UNIVERSITY OF TURKU

# ABSTRACT

| | |
|---|---|
| | Bachelor´s thesis |
| X | Master´s thesis |
| | Licentiate´s thesis |
| | Doctor´s thesis |

| | | | |
|---|---|---|---|
| Subject | International Business | Date | 3.6.2020 |
| Author(s) | Simo Lagerspetz | Student number | 505419 |
| | | Number of pages | 102p. + appx. |
| Title | Knowledge transfer in offshore insourcing:<br>A case study of Nordic MNC in knowledge-intensive business services | | |
| Supervisor(s) | D.Sc Niina Nummela<br>D.Sc Riikka Harikkala-Laihinen | | |


Abstract

Offshoring is a major part of globalized economy as advances in communications technology and logistics have allowed production to be located in practically anywhere regardless of the market the production serves. Especially offshoring of knowledge-intensive business services has benefitted from the advances in communications technology, as companies are able to choose the location of the production freely according to their needs. Knowledge transfer is a vital part of offshoring, especially in offshoring of services, and success of knowledge transfer has a large impact on the success of the offshore. The case in this study is an offshoring transition of a knowledge-intensive business service unit of a Nordic MNC from Finland to Eastern Europe.

This research was conducted as an ethnographic research with participant observation method and the researcher had a significant role in the offshore transition. The previous literature about knowledge transfer and knowledge transfer in offshoring and service contexts were reviewed to form a perspective about what impacts the effectiveness of knowledge transfer and which challenges knowledge transfer has. Due to the focus of the previous literature, and the position the researcher had in the organization, the study focuses on the challenges that the employees conducting the knowledge transfer experience. Data was gathered by observing the knowledge transfer and the actions of the employees as well as by interviewing the employees who participated into the transition.

The transfer of technical and explicit knowledge happened rather smoothly, but the transfer of tacit knowledge encountered issues. Previous experience of the employees was found to be a significant hinderance to transfer of tacit knowledge, as the recipients had difficulties to adopt new habits and methods. Similarly, the communication between the sources and the recipients, and the organization and the recipients were problematic and resulted in issues that had a negative effect on the knowledge transfer. These issues were caused by the differences in cultures of the recipients and sources, as well as due to the differences in the needs and the goals of the recipients and the organization.



| | |
|---|---|
| Key words | Knowledge Transfer, Offshoring, KIBS |
| Further information | |

| | | | |
|---|---|---|---|
| Oppiaine | Kansainvälinen liiketoiminta | Päivämäärä | 3.6.2020 |
| Tekijä(t) | Simo Lagerspetz | Matrikkelinumero | 505419 |
| | | Sivumäärä | 102s. + liitteet |
| Otsikko | Tiedonsiirto organisaation sisäisessä siirrossa ulkomaille:<br>Tapaustutkimus pohjoismaisesta monikansallisesta tietointensiivisestä yrityspalvelu -yrityksestä | | |
| Ohjaaja(t) | KTT. Niina Nummela<br>KTT. Riikka Harikkala-Laihinen | | |


Tiivistelmä

Tuotannon siirto ulkomaille on tärkeä osa globalisoitunutta taloutta, koska viestintäteknologian ja logistiikan kehitys on mahdollistanut tuotannon sijoittamisen käytännössä mihin tahansa, riippumatta siitä mitä markkinoita tuotanto palvelee. Erityisesti tietointensiivisten yrityspalvelujen siirtäminen on hyötynyt viestintäteknologian kehityksestä, sillä yritykset pystyvät valitsemaan tuotannon sijainnin vapaasti omien tarpeidensa mukaan. Tiedonsiirto on elintärkeä osa tuotannon siirtämistä ulkomaille, etenkin palveluiden siirtämisen kohdalla, sillä tiedonsiirron onnistumisella on suuri vaikutus siirron onnistumiseen. Tämän tutkimuksen tapauksena on pohjoismaisen monikansallisen yrityksen tietointensiivisen yrityspalveluyksikön siirtäminen Suomesta Itä-Eurooppaan.

Tämä tutkimus suoritettiin etnografisena tutkimuksena osallistuvalla havainnointimenetelmällä, missä tutkijalla oli merkittävä rooli yksikön siirtämisessä. Aikaisempaa kirjallisuutta tiedonsiirrosta, tiedonsiirrosta ulkomaille, sekä tiedonsiirrosta palvelukontekstissa, tarkasteltiin näkemyksen muodostamiseksi siitä, mikä vaikuttaa tiedonsiirron tehokkuuteen ja mitä haasteita tiedonsiirrossa esiintyy. Edellisen kirjallisuuden painopisteen ja tutkijan aseman vuoksi tutkimuksessa keskitytään haasteisiin, joita tiedon siirtäjät kokevat. Tietoja kerättiin tarkkailemalla tiedon siirtoa ja työntekijöiden toimia, sekä haastattelemalla muutokseen osallistuneita työntekijöitä.

Teknisen ja eksplisiittisen tiedon siirto tapahtui melko sujuvasti, mutta hiljaisen tiedon siirtämisessä ilmeni ongelmia. Työntekijöiden aiemman kokemuksen havaittiin olevan merkittävä este hiljaisen tiedon siirtämiselle, sillä kokeneilla vastaanottajilla oli vaikeuksia omaksua uusia tapoja ja menetelmiä. Samoin lähteiden ja vastaanottajien, sekä organisaation ja vastaanottajien välinen viestintä oli ongelmallista ja johti ongelmiin, millä oli kielteinen vaikutus tiedon siirtoon. Ongelmat johtuivat vastaanottajien ja tiedon lähteiden keskinäisistä kulttuurieroista, kuin myöskin vastaanottajien ja organisaation tarpeiden ja tavoitteiden eroista.



| | |
|---|---|
| Asiasanat | Tiedonsiirto, ulkoistaminen, tietointensiiviset yrityspalvelut |
| Muita tietoja | |

UNIVERSITY OF TURKU
Turku School of Economics

# KNOWLEDGE TRANSFER IN OFFSHORE INSOURCING

## A case study of Nordic MNC in knowledge-intensive business services

Master´s Thesis
in International Business

Author:
Simo Lagerspetz

Supervisors:
D.Sc. Niina Nummela
D.Sc. Riikka Harikkala

12.11.2019
Turku

The originality of this thesis has been checked in accordance with the University of Turku quality assurance system using the Turnitin OriginalityCheck service.

# Table of Contents

## List of figures



## List of tables

# 1 INTRODUCTION

## 1.1 Background for the study

Offshoring happens when companies relocate their operations to foreign countries. Mainly this is done so that organizations can leverage international division of labor and specialization to reduce costs of operations. (Jahns et al. 2006.) Main benefits that offshoring provides to the companies are cost savings and flexibility. On average, in 2004 a German company saved €0,52 for every euro the spent in offshore projects in India. On the other hand, Germany has substantially stricter laws and regulations about responding to market changes and lay off workers or create new jobs than India, thus giving the companies clear driver to engage in offshoring projects. (Farell, 2005.)

On the other hand, more and more companies are offshoring to closer countries, for example from Western Europe to Eastern Europe. This is mainly due to the shorter cultural and geographic distance, which tends to lower the additional costs related to offshoring. (Trampel 2004; Bock 2008.) Offshoring, however, has changed drastically in recent years and there are new trends in offshoring. Companies seek to bring back their offshored ventures to the developed countries. This happens due to various reasons. For example, companies might try to improve brand image by producing locally. (Albertoni et al. 2017; Di Mauro et al. 2018.)

Traditionally, at least in Finland, offshoring has mainly been associated with heavy industry and production of goods, as offshoring of manufacturing plants tends to get plenty of media coverage. However, advancements in information and communication technology have enabled companies to split production processes and transfer parts of the process to offshores in order to cut costs (Grote & Täube 2006). Therefore, services can also be offshored. Most common target to offshore services is India, which has been dominating offshoring and outsourcing markets in business and technology services. Other countries have started to aggressively lure offshoring operations by providing tax cuts and favorable policies. (Kaka 2008.)

One of the various types of services that are currently being offshored around the world is knowledge-intensive business services (KIBS). KIBS are companies that produce information or service products, their operation relies heavily on professional knowledge, their products are sources of information or knowledge and KIBS tend to have businesses or public sector as clients (Miles et al 1995, 23-40). The importance of the knowledge intensive business service (KIBS) sectors has ascended to be a vital part of modern economy. KIBS tie together organization’s prowess to create sustainable competitive advantage and capacity to generate and make use of its knowledge-based resources and abilities (Drucker, 1993; Ramadan et al 2017). Knowledge can be viewed as one of the

main assets a company has. According to Grant's (1996) knowledge-based view of the firm, the main factor of competitive performance differences between companies is how they generate, develop, and use knowledge and intellectual assets. The core assets of KIBS sectors are shown in the creativity, expertise, know-how and know-what of the employees (Dooley, 2000, see Ramadan et al. 2017). Therefore, KIBS are knowledge-dependent sectors. Continuous generation and use of knowledge and intellectual assets are paramount to improvement of business and competitiveness (Ramadan et al, 2017).

While it is often extremely cost effective to offshore services to developing countries, these savings do not come easily. Offshoring operations have rather high failure rate. For example, McCue (2005; see Fabriek et al. 2008) estimated that half of the offshores of the information technology services fail. Fabriek et al. (2008) found similar failure rate for offshoring custom software services. As production processes in knowledge-intensive business services tend to rely heavily on information systems and technology, it is safe to assume that the failure rate of such offshoring projects is similar. A major barrier to the success of an offshoring project is successful knowledge transfer, where the necessary knowledge is transferred to the new unit in order to process the tasks required for the project. (Wendling 2013; Wende et al. 2013.) Transferring staff to the new production location is usually not an option, since the existing staff is unlikely to accept lower salary and relocation, therefore making the transfer of knowledge of how to continue production without productivity loss, the main target of knowledge transfer in offshoring projects (Chua & Pan, 2008). Knowledge transfer is paramount to the success of the offshoring project and failures in knowledge transfer often result in failure of the offshore project (Chen et al. 2013).

Knowledge transfer is essentially the transfer of the best practices within an organization. An organization tries to replicate a practice by implementing a practice to some part of the organization, which is performed better or is otherwise superior in another part of the same organization. Movement of knowledge is definite experience, which depends on the characteristics of the involved personnel. Therefore, the transfer of knowledge can be viewed as a dyadic exchange between the source and the recipient. (Szulanski 1996.) Knowledge transfer revolves around the individuals who continuously create and improve their personal skills and tacit knowledge (Chen et al. 2013). Successful knowledge transfer it is paramount to utilize the individuals who conduct the knowledge transfer and carry the existing tacit knowledge to the new unit (Nguyen et al. 2014; Betz et al. 2014). When transferring knowledge within the organization, like in this case, Galbraith (1990) researched that approximately a third of offshoring projects were terminated and the successful ones suffered a mean of 34% productivity loss. Chua and Pan (2008) argue that in order to utilize low production costs of offshore location, a company must be capable of transferring knowledge without productivity and knowledge loss to succeed with offshoring.

## 1.2 Purpose of the study

Previous research on knowledge transfer is plentiful. Various studies have been made about knowledge transfer and its mechanisms (see e.g. Zander & Kogut 1995; Argote & Ingram 2000; Szulanski 2000; Sun & Scott 2005). Multiple studies on the role of knowledge transfer and its challenges in offshoring projects have been conducted as well (see e.g. Gregory et al. 2009; Balint et al. 2016). However, there is still a gap in understanding how the knowledge transfer occurs in offshoring projects (Chen et al. 2013), and overwhelming majority of the research, especially about the challenges of knowledge transfer, gathers data from management- or C-level personnel (see e.g. Huong et al. 2011; Betz et al. 2014; Haasis et al. 2018).

Researchers have acknowledged this gap and called for research for more detailed information about the knowledge transfer process (Strasser & Westner 2015), and its mechanics and the perspective of employees (Argote & Ingram 2000; Argote & Hora 2017). Also, many researchers acknowledge that most of the studies conducted about knowledge transfer in offshoring projects are limited to one country, with majority studying major Asian offshoring targets, such as India and China (see e.g. Gregory et al. 2009; Chen et al. 2013). Moreover, while some studies have researched knowledge transfer barriers and facilitating factors (see e.g. Betz et al 2014; Strasser et al. 2018), they do not differentiate offshore outsourcing and offshore insourcing, and tend to concentrate on the perspective from major developed economies like Germany or USA.

Another research gap in previous literature is that research about MNCs and offshoring in MNC context tends to focus on offshoring where the operation is transferred under a subsidiary (see e.g. Minbaeva 2007; Blomkvist 2012). In this case, the organization stays the same, even if the location is in different country. Studies that focus on subsidiary viewpoint consider issues with communication, management and differences with organizational cultures., but in this case as the organization stays the same such issues should not be as rampant. Additionally, to researcher's knowledge, while limited, there are no studies currently that concentrate on the personnel's point of view who, in fact, conduct the knowledge transfer in offshore insourcing project, at least from the Nordic perspective. This study tries to fill such research gap and can provide important results with the unique data that the researcher has access to.

How knowledge transfer can be enhanced, and challenges of knowledge transfer mitigated during intra-organizational offshoring?

a. How tacit knowledge is transferred within organization?
b. How offshoring affects knowledge transfer?
c. What are the challenges of knowledge transfer?

The scope of this study is naturally defined by the setting and accessible data. This limits the study to research only insource offshoring of a KIBS unit, and a single case. There are significant benefits when focusing on a single case, however. This arguably provides a deeper understanding of the phenomenon and more complete observation, which should provide more accurate results, when the attention of the researcher stays indivisible. The perspective of focusing on the experiences of the low-level employees and not managers, is chosen due to the existing research and data, which encourages to research more detailed, 'hands-on' experience. Additionally, the researcher has better opportunity to evaluate the truthfulness of the gathered data, than it would be possible if the main target of the interviews was management- or upper-level. As the study focuses on the perspective of the employees, the organizational implications will focus on the pre-transition planning and resource management.

