distance

When asked about the impact of geographical distance on the knowledge transfer process the respondents brought up two main issues. First of all, the actual distance between the headquarters and the North American subsidiaries that prevents people to meet face-to-face and secondly the difference in time between the entities which is from six to nine hours.

Interviewee HQ3 said that when people are in the same location it takes a second to step in their offices and the message is more efficiently delivered face-to-face. In addition, proximity also brings people to share not only job-related information but also more private and informal.

Distance influences information that is shared even when people are at the same location but in two different buildings, and “even more when there is an ocean in between” (HQ3). Also, interviewee HQ2 believes that it is easier to exchange information face to face, and to obtain better results. His strategy is to visit the foreign subsidiaries regularly “in order to transfer the objectives and tasks fairly and with transparency”. The same concept is presented also by SUB1 and SUB6.

All interviewees answered that time-zone difference can be a problem. HQ3, HQ4, SUB3, SUB4 and SUB5 all explain that they share less information because of it. Partly is because they do not want to disturb colleague on the other side calling them outside of work hours. Or they only have a few hours to communicate with each other. But this time-zone difference could also be an issue since the information that is not shares “could have been crucial and improve how they do Ecomax there” (HQ4).

HQ2 and SUB1 suggest that to overcome the time-zone issue they work twelve, fourteen hours a day. All the subsidiaries respondents also added that it is very inconvenient to have a few hours of interaction with the headquarters’ colleagues, but that an adequate organization can make it better. The subsidiaries’ respondents describe that the mornings are dedicated to interaction and communication with the headquarters, and the afternoons
to local activities. However, for locations such as California, USA or Calgary, Canada hardly have a chance to communicate to the headquarters except for emails since there are nine hours of time difference.

Additionally, SUB4 exemplify the long-distance communication as the “Chinese whisper” game. He explains that a message that starts from the subsidiaries as a big problem, changes from interlocutor to interlocutor and it arrives to the final receiver with a twisted meaning and with a much smaller level of importance.

In relation to the service and maintenance department interviewee SUB3 informed us that if there is any issue that is related to an engine and the service technicians in Canada or US need urgent information from its Italian colleagues, there is a control room which is operative 24h/day for maintenance support.

4.5.4 Expatriates

The presence of an expatriate at the subsidiary level is seen from all the interviewees as very favourable when it comes to transferring knowledge from the headquarters to the subsidiary and reversed. Interviewees HQ4, SUB1, SUB2 and SUB3 also pointed out that the role of an expatriate is not beneficial only for its own department, but it has a much greater role in helping everyone. Expatriates can improve existing relationships and build new ones (HQ1), they work together with the subsidiary’s team bringing (and being) an example from the headquarters’ (HQ2, HQ3), supporting in the subsidiary’s coordination (HQ3, SUB4) helping with understanding cultural differences, translating and explaining information received and send from headquarters to subsidiaries (SUB2, SUB5, HQ4) and they can be the headquarters’ reference point (SUB3).

“Expats are a useful tool that helps locals communicate with the HQ. they are needed to bring seeds from the corporate culture in the subsidiary to see if they can make them bloom, they are needed for discreet monitoring of the situation and local investments, and they acquire international experience that can be useful for the company in other markets.” Interviewee SUB4

Additionally, some of the interviewees highlighted that there might be cases where the expatriate could not be easily accepted by the subsidiary’s management since it could be
seen like a “spy” (as defined by Interviewee SUB2), or issues could emerge when an expatriate limits communication (SUB5).

“The negative part of an expatriate is that this person becomes relied on heavily. There's a lot of conversations where they pull that person in only because of the language. [...] I've seen that before where it just it turns into an Italian discussion. When that person goes away it also becomes a big problem.” Interviewee SUB5

Eventually, there are positions such as sales where expatriates are not seen very appropriately, since clients prefer to deal with people from the same culture: “When it comes to the sales, unfortunately American likes the deal with Americans” (SUB6).

4.6 Individual elements and their influences

4.6.1 Language

The language of communication adopted between the studied entities in AB is English, despite the headquarters’ employees mother tongue being Italian. SUB1, SUB5, HQ3 and HQ4 have explained that the level of English as a second language in the headquarters is improving thanks to weekly English courses provided by the company, but not everyone has reached a proficient level yet. Therefore, the language difference was pointed out to be a big issue and a barrier to communication. All interviewees agreed on it, except interviewee HQ1 who consider it as “not an issue” at all. We believe this is due to her confidence in the English language, which we recognized during the interview.

HQ4 declared that the language difference prevents him from transferring all the information to the subsidiaries, SUB5 indicated that language and culture can affect how people read and interpret information and HQ2 explained how it can be risky and time-consuming to have a poor understanding of the English language, for example when reading and understanding contracts, articles and tax regulations, since “just a preposition can totally change the meaning of something and then it takes twice as much time to arrive to the final draft of the agreement”. Additionally, HQ3 told us that even the English terms adopted in Italian sometimes have different meanings overseas or they are wrongly used into context, such as leasing contracts that in the Italy are called “rent” contracts.
On the other hand, the English-speaking interviewees described two examples in which the language can shape their behavior, or it could be a barrier to transferring knowledge. Interviewee SUB5 said that he is much more willing to communicate more with people in the headquarters that speak better English since the communication is faster, smoother and there are much less misunderstandings; and interviewee SUB6 clarifies that language can be a big problem especially during employees trainings and foreign assignments if colleagues cannot speak the same language.

4.6.2 Trust

All the interviewees showed a great importance of personal trust in the information sharing, and trust was found to affect the reliability of the information sent and received. Interviewee HQ3 explains how this factor is taken into account since the incorporation of a subsidiary. The headquarters are used to appoint a person of trust in the newly born foreign entities in order to facilitate the relationship and communication with it since the beginning. The presence of trust can also influence the reliability of the information. According to employee HQ2 the information received loses its value and importance if he has little trust in the sender, and the other interviewees confirmed that information collected from a source is categorized and shared according to the level of trust with this source. While HQ4 and SUB5 said that if they don't trust the person on the other side of the ocean they will communicate less or even stop the transferring information completely.

Eventually, SUB4 explained that trust is a very interesting matter because in theory in the workplace everyone should share the same information with anyone disregarding trust, relationships or other preferences. However, he also agrees that it is easier to share information with trusted people and most of the times trust drives people to share more information even in the workplace.

4.6.3 Transparency

Transparency element in the MNC concerns the standardization of processes, the daily activities carried out and the clarity of information requested and collected, and it has been highlighted as an important element that would improve the knowledge transfer (SUB1, SUB2, HQ1, SUB2, HQ4). SUB3 stated when there is a lack of transparency between employees, a task cannot be carried out properly. While SUB4 considers
transparency a tool to gain more information. In fact, when an employee is not transparent with the other and lack of explaining why an information is needed, probably the employee will refrain from sharing this information. Interviewee SUB2 linked the improvement of transparency in the company with the improvement of the information exchange between colleagues from the subsidiary and the HQ.