Another limitation to the scope is the geographical or cultural context as European, specifically Nordic-Eastern European. While this will naturally hinder the possibilities to generalize potential results, at least on some degree, there is potential for more detailed information about certain factors that should be taken into an account, even in cases where the cultural context might not be the same.

## 1.3 Case description

The case of this study is an offshore transition of a service operation unit of a Nordic MNC. The unit operated in Finland and provided services in the Finnish market of its business line. The unit was transferred from Finland to Eastern Europe during the study. The company has previously transferred similar units, which provided same services for other Nordic markets to the same location from either Finland or from other Nordic host countries, therefore making this the last transfer for the said business line. Timeframe for the transfer was from early fall of 2019 to the end of December 2019, after which only supporting parts will stay in Finland. The transferring unit is divided into two teams, with total of 15 employees and the new location was created as a similar sized unit, with same division, but in the target country the international side and the domestic sides have different leaders.

The transition had an additional transition manager, both team leaders (existing and new team's) as well as business line leader as overseers. Employees from the target country were trained in Finland as well as in the target country by the senior employees in the old unit. International side of the new team was created out of employees that had previously worked in other Nordic markets in the company, whereas the domestic side was created out of completely new personnel. Organizational hierarchy of both transitioned teams stays the same even though they are relocated to a different country.

The transition process was planned to start with a training phase, during which the recipients came in pairs to Finland to train and they stayed for three weeks at a time. After each pair was transferred back to the target location, responsibility of production of the processes which the recipients were trained to perform in Finland, was transferred to the new location as well. This was planned to continue until the end of November and at the start of December, all the processes were performed in the new location. During the December the sources were providing support for the recipients in the processes. The support was provided via online communication tools. In January 2020 the transition was planned to be completed and support would be provided by business analyst. The Finnish team would cease to exist on 31st of December 2019.

Few members of the source team went to train the recipients in the target location for varying periods of time. The researcher and another employee went to the target location on the 28th of October. After few weeks an additional source was sent to the target location. At the end of the November the researcher was the only source in the target location, and he returned to Finland on the 18th of December. The sources trained the recipients in the target location as well and were meant to deepen the knowledge of the recipients about the processes that the recipients were trained to perform. However, couple of the recipients did not have the opportunity to go to Finland, thus they needed training from the sources and those recipients who came back from Finland. Additionally, the sources monitored the performance of the recipients and gave feedback to the recipients. The team organized daily meetings online about specifics of the day and the division of labor. The transition manager organized weekly meetings online, during which the progress of the transition and future goals were discussed.

The work itself required substantial amount of knowledge about the function of the markets (both Finnish and foreign) as well as customer knowledge and knowledge about the softwares in use. In order to perform the work well and in reasonable timeframe, employees must have good communication with other units, most of which resided in the same location that the team in Finland, which have helped with the flow of communication enormously.

The researcher worked in the team targeted for transition before the announcement of the transition and through the process until the end of transition. This allowed the researcher to observe and analyze the transition process and knowledge transfer as well as be part of it and take notes and observations. This setting also provides an opportunity to gather unique data from interviews as well as allowed the evaluation of the truthfulness of the data. Naturally this creates a certain doubt about the integrity and objectivity of the research. However, as the researcher was relatively new employee in the company, and it was known beforehand that the employment is only temporary, the researcher does not have such embeddedness or affection for the position as a regular, permanent worker might have.

The research will focus on the international side, since the researcher has much closer access to the transition happening in the international side, partially due to the fact, that in the target country the two sides are in fact two different teams in different locations. While all the interviews and most of the observations are made based on the knowledge transfer process within the international side team, there were some cross-training due to shifting responsibilities, which in turn can create interesting results with the setting.

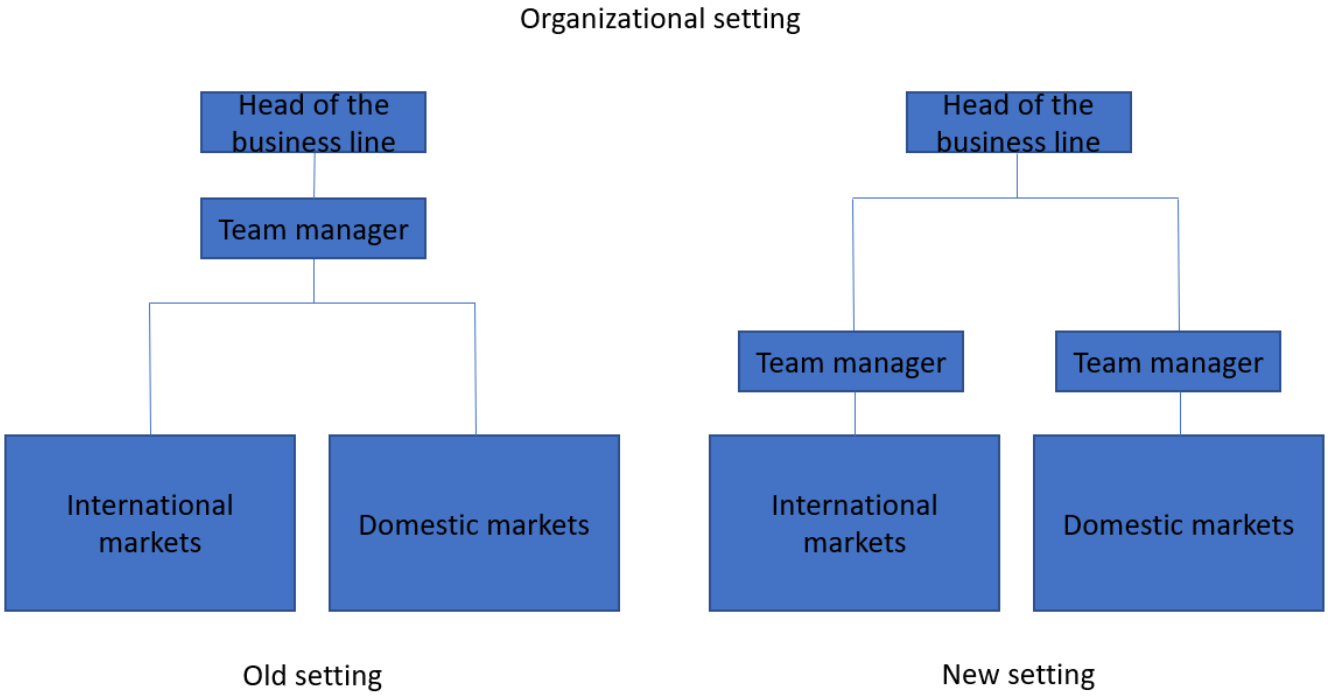



Figure 1 Organizational setting

As shown in figure 1, the organizational setting changed during the transition slightly, as both teams are not managed by the same person and their cooperation was decreased slightly. Instead in the new setting, the international side, which was the focus of the study, increased its cooperation with other Nordic market teams.

# 2 KNOWLEDGE TRANSFER

## 2.1 Nature of knowledge

Knowledge can be classified as something that requires comprehension, understanding and learning and is processed by an individual. Knowledge can be acquired by interaction with the surroundings and other individuals, by processing information gathered from the world. This information can be oral, written or graphic, but becomes knowledge after processed into the mind of an individual, while outside of the mind only information exists. Therefore, communication via messages, of any kind, do not carry knowledge to the recipient, but have the required information in them for the recipient to process the information into knowledge. Knowledge is dependent of individual knowledge structures, against which the information is processed, and knowledge comprehended. These structures are unique and therefore individuals gain different knowledge with the same given information. (Wilson 2002.)

According to Polanyi (1962) knowledge can be divided into two separate forms, explicit and tacit. Explicit knowledge, also known as codified knowledge, is the type of knowledge that can be transmitted or stored outside of mind, in systematic language (Polanyi 1966). Explicit knowledge bases on criteria that has been universally accepted and objective. Explicit knowledge can be coded or transferred with relative ease and has characteristics of public goods. (Cavusgil et al. 2003.)

Tacit knowledge is knowledge that people know but cannot explain. People rely on their knowledge of a certain task to perform that task but cannot explain what or how they are doing it. For example, people who ride a bike rely on their muscles to maintain balance and go forward but fail to explain how exactly, are they maintaining their balance. (Polanyi 1962.) On the other hand, tacit knowledge, in more practical terms, includes cognitive and technical elements. Cognitive elements provide perspective to the knowledge based on the beliefs, viewpoints and paradigms of an individual, whereas technical elements include know-how, crafts and skills that individuals apply in actions and therefore affect the overall knowledge of the individual about the task. (Johnson-Laird, 1983; Nonaka 1994.)

On the other hand, Cowan et al. (2000), however, argue that knowledge is almost always inherently explicit. Knowledge appears to be tacit, if knowledge is not codified. Codified knowledge can also appear as tacit to certain groups, as understanding of the context varies, therefore hindering or bolstering individual's ability to decode knowledge. Cowan et al. (2000) further argue that reasons for knowledge not to be codified is purely economical, as the costs of codification might outweigh the benefits. Johnson et al. (2002) instead argue that tacit and explicit knowledge does not contradict with each other but are

complementary. Certain types of knowledge, especially knowledge regarding skill, can be codified but still fail to produce similar results for different individuals, when that knowledge is turned into action.

Instead of knowledge being tacit or explicit knowledge can also be seen to interact along a continuum and the nature of the knowledge can change temporarily or permanently. Knowledge used to perform jobs, generally require certain tacit knowledge to interpret, even though the knowledge itself is codified as explicit. Fully tacit knowledge can also be codified and thus moves towards the explicit end of the continuum. Codification is usually done in efforts to decrease the costs of transferring the knowledge. As the nature of the codification processes and methods vary, as well as the nature of the knowledge varies, the movement along the continuum is not standardized. (Nonaka 1994; Grant 1996; Nonaka and von Krogh 2009.)

Related to this continuum of knowledge Johnson et al. (2002) stated that individual knowledge has four categories:

- know-what – referring to knowledge about facts
- know-why – referring to knowledge about principles or laws of motion in nature
- know-how – referring to skills and abilities to perform an action
- know-who – referring to knowledge about which parties hold knowledge

The latter two are more abstract and more context dependent that the other two, thus making them more tacit knowledge. Specific codification however may move such knowledge towards the explicit end of the continuum, as the knowledge changes from know-how to know-what as explained in figure 1 below.

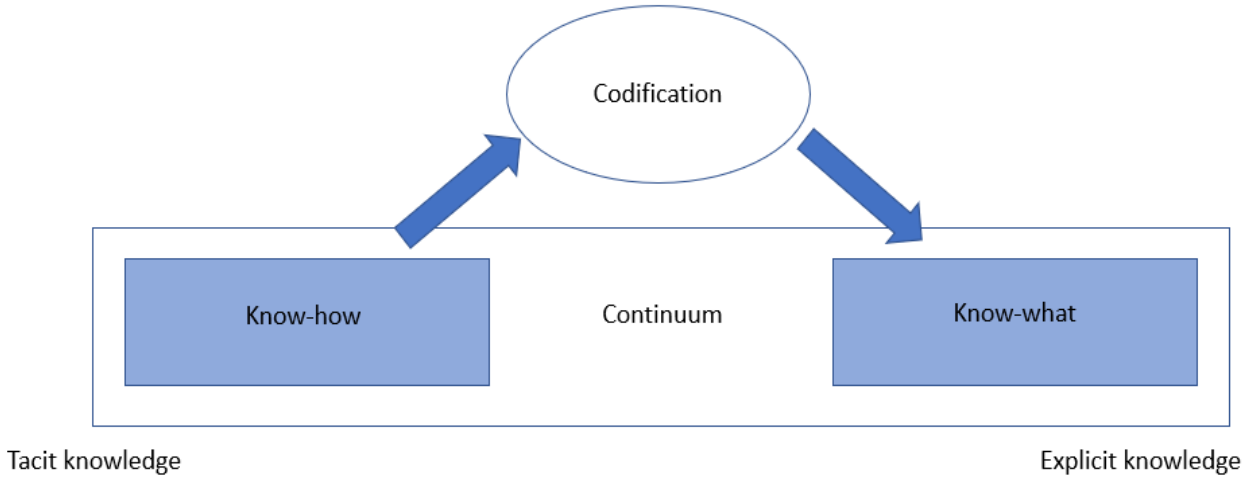



Figure 2 Codification of knowledge moves knowledge along tacit-explicit continuum

For purposes of this study, it is assumed that tacit and explicit knowledge interact as continuum and are not inherently different between each other but include certain elements of both. This approach was chosen due to the fact, that in theory, all the knowledge required to perform the operations of the case offshore, could be codified and thus become explicit. In practice, though, the amount of knowledge would be so massive, that the codification process would not be economically feasible, and the offshore employees require certain tacit knowledge in order to perform the operations within a reasonable time frame.

Overall, knowledge can be viewed as a tool to perform actions. Nonaka and von Krogh (2009) argue that knowledge is essentially the capacity to act and the action is based on the explicit and tacit elements of the knowledge. They (Nonaka & von Krogh 2009) also argue that further gained knowledge, tacit or explicit, enhances this capacity and alternates, as well as, creates new tacit or explicit knowledge when being used or new information acquired.

From here we can see that knowledge exists in various forms and is rather subjective in both, how knowledge presents itself and how it can be applied. To understand how knowledge transfer works it is necessary to identify what is knowledge in an organization and where it is in an organization. While knowledge can be either tacit or explicit and its form may vary, in this study, tacit knowledge refers to the knowledge that was not codified before the offshoring process started, as it is in the interest of the study to simplify the distinction for both interviewees and readers.

## 2.2 Knowledge in organizations

According to Barney (1991) competitive advantage relies on unique resources that are either hard or impossible to imitate, or hard to acquire. In terms of human capital, Barney (1991) mentions experience, intelligence and relations between employees. Resources can be dived to property-based resources, such as patents or logistic chains, or to knowledge-based resources, such as skills or market knowledge. Knowledge-based resources are in general hard to copy, therefore providing competitive advantage. (Miller & Shamsie 1996; McEvily & Chakravarthy 2002.) Knowledge is primary source of input in production and value for a company, because all human productivity is essentially depending on knowledge (Grant 1996).

Organizations capabilities are defined by the knowledge of individuals and the social knowledge of the organization that allows decision making, such as work coordination or production increase/decrease. This social knowledge is based on experience which shows in organizing principles which allow the development, improvement and transfer of new capabilities in the organization. (Zander & Kogut 1995.) Tsoukas and Vladimirou (2001)

define organizational knowledge as the capability of the members of an organization to make conclusions in the context of their work by using generalizations and sets of rules that have evolved through collective understanding and experience. Other researchers, however, define organizational knowledge as all the knowledge learned and possessed within the organization, that is related to the organization or its business or processes, as organizational knowledge (Argote & Ingram 2000; Chiva & Alegre 2005).

Organizational knowledge is created through promotion and sharing the knowledge created by individuals. To achieve this, knowledge must be understandable and connected to the knowledge system of the organization. (Nonaka & van Krogh 2009.) Knowledge is individual's ability to process, to interpret or represent the reality, and learning is improving that procedure. Members of an organization go through this process, creating new knowledge, thus an organization goes through the same process via its members. This knowledge can be codified and stored for transmission and then brought into the context of the organization, creating organizational knowledge. (Chiva & Alegre 2005.)

Organizational knowledge is stored into three different reservoirs within the organization. Firstly, the members of the organization possess the human capital: knowledge, skills and social relations. Secondly, the tools used in the organization, both hardware and software, which typically possess production and process related knowledge. And thirdly, in the tasks and routines and their combination, which typically possess knowledge related to work efficiency and quality. (Argote & McGrath 1993; accoding to Argote & Ingram 2000.) Walsh and Ungson (1991) however, argue that organizational knowledge resides in five reservoirs: individuals, roles and organizational structures, operating procedures and practices, organizational culture and physical structure of the workplace.

We can see from here that knowledge in organization resides in multiple levels and exists in different forms. As stated above that knowledge guides actions of individuals and thus the actions of the whole organization, therefore it can be argued that transferring that knowledge to new members of an organization is paramount to keep the organization running. Especially in the offshoring context as location and personnel change, it is necessary to consider how knowledge can be drained from the existing sources into the new ones and retained there. In KIBS companies, the relevant knowledge is often found in tacit form (Koch & Strotmann 2008). Therefore, the combination of KIBS and offshoring context arguably makes the success of knowledge transfer from the existing sources the paramount goal of the transition.

## 2.3 Knowledge transfer in organizations

Knowledge transfer can be defined in multiple ways. As discussed Szulanski (1996) views knowledge transfer as the transfer of best practices within an organization. Other

researchers have more result-oriented approach, like Sun and Scott (2005) who argue that knowledge transfer happens as information transfer, when the information can generate new knowledge. Then such knowledge changes the beliefs and assumptions, changing the dominant modus operandi. Similarly, Argote and Ingram (2000) state that knowledge transfer is about the interaction of units within the organization and the recipient learns from the experiences of the source, thus changing the future actions of the recipient. Knowledge transfer can also be viewed as a result of knowledge sharing, where two parties engage into a process where one obtains knowledge from another (see e.g. Bathelt et al. 2004). On the other hand, knowledge transfer can allow mutual learning between the participating units and improves the capability to innovate and create new knowledge for both parties (Kogut & Zander 1992). In this study, Szulanski's (1996) definition for knowledge transfer is chosen, as the goal of the transition is to transfer the best practices to the new team.

Knowledge transfer is a process when an organization brings set of routines into a new setting and maintains that situation until knowledge transfer is completed. Knowledge transfer has multiple phases: initiation, implementation, ramp-up and integration as shown in figure 2. Initiation phase is about the recognition of the opportunity for knowledge transfer and requires understanding of the existing knowledge gap between the recipient and the source, after which the decision for knowledge transfer has been made. Implementation phase consist the exchange of information and resources between the source and the recipient. Ramp-up phase happens when the recipient starts to use the acquired knowledge. Lastly the integration phase happens gradually after the knowledge transfer has provided satisfactory results and the use of the obtained knowledge becomes a routine. (Szulanski 2000.) In this study focus will be in the implementation and ramp-up stages as the researcher did not have access to observe the initiation phase of the transition and the later stages of the integration phase. However, it can also be argued that the recipients go through the same process with every bit of knowledge and every task. Therefore, both initiation and integration can be studied as well.

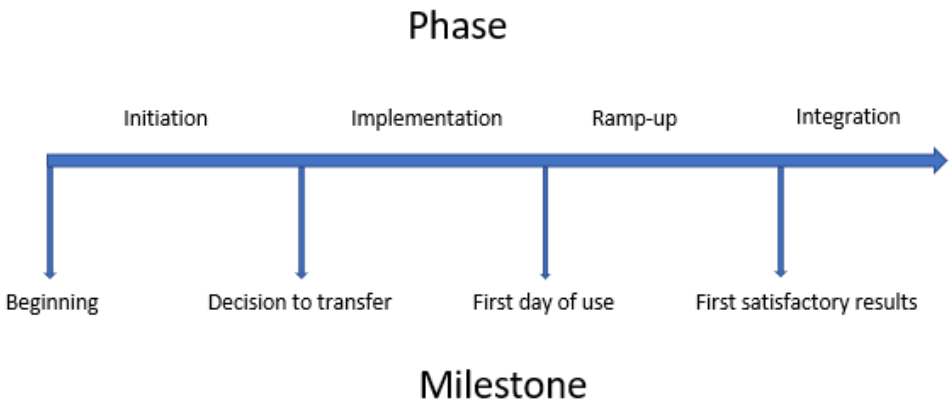



Figure 3 The process of knowledge transfer (Szulanski 2000, 12)

To study and observe the process understanding of when knowledge transfer happens is needed. Knowledge transfer occurs within an organization, when a unit interacts with another unit. Knowledge transfer can occur explicitly or implicitly, depending whether the recipient unit can identify the knowledge and the source of said knowledge. Therefore, knowledge transfer happened when either knowledge is moved within the organization or when knowledge reservoir is modified. (Argote & Ingram 2000.)

Transferring knowledge between different units in an organization is typically difficult. Such transfer faces obstacles like differences in culture, capability or technology. Additionally, members of a unit are prone to think that their experience is more relevant than other units' experience. Therefore, knowledge transfer between units require close established relations between the source and the recipient unit. (Minbaeva 2007.) Hansen et al. (1999) argues similarly that direct relations between units enhance knowledge transfer within organization while lack of direct links hinder it. In MNC context knowledge is typically transferred through organizational boundaries. Easterby-Smith et al. (2008) argue that knowledge transfer through organizational boundaries, such as from a headquarters to a subsidiary, these obstacles hinder knowledge transfer further as the differences are larger. In this study however, such organizational boundaries should be rather limited, as the organization does not change.

Knowledge transfer occurs via interaction as stated above, but also requires other factors to happen. Gupta and Govindarajan (2000) identified five main factors that are required for knowledge transfer to happen. These factors are (1) value of the source's knowledge, (2) motivational disposition of the source, (3) motivational disposition of the recipient, (4) existence and richness of transmission channels and (5) absorptive capacity of the recipient.

Value of the knowledge is important, since it is necessary that the source possesses knowledge that is hard to replicate, and which has value to other units in order to start

knowledge transfer process. Otherwise, it is not sensible or economically feasible for the organization to engage in knowledge transfer. (Gupta & Govindarajan 2000.) Conveniently, increased value and uniqueness of knowledge facilitates knowledge transfer, as recipient is more motivated to learn and engages more into the knowledge transfer (Easterby-Smith et al. 2008).

Motivational disposition of the source reflect the general interest of the source to share the knowledge, Gupta and Govindarajan (2000) suggest that in general source has no interest in engaging in knowledge transfer, unless given an incentive, which will lead to an increase in quality and speed of the knowledge transfer. Many researchers have acknowledged sources motivation to engage as a major barrier, for example Sun and Scott (2005) identified that source often feels that sharing knowledge will be a disadvantage to their own position. Therefore, it can be argued that some outside incentive is required. Additionally, Gupta and Govindarajan (2000) argue that motivational disposition of the recipient has similar effect and requires incentive, but for other reasons such as ego-defense mechanisms or power struggle.

Existence and richness of transmission channels reflect the possibilities for source and recipient to interact. Balint et al. (2016) argue that repetitive interaction between the source and the recipient is a necessity for knowledge transfer. Similarly, Gupta and Govindarajan (2000) propose that closer linkage is between the sides of the transfer results in better outflow of knowledge and multiple ways of communication enhance it further. Frequent interactions develop the relations between the parties and allow the parties to better understand each other and adapt to the needs of each other (Cavusgil et al. 2003).

Absorptive capacity of the recipient refers to the recipient's ability to comprehend and process information, understand the value of new knowledge and apply that into use (Cohen and Levinthal 1990). Absorptive capacity is essential for knowledge transfer. Generally absorptive capacity tends to be cumulative, as units with prior knowledge about related or complex knowledge are more capable of absorbing and leveraging new transferred knowledge. Absorptive capacity enables unit to utilize new knowledge and apply such knowledge to improve business operations. Therefore, absorptive capacity is related to higher performance. Absorptive capacity enhances unit's ability to benefit from central network position as the unit can leverage wider array of new knowledge. Without absorptive capacity unit has little to none benefit of its networking position. (Tsai 2001.) Prior knowledge of an organization or a unit impacts the ability to absorb and assimilate new knowledge. Absorbing and assimilating knowledge is dependent to the field and nature of operation and therefore prior knowledge shapes knowledge acquisition and transfer. (Cohen & Levithal 1990.)

We now have an understanding on what is knowledge transfer is, when it happens and what is required. However, there is also a need to be measure knowledge transfer as this study concentrates of the challenges of knowledge transfer in certain context. Therefore,

this study adopts the result-oriented viewpoint, that knowledge transfer causes certain changes in the recipient. Knowledge transfers within the organization at individual level but is usually more useful to measure at higher levels, such in a division or department level. Knowledge transfer can be measured in multiple ways, for example measuring the codified knowledge accessible. Performance based measurement is generally more useful when measuring transfer of tacit knowledge. (Argote & Ingram 2000.) According to Easterby-Smith et al. (2008) improved knowledge or performance measure knowledge transfer but create the problem of controlling other variables that affect the changes. Measuring changes in knowledge requires capturing the changes in each of the reservoirs (members, tools and tasks) that organizational knowledge lies in the organization, creating significant problems in creating fitting methods of measurement. (Argote & Ingram 2000.) Osterloh and Frey (2000) argue that knowledge transfer cannot be measured at all, but only the outcome can be measured and observed.

As we can see from this chapter, knowledge transfer is transfer of practices and transfer of the ability to act accordingly. For knowledge transfer to happen, mentioned requirements are needed. As stated, measuring the transfer of practices is needed for this study, but to do so more understanding on how knowledge transfers is required.

## 2.4 Mechanisms of Knowledge Transfer

### *2.4.1 Levels of knowledge transfer*

Knowledge in an organization can be divided depending on at which level of the organization the knowledge resides. There are four different levels for knowledge: individual, team, organizational and inter-organizational. Therefore, knowledge can only transfer within or between the levels (Crossan et al. 1999; Sun & Scott 2005). Since this study is about intra-organizational knowledge transfer, knowledge only transfers between and within the first three levels, while the role of the organizational level is rather minor. Therefore, inter-organizational knowledge will not be considered further. Learning is widely considered to originate in the individual level (e.g. Kim 1993; Simon 1991) and is mainly a subconscious process (Crossan et al. 1999). On the other hand, within an organization learning is collective and happens in units or teams that form a hub for individuals to share and learn (Simon 1991; Sun & Scott 2005). Knowledge can then be shared wider among the organization and reflect the change in processes of the organization (Sun & Scott 2005).

Sun and Scott (2005) argue that knowledge transfer happens as a result of information transfer within and between these levels. This was visualized by Crossan and Hulland

(1996; see Sun & Scott 2005) in a learning matrix of organizational levels. Sun and Scott (2005) further argue that barriers of knowledge transfer can be encountered in interactions on each level and between levels.

Table 1 Paths of knowledge transfer in organization (adapted from Crossan & Hulland 1996; see Sun & Scott 2005, 77)

| | | Recipient of Knowledge | | |
|---|---|---|---|---|
| | Levels of interaction | Individual | Team | Organization |
| Source of Knowledge | Individual | 1.1 | 1.2 | 1.3 |
| | Team | 2.1 | 2.2 | 2.3 |
| | Organization | 3.1 | 3.2 | 3.3 |

Table 1 shows the levels, in which type of interaction knowledge transfer happens. Levels are separated into the layers according to the source of the knowledge, pointing out the knowledge flow. For example, 3.1 reflects an interaction in which the knowledge flows from the whole organization to a single individual, like would happen in a situation where an employee participates in an online course provided by the organization.

Other researchers (see e.g. Hansen et al. 1999; Connell et al. 2003; Jasimuddin et al. 2005) define two other approaches: personalization and codification. Personalization is a type of a transfer when the source shares the knowledge via direct personal contact and that knowledge is tied closely to the person or unit which possesses said knowledge. Typically, this approach is used to describe the transfer of tacit knowledge. (Hansen et al. 1999; Jasimuddin et al. 2005.) Codification refers to a process where knowledge can be codified in readable form, stored and transmitted resulting in an easy access to the knowledge. Typically, such approach is used for transfer of explicit knowledge. (Hansen et al. 1999; Connell et al. 2003.)

Various, different approaches to knowledge transfer mechanisms appear in the literature, and they do not exclude each other by default, but are rather different approaches to comprehend the process of knowledge transfer. For example, proposed codification approach can also be viewed as movement of reservoirs, as the codified piece of information is moved to the recipient from the source. As we have knowledge on the knowledge flows and basic methods there is a need to understand what affects these.