However, other interviewees such as SUB2 and SUB3 clarified that transparency should not influence the way knowledge is transferred because a professional should always carry out a job with transparency. Lack of transparency can create issues for the entities that compose the MNC, since it can lead to a lack of coordination and misunderstanding on the tasks that employees have to carry out.

Eventually, transparency of processes was found to differ between departments. Interviewees suggested that departments such as accounting seem to have a higher level of transparency in their processes and daily activities, when other departments such as project management seems to have greater need of standardization and transparency.

**4.6.4 Motivation**

The Interviewees explained the importance of personal motivation in the knowledge transfer process and how some of them motivates individual to share information (HQ3, SUB2, HQ4, SUB5). Personal motivation was found in the commitment toward AB and their teams, in the feeling of belonging to a big multinational group and in being proud of their jobs and of the product sold. For instance, interviewee SUB2 explained how his motivation comes from the excellence of the product in Italy and he is committed to bring the same standards of the product to Canada. Moreover, SUB3 showed a very high level of commitment to the MNC which motivates him to always do better with the end goal of developing his career in the Canadian subsidiary or other subsidiaries of AB.

On the other hand, motivation was also found to come from external sources. For example, HQ2 and HQ3 suggested that is very important to make employees feel part of the team, involve them into future planning and talk with them about career opportunities within the MNC. Additionally, SUB5 and SUB6 told us how their team has agreed to motivate each other in order to create a better working environment and to face the daily tasks and issues with a more positive attitude. Other interviewees explain how the
president and other directors’ business trips to the subsidiaries are a source of motivation; they increase morals and remind employees that they are part of a bigger group.

4.7 Technological elements

4.7.1 Technology

Communication between the headquarters and subsidiaries is facilitated by technologies such as SAP (the ERP system used in the MNC), emails, phones and skype for texting and video calls.

SAP: interviewees HQ2, HQ3, HQ4 and SUB2 explained that this is an important tool to share information in the group. It is a platform where information can be entered or accessed by users in every country at the same time. SAP allows employees to translate the local information using into templates with rules adopted by the AB headquarters. This tool had to be tailored to match countries specificities and rules, such as accounting principles, but it is still interconnected within the entire group. SAP is mainly used by accounting and purchasing departments and the interviewees find it very beneficial.

“The process of transferring information is directly implemented in the system we use: SAP system. We also have some standardizing the reporting structures based on Excel”

Interviewee HQ2

E-mail seem to be the favorite channel chosen by everyone. The three main reasons of interviewees choosing emails are to deliver technical messages, since it helps to write extensively and in details; to overcome the time-zone differences; and to better deliver the message in a foreign language (HQ3, HQ4). However, both HQ4, SUB1, SUB4 and SUB5 told us that sometimes they feel that there is an ‘over-use” of emails in the MNC.

Phones calls are mainly used within the entity as a secondary way of communication. Interviewee HQ1, HQ3 and SUB4 explain they call each other when they need immediate information or as an e-mail follow up. Sometimes to remind the interlocutor to the other side of the ocean to answer emails, and sometimes to better explain the concepts of emails. Only interviewee SUB3 and SUB6 told us they use phone call as frequent as emails.
Skype was defined by interviewees HQ2, HQ3, HQ4, SUB1, SUB5, and SUB6 a great tool for video-communication. For most of the interviewees the face-to-face communication is the most efficient and effective, and video-conferences seems to be an alternative solution to business trips. It was also explained by HQ4 that skype texting feature is very helpful when it comes of deliver an effective message. This is why much less employees use skype texting and when a pop-up appears, they are more likely to promptly answer.

4.8 Findings in brief
A summary of the empirical data is presented in this section. The findings have been summarized by the authors in two tables: Table 6 presents the main findings related to the conventional and reversed knowledge flows and the benefits of knowledge transfer in the MNC. Following, Table 7 presents the main findings in relation to the organizational, individual and technological elements and their influences on the knowledge transfer.

Table 6 – Empirical findings: Knowledge transferred and benefits

<table>
<thead>
<tr>
<th>Concept</th>
<th>Findings</th>
</tr>
</thead>
</table>
| **Knowledge transfer** | **Conventional flow**  
- Knowledge exchanged: targets, clear explanation on responsibilities, organizational directions, training and technical support, information concerning the CHP sales and manufacture;  
- More information needed: financial forecast and budgets, HR information to better plan the local team, and price lists.  
| **Reversed flow** | - Knowledge exchanged: local know-how, information on the foreign entities’ market, specificities to reach local compliance and information concerning own team.  
| **Benefits** | - Growth and development of the MNC, better coordination and compliance of the subsidiaries, creates multicultural, bilingual, and adaptable personnel, and eventually it can benefit the business improving margins, company image, branding and performance.  

Source: own construction
Table 7 - Empirical findings: Influences on the knowledge transfer

<table>
<thead>
<tr>
<th>Concept</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultural</td>
<td>- National differences such as attention to formalities and details, problem solving and balance between work and professional life; - Shared corporate culture and values; - Importance of personnel that fits with multiple cultures to overcome differences.</td>
</tr>
<tr>
<td>Relationship HQ-Subsidiaries</td>
<td>- Control is exercised from headquarters to subsidiaries; - Little interest shown in the subsidiary’s business and little communication with some departments; - Reaction of “over-communication” and &quot;silence&quot; from subsidiaries; - Good personal increases communication and information shared.</td>
</tr>
<tr>
<td>Geographical distance</td>
<td>- Message is more efficiently delivered face-to-face; - Time-zone difference can delay or obstruct information shared; - Message content and meaning loses value in transmission; - Better organization of the day and working long overtime hours to overcome the time-zone difference.</td>
</tr>
<tr>
<td>Expatriate</td>
<td>- Expatriate as a beneficial international business tool and the headquarters reference point; - Benefits shown for several departments improving existing relationships and supporting coordination; - Expats bring and are the example of headquarters; - Over relied on and could limit communication.</td>
</tr>
<tr>
<td>Language difference</td>
<td>- Common language of communication is English; - Barrier to communication preventing from all the information or limiting the interlocutors; - Influences how people read and interpret information; - Low proficiency in English can be risky and time-consuming.</td>
</tr>
<tr>
<td>Trust</td>
<td>- Different trust levels increase or decrease communication; - Sharing information from the headquarters only in presence of trust; - Information is categorized and shared according to trust in the source; - Different reliability is assigned according to trust in the source.</td>
</tr>
<tr>
<td>Transparency</td>
<td>- Transparency influences the quality of a job carried out; - Tool to gain more information and is needed in standardization of processes; - Lack of transparency lead to a lack of coordination and misunderstanding.</td>
</tr>
<tr>
<td>Motivation</td>
<td>- Personal: ride in product, brand and high standards; expectation of career development - External: engaging the subsidiaries' teams; motivating each other for better working environment; president and other directors’ business trips to the subsidiaries</td>
</tr>
<tr>
<td>Technology</td>
<td>SAP, E-mail, Phone calls, Skype facilitate communication and increase knowledge flow</td>
</tr>
</tbody>
</table>

Source: own construction
5 Analysis

In this chapter the authors present the analysis of the knowledge transfer flows within AB and analyze the benefit of sharing information and know-how within the MNC. Following, the elements and influences on the information flows and the difference in perspective between the entities were analyzed.

5.1. Knowledge transferred

The knowledge types that are shared within the organization are as defined by Kogut & Zander (1992) both information and know-how. The channels used to exchange information were found to be phone, emails, Skype video-calls and texting and face-to-face meetings during business trips. We identified the two knowledge flows indicated by Yang et al. (2008), conventional knowledge transfer collecting knowledge generated at the headquarters and reversed knowledge transfer collecting knowledge generated at the subsidiary level (Yang et al., 2008).

Knowledge shared in the conventional flow are mainly related to product and policies, targets, training and technical support (Aydin & Terpstra, 1981), responsibilities, and organizational directions. Product knowledge are related to cogeneration plants sales and manufacture required to complete tender applications or other offers, and other product specificities concerning manufacturing, drawings and status update. Training courses for subsidiaries’ employees at the beginning of their career and technical support during daily tasks. Other knowledge such as human resource policies to better plan the local team, and price lists would be required by the subsidiaries’ management (Aydin & Terpstra, 1981).

Knowledge exchanged in the reversed flow are related to local market specificities (Yang et al., 2008) concerning local know-how and other information about the foreign entities’ markets to reach local compliance. Additionally, subsidiaries share information about product specificities and local requirements. This knowledge allows the headquarters’ research and development department to make product adaptations reaching compliance in the foreign markets (Aydin & Terpstra, 1981; Håkanson & Nobel, 2000), americanize the product and the way of doing business. Our findings did not confirm sharing of coordination strategies with the headquarters for the local market (Yang et al., 2008).
5.2 Benefits of knowledge transfer

AB’s employees made clear that for a multinational corporation such as AB, sharing knowledge is the key to success, confirming the theory of Argote & Ingram (2000). The authors suggest that knowledge provides the basis for competitive advantage in MNCs and to achieve success. (Argote & Ingram, 2000). “Communication is everything. A company that communicates wins! A firm that does not communicate eventually loses!”. Interviewee SUB4

Knowledge sharing was found beneficial for the growth and development of the MNC, for coordination and compliance in the subsidiaries, and to reach company goals. It creates multicultural, bilingual and open-minded personnel that can operate in multiple markets and it is more committed to the corporation, increasing the feeling of belonging. Eventually, AB benefits in terms of expertise, since the employees in the subsidiaries learn from the headquarters’ past experiences and teach them about new processes or product specificities that could be applied to other markets where subsidiaries are present.

5.3 Organizational influences

5.3.1 Culture

The two level of culture analyzed in this section are national and corporate culture, which are the set of values, beliefs, customs and rules held by a specific group of people in a country and in a corporation. (Wild & Wild, 2016; Boh & Yun Xu, 2013).

a) National culture

In relation to the national culture, our empirical findings have brought up three main differences between Italian and North American culture: formalities, problem solving and the balance of work and personal life; and they were reinforced by Hofstede’s Insights (2019, May 28)’s country comparison. In particular the most important cultural dimensions that are shown to create distance between the entities’ national cultures are: individualism, masculinity and uncertainty avoidance (Hofstede, et al., 2010).

Bhagat et al. (2002) found that knowledge transfer can be influenced by the individualistic level of a culture. Knowledge exchanged by individualistic cultures are more explicit, whereas knowledge shared by collectivistic cultures are more implicit (Bhagat et al., 2002). Our findings added other influences: first of all national culture influences the way
information is shared from one entity to the other. From the headquarters the information is communicated in a formal way, and full of details. This more bureaucratic approach typical of a high uncertainty avoidance (Hofstede’s Insights, 2019, June 1) also drives the parent company to create detailed manuals and procedures to be followed. On the other hand, knowledge that originated at the subsidiary level and shared bottom-up is more practical and communicated informally and in a simpler manner. Secondly, the Italian attitude to problem solving could negatively influence the quantity of information shared from their side. The headquarters is more inclined to share more general procedures, but less case-specific details, since they assume the same level of problem solving is held by the employees in the North American subsidiaries. On the contrary, the foreign entities expect to receive a wider range of information to complete the specific tasks assigned. Thirdly, the higher distinction between work and personal life in the knowledge receiver would impact its absorptive capacity, since employees might not identify the knowledge as relevant, assimilate it, and exploit it (Lane, et al., 2006; Bhagat et al., 2002).

b) Corporate culture
Boh & Yun Xu (2013) found that a cultural alignment reached through the creation of a shared corporate culture facilitates the knowledge transfer in an international context, and decreases the influence exercised by national cultures on knowledge transfer processes. AB pays great attention to the creation and implementation of a corporate culture shared both at headquarters and subsidiaries’ levels base on the values of working with passion, consider other people’s point of view, growing professionally, helping AB to grow, safeguarding the safety of individuals, upgrading efficiency boosting the company solidity and competing fairly in the market (AB Cogeneration World: AB Way, 2019).

On top of it, AB takes care of the cultural aspect since the recruiting process, selecting personnel which culturally dynamic and open to diversity, that can fit various national cultures and with the the corporate culture, confirming the state by Wild & Wild (2016), Boh & Yun Xu (2013), Demir & Fjellström (2012). Hiring this type of personnel narrows cultural distances (Wild & Wild, 2016) and positively influence knowledge transfer enhancing communication (Boh & Yun Xu, 2013; Demir & Fjellström, 2012). As shown by our findings employees that are culturally dynamic and open, narrow the cultural distances.
5.3.2 Relationship HQ-Subsidiary

The relationship between business units and the headquarters, depends on the level of interdependence of the entities, the cultural differences, power distribution and the degree of autonomy of the business unit (Godiwalla, 2016). In the context we analyzed, there is not a common view of the type of relationship that is established between subsidiary and headquarters. Headquarters employees firmly stated that there is a control relationship from the headquarters to the North American subsidiaries, and interviewees from foreign entities manifested issues in the relationship with the headquarters. These issues are lack of feedbacks and communication from the headquarters that is interpreted as a lack of interest in the subsidiary business or trust toward them.

Our findings confirm that the relationship between headquarters and subsidiaries can influence the knowledge transfer process as suggested by Easterby-Smith et al. (2008). The two major influences found are the “over-communication” and the “silence” reaction. Over-communication happens as a reaction to stressful situations, where the subsidiary sends plenty of information to the headquarters, simply to show them that they are actively working. Silence is experienced when too much control is exercised from the headquarters toward the subsidiaries.

Another relevant concept found concerns the personal relationship between employees of subsidiaries and headquarters. Employees from both sides told us that a friendship or even simply a respectful and informal relationship between people makes them more comfortable, not afraid to do the wrong thing and share more information. A good relationship between the headquarters and subsidiaries’ managers can positively influence the quality and quantity of information shared (Abdullah & Liang, 2013). Our findings show a benefit of a good relationship for all employees, not only managers.