### *2.4.2 Factors impacting the knowledge transfer*

There are multiple factors that affect the mechanisms of knowledge transfer, and how knowledge can and should be transferred. Grant (1996) argues that the nature of the knowledge being transferred as well as the characteristics of the source and the recipient have a significant impact on knowledge transfer. Easterby-Smith et al. (2008) presented a framework of factors influencing the knowledge transfer. The proposed factors can be dived into four categories: characteristics of the source, characteristics of the recipient, nature of knowledge and organizational mechanics. Framework by Easterby-Smith et al. (2008), shown below in figure 4, has similarities with the factors that enable knowledge transfer proposed by Gupta and Govindarajan (2000) but go deeper into the elements that affect the process.

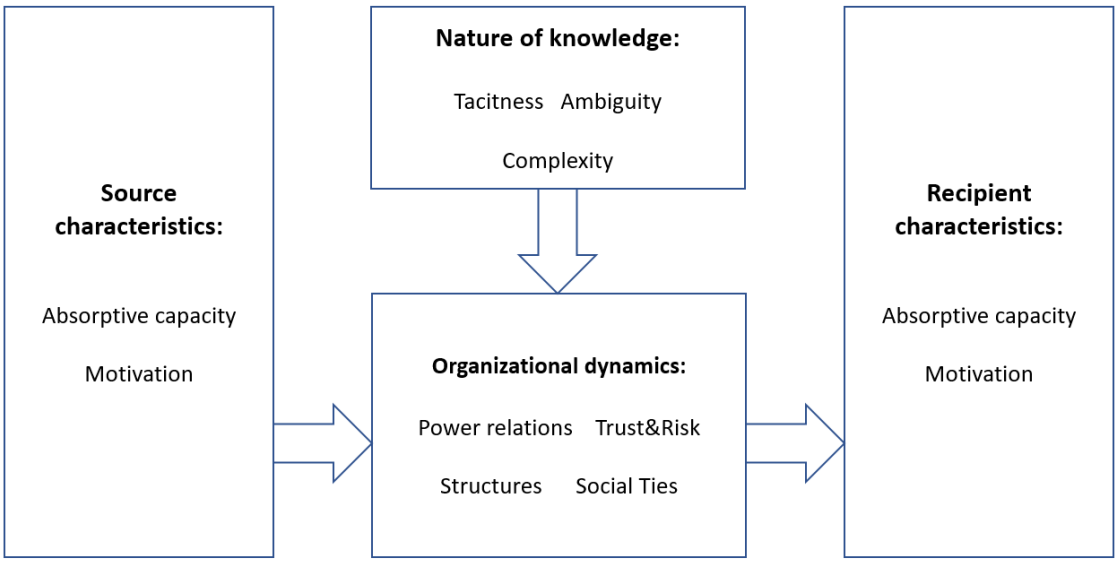



Figure 4 Factors of knowledge transfer (adapted from Easterby-Smith et al. 2008, 679)

Many researchers have acknowledged the impact of nature of the knowledge to the effectiveness of knowledge transfer (see e.g. Simonin 1999; Minbaeva 2007). Tacitness in general has a negative impact on the knowledge transfer and require human-based mechanisms to transfer (2006, Minbaeva 2007). Complexity of knowledge refers to the level interdependency of knowledge on other factors, such as technology or routines. Complex and ambiguity knowledge requires more time and absorptive capacity to transfer. (Simonin 1999, Minbaeva 2007.) Specificity of knowledge also affects the knowledge transfer mechanisms, as stand-alone-knowledge generally is easier to transfer (Minbaeva 2007).

Characteristics of both sources and recipients include absorptive capacity and motivation. Absorptive capacity refers to the ability of an individual to process and utilize new

knowledge or information (Cohen & Levinthal 1990). Absorptive capacity has been defined as a major factor that impacts knowledge transfer (see e.g. Cohen & Levinthal 1990; Tsai 2001; Sun & Scott 2005; Haasis et al. 2018) and determines the speed of transfer as well as how effectively, different methods transfer knowledge. Easterby-Smith et al. (2008) argue that an organization, which can efficiently absorb knowledge, has the tools to diffuse it effectively as well. On the other hand, motivation can be viewed as another component of absorptive capacity (Minbaeva et al. 2014) Motivation is a significant factor determining how engaged parties are in the knowledge transfer and usually require outside incentives to be motivated (Gupta & Govindarajan 2000).

Knowledge transfer involves at least two parties, which are affected by the dynamics of the organization and context. Power relations between the parties are often asymmetric and generally source is in a more superior position. Further the transfer proceeds, more the dependency lessens, thus creating need to balance the bargaining power and the speed of the transfer. (Easterby-Smith et al. 2008.) Trust and risks are important factors as they define the ability of the parties to engage into the knowledge transfer. Source needs to trust the recipient and risks on losing the control over the knowledge, while the recipient needs to trust that the knowledge is useful. (Goh 2002; Sun & Scott 2005; Easterby-Smith et al. 2008.) Structures refer to the context of the knowledge transfer, which the mechanisms reflect (Easterby-Smith et al. 2008). Social ties and informal relations enhance trust between the parties and mitigate cultural differences, while poor relations hinder the possibilities for knowledge transfer (Goh 2002; Easteby-Smith et al 2008).

Another important factor for knowledge transfer is the aspect of teamwork, especially team learning, and its impact on the team dynamics and knowledge transfer mechanisms. When a group works together, converges strategic approach of individuals creating a shared reality (Levine et al. 2000.) Working in groups enhance idea generation and sharing knowledge (Paulus & Yang 2000). Moreover, it is important to provide opportunities for recipient unit's members to communicate and provide feedback on individual members of the unit. This allows generation of transactive memory system within the unit about which members are good at certain task and who knows what. Transactive memory systems have a positive impact on the performance of the unit. Solely training individuals does not facilitate the generation of such memory system and hinders the performance of the unit. (Moreland & Myaskovsky 2000.)

Knowledge transfer is impacted by various factors that affect the process in different ways. These factors can be related to the characteristics of the participants, the knowledge being transferred or the setting the organization provides. Now that understanding of these factors have been established, there is a need to understand how the knowledge transfers from the reservoirs it exists to the desired reservoirs.

### *2.4.3 Knowledge transfer through reservoir networks*

As discussed before, in an organization knowledge is embedded in either members of the organization, in tools used in organization or in tasks and routines performed in the organization. According to Argote and Ingram (2000) knowledge transfer happens in two different ways, which have different approach to the knowledge transfer and how knowledge should be transferred. They argue that knowledge can be transferred by moving knowledge reservoir from the source to the target of the knowledge transfer or by modifying the existing knowledge reservoirs of the target towards to the desired outcome. For an example, this type of transfer is demonstrated when employees are moved to another unit within an organization (moving reservoirs), or employees of a certain unit are trained by employees of another unit (modifying reservoirs).

Moving member components is an efficient way to transfer knowledge between the source and the recipient (Rothwell 1978). Individuals are able to transfer tacit and explicit knowledge to new context, as well as re-apply transferred knowledge to the new context avoiding compatibility issues (Argote & Ingram 2000). Gruenfeld et al. (2000) argue that moving member components temporarily between units facilitate innovation and knowledge transfer. However, they state that influence of the individuals transferred is more significant in the original unit after they have been transferred back to the original unit. In contrast, individuals in the recipient unit seem to innovate and enhance processes more thus implying that transferred personnel have indirect influence within the new context.

Embedding knowledge into tools improves the effectiveness of knowledge transfer (Zander & Kogut 1995). Knowledge transfer embedded in technology is generally more successful when the technology transferred is thoroughly understood and the transfer is accompanied with movement of member components (Galbraith 1990). On the other hand, technology embedded knowledge is both easier and faster to imitate and such knowledge tends to transfer outside of the organization more rapidly than knowledge embedded into processes and routines (Mansfield 1985; Argote & Ingram 2000). Knowledge transfer via routines and tasks can be effective but varies significantly depending on the characteristic of both the routines and tasks, as well as both originating and receiving units (Gersick & Hackman 1990; Argote & Ingram 2000).

Knowledge can also be embedded into the reservoir networks, networks combining two or more of said reservoirs. Such can be for example member-task network (division of labor), tool-task network (certain tool is used in a particular way to perform a task) or a member-member network (two individuals have found ways to work efficiently and share information or knowledge with each other. Knowledge transfer through networks is challenging as the context of the network is different for the source than the recipient (Argote & Ingram 2000). This is amplified in knowledge transfers were these networks

contain human components due to the different skillset of the recipient human components and their own context, such as division of labor. Implementing network, such as division of labor with tasks, can diminish the performance of the recipient group in cases were the recipient had experience. On the other hand, implementing of such networks into a newly formed unit enhances the performance. (Wegner et al. 1991; Argote & Ingram 2000.)

Generally, knowledge transfer which includes member components are more difficult to conduct efficiently than knowledge transfer via other components. Subnetworks including member components have more variation than technological components or task and routines. Therefore, member components are more subjected to context and the outcome is less predictable. Additionally, knowledge transfer via subnetworks with member components generate another layer of challenges when the member components are not moving themselves, but the subnetwork is transferred from the source to the recipient. (Argote & Ingram 2000.) In contrast transferring subnetworks of tasks and technological components transfers effectively to newly formed units. Knowledge created by the source and embedded into the technological component-task sequence is easy to leverage, thus facilitating knowledge transfer. (Epple et al. 1996.)

Networks including member components and tasks affect knowledge sharing in groups. While groups tend to concentrate on the information commonly shared, if group can identify specialist of certain task, such bias towards already shared information is reduced. Therefore, such network has a positive impact on knowledge sharing and performance. (Strasser et al. 2000.)

Zander and Kogut (1995) argue that knowledge can be embedded into tools of the organization enhance the reusing knowledge during knowledge transfer, thus improving performance. Balint et al. (2016) however argue that in order to effectively enable reuse of knowledge, there is a need for member-tool network via the knowledge is transferred. They argue that knowledge transfer via only tool-reservoirs, such as work instructions, is detrimental to knowledge transfer without the influence of the member, who can act as a carrier of the knowledge.

As discussed in chapter 2.4, knowledge transfer within an organization on different levels by modifying or moving the reservoirs where knowledge exists. Easterby-Smith et. (2008) argue that knowledge transfer between organizations is affected by the characteristics of knowledge, characteristics of the individuals who transfer the knowledge and the characteristics of organizations. Similarly, it can be argued that knowledge transfer between two different units within a single organization are impacted by the characteristics of the units between which the knowledge is transferred. Therefore, aforementioned characteristics that impact knowledge transfer between organizations, have an impact in an

intra-organizational knowledge transfer as well. Knowledge transfer effectiveness is crucial for knowledge transfer to be successful, therefore there is need to understand what kind of barriers there are to knowledge transfer.

## 2.5 Barriers of knowledge transfer

### *2.5.1 Knowledge-related barriers*

In previous research, various barriers to knowledge transfer have been identified. Some of the barriers can be viewed as context neutral barriers as they are related to the type of knowledge itself. Tacitness of knowledge causes a few barriers to knowledge transfer. According to Zander and Kogut (1995) tacitness of knowledge increases the difficulty of articulation, thus making tacit knowledge harder and slower to transmit. Simonin (1999) argues that tacitness increases significantly knowledge ambiguity and thus impacting negatively on the outcome of the knowledge transfer. Tacit knowledge is largely embedded into the members of an organization and difficulty of articulation and lack of codifiability of tacit knowledge causes such barriers to occur. (Argote & Ingram 2000; Minbaeva 2007.)

Complexity of knowledge is also considered to have a negative impact on knowledge transfer. Complex knowledge can be complicated to transfer as complex knowledge is interdependent on multiple things and thus harder to both articulate and grasp setting barrier for both source and recipient. (Simonin 1999; Minbaeva 2007.) Third aspect of knowledge that is generally related to have a negative impact on knowledge transfer is specificity, or rather lack of it. Non-specific knowledge or broad knowledge tends to be interrelated to other things similarly to complex knowledge. Therefore, non-specific knowledge creates same barriers for knowledge transfer as complex knowledge. (Minbaeva 2007.) Zander and Kogut (1995) argue that non-specific knowledge causes barriers to knowledge transfer due to its dependency on other functions.

However, in Minbaeva's (2007) research she found out that significance of the characteristics of knowledge to the effectiveness and outcome of knowledge transfer is significantly lower when other determinants are factored as well. Therefore, there is need for another approach towards the barriers of knowledge transfer, to examine the factors that affect the knowledge being transferred and not the knowledge itself. Sun and Scott (2005) divide the sources for barriers to knowledge transfer according to the Crossan and Hulland's (1996) levels where knowledge transfer happen: individual, team, organizational and inter-organizational. It could be argued that knowledge transfer in this case happens between organizations, as the new team operates in a different country in a

branch office. The fact that the organization itself doesn't change, blurs the organizational boundaries enough that it is justified to focus on other aspects than inter-organizational barriers.

### *2.5.2 Individual-level barriers*

Individual level barriers are such that affect the individual ability to transfer knowledge. (Sun & Scott 2005). Absorptive capacity is widely recognized as a major barrier as it hampers the pace of knowledge transfer and limits the effectiveness of methods (see e.g. Gupta & Govindarajan 2000; Goh 2002; Minbaeva 2007). Low absorptive capacity of the recipient side sets a barrier to knowledge transfer. Especially knowledge gaps in core production or technical expertise result in knowledge loss, as the recipient is unable to utilize knowledge fully. (Haasis et al. 2018.)

As mentioned before, motivation is highly related to absorptive capacity. Gupta and Govidarajan (2000) proposed that lack of motivation prohibits parties to engage in the knowledge transfer process. For an individual, it is often beneficial to withhold relevant knowledge, as it can promote position within the organization and act as a source of power. Being the only source of certain knowledge, an individual has leverage over the organization an becomes hard to replace. Often employees do not see any reward from transferring knowledge and thus refrain from sharing knowledge, hampering knowledge transfer. (Goh 2002.) On the other hand, fear of exploitation is a major issue when transferring knowledge offshore or outsourcing services. Source of the knowledge often think that transferring knowledge results into layoffs after the knowledge transfer as production is transferred along the knowledge. (Haasis et al. 2018.)