The message is delivered more effectively due to the continuous interaction between interlocutors (Godiwalla, 2016). Employees from the subsidiaries and headquarters learn to understand each other, to trust and respect each other’s view and work and this boosts the knowledge flow.
5.3.3 Geographic distance

Employees in an MNC can experience a negative impact on the knowledge transfer process due to long transmission channels, different time zones, and issues in communication (Ambos & Ambos, 2009). Interviewees from both headquarters and subsidiaries confirmed the negative influence of the time-zone on the information flow between the two entities and also the issues in communications.

From the headquarters, employees often refrain from contacting the colleagues overseas, because they do not want to disturb them outside of working hours. Employees from subsidiaries are driven to organize their work differently since they only have a few hours to communicate with the headquarters in the morning, and then they focus on local market and activities in the afternoons. This was found to be a hustle for both respondent’s groups in present of urgent matters outside of common working hours and with the furthest locations of Alberta and California where there is not shared working hours.

Distance is shown to create issues in communication (Ambos & Ambos, 2009) affecting the message. As explained by interviewee SUB4 the message sent from one employee in the subsidiary, adjusts every time it goes to a different interlocutor, it is assigned a different level of importance or sometimes even a different meaning when reaches the final collector of the message. In the long run this can create misunderstandings between the entities and even interruption in communication.

The third way that geographical distance affects the information flow is by preventing face-to-face communication. It was found by (Fjellström et al., 2017) that proximity lowers misunderstandings, narrows cultural and language differences, create more interpersonal relationships between colleagues, and expedite clarifications. Our results confirmed that missing face-to-face communication influences the process. Interviewees explained that a message is better delivered in person and people are more willing to disclose information of any sort, even private. Business trips from the headquarters to the subsidiaries or from the subsidiaries to the headquarters are considered beneficial to overcome the problem.
5.3.4 Expatriates

Expats are found to be a useful tool that facilitates communication between headquarters and subsidiaries, narrows cultural differences, and monitors the situation in the subsidiaries. Moreover, expatriates acquire international experience that can be useful for AB in other markets. The purpose of enhancing communication to transfer the knowledge between the headquarters and subsidiaries was also found by Chang, et al. (2012), and so the control mechanism was found by (Minbaeva & Michailova, 2004).

Expatriates are responsible to collect knowledge from complementary functions and departments (Minbaeva & Michailova, 2004). They have a much greater role or helping everyone in the subsidiary with translations, explaining information, company structure and contacts. But the dominant role of the expatriate is to deliver the message from headquarters to subsidiaries, being the example. It is therefore confirmed that the key role of an expatriate is to collect and share tacit knowledge (Bonache & Brewster, 2001).

As an addition to the theoretical framework, our findings also highlighted two important discoveries about the role of an expatriate. The first one is the initial rejection of the expatriate from the subsidiary’s management, caused by the fear of excessive control from the headquarters. Secondly, in a few cases, expatriates were found to be an obstacle to the knowledge sharing, becoming the main receiver and collector of information, and limiting communication.

It is very interesting to notice how the headquarters’ interviewees only recalled positive characteristics of expatriates. However, as it was found out, it is important that the headquarters follow the introduction process of the expatriates in the foreign entities to facilitate the transition, and that there is not an overreliance on these employees.

5.4. Individual elements

5.4.1. Language difference

The difference in language between AB’s headquarter and its subsidiaries (English and Italian) were found to be barrier for most of the employees in the knowledge sharing process, as indicated by Harzing & Feely (2008) and Hedlund (1999). Both headquarters and subsidiaries’ interviewees experience influences in the knowledge flow due to language difference.
The main effects found on the knowledge transfer processes are three. Firstly, employees avoid sharing information because they are not confident enough with the language. Secondly, we support what stated by Welch & Welch (2008): employees in the subsidiaries communicate less with the employees in the headquarters because sharing information becomes very time consuming due to slow-speaking and misunderstanding. Third, it could create misunderstandings in interpreting information. However, the language difference does represent a barrier for the employees that master both English and Italian languages, such as the expatriates and Interviewee HQ1. Expatriates were actually found to help the subsidiaries’ employees in the translation of some documents and communication.

Additionally, the AB Headquarters realized the importance of having a shared common language with which they can communicate with the subsidiaries (Kogut & Zander, 1992). The headquarters is working on English empowerment of its employees by providing free weekly English classes for all employees. This will improve the communication between the entities and enhance knowledge sharing (Welch & Welch, 2008).

5.4.2. Trust

Trust is considered by Boh & Yun Xu (2013) to be the most important factor to reach effective knowledge transfer since it increases the employee’s commitment to share and explain their expertise. Also, our empirical evidence confirms that trust is a fundamental factor that affects directly the way employees communicate and the content of what they share.

The negative influence of trust is shown in two cases. Information coming from people in which there is less trust lose value. Secondly, if there is no trust in a person the interlocutor on the other side they will interrupt, or limit communication and knowledge transferred. In the other hand, trust as a positive influence is shown in an increase of information shared in the presence of trust, and they are better categorized and assimilated.
The perspective of trust within the MNC drives employees’ expectation goodwill (Li, 2005) and our findings show that companies focus on building trust from the establishment of subsidiaries in order to facilitate knowledge sharing. Mayer, et al. (1995) explain trust as the willingness to accept a risk. Our study provides an example, demonstrating that the presence of trust does not influence the quantity of information shared but the expected quality. Information from a trusted source is therefore defined reliable which confirms the findings of Li (2005), about information reliability depending on the integrity of the partner.

However, our study does not provide enough empirical evidence to explain, confirm or develop theory Harzing & Feely (2008) related to the negative influence the language barrier on trust. We found that mistrust cases interruption in communication, but we did not find any evidence that it is generated by language differences. Eventually, one of the interviewees suggested that trust should not influence the information flow.

5.4.3. Transparency

A contrast was found between the headquarters and subsidiaries of the level of transparency. The Headquarters interviewees believes that the transparency of the information should be contained to keep the work confidentiality. While the subsidiaries’ interviewees consider that all information should be shared since it is part of their obligations as professionals. For employees in the foreign entity transparency is also seen as a tool to improve the position in the company and receive a promotion (Sumelius, Björkman, Ehrnrooth, Mäkelä & Smale, 2014).

Berente, et al., (2009), and Yih-Tong Sun & Scott (2005) declare that transparency has a strong influence of the knowledge transfer process between employees of the two entities. It can be referred to as the level of understanding and clearness that effects the absorption of information between the recipient and sender. Our findings put emphasis on the of the effects of transparency on the knowledge transfer process. The interviews show that employees might share less information when they feel there is lack of transparency from their interlocutors. On the other hand, transparency in the MNC is needed so that everyone can operate on the same level, and the more transparent a process the more information is shared. Moreover, we discovered that employees’ task might be negatively affected by the lack of transparency because of missing processes and structured work.
Therefore, our finding supports the theory of Berente, et al. (2009) that the MNC should have a standardization approach for transferring information, in order to facilitate daily tasks and that everyone is made aware of knowledge. A standardization was found only in some departments of the MNC. For the majority of interviewees transparency and process standardization is only based on self-organization and preferences.