Motivation impacts individual's willingness to engage into knowledge transfer, but relations do as well. Relations between the source and the recipient can become a major barrier to knowledge transfer. Problematic relations hinder effectiveness of communication and knowledge transfer is less likely to be effective. (Goh 2002.) Relations affect the ease of communication and frequency of it, which directly links to the exchange of information between the source and the recipient (Szulanski 2000). Relations also affect the knowledge on who-knows-what, thus better relations generate new communication channels facilitating knowledge transfer, while absence of such channels prohibit knowledge transfer (Argote & Ingram 2000).

On the other hand, cultural differences potentially cause major individual barriers to knowledge transfer. Differences in working methods and learning methods prohibit knowledge transfer and decrease the pace. Cultural differences can also lead to a need to modify tasks and routines on both production and managerial level. (Haasis et al. 2018.) Simonin (1999), however, argues that cultural differences are not inherently a barrier for

knowledge transfer, but organization's experience in collaboration and lack of collaborative culture within the organization allow cultural distance to become a barrier. Language barriers often result into loss of knowledge, which is amplified if the common language used between source and the recipient is second language for both groups (Haasis et al. 2018).

### *2.5.3 Team-level barriers*

Team level barriers are barriers that occur in interaction within or between teams. Teams act as a hub for learning for individuals learning. While learning happens individually, in an organization it is collective social process and teams provide opportunity to process newly obtained knowledge and discuss about it. Team level barriers are sometimes interchangeable to individual barriers but operate on a different level. For example, competencies of an individual, or whole team, such as absorptive capacity, affect the knowledge flow from source to recipient on both levels. Therefore, lack of competencies determines the extent of knowledge transfer and might pose a barrier. Similarly, relations are also a team level barrier, since team members affect each other's opinions and thus affect the individual relations and extend of knowledge sharing. (Simon 1991; Sun & Scott 2005.)

Team structuring can also cause barriers, since teams have tendency to discuss mainly about shared knowledge and dismiss sharing knowledge possessed by only few members. This can however be balanced by specialization and assigning clear roles, which enhance knowledge sharing. (Strasser et al. 2000.) However, knowledge that is highly personified and possessed by few individuals in the source team is most difficult to transfer (Argote & Ingram 2000).

Additionally, team norm is a potential source of barrier or factor that facilitates knowledge transfer. Team shares identity and form common values and motives. Deviation from those create uncertainty, which hinders the knowledge transfer. (Sun & Scott 2005.) Team's predicted impact of knowledge sharing in terms of compensation affects significantly on team's behavior to develop networks and mechanisms of knowledge sharing, thus facilitating or hindering the process. (Cabrera & Cabrera 2005.) Sun and Scott (2005) also acknowledge culture as a team level barrier, as teams have largely varying learning cultures and values, which can significantly hinder knowledge transfer between teams.

### *2.5.4 Organizational-level barriers*

Sun and Scott (2005) identify organizational level barriers to be related to organizational systems and structures, and organizational relations. For example, existing structuring of tasks and division of labor might cause a significant barrier, since that structuring might not work in the new context. Similarly transferring existing network to a new context often fails as the components are interdependent. (Argote & Ingram 2000.) Organizations should try to ensure that employees work with individuals and groups with similar knowledge capacities. Similar knowledge capacity of the recipient and the source facilitate knowledge transfer, while large differences hinder knowledge transfer. (Goh 2002.)

On the other hand, organizational relations pose a both significant threat and a possibility for knowledge transfer. Each unit have a network position, which affects unit's access to knowledge through social networks within the organization. Units residing in central positions in the organizations interunit network are more like to have access to important knowledge and thus are more like to create valuable organizational knowledge. Central interunit positions facilitate knowledge transfer and decrease the costs of knowledge transfer. Therefore, the new positioning of the team has a significantly different impact on such knowledge transfer than the existing positioning. (Tsai 2001.)

Sun and Scott (2005) further theorize that source of these organizational level barriers is in organizational culture. Similarly, Goh (2002) argues that successful knowledge transfer requires that organization's culture promote collaboration and co-operation. Such culture can be viewed as a necessity to knowledge transfer, as knowledge transfer mainly happens via co-operation. Trust between individuals and groups act as a significant variable for co-operation and employees desire to participate in co-operation required for knowledge transfer. Organization can enhance level of trust with open decision making and by allowing employees open access to information. On the other hand, secretive and unilateral decision making and lack of information and communication hinder trust and results in poor climate for co-operation to foster. Poor conditions significantly decrease the effectiveness of structured processes of knowledge transfer. Organizations which culture allows and encourages employees to seek and solve problems, improves knowledge transfer and lack of such culture hinders it. (Goh 1998; Goh 2002.)

However, in addition to mentioned barriers, resources can potentially create significant barriers to knowledge transfer. Resource allocation to the knowledge transfer becomes difficult when location changes. Organizations tend to have problems on motivating employees of the source unit to be temporarily transferred to the new location to conduct the knowledge transfer and training. This is true especially in cases of offshoring. (Haasis et al. 2018.) Research by Balint et al. (2016) highlights the importance of correct resource allocation. They argue that repetition and reuse of acquired knowledge significantly im-

proves performance, but only if the recipients need to engage in training with source employees. In fact, they argue that knowledge transfer via only codified knowledge repositories might be detrimental to the knowledge transfer. This is supported by Guo et al. (2019) who argue that a significant barrier to knowledge transfer is lack of carriers of knowledge, which allow recipients to further understand codified knowledge. However, Guo et al. (2019) propose that the carrier does not necessarily need to be a person, but for example a software can act as a supporting element.

As discussed earlier in this chapter, knowledge in an organization exists in many forms and the knowledge transfer mechanisms should reflect the needs that the knowledge aimed to be transferred requires. Knowledge transfer as a process is a complex process with multiple potential bottlenecks and sources of barriers. These should be taken into consideration before knowledge transfer is initiated. In the following chapter, knowledge transfer will be studied in the context of offshoring.

# 3 KNOWLEDGE TRANSFER IN OFFSHORING PROJECTS

## 3.1 Defining offshoring

Offshoring is essentially a result of a change in competitive advantage. When it is more feasible to produce somewhere else than in the place production currently happens, production location moves to a new, more feasible location. This phenomenon has been present throughout the history but has become ever more present during the 21st century. Offshoring includes goods production, but as communication technology has developed, more and more services that can be produced in off-country locations have been offshored as well. (Blinder 2006.)

Offshoring by default means that the location of the production is changed from a country to another. Offshoring usually is related to a transfer to a remote country and term nearshoring is used to refer offshoring production to closely located areas, for example Western European companies offshoring to Eastern Europe. In general, offshoring is conducted to maximize benefits of cheaper labor. Nearshoring instead aims to lower the production costs, while minimizing the additional costs caused by the changes in production and adaptation to different cultures and languages. (Trampel 2004; Bock 2008.) Mainly the choice between locations is that lower wages equal to lower skills and education of workers, resulting more costs in setting up the production and fixing issues. Companies need to balance such tradeoff when choosing the location to offshore. (Bock 2008.)

However, in the recent years a new phenomenon of reshoring has gained importance in global economy. Companies are relocating offshored jobs back to developed countries and developed countries have started programs to aid such actions. Typically, reshoring happens when the original offshored production is underperforming or when the business environment in the host country has changed in a way that the underlying advantages of the original offshore decision are not in place anymore. (Albertoni et al. 2017.) Di Mauro et al. (2018) argue that in additionally competitive strategy can be a motivation to re-shore production, such as improvement of 'locally made' -brand image.

On the other hand, decisions to offshore, or re-shore for that matter, production might not always be economic based decisions. Management characteristics have a significant impact on these decisions. Personal experiences about offshoring or the host country can act as a factor affecting such decision. Similarly, managers have opinionated decision about the chosen strategy. Managers have difficulties to change the chosen strategy even when the strategy is underperforming, thus falling into the sunken cost logic. (Musteen 2016.)

While the motivations to offshore vary, modes of offshoring do as well. Offshoring can be done in two different ways. The first method is outsourcing, which can be defined

as a situation where the production of goods or services are conducted by a source external to the organization (Lankford & Parsa 1999). Typically, this is done because the external source is more efficient in that specific production, thus allowing the outsourcing company to focus on the core business (Schneiderjans & Zuckweiler 2004).

Offshore insourcing however means that the production is relocated to another country but kept within the boundaries of the organization. To succeed in in offshoring project, companies need to be committed to learn and improve offshore processes (Prikladnicki et al. 2007; Moe et al. 2012). Offshoring requires a trusting relationship between the parties in order to develop and improve the offshore process. This can be hard to form in outsourcing projects. Outsourcing projects are more likely to face several issues that hamper the success of offshoring. Such include high turnover, lack of commitment, lack of domain knowledge and poor communication. While insourcing, the company retains more power over processes and thus have greater access to develop them. (Moe et al 2012.) In general, offshoring can be divided by the governing party and by the host country. Offshore ventures managed by a third party is considered outsourcing, while ventures fully controlled by the offshoring company are captives. Similarly, the location of the venture divides the ventures in nearshore ventures and offshore ventures. (Tate & Bals 2017.) This is illustrated in table 2 below.

| Governing party | Nearshore outsourcing | Offshore outsourcing |
|---|---|---|
| | Nearshore captive | Offshore captive |
| | Geographic location | |

Table 2 Offshoring options (adapted from Tate & Bals 2017, 107)

In this study, the view that *offshoring is change of production location to a foreign country* is adopted. It seems appropriate to adopt the viewpoint that the change is driven by the cost savings as it was the reason for the offshoring decision in the company. Additionally, in this case the offshoring seems to fit into the nearshoring category of a nearshore captive, as the venture is a branch office abroad. Therefore, further mentions about offshoring in this study refer to *nearshore captives*. As offshoring, as a phenomenon, has been identified, there is need to explore the further impact that the offshoring context has on knowledge transfer.

## 3.2 Knowledge transfer in offshoring projects

### *3.2.1 Transferring knowledge across national borders*

Organization that chooses to engage into an offshoring project faces the task to transfer knowledge from the onshore to the offshore location. The offshore staff must acquire the new knowledge in a rapid pace so they can get a quick access to existing domain knowledge and find out who-knows-what in order to start the production. In the case of offshoring, knowledge transfer resembles knowledge diffusion because of the relatively short time frame for the knowledge movement. The knowledge that is not transferred will result to a knowledge loss and it is common that large swaths of knowledge will be lost with the employees that are laid off from the onshore location. (Chua & Pan 2006.)

Knowledge transfer between countries is a complex process which has its unique challenges (Gaur et al. 2019). Cross-border knowledge transfer means that there are differences in formal and informal institutions and culture that pose additional challenge on top of the geographical distance (Cuervo-Cazurra & Rui 2017; Minbaeva et al 2018). Cuervo-Cazurra and Rui (2017) argue that a major source of barriers to knowledge transfer is biased or neglecting attitude towards the knowledge of the source. They found out that if recipient side has a dismissive attitude towards the knowledge, it hinders the acquisition of knowledge. Additionally, the biased attitude towards source's knowledge caused recipients to not use the knowledge and refuse to acknowledge the superiority of such knowledge even after the acquisition of the knowledge (Cuervo-Cazurra & Rui 2017).

On the other hand, motivation of the source of the knowledge to fully engage into the knowledge transfer process is more relevant question when knowledge transfer happens in offshoring context (Chua & Pan 2008). Transferring the knowledge bears more risk of exploitation for onshore employees, and thus might result in onshore employees to withhold knowledge and intentionally perform knowledge transfer poorly (Blomkvist 2012).

Social integration mechanisms are mechanisms that foster individuals to create social relations and interact with each other to pursue a common goal. Such mechanisms are extremely potent in creating absorptive capacity and enhancing knowledge transfer or knowledge diffusion within a group. (Von Briel et al. 2019.) Von Briel et al. (2019) argue that for successful cross-border knowledge transfer, promotion of these social integration mechanisms, are vital. Similarly, Cuervo-Cazurra and Rui (2017) argue that weak social integration mechanisms between source and recipient, as well as within the recipient unit, create a barrier for knowledge transfer from external sources and hamper the use of external knowledge, by blocking the conversion into internal knowledge. They argue, that lack of social integration diminishes the incentives for employees to seek for knowledge from external sources.

Chua and Pan (2008) conducted an empirical study about an offshore knowledge transfer project. They found out that previous technical knowledge of a new formed team to be significant bottle neck and that this results in knowledge loss due to intentional decision not to try to transfer certain tacit and process knowledge due to hindered absorptive capacity. They argue that the absorptive capacity was hindered in these areas because of the lack of technical knowledge. Fast paced knowledge transfers result in knowledge overflow for recipient side and typically this hinders the ability to absorb more complex knowledge. As knowledge overflow is a common phenomenon, frequent evaluation and feedback is an important tool to asses which transferred knowledge can in fact be applied on the offshore site. For technical knowledge few months is usually enough to reach satisfactory results, but for organizational and tacit knowledge six- to twelve-month transfer period was found inadequate. (Chua & Pan 2006; Chua & Pan 2008.)

As discussed above knowledge transfer in offshoring context happens in a special setting and adds additional challenges to the process. One of the major differences to knowledge transfer abroad relates into differences in organizational culture, which requires deeper exploration.

### *3.2.2 Organizational culture in offshoring context*

As previously discussed, organizational culture is widely acknowledged to be an important factor of the effectiveness of knowledge transfer process and either a source of barriers or an enhancing force to the process. In context of offshore knowledge transfer, this becomes a more prevalent factor due to the fact, that subsidiaries, or offshore units, operate within their local environments and comply with the corporative culture of the headquarters. This can cause conflicts between the corporative culture and local national culture. Offshore locations develop their own values and norms making it difficult to transfer organizational culture abroad. (Jaeger 1983; Regnér & Zander 2011; Li & Lee 2015.)

Gaur et al. (2019) argue that national cultural differences are reflected in the differing organizational cultures within the same organization. They also argue that while the national differences might not affect the transfer of codified knowledge, the flow of tacit knowledge can be impacted significantly due to differences in communication and social interaction. Additionally, they argue that even in situations where the offshore location has integrated corporate culture well, the national institutional environment can affect knowledge transfer as some of the national characteristics remain after integration.