5.4.4. Motivation
The empirical evidence of our study shows that employees’ motivation affects the willingness of employees to share their knowledge, as suggested by Huang, et al. (2013). Our findings show that AB is only relying on the intrinsic motivation that employees have to share knowledge. Intrinsic motivation is found to come from employees the pride in the company brand and product, commitment toward the company and the team, career expectations and professionality.

The MNC does not adopt extrinsic motivation mechanisms as suggested by Huang, et al. (2013) or reward systems (Argote et al., 2003). Extrinsic motivation is found to be dependent on the manager’s discretion or self-created inside the teams. Some of the motivational techniques used from the headquarters’ managers to motivate subsidiaries’ employees are involving them in future planning, explaining career opportunities, increasing the owner and directors’ business trips frequencies to the subsidiaries. Another form of extrinsic motivation come from inside the teams where employees have personally decided to motivate each other daily to create a more friendly atmosphere and work better. A lack of reward system (Argote et al., 2003) or other motivation mechanism implemented by the human resources department (Huang, et al., 2013) would probably have a positive impact on the motivation of AB’s employees.

Eventually, our findings show that the motivation of subordinates can be affected by the reaction of the management when receiving the information. After a negative reaction subordinates are more cautious in sharing information or they even avoid doing so.
5.5. Technological elements

5.5.1. Technology

Technology can improve the knowledge transfer process between two entities (Albino et al., 2004). To this end, the interviewees explained us that communication between the headquarters and subsidiaries are facilitated by technologies such as SAP, emails, phones and Skype. Technology helps with organizing information where it can be easily accessed by the employees of the organisation (Albino et al., 2004). In our study the ERP system was the only tool discovered to serve to this purpose, and it is used only by a few departments such as accounting and purchasing.

The three main ITC tools used in AB to improve knowledge transfer efficiency are the following: SAP allows employees to translate the local information into templates with rules adopted by the AB headquarters so that everyone is able to read and understand the same information; E-mails allow interviewees to deliver technical messages limiting misunderstandings caused by the language, to overcome the time-zone differences; to better deliver the message in a foreign language. Phones calls are mainly used within the entity as a secondary way of communication such as an e-mail follow up or reminder. Skype gives opportunity to communicate face-to-face through the video feature. Video communication is seen as an alternative solution to business trips between entities. Eventually skype texting feature was also found helpful when it comes of deliver an effective message for its instant messaging tool and its pop-up feature.

Wang et al. (2004) affirm that technology can applied immediately within an organization with a little or no adaptation. Our findings partly disagree on this aspect. For what concerns AB’s ERP system, respondents have explained how SAP had to be tailored to countries specificities in order to respect local compliance.

5.6. Perspectives compared

Further analysis was carried out in Appendix 3, Appendix 4 and Appendix 5, to understand similarities and differences in the answers of headquarters, subsidiaries, and expatriates’ interviewees, and to understand the influence differences between conventional and reversed knowledge’ influences. Appendix 3 refers to organizational influences, Appendix 4 to individual and Appendix 5 technological. Influences were listed and a check mark was assigned depending of which category of responded stated
it. Three categories of respondents are headquarters (HQ), subsidiaries (SUB), and expatriates (EXP). Various differences in headquarters and subsidiaries perspectives are shown, whereas expatriates’ point of view was found to be a mix between the two perspectives.

A comparison of organizational elements is shown in Appendix 3. National cultural differences in formalities, problem solving and balance between work and personal life have only been pointed out by Italian employees and they are found to influence communication style, formal and detailed from the headquarters to subsidiaries and informal and concise from the subsidiaries; and their absorptive capacity, which is found to be higher in the Italian culture and lower in the North American. A corporate culture shared by all employees and the presence of culturally dynamic employees identified by the expatriates was found to narrow the national differences positively influence both conventional and reversed flow. The headquarters point out a positive relationship between the entities, even if interviewees from subsidiaries claim a lack of interest and feedback toward the foreign entities. The relationship is found to influence the subsidiaries knowledge flow in over-communicating or as experienced by the headquarters with an interruption in communication. Expatriates were not shown to be influenced by the relationship. In terms of geographical distance, all respondents are deeply influenced by missing face-to-face communication, time-zone differences and subsidiaries’ employees also experience a loss information value in the message sent to headquarters. Moreover, headquarters solution of working overtime to narrow time-zone differences does not seem to be expected and acknowledged at the subsidiaries’ level. Eventually, headquarters are shown to have a bias opinion about the presence of expatriates in the subsidiaries, viewing them only as a very positive tool to send and receive knowledge (this perspective is shared also from the expatriates themselves). However, the subsidiaries colleagues pointed out that that the over-reliance on expatriated causes delays or interruptions in communication.

A comparison of individual elements is shown in Appendix 4. Personal relationships between employees was found important from both entities, facilitating and increasing knowledge shared from one entity to the other. Opposite perspective is found on the language influences, defining it a barrier to knowledge transfer. Headquarters’ employees see the English language as a tool to transfer knowledge to its subsidiaries, even if low
proficiency prevents them from transfer all the information that they want to the subsidiary. In the subsidiaries, interviewees are driven to contact more often employees with high English proficiency to make the communication smoother. Headquarters employees are highly influencing factor since are not keen to exchange without trust, and that assign different level of reliability to the information received depending on it. Subsidiaries employees, including expatriates, do not assign the same importance to trust even though they agree in its influences in the amount of information shared. In the case of transparency, subsidiaries interviewees and expatriates gave importance to it on both flows to share more information and carry out the daily tasks in a more effective and efficient way. However, some of them claim the lack of transparency from the headquarters and its negative impact on the conventional knowledge flow. Eventually, motivation was experienced to be an influence only for subsidiaries and expatriates that mainly rely on intrinsic motivation and are subject of extrinsic motivation from headquarters. Influence of motivation on the conventional knowledge flow was not mentioned.

Technological element is compared in Appendix 5. Both headquarters and subsidiaries acknowledge the importance of this element in terms of ERP system, emails, phone calls and skype as a positive influence on the knowledge transfer processes, both conventional and reversed.

5.7. Conceptual framework updated
The conceptual framework built in Chapter 2 has been updated after the analysis of the empirical findings and is represented in Figure 3 below. Starting from the left the framework identifies the organizational, individual and technological elements that influence the knowledge transfer. Following, Figure 3 shows the two knowledge flows, conventional knowledge transfer that goes from the headquarters to the subsidiaries and reversed knowledge that goes from the subsidiary to headquarters. In the middle of these flows the authors added a short description influences that the elements have on each flow. Each element in the ‘Element key’ section was given a number to associate it with its influences. Not all elements were found to influence both flows.
5.8. Communication, engagement and culture preservation

In addition to the influences investigated, the empirical results of the research highlighted three main concepts that are worth discussing. Communication was found to be the key driver of knowledge transfer and it is directly linked to all the elements that influence the process. On one hand communication is influenced by the elements, but on the other hand all the influences seem to have a negative impact on the knowledge transfer process in presence of communication. In the first scenario communication is influenced by elements such as geographical distance or language that limit communication and can create misunderstandings or interruptions in communication. In the second scenario it was evident from our result how constant and continuous communication between employees of the two entities increases the quality and quantity of information shared limiting the influences of organizational, personal and technological elements.

Engagement (participation) is required from both headquarters and subsidiaries to improve relationships, communication and ease the knowledge transfer process. This
aspect is shown to be relevant for the subsidiaries’ managers in particular. Missing feedback from the headquarters, and missing engagement in corporate decisions is seen by the subsidiaries managers as a lack of interest in the foreign entities or a lack trust in the foreign entities’ management. The headquarters should increase subsidiaries’ managers participation in operational decisions, sharing more information with their managers, and engaging more in the communication with the foreign entities.

Conserving own cultures is seen as a very positive aspect for some of our respondents. The different way of approaching things can be beneficial for the MNC and for the information flow, since employees can learn more from each other. Thus, our findings suggest that there should be shared values in both headquarters and subsidiaries’ levels, in order to narrow differences (Godiwalla, 2016, Miroshnik, 2002) but not a full imposition of a culture on the other. What is important is to be open to diversity.
6. Conclusion

This chapter presents conclusion and answers to the research questions. The authors describe the contribution of their findings to the literature, limitations of the research and suggestions for further research.

6.1. Conclusions and answer to research questions

The main purposes of this research were to reach a deeper understanding of the elements that influence the knowledge transfer process in the MNC’s environment and how these elements influence the knowledge flows. Ultimately, the research is aimed toward a better understanding of the benefit of conventional and reversed knowledge transfer for both subsidiary and parent company. Many elements were found to positively and negatively affect the knowledge shared within AB, the MNC subject of our study, and the knowledge transfer was shown to be extremely important for the MNC development and grow. Our research questions are answered below.

**What are the elements that influence knowledge transfer?**
This research identifies the elements that influence the knowledge transfer process, them being Culture, Relationship between headquarters and subsidiary, Geographical distance, Expatriates, Relationship between employees, Language difference, Trust, Transparency, Motivation, and Technology such as shared ERP system, Emails, Phones and Skype.

**How can they influence the knowledge transfer flows within an MNC?**
The elements exercise influences on the knowledge transfer, and differences were found between the conventional and reversed knowledge transfer processes.

Culture can influence the formality and detail of the knowledge shared, and the absorption capacity of the receiver. A shared corporate culture and the presence of ‘culturally smart employees’ is found to narrow the cultural differences and to improve knowledge transfer. A stressful relationship between headquarter and subsidiaries can cause silence or over-communication from the subsidiaries. Under excessive control from the headquarters, the subsidiaries’ management decreases or even interrupts sharing information to the parent company. On the other hand, in a more autonomous context, subsidiaries tend to over-communicate even non-important information, to show that are actively working.
Geographical distance influences the knowledge flows between the two entities in terms of missing face-to-face communication, that prevents employees from working together and sharing information. A wide time-zone difference between entities creates delays in communication and an overreliance on emails. Expatriates are communication facilitators, narrowing cultural differences, and being the example of the headquarters in the subsidiaries collecting and sharing tacit knowledge, but they limit communication to the subsidiaries since the headquarters heavily relies on them.

Personal relationships influence both quality and quantity of knowledge shared between the entities since employees are keener to communicate, and communication creates more opportunity to share knowledge. Language difference was mainly found to be a barrier for knowledge sharing since communication becomes time-consuming for the subsidiaries, and in the headquarters, individuals are not proficient enough to share information. Trust influences the reliability of the information and the headquarters employees refrain from sharing without trust. Transparency in processes, structure and daily activities has a positive influence on conventional and reversed knowledge transfer. Standardization of processed seems to enhance transparency for the headquarters. Both intrinsic and extrinsic motivation influence the quality and quantity of information shared from the subsidiaries to the headquarters. Technology improves both knowledge transfer flows facilitating and increasing communications though SAP, emails, phones and Skype video calls and texting.

Therefore, the elements influencing the conventional knowledge transfer are Culture, Geographical distance, Expatriates, Personal relationships, Language, Trust, Transparency and Technology; and the elements influencing the reversed knowledge flow are Culture, Relationship HQ-subsidiary, Geographical distance, Expatriate, Personal relationships, Language, Transparency, Motivation, Technology.

**How can knowledge transfer benefit the subsidiary and the parent company?**

In this study it was acknowledged that there are two main streams of knowledge flow that are important to share within the MNC. The conventional knowledge flow collects all information generated at the headquarters (Yang et al., 2008) such as targets, responsibilities, organizational directions and technical support, information concerning the CHP sales and manufacture. The reversed knowledge flow collects all information
generated at the subsidiary level (Yang et al., 2008) such as local know-how, information concerning the foreign entities’ market, and other specificities to reach full local compliance in the activities and products.

Sharing knowledge benefits the MNC creating multicultural, bilingual and open-minded personnel that can operate in several markets and are highly committed to the organization and in terms of gaining new expertise and foreign markets compliance. Eventually, knowledge transfer benefits the MNC with growth of the entire group and improvement in coordination of the foreign entities. Sharing knowledge is described as the key to success, guaranteeing competitive advantage.

6.2. Theoretical, social, and practical contributions

This research contributes to the literature under various aspects. We answered the call of Doz (2011) for qualitative study in the international business literature providing a rich amount of information on the MNC, its knowledge, processes, and benefits. This study also contributed adding to the knowledge-based view, under knowledge transfer. It contributed with an in-depth understanding of all the elements and influences exercised on the conventional knowledge flow and reversed knowledge transfer processes being: Culture, Relationship HQ-subsidiary, Geographical distance, Expatriates, Relationship between employees, Language difference, Trust, Transparency, Motivation and Technology. It added to the findings of Yang et al. (2008) and Claver-Cortéz et al. (2018) on the characteristics of conventional and reversed knowledge transfer and their benefits, such as creation of cultural smart personnel, increase expertise and know-how, growth and development of the entire group, competitive advantage. Eventually, it contributed with the conceptual framework in Figure 3: Influences on the conventional and reversed knowledge transfer.

Our contribution to the society is to stress on the importance of certain characteristics of employees in the international business environment. Due to globalization, people are found more and more exposed to different cultures, and being culturally smart and open to diversity increase and improve communication between people, narrows cultural distance (Wild & Wild, 2016) and positively affects the knowledge transfer (Boh & Yun Xu, 2013). Additionally, it would and encourage employees to expatriate and facilitate the knowledge flows in MNCs. Additionally, another important characteristic is
employees’ proficiency in the English language, in order to work efficiently and effectively in an international context. Eventually, it is meaningful to point out the importance of knowledge for the MNC’s development but also for society’s development.