Parts of an organization also form sub-cultures that can have extremely different values and norms that the surrounding organizational culture. These sub-cultures determine how knowledge is viewed and valued within that unit and might create conflicts which

cause miscommunication. Therefore, it is imperative to understand how different subcultures affect the knowledge transfer. (De Long & Fahey 2000.)

The headquarter plays an important role in generation of organizational culture in the organization's offshore locations and units. It is paramount to promote knowledge sharing as a standard, eliminate hindering factors and promote enabling factors such as collaboration and tools of knowledge transfer. (Blomkvist 2012.) Minbaeva et al. (2018) highlight the importance of organizational culture that favors knowledge transfer, as sufficient channels of knowledge transfer do not ensure success in knowledge transfer processes. They argue that the effective use of channels is more important, which enhances the codification ability of the source.

Vaara et al. (2012) suggest that cultural differences between the source and recipient impact positively on the knowledge transfer. This is due to the potential of learning when two parties with large differences in the knowledge bases engage into a knowledge transfer process. However, they argue that cultural differences have a potential of causing social conflicts between parties that lead to miscommunication and mistrust, which significantly hinder knowledge transfer. People usually associate converging beliefs and values with attractiveness and trustworthiness. This applies to both real and stereotypical conceptions which might not correspond to organizational reality. This typically results in in-group versus out-group bias and cooperation issues between parties. (Vaara et al. 2012.) Similarly, McAllister (1995) argues that trust tends to be greater between groups when the groups are culturally similar. Vaara et al. (2012) further argue that organizational integration between the parties of knowledge transfer is necessary in order to avoid social conflicts. They propose that better the organization can integrate the parties, better is the outcome of the knowledge transfer, thus limiting potential social conflicts and accessing the benefits of cultural differences.

Implementation of newly acquired knowledge is related to the similarities of norms and values between the source and recipient (Yildiz & Fey 2010). Szulanski (2000) argues that incompatibilities need to be unlearned before full implementation and integration of the new knowledge. Transfer of new knowledge does not mean that recipients will accept it and use it instantly. The recipients might report that they are using the new knowledge, but instead still use previous routines and working patterns, or only partially implement the acquired knowledge. (Kostova 1999; Yildiz & Fey 2010.) Perceived value of the acquired knowledge by the recipients determine the rate of implementation of the acquired knowledge. Also, an important factor of the implementation rate is how the knowledge can be related to the existing knowledge and past experiences. (Yildiz & Fey 2010.) Organizational unlearning, which refers to the process of discarding existing routines and adapt new ones, is an important tool to enhance implementation of new knowledge. (Tsang & Zhara 2008; Wang et al. 2017.) Organizations should aim to eliminate such

routines and structures that hinder implementation of new knowledge and thus set a barrier to the knowledge transfer. (Yildiz & Fey 2010.)

Even as unlearning can significantly improve knowledge transfer, it is vital for the organization to preserve the elements that are compatible between the parties (Yildix & Fey 2010). Argote and Ingram (2000) argue that knowledge transfer requires modification of routines and processes when transferred to a new context, as they possess embedded knowledge that is not entirely interdependent from the existing context, thus making it impossible to transfer such knowledge.

Offshoring as a context for knowledge transfer includes certain specifics which should be considered, when offshoring is conducted. As discussed, context of offshoring sets prerequisites for a successful knowledge transfer compared to its counterpart, knowledge transfer conducted within national borders. In the following chapter, effects of KIBS context to knowledge transfer is pondered.

## 3.3 Knowledge transfer in KIBS context

Offshoring of KIBS has experienced a significant growth as a phenomenon during the last decades and the range of services being offshored has increased from coding and call-center work to various back-office services. Large scope of KIBS offshoring has created clusters within the developing countries, which has accelerated the offshoring, as companies have better access of skilled workforce in those areas. Offshoring KIBS places more emphasize on the knowledge management, in terms of knowledge transfer compared to more traditional offshoring of production of goods. (Massini & Miozzo 2012.)

Labor-intensiveness of services make knowledge management and knowledge transfer mechanisms important to process improvement and standardization (Rai & Sambarmurthy 2006). Standardized processes and knowledge of implementation and retaining knowledge are essential in services offshoring (Balint et al. 2016). Offshored service delivery centers typically have high turnover rates, which sets a challenge to retain knowledge once offshoring is completed. Standardization allows organization to retain knowledge of the processes. (Levina & Su 2008; Balint et al. 2016.) However, KIBS sector usually relies heavily on high customization of services towards clients' needs and tend to have large amounts of uncodified and specialized knowledge embedded into the organization. This results in a situation where knowledge exists only in tacit form, creating challenges to standardization. (Koch & Strotmann 2008.)

Based on above, knowledge transfer in KIBS context revolves around the nature of the knowledge and the tacitness of the knowledge. Tacit knowledge, as discussed before, is more difficult to transfer (see e.g. Minbaeva 2007) and requires more commitment from individuals who posses the knowledge (see e.g. Argote & Ingram 2000). According to

Balint et al. (2016) usage of knowledge repositories (physical knowledge reservoirs) do not facilitate knowledge transfer alone but require a human interaction as the individual who possesses the knowledge acts as a carrier of the knowledge for the recipient. This supports the proposition of Argote and Ingram (2000) that member-tool or member-task networks are effective methods for transferring tacit knowledge. Furthermore Balint et al. (2016) research shows that relying on knowledge repositories without the carrier is detrimental for knowledge when transferring knowledge in service context. This supports the claim that KIBS sector is reliant on its employees and tacit knowledge they possess.

Leonardi and Bailey (2008) propose that knowledge transfer when offshoring KIBS should promote task-based offshoring. Significant amount of knowledge in KIBS processes is embedded into tasks and employees' interaction with the tasks. Knowledge transfer should revolve around knowledge about the processes and less around organizational knowledge or knowledge about the product. (Leonardi & Bailey 2006.) However, Thompson et al. (2000) argue that broad training and comparison of different cases greatly enhances individual's ability to transfer knowledge. In contrast, they argue that those who do not compare different cases and are not concerning the underlying principles transfer knowledge poorly. Argote and Ingram (2000) also promote task-based knowledge transfer mechanisms, if they include networks of knowledge reservoirs, such as tool-task or member-task networks. Since tasks require individuals to perform them, tasks and task-member networks are effective to transfer tacit knowledge that is embedded in both reservoirs. (Argote & Ingram 2000.)

Networks that include tasks is an effective way to transfer knowledge, however tasks generally need to be adjusted according to the new context (Argote & Ingram 2000). Replication of a process or a task is not possible by combining correct pieces together, as they include employees who always possess unique organizational skills. Replication takes time to build in order to adapt to the new context. (Teece et al. 1997.) However, Balint et al. (2016) suggest that knowledge transfer should always occur with standardized processes and modification should be left to post-implementation phase, as the modification of the processes is detrimental to the knowledge transfer effectiveness.

## 3.4 Synthesis

Figure 5 presents the theoretical framework for this study. The framework is an adaptation of multiple models which approach challenges of knowledge transfer from different viewpoints. This framework illustrates the factors and the process leading to an effective knowledge transfer between the source and the recipient. Based on the previous literature, the framework combines the process of knowledge transfer with various factors with that

affect the knowledge transfer. These factors potentially create barriers for effective knowledge transfer.

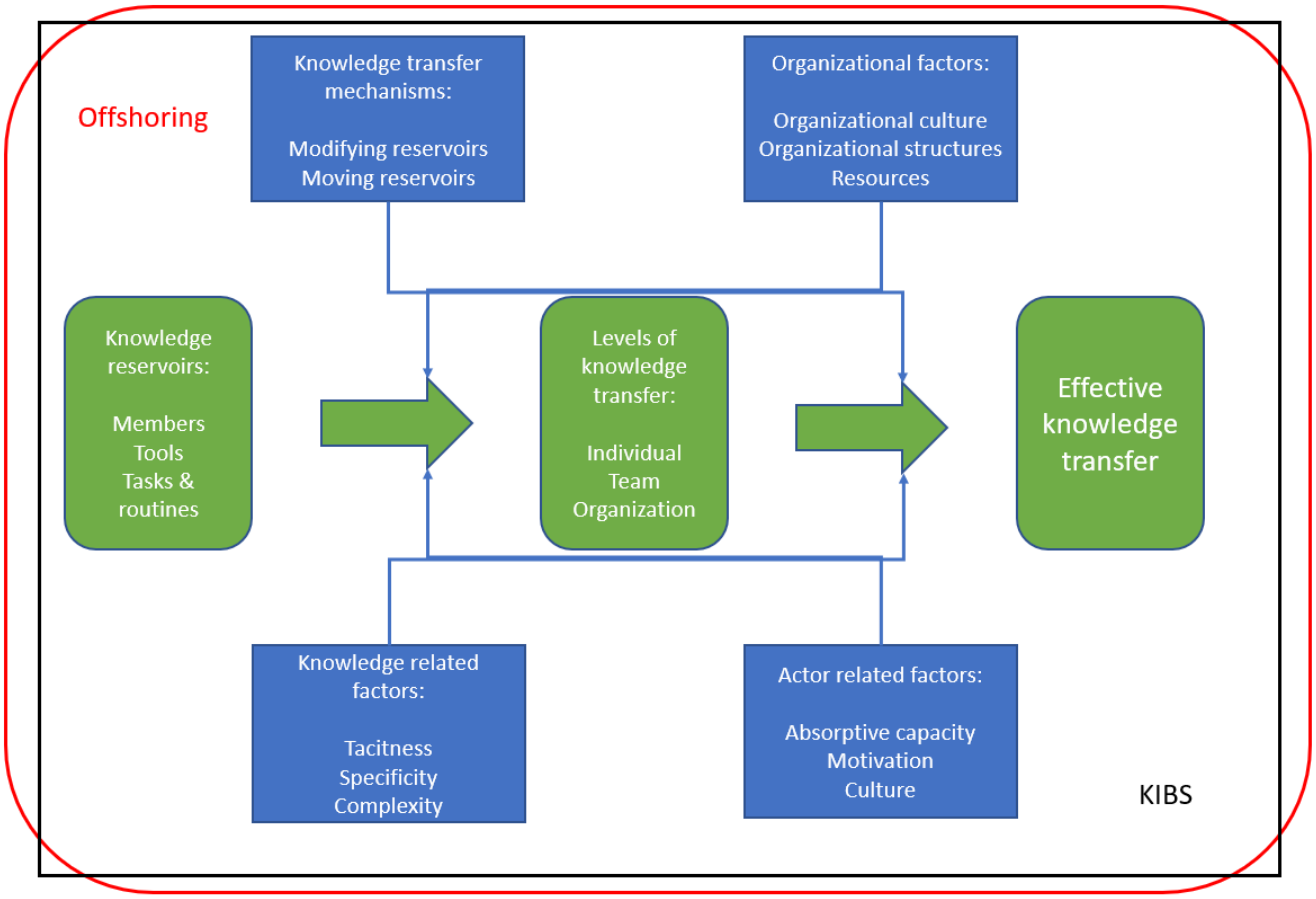



Figure 5 Conceptual Framework

The framework presented in figure 5 consist of location of knowledge in an organization. This was adapted from Argote and Ingram (2000) and their framework on the knowledge reservoirs in an organization where knowledge is stored in either members, tools or task and routines of an organization. Secondly, the framework has adopted knowledge flow level framework from Crossan and Hulland (1996; see Sun & Scott 2005) in which knowledge can be transferred in an interaction between individuals, teams and the organization. In this case, the fourth level, inter-organizational, was left out due to it not being relevant for the study.

Additionally, there are factors that affect the knowledge being transferred. These factors have been divided into four groups. Firstly, knowledge transfer mechanisms, modifying knowledge reservoirs or moving knowledge reservoirs. Secondly, knowledge related factors, which refer to the nature of knowledge like tacitness, specificity and complexity. Thirdly, actor related factors, which refer to the characteristics of the individuals who participate in the knowledge transfer process. These characteristics include absorp-

tive capacity, motivation and culture. And finally, organizational factors such as organizational culture, organizational structures and resources are determined by the organization. These factors affect both, the level on which the knowledge is transferred and on the act of knowledge transfer itself, by facilitating the knowledge transfer or creating barriers to it.

Knowledge can be transferred within an organization by moving knowledge reservoirs. The reservoirs are members, tools and task and routines. In practice moving the reservoirs mean that those reservoirs that posses the knowledge are moved to the new location, thus providing the knowledge to the recipients. In practice this means that for example personnel, who posses the knowledge, are transferred to work in the new team, or by providing the recipients access to existing knowledge repositories of explicit knowledge, such as work instructions. Alternatively, knowledge reservoirs of the recipients can be modified, which in practice refer to the training of the recipients and adjusting the tasks and tools to the new context. (Argote & Ingram 2000.) These methods can also be used in conjunction, and often temporary movement of members to enable the modification of the recipient's reservoirs can be considered an effective way to transfer knowledge (Argote & Ingram 2000; Gruenfeld et al. 2000; Balint et al 2016).

Knowledge related factors and actor related factors are based on the framework presented by Easterby-Smith et al. (2008), which is shown in more detail in figure 3. Knowledge related factors refer to the characteristics of knowledge and how it affects transfer of knowledge. Tacitness of knowledge create a barrier to transfer of knowledge and requires human interaction to be transferred. More complex the knowledge being transferred is, slower the knowledge transfers and the transfer requires more competence from the participants. Similarly, as the degree of specificity of the knowledge declines, transferring that knowledge becomes more difficult and time consuming. (Easterby-Smith et al. 2008; Simonin 1999; Minbaeva 2007; Zander & Kogut 1995.)

Actor related factors refer to the characteristics of the source and the recipient of the that have an impact on the effectiveness of knowledge transfer. In framework by Easterby-Smith et al. (2008) absorptive capacity and motivation are individual characteristics that impact on the knowledge transfer. Absorptive capacity of the participants has a significant impact on the effectiveness of the knowledge transfer, as it largely determines how efficiently the source can output knowledge and the recipient can absorb knowledge (Easterby-Smith et al. 2008.) Motivation on the other hand largely determines the degree of engagement of the parties to the process (Gupta & Govindarajan 2000). Additionally, culture was added as an actor related factor. Cultural differences of individuals have potential to create significant barriers to knowledge transfer (Haasis et al. 2018).