This study has important practical contributions for MNC’s managers both at the headquarters and subsidiaries’ levels. Managers can easier understand the influences on conventional and reversed knowledge transfer, and they could leverage on the positive ones to enhances the information flow and reach competitive advantage. Managers from both sides should commit to lower the barriers to knowledge sharing, and decrease the negative influences identified on the knowledge transfer process. This study showed some practices being already in place such as English Empowerment, and selection of culturally smart people but more strategies can be developed. Other actions could be the implementation of a reward system as an extrinsic motivation mechanism, and the increase processes standardizations for a higher transparency. Eventually, it contributed showing the benefit of the knowledge transfer processes for the entire MNC and its subsidiaries and managers motivated to reach competitive advantage for their corporations should focus on improving the knowledge transfer flows.

6.3. Limitation and suggestions for further research
The study has a number of limitations. The major limitation of this study is the research has been conducted using a single case study, on one multinational company. The single case study is good for exploratory purposes, but the findings are specific of AB group. Moreover, the empirical data is limited by ten interviews, four from the headquarter and six from the subsidiaries because we narrow our interviewees selection due to a limited amount of time. Another limit of the research was the culture similarities North American and Italian make the culture factor less relevant to influence the knowledge transfer. Thus, these results may differ if applied to subsidiaries from other countries or if applied to other MNCs with different values and cultures. Eventually, the study did not consider the relationship that can be present between each element that influences the knowledge transfer process and the effects of benefits on the subsidiaries and MNC’s performance.

This study creates an in-depth understanding of the knowledge transfer process and its influences. However, there are questions and concepts that remain unanswered and further research is desirable. Our suggestions for further researches are to replicate the
qualitative study with a multi-case study including a larger sample of MNCs which will enable researchers to confirm the findings of this study. This will also allow understanding if cultural differences have a stronger influence between cultures other than North American and Italian. Additionally, it would be interesting to extend our study with an analysis of the relations between the elements which influence the knowledge transfer process and by extending understanding how the benefits of the knowledge transfer process can influence the subsidiaries and MNC’s overall performance. We also suggest carrying out a study that will evaluate the power of the influences on the knowledge transfer process. Eventually, this research highlighted three significant concepts which are worth exploring in further researches: communication, engagement and conserving own culture.
Appendices

Appendix 1 - Questionnaire to be addressed to the parent company

1. Could you please briefly introduce yourself and your position in the company?
   - Name
   - Age
   - Education background
   - Position in the company
   - Years in the company
   - Do you have International experience?

2. Do you have contact with the North American subsidiaries?
   - How often do you contact them?
   - In what regards?
   - Medium for communication? (Email, phone, skype etc.)

3. In general, how would you describe the relationship between the headquarters and the two North American subsidiaries?
   - Canadian subsidiary – examples
   - US subsidiary – examples

4. In what aspects is the company culture shared at the subsidiary level?

5. Concerning knowledge sent to the subsidiary:
   - What type of information do they need from you?
   - How do you send this information?
   - How does it help both you and them?
   - What are the challenges that you face in sending information to the subsidiary? And what can make the process easier?
   - How are knowledge received? Do you think they are received correctly, or are they “lost in translation”? Do you have any example?

6. Concerning knowledge received from the subsidiary:
   - What type of information do you usually need from them?
   - How do you receive this information?
   - How does the information help you to make decisions?
   - What challenges do you face regarding the information you receive? And what can make the process easier?
   - How are knowledge received? Do you think they are received correctly, or are they “lost in translation”? Do you have any example?

7. How do you think that individual factors can influence the information flow? Such as:
   - Personal motivation (i.e. What motivates you to share information with subs?) + examples
   - Language difference (i.e. How does language influence the knowledge that you send and receive…?) + examples
   - Trust built (i.e. how does the trust toward your colleagues affect knowledge you send and receive?) + examples
   - Transparency in daily processes (i.e. how does a transparent process used daily influence the knowledge shared?) + examples

8. How do you think that organizational factors can influence the information flow? Such as:
   - Relationship between the HQ and subsidiary (i.e. how does the relationship with the between the two entities in terms of interdependence/control /autonomy?) + examples
   - Distance between the entities (i.e. how does the geographical distance and time difference influence the knowledge sent and received?) + examples
   - Cultural differences (i.e. how does the cultural difference between Italians and Canadians/Americans influences the knowledge shared?) + examples
   - Company Culture (i.e. do you think that the creation of a common company culture can help sharing knowledge? In which terms?) + examples
o Presence of an expatriate (i.e. how does it help to have an expatriate in the subsidiary in terms of sending and receiving knowledge? Is it beneficial to have expatriates in subsidiaries? How?) + examples

9. Why do you think is important to share knowledge within AB group?
   o Receiving them from subsidiaries: examples
   o Sending them to the subsidiaries: examples

10. How can knowledge exchange benefit the entire Group AB? examples

Appendix 2 - Questionnaire to be addressed to the subsidiary

1. Could you please briefly introduce yourself and your position in the company?
   o Name
   o Age
   o Education background
   o Position in the company
   o Years in the company
   o Do you have International experience?

2. Do you have contact with the parent company?
   o How often do you contact them?
   o In what regards?
   o Medium for communication? (Email, phone, skype etc.)

3. In general, how would you describe the relationship between the subsidiary and the headquarters?
   o Examples

4. Do you think the subsidiary shares the same values and company culture as the headquarters? In what aspect?

5. Concerning knowledge sent to the headquarters:
   o What type of information do they need from you?
   o How do you send this information?
   o How does it help both you and them?
   o What are the challenges that you face in sending information to the headquarters? And what can make the process easier?
   o How are knowledge received? Do you think they are received correctly, or are they “lost in translation”? Do you have any example?

6. Concerning knowledge received from the headquarters:
   o What type of information do you usually need from them?
   o How do you receive this information?
   o How does the information help you to make decisions?
   o What challenges do you face regarding the information you receive? And what can make the process easier?
   o Do you think knowledge are usually received correctly? Or do you think sometimes they are “lost in translation”? Do you have any example?
   o Do you think that the way you share knowledge with the headquarters influences the way knowledge are received back to subsidiary?

7. How do you think that individual factors can influence the information flow? Such as:
   o Personal motivation (i.e. What motivates you to share information with headquarters?) + examples
   o Language difference (i.e. How does language influence the knowledge that you send and receive...?) + examples
   o Trust built (i.e. how does the trust toward your colleagues affect knowledge you send and receive?) + examples
   o Transparency in daily processes (i.e. how does a transparent process used daily influence the knowledge shared?) + examples
8. How do you think that organizational factors can influence the information flow? Such as:
   o Relationship between the HQ and subsidiary (i.e. how does the relationship with the between the two entities in terms of interdependence/control /autonomy?) + examples
   o Distance between the entities (i.e. how does the geographical distance and time difference influence the knowledge sent and received?) + examples
   o Cultural differences (i.e. how does the cultural difference between subsidiary and the headquarters influences the knowledge shared?) + examples
   o Company Culture (i.e. do you think that the creation of a common company culture can help sharing knowledge? In which terms?) + examples
   o Presence of an expatriate (i.e. how does it help to have an expatriate in the subsidiary in terms of sending and receiving knowledge with the headquarters? In general, is it beneficial to have expatriates in subsidiaries? How?) + examples

9. Why do you think is important to share knowledge within AB group?
   o Receiving them from subsidiaries: examples
   o Sending them to the subsidiaries: examples

10. How can knowledge exchange benefit the entire Group AB? examples
Appendix 3 – Organizational influences: perspectives compared

<table>
<thead>
<tr>
<th>Elements and their influences</th>
<th>HQ</th>
<th>SUB</th>
<th>EXP</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A) Organizational elements and their influences</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>(1) Culture</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Italians are formal and detailed; North Americans are informal and direct</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Italians are more inclined to problem solving than North Americans</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Italians do not have a net distinction between work and personal life; North Americans have a better balance of it</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Shared corporate culture and values</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Importance of personnel that fits with multiple cultures to overcome differences</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td><strong>(2) Relationship between HQ and Subsidiaries</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subsidiaries are quite autonomous</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Little interest shown in the subsidiary’s business</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Low level of communication with some department</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Control relationship from the headquarters to the subsidiaries</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Reaction of “over-communication” from subsidiaries</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Reaction of “silence” from subsidiaries</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td><strong>(3) Geographical distance</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Missing face-to-face interaction</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Time-zone difference can delay or obstruct information shared</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Sharing less information and mainly via email</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Message content and meaning loses value in transmission</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Better organization of the day to overcome the time-zone difference</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Working long overtime hours to overcome time-zone difference</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td><strong>(4) Expatriates</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expatriate as a beneficial international business tool</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Benefits shown for several departments</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>They improve existing relationships and build new ones</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Expats bring and are the example of headquarters</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Supporting in the subsidiary’s coordination</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Narrow cultural differences, help understanding information received</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Headquarters’ reference point</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Over relied on</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>They could limit the communication</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>

Source: own construction from ‘Empirical Data’
### Appendix 4 – Individual influences: perspectives compared

<table>
<thead>
<tr>
<th>Elements and their influences</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>B) Individual elements and their influences</td>
<td></td>
</tr>
<tr>
<td>(5) Relationship between employees</td>
<td></td>
</tr>
<tr>
<td>Importance of personal relationships between the employees</td>
<td>✓ ✓ ✓</td>
</tr>
<tr>
<td>Information flow increases with good relationships between people</td>
<td>✓ ✓ ✓</td>
</tr>
<tr>
<td>Increases willingness to share more confidential or personal info.</td>
<td>✓ ✓ ✓</td>
</tr>
<tr>
<td>(6) Language difference</td>
<td></td>
</tr>
<tr>
<td>Barrier to communication</td>
<td>✓ ✓ ✓</td>
</tr>
<tr>
<td>Prevents from transfer all the information to the subsidiaries</td>
<td>✓</td>
</tr>
<tr>
<td>Influences how people read and interpret information</td>
<td>✓</td>
</tr>
<tr>
<td>Low proficiency in English can be risky and time-consuming</td>
<td>✓</td>
</tr>
<tr>
<td>Communication is mainly directed to English proficient employees</td>
<td>✓</td>
</tr>
<tr>
<td>Difficulties and inefficiencies can rise</td>
<td>✓ ✓ ✓</td>
</tr>
<tr>
<td>(7) Trust</td>
<td></td>
</tr>
<tr>
<td>Trust is taken care from the incorporation of a subsidiary</td>
<td>✓</td>
</tr>
<tr>
<td>Different trust levels increase or decrease communication</td>
<td>✓ ✓ ✓</td>
</tr>
<tr>
<td>Sharing information from the headquarters only in presence of trust</td>
<td>✓</td>
</tr>
<tr>
<td>Information is categorized and shared according to trust in the source</td>
<td>✓</td>
</tr>
<tr>
<td>Different reliability is assigned according to trust in the source</td>
<td>✓</td>
</tr>
<tr>
<td>Trust in the workplace should not influence knowledge transfer</td>
<td>✓ ✓</td>
</tr>
<tr>
<td>(8) Transparency</td>
<td></td>
</tr>
<tr>
<td>Transparency is needed in standardization of processes</td>
<td>✓ ✓</td>
</tr>
<tr>
<td>Transparency influences the quality of a job carried out</td>
<td>✓ ✓</td>
</tr>
<tr>
<td>Is a tool to gain more information</td>
<td>✓ ✓</td>
</tr>
<tr>
<td>A professional should always carry out a job with transparency</td>
<td>✓ ✓</td>
</tr>
<tr>
<td>A few departments suffer from lack in transparency from the HQ</td>
<td>✓ ✓</td>
</tr>
<tr>
<td>(9) Motivation</td>
<td></td>
</tr>
<tr>
<td>Intrinsic: pride in product and brand and high standards</td>
<td>✓ ✓</td>
</tr>
<tr>
<td>Intrinsic: expectation of career development</td>
<td>✓ ✓</td>
</tr>
<tr>
<td>Extrinsic: engaging the subsidiaries' teams</td>
<td>✓</td>
</tr>
<tr>
<td>Extrinsic: motivating each other for better working environment</td>
<td>✓ ✓</td>
</tr>
<tr>
<td>Extrinsic: president and other directors’ business trips to the subsidiaries</td>
<td>✓ ✓</td>
</tr>
</tbody>
</table>

Source: own construction from ‘Empirical Data’
### Appendix 5 – Individual influences: perspectives compared

<table>
<thead>
<tr>
<th>Elements and their influences</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>C) Technological elements</td>
<td></td>
</tr>
<tr>
<td><strong>(10) Technology</strong></td>
<td></td>
</tr>
<tr>
<td>SAP: It is an important tool to share information in the group</td>
<td>✓</td>
</tr>
<tr>
<td>E-mail: helps overcome time-difference</td>
<td>✓</td>
</tr>
<tr>
<td>E-mail: helps deliver formal message</td>
<td>✓</td>
</tr>
<tr>
<td>E-mail: helps deliver message in foreign language</td>
<td>✓</td>
</tr>
<tr>
<td>E-mail: over-use between the entities</td>
<td>✓</td>
</tr>
<tr>
<td>Phone calls: used to follow up emails</td>
<td>✓</td>
</tr>
<tr>
<td>Phone calls: for urgent requests</td>
<td>✓</td>
</tr>
<tr>
<td>Skype video-call: to overcome missing face-to-face communication</td>
<td>✓</td>
</tr>
<tr>
<td>Skype text: helpful to deliver an effective message.</td>
<td>✓</td>
</tr>
</tbody>
</table>

Source: own construction from ‘Empirical Data’
References