Lastly, there are organizational factors which include wide array of factors that the organization generates. These are such as organizational culture which can either facilitate or hinder knowledge transfer, organizational structures which enable or disable

knowledge transfer. Resources can also be viewed as a major impacting factor, as organization decides the amount of time and effort is put into the knowledge transfer process, thus affecting the effectiveness and success of the knowledge transfer. (Tsai 2001; Goh 2002; Sun & Scott 2005; Balint et al. 2016.)

This whole framework operates in the contexts of offshoring and KIBS. Offshoring has a significant impact on the knowledge transfer process. As discussed before offshoring creates additional challenges to the knowledge transfers, which need to be resolved to achieve effective knowledge transfer. For example, offshoring impacts the amount of resources available to the knowledge transfer and thus determines the degree of utilization of member reservoirs in the process. Similarly, offshoring determines the cultural differences of the actors of knowledge transfer and thus potentially creates barriers related to the cultural differences. While offshoring naturally has a larger impact on some components in this framework than others, it can be argued that the offshoring context has some impact to all of them. Similarly, to offshoring KIBS as a context impacts the whole process. For example, KIBS as a context typically increases the tacitness of knowledge that is transferred. Therefore, KIBS context tends to mean that relevant information in an organization is largely present in member reservoirs and tasks and routines, thus impacting on from which reservoirs and through which levels knowledge flows to the recipients. (Chua & Pan 2008; Koch & Strotmann 2008; Argote & Ingram 2000.)

To summarize, the framework indicates that if a strong understanding of the impacting factors of knowledge transfer in offshoring context is present, the challenges can be identified and thus barriers eliminated or mitigated. Moreover, this should positively impact the successfulness of the knowledge transfer and thus successfulness of the offshoring project. In the following chapter the empirical research is introduced.

# 4 METHODOLOGY

## 4.1 Research approach

The research approach is the strategy that allows the researcher the access to the information that is needed to answer the objective of the study (Ghauri & Grønhaug 2002, 47). The purpose of this study is to examine knowledge transfer in an offshore insourcing project and recognize the enhancing factors and potential barriers that impact the outcome of the knowledge transfer. The qualitative research approach was chosen as the most suitable option. The research problem focuses on the individuals and their actions in an organization and is rather abstract. Qualitative approach supports such researches (Ghauri & Grønhaug 2002, 87). Qualitative data focuses on natural events in natural settings which is well-suited to describe real life situations. Qualitative data takes the local context into account and has the emphasis on the specific case. The data also allows production of rich and holistic explanations. Data, that is collected over a sustained period, has an ability to describe causality. Ability to variate data collection methods and times, gives qualitative studies better understanding of the progress of the phenomenon it studies. (Miles & Huberman 1994, 10.) Therefore, qualitative research seems to be the best option for this study. In this study, the context is extremely relevant and there is a need to gather rich data. The study focuses on a knowledge transfer process and especially the individuals performing the knowledge transfer and their experiences, thus understanding the causality of events and actions is crucial.

However, the main reason to choose qualitative approach is purely practical. The aim of the study is to provide ways to enhance knowledge transfer and mitigate the challenges that, those who transfer the knowledge, face. Quantitative research that can provide statistically significant information about ways that enhance knowledge transfer and mitigate its challenges, would require vast amount of resources and ability to research multiple instances in which various efforts to enhance knowledge transfer were implemented. Thus, a quantitative method was not regarded as feasible. Additionally, it is obvious that such study would have multiple different contexts, which would hinder the ability to focus on the particular context of this study and would not aim to fill the research gap this study aims to fill.

Qualitative research can be conducted in multiple different ways. The method for this study was chosen to be ethnographic research. Ethnographic research differs from other scientific methods in two ways. Firstly, it is necessary to find out what are the actual actions of participating individuals and the reasons behind those actions, before it is possible to make interpretations of those actions. Secondly, the researcher cannot control what happens and cannot control the environment. (LeCompte & Schensul 1999, 1-2.)

Ethnographic method has certain strengths over other qualitative methods. It provides an accurate reflection of perspectives and behavior, provides more intimate and accurate interaction with the participants, and most importantly allows the evaluation of the discrepancy between the actions and statements of the participants. (LeCompte & Schensul 1999, 8; Khan & Jerolmack 2013.)

For this study ethnographic method was chosen for few reasons. Ethnographic research can provide a unique data set for the research. In this study, the researcher was able to observe the environment of knowledge transfer and thus had the ability to potentially notice underlying factors that impacted knowledge transfer, which other participants of the knowledge transfer did not notice. Additionally, the ability to evaluate the accuracy of the data gathered by interviews was considered as a positive aspect, thus affecting the choice of the research method. In this study, ethnographic method allows the researcher to better focus on the challenges, that the individuals face during the process, which was considered relevant for the aim of the study. Additionally, the lack of ethnographic studies in previous literature about knowledge transfer favored such approach for this study, as the researcher had a unique opportunity to conduct study of this type. Arguably a new approach offers a chance to either confirm or challenge previous findings.

## 4.2 Data collection

### *4.2.1 Observation*

In this study data was collected in two ways, through observation and through interviews. Observation is an ethnographic research method that requires the researcher to use number of different ways to collect data and play different roles in the group (Baker 2006). Gorman and Clayton (2005, 3) defined observation as a systematic recording of observable phenomenon or behavior in a natural context. Observation requires that the researcher uses multiple ways to collect data and must play various roles within the group, while maintaining a primary role of a researcher in order to collect data and analyze it (Baker 2006). In this study, observations were made by watching the participants and their actions, and by listening conversations and meetings. Due to the rather active role of the researcher, some conversations about the progress of the knowledge transfer and about the factors impacting it were also initiated with the participants. Additionally, the researcher contemplated his own actions and how it impacted the knowledge transfer.

As discussed above, systematic observation is an important aspect of observation. In this study, the observation was conducted every workday from September until the end of December 2019. Observations were written into a field log which was updated daily,

excluding holidays. As the observations were related to both work and this study, the observations were analyzed throughout the day, especially during the time the researcher was in the target country. Therefore, the observation can be considered systematic in this study.

Observation as a data collection method can be divided into three categories, depending on the role of the researcher. Participant observation happens when the researcher is part of the phenomenon that is the subject of the research. Participating observation means that the researcher has an impact on the phenomenon that is the subject of the research, but the researcher has a definite "outsider" role and is not a part of the group or the organization that is being observed. Neutral observation refers to a research where the researcher actively stays out of the phenomenon and does not impact on the events, therefore the phenomenon presents itself as it would without observation. (Paalumäki & Vähämäki 2020.) In this study, participant observation was used, as the researcher did actively participate in knowledge transfer and had a role that significantly impacted the outcome of the knowledge transfer.

When observation is conducted, it is important to decide the range of observation and limit the observation to those subjects that are relevant for the study. Also, it is important to decide which aspects are worth to observe and when should observation be conducted. Generally, in a case where the researcher has only a vague knowledge about the phenomenon being observed, it is reasonable to start with free observation, which is essentially observation of everything. Therefore, the researcher can notice the characteristics of the context and observe without any biases. (Paalumäki & Vähämäki 2020.) Typically, the researcher creates field logs and keeps diary about the events and actions taken within the context of the phenomenon. This should include the actual actions related to the phenomenon, but also can include other sources, like conversations within the group, emails, meetings etc. (Paalumäki & Vähämäki 2020; Baker 2006.)

In this study, observation aimed to find challenges, enhancing factors and other points of interests regarding the phenomenon, like changes in overall feeling of the participants towards certain issue or aspect of the process. Due to the limited understanding of the phenomenon during the observation phase, the researcher tried to observe everything possible, at least in the early stages of the transition. During the later stages, the focus was placed more on the conversations with the participants as it was clear for the researcher that everything cannot be covered, and the researcher had obligations towards the organization to perform in his job. Thus, the conversations with the participants and the conversations the participants had between each other was deemed to be more fruitful and efficient targets for observation.

In this study, participant observation was a natural selection for observation method, due to the researchers position in the organization. Observation was conducted in the workplace, both in Finland and in the target location while the researcher was stationed

there to conduct knowledge transfer. A field log, or a diary, was created about the interesting facts and events that impacted knowledge transfer process. Conversation of the participants, their actions, progress of knowledge transfer, email correspondence during the process and managerial actions were observed during the knowledge transfer process. The focus was on the conversations of the participants and the actions of the participants during the process.

### *4.2.2 Interviews*

Another data collection method for this study was interviews. A problem with participant observation is that the researcher can be subjective towards the phenomenon and due to previous experience and biases, focuses on certain things while missing other aspects (Paalumäki & Vähämäki 2020). Baker (2006) argues that observation inherently includes researcher bias, which results into selective observation, selective recording and selective interpretation of situation. To alleviate these problems there was a need to gather data that offer a different viewpoint and do not share the biases with the researcher. Therefore, interviews were chosen as the second data collection method.

Interview is the most common method for data collection in qualitative studies. Generally, they are conversations that consist a series of questions and answers (Eriksson & Kovalainen 2016, 83). Interviews can be divided into different types depending on the level of structuring the interview consist (Hirsjärvi et al. 1996, 203). Structured interview has a clear format and a definite order in which each question will be asked. An unstructured interview resembles normal discussion as it has no format or guidelines. A semi-structured has pre-determined questions but allows the researcher to enrich the data by asking additional, more specific questions during the interview. (Ghauri & Grønhaug 2002, 100–101; Hirsjärvi et. al 1996, 203–204; Eskola & Suoranta 1998.)

Semi-structured interview was chosen, as it allows certain flexibility for the researcher. The subject was quite broad and has multiple aspects, therefore semi-structured interview fitted well for the data collection purpose. The interviews included relatively large number of questions but answers mainly overlapped with multiple questions and thus only few additional questions were needed. To ensure that the necessary topics were covered, the operationalization of the research questions was conducted. Operationalization of the research questions aims to combine theory with real-life context. Empirical portion of the study should reflect the theory it is based on therefore operationalization of the questions is necessary. (Eskola & Suoranta 1998.) Operationalization is shown in table 3 below and the interview in appendix 1.

Table 3 Operationalization of the Research Questions

| Research Question | Sub Question | Themes | Theory Chapter | Interview Themes | Questions |
|---|---|---|---|---|---|
| | | Introduction | | Introduction | 0.1-0.2 |
| How knowledge transfer can be enhanced, and challenges of knowledge transfer mitigated during intra-organizational offshoring? | How tacit knowledge is transferred within organization? | Nature of knowledge<br>Knowledge transfer in organization<br>Knowledge reservoirs | 2.1, 2.2, 2.3, 2.4, 2.5 | General questions<br>Tacitness<br>Complexity<br>Specificity<br>Availability | 1.1-2.11 & 4.1-4.22 |
| | How offshoring affects knowledge transfer? | Nature of knowledge and offshoring.<br>Organizational knowledge and offshoring<br>Challenges in offshoring context | 2.1 & 3.2 | Nature of knowledge in offshoring | 3.1, 5.1, 7.1, 7.2 |
| | What are the challenges of knowledge transfer? | Challenges of knowledge transfer | 2.4.1 & 2.5 | Individual level<br>Team level<br>Organization-Team level | 6.1-6.12<br>+ potentially additional questions |

Interviews were only conducted on the personnel which actively participated in the process of knowledge transfer, as they were the individuals, who most likely had the best insight about the phenomenon. This was based on the researcher's subjective opinion and earlier observations about which employees had largest roles in the transition. This method is theoretical sampling, in which the sample for a study is chosen purposefully and without randomness. Choosing interviewees by purpose differs significantly from other types of interviews with a random sample population. (Ghauri & Grønhaug 2002,

121.) In qualitative studies, the criterion is not quantity but rather quality (Eskola & Suoranta 1998). Therefore, the researcher chose to invite those with the most active and longstanding participation to the knowledge transfer, as they were most likely to have the most insight about the subject. Interviewees for the study were chosen by those who volunteered for the interview. As the researcher personally knew every respondent through his work, there were no need for separate introduction or invite. All the respondents were informed about the study and about the fact that the researcher was observing them as the transition started. Generally, the interviews were scheduled couple days prior the interview, but sometimes even for the same day. As nearly everyone who were asked to participate, wanted to participate to an interview, certain elimination was necessary due to time constrains. Therefore, twelve interviews were conducted consisting six sources of knowledge and six recipients of knowledge.

Table 4 Summary of the interviews

| Interviewee | | Language of the interview |
|---|---|---|
| Recipient | A | English |
| Recipient | B | English |
| Recipient | C | English |
| Recipient | D | English |
| Recipient | E | English |
| Recipient | F | English |
| Source | A | Finnish |
| Source | B | Finnish |
| Source | C | Finnish |
| Source | D | Finnish |
| Source | E | Finnish |
| Source | F | Finnish |

Interviews were conducted after all the processes were transferred from Finland to the new location and the Finnish personnel were only performing quality control and act as a support unit for the new team. All the interviews were conducted face-to-face in interviewee's home country. Therefore, the recipients were interviewed first and sources after the researcher had returned to Finland. Interviewees from the recipient team had experience in working in other Nordic market teams and had previous experience ranging from one to four years. Interviewees from the source team either had joined to the Finnish

market team initially or were moved to that team from other teams as their previous teams were offshored. Their experience ranged from three to over 20 years of experience. All the interviewees worked as Service Operating Officers in the organization. Due to certain sensitivity surrounding the subject of the study and participants' wishes to stay completely anonymous, no further or more specific information can be provided, and the interviewees will be referred as shown in table 4 above. Interviews lasted from 40 minutes to one hour and 30 minutes, with an exception of one interview, in which the respondent refused to be tape recorded, thus lengthening the interview to close to three hours. Notes were taken on the alongside the interviews and important points were dotted down right after each interview.

Since the respondents were previously familiar with the researcher and the subject had been discussed previously in work related situations for multiple months, the researcher was able to have open discussion and quite relaxed interviews. Personal relations between the respondents and the researcher seemed to positively affect the openness of the interviews and rich data set was gathered. Even still, the sensitivity of the subject and the fact that the researcher was still employed by the same organization, cast certain shadow of doubt regarding the truthfulness of the interviews in answers that related to respondents' personal performance, i.e. experienced barriers. This is especially true for the recipients, which might have felt uncertainty due to the temporary supervisory role of the researcher over them as the overseer of the transition in the new location prior the go-live stage.

## 4.3 Data analysis

Analysis on qualitative data is conducted so the researcher can clarify the raw data and thus create new knowledge about the phenomenon. Analysis aims to condense the data without losing information. (Eskola & Suoranta 1998.) It is essential to acknowledge whether the analysis is conducted deductively or inductively, depending on whether the analysis bases on theoretical model or not (Eriksson & Koistinen 2005, 30). However, it is also possible to perform theory-bound analysis, in which the theory supports results and conclusion, but the analysis is not directly based on the theory. In theory-bound analysis it is also essential to notify possible incompatibilities between the results and previous research. (Eskola 2001, 135-140.) In this study, theory-bound approach to the analysis was chosen due to the relatively high interdependency of the case and context, and as the previous research is concentrated on certain contexts, such as subsidiaries, purely deductive analysis would be difficult.

There are multiple methods how to conduct a qualitative data analysis. The method of choice should fit to the goals of the study and be able to provide an answer to the research question. (Eriksson and Koistinen 2005, 29.) In this study thematic analysis was chosen

to be the method of analyzing the data. Thematic analysis was chosen due to its suitability to identify and analyze repetitions in the data. The researcher can identify patterns and themes from these repetitions and analyze which pieces of information are relevant or meaningful to the research question. Thematic analysis is a flexible method that enables creation of rich knowledge from complex data and further reveal themes from different levels in data that can be structured to a clear body of knowledge (Attride-Stirling 2001; Braun & Clarke 2006.) Analysis of observed data does not fundamentally differ from other analyzing methods of qualitative data. However, it is essential to ensure that all the relevant data is analyzed, which highlights the importance of well created field logs. (Paalumäki & Vähämäki 2020.) It is also worth to acknowledge that the process of data analysis is entangled with the data collection. The researcher commonly simultaneously collect, processes and analyzes the data, and while reporting certain parts, is often engaged into other activities like analyzing data as well. (Creswell 2013, 183.)

In this study, the analyzing process followed the phases of thematic analysis framework by Braun and Clarke (2006). Their framework includes six steps. Firstly, the researcher must familiarize oneself with the data by transcribing the data, reading it repeatedly and taking notes about the initial ideas. In the second phase initial codes are created by coding important features across the data set and compiling relevant data for each code. In the third phase codes are compiled into potential themes and all the important data gathered according to the themes. In the fourth phase themes are reviewed whether they work with the coding and then thematic map is created. The fifth phase consist of refining the specifics of each theme and generation of clear definitions of the themes. Final step is to produce the report which allows for final analysis while the researcher selects interesting extracts and examples from the data that relate back to the research questions.

First step was naturally ongoing from the beginning of the process since the observation required the transcription of the observed data. Interviews were transcribed based on tape recordings, except for one of the recipients, who refused to be recorded, therefore data from that interview relied purely on notes taken as the interview was ongoing. The interviews were transcribed from English to English and from Finnish to Finnish so potential misinterpretations of nuances could be avoided. The parts from the Finnish interviews that were used in the report were translated to English in the reporting phase. Transcriptions were created word-to-word from the tape recordings. This was important due to the inherent problem of subjectivity when conducting ethnographic research. Full transcriptions provide richest data set for extracts, which are important in order to gain different perspectives about the phenomenon and can be presented in the report. The initial ideas hatched already during the observation phase, some enhanced or evolved by the interviews and some were scraped all together as interviews provided more insight about

the phenomenon. As the interviews were organized few weeks before the end of the process and thus the observation phase, at the end of the observation phase the researcher had quite good understanding of the data set.

Initial coding was also started during the observation phase as notes were not only organized by dates, but also by relation. After the initial coding the data set was read, and relevant information grouped. Third step was to group data into potential themes. Attride-Stirling (2001) proposed that thematic analysis should be conducted in a way that themes are organized into basic themes, organizing themes and global themes. Basic themes are lowest level themes that have little information on their own and need to be read with other basic themes. Organizing themes cluster basic themes into a whole. Their role is to group several basic themes and specify the main assumptions underlying a broader theme. Global themes group organizing themes to form an argument or claim about the phenomenon. They summarize the clusters of lower level themes on macro stage. (Attride-Stirling 2001.) In this study, two global themes were created to apprehend the core of the dataset: effectiveness of knowledge transfer and challenges to knowledge transfer. After thematic network was completed, the themes were reviewed and named accordingly. The thematic networks are shown in appendix 2. Afterwards reporting was started, which reflecting to the research questions and previous literature. Analysis based on the framework of the study and the thematic networks so that concentration on the most significant data was enabled.

## 4.4 Trustworthiness of the study

Evaluation of qualitative study can be considered difficult since traditional measures, validity and reliability, are not suitable for evaluation of a qualitative study due to the lack of metrics and operationalization of phenomenon that is subject to research. Therefore, it is imperative to report transparently the actions taken during the qualitative study. Qualitative studies are practically never replicable due to human behavior being interdependent to the context. Therefore, it is crucial to evaluate the applicability of the results to other contexts and situations. The researcher must critically ponder the results of the study and the causation chains of events to form an understanding how the context affected the results. (Aaltio & Puusa 2011.)

Guba (1981) presented a model for assessing the trustworthiness of qualitative studies. This model consists four different criteria for evaluation:

- credibility
- transferability
- dependability
- confirmability

Credibility refers to the truthfulness of the information and how well the results are in line with the reality. Guba (1981) introduces multiple ways to improve the credibility of the study. Prolonged engagement at a site allows research subjects to adjust to the presence of the researcher thus mitigating distortions caused by the presence of the researcher. Researcher also have opportunity to test their own biases and perceptions. (Guba 1981.) In this study, the engagement at the site can be considered prolonged, as would be typical for a research that use participant observation as a method for observing, since presence of the researcher did not impact on the behavior of the subjects. The fact that multiple subjects forgot that the research was even conducted support this claim. Guba (1981) argue that persistent observation is a required to enhance the credibility, due to the need to identify penetrating qualities and atypical characteristics of the phenomenon, and the researcher should be able to justify the characterization. It can be claimed that the observation in this study was persistent enough to recognize the penetrating qualities and atypical characteristics. This is shown in the field log as the focus shifts from individual qualities to structural issues and then back to individual qualities, which happens due to the change in the perspective of the researcher. Guba (1981) argues that credibility increases if researchers can notify their own questioning of the penetrating qualities and atypical characteristics. Third method that was used to increase credibility is triangulation. Guba (1981) argues that no information should be accepted that cannot be verified from two sources. In this study, two methods of data collection were used and there is ample data gained via interviews from twelve different sources. This allowed the researcher to triangulate the results and verify information from multiple sources.

The second criterion is transferability, which refers to the general applicability of the results and theoretical contribution of the study. This can be difficult since qualitative studies can be rather context dependent. However, transferability can be increased by purposive sampling. Purposive sampling maximizes the range of information and allows collection of rich descriptive data, so that the results can be compared to other contexts and by reporting characteristics of the context in detail so that comparison about the fittingness to other contexts can be made. (Guba 1981.) In this study, the range of exposed information is rather high due to the percentage of the respondents, approximately 70%, interviewed compared to the total amount of personnel that participated into the knowledge transfer process. Due to same reason, and with persistent observation, it can be claimed that the data set is rich enough and in detail enough that it can be compared to other contexts. Similarly, it can be claimed that there is detailed enough description about the characteristics of the context in question so that the comparisons to other cases can be made.

The third criterion is dependability which refers to the consistency and the stability of the data and the results, and how well the procedures of the research are documented, so that the research can be audited. Consistency and stability can be increase by overlapping

methods to triangulate and to complement weaknesses, and by establishing audit trail, so that the data collection and analyzing process can be audited. (Guba 1981.) In this study observation and interviews were used so that they can complement each other. Observation gives tools to verify data gathered from interview and interview point out perspectives that were missed by the observer. The report has detailed information about the data collection and analyzing methods which provide certain audit trail, but since the case organization prohibited the publication of any field logs, the audit trail is slightly lacking.

Final criterion is confirmability which refers to the accuracy of the study or how well the results reflect the truth instead of the researcher's biases. Triangulation mitigates this issue as it provides wider array of perspectives and diminishes personal biases. Researcher should also practice reflexivity and report in detail what assumptions led to the actions taken. (Guba 1981.) In this study the respondents' perspectives are shown with ample quotes in result to ensure that the researcher's biases are not dominant, and the results are not drawn from such biases or from a single perspective. Reflexivity was used in the formation of the interview as discussed before, and the actions are justified basing them on, not only the observation, but on theory and previous research as well.

Ethnographic research and observation method have been accused of being either too objective or subjective. Earlier these studies have been criticized about the tendency to present events realistically and quantify the events detached from the experiencing subject. Modern research instead has been criticized about the subjectivity of the researcher as it is difficult to separate observations from the person and it is always subjective in which aspects the researcher concentrates on, or further how subjective are the interpretations. (Paalumäki & Vähämäki 2020.) It is necessary for the researcher to be able to present previous attitudes and biases and report own actions so that the choices the researcher makes can be justified (Polkinghorne 2005).

Another critical part of the ethnographic research is the potential for ethical issues. This requires balancing between different roles. It is possible that researcher is seen as an ally of a certain group, through which some important issues are brought public. Therefore, the researcher should detach oneself from the community and highlight the academic role. Ethically it is most relevant that the actions of the researcher do not endanger or cause harm to the community, especially those which are in some way subdued or weaker position. (Koskinen et al. 2005, according to Paalumäki & Vähämäki 2020; Holmila 2005, according to Paalumäki & Vähämäki 2020.)

This study excessive objectivity cannot be considered an issue due to the researcher's significant role in the process. Additionally, context is a relevant aspect in the study and the experiencing subjects are crucial for the study. Therefore the study is not detached from its context. The subjectivity is alleviated by gathering data from a rather large pool of sources, as the interviewees represent over half of the people who participated into the knowledge transfer process. The ethical issues in this study are much harder to balance

as there are three different entities or communities that can have different interests: the organization, the Finnish employees (and other employees in countries with high labor costs) and the employees in the offshore location. Especially, since the interests between the employees in Finland and the offshore location can collide, the researcher decided to take neutral stance and report things as they are. On personal level this is made easier by the fact that the researcher currently has no ties to the organization. It also can be argued that such approach provides most accurate results as there is no need consider common good of certain community.

Overall the trustworthiness of the study can be considered rather high. As discussed previously, data was gathered from a wide range of participants, amounting to 70% of personnel who participated into the knowledge transfer process. The observation was conducted over a long period of time and done persistently. This ensures that amount of uncovered data was minimized. Additionally, the large percentage participants interviewed improve the objectivity of the study as it provides wider options for triangulation. The analyzing was conducted as a theory-based analyzing and triangulation was conducted to ensure the accuracy of results and to mitigate subjectivity. Additionally, the two methods of data gathering improved the dependability and the stability of the data. Observation conducted in two locations further improved the stability of the data, as the observations are not fully bounded to a single context and knowledge transfer environment. The results being discussed in conjunction with previous literature and rich data set from multiple sources should ensure that the study is able to reflect the phenomenon truthfully within its context. The researcher's access to observe the phenomenon happening in reality can also be viewed as an enforcing factor of trustworthiness, rather than an issue of subjectivity. In the next chapter findings of the study will be discussed.

# 5 FINDINGS

In this chapter the findings of the study are introduced. At first, the study presents the findings obtained by observation and afterwards the findings from interviews are presented with the support of quotations and observations.

## 5.1 Knowledge transfer during the transition

The transition started in September 2019 and the initial plan was that the recipients come to Finland to be trained in pairs. These pairs were going to be trained for three weeks, and then the pair would go back to the new location, while a new pair would come to Finland. For each recipient a tutor was assigned, but due to the high degree of specialization of the Finnish team, the plan was that each of the source team members could train their responsibilities to two or three different recipients. In order to follow the progress of the recipients, a skill matrix was created, which included each of the tasks performed by the unit and the idea was that the recipients would mark their own skills into the matrix which then would be ratified by the sources.

The training was planned to be task-based and the goal was that each task could be handled by two or three different individuals. The recipient team had requested that they would be trained to have a clear division with responsibilities towards clients, which was not the practice in the Finnish team, but the request was honored by the trainers. Additionally, after the first two pairs of the recipients had been trained in Finland, two of the sources would leave to the new location to overseer the transition. This was supposed to be simultaneous with partial transfer of tasks to the new location. Afterwards, one more source team member would be sent to the new location, who would only stay for two weeks to enhance training.

During the first few days it became apparent that the recipients had a different view on how they wished the training to be conducted. The recipients seemed to be waiting for the sources to come and actively teach, while the sources were under impression that the recipients held basic knowledge about the processes and would seek for help. This division was present throughout the whole transition. It seemed that the source team felt that it is the recipients' responsibility to ask and initiate the knowledge transfer. The recipients on the other hand, tended to rely on their previous knowledge and each other, even when they had gaps in their knowledge. Some of the sources saw that they had no obligation to proactively engage in the knowledge transfer due to the experienced lack of the recipient proactivity.

*So, at first, I thought I would be trained like in school. […] It took me a week to understand that nothing will happen if I will not be active.* (Recipient A)

Lack of communication and planning before the start of the training created some issues, as the plans were sometimes changed spontaneously. For example, there were different views of the final goals of the transition between the recipients and the organization. The recipients wished to modify certain processes while some of the sources wanted to implement processes as they existed previously, which was the original plan of the management. The original goal was not clear for the recipients nor for all the sources either. Additionally, the lack of premade methods and tools for training the recipients meant that sources relied on the activity of the clients and real examples. As the market activity was rather limited, the training was not as efficient as the participants would have hoped, thus resulting in suboptimal use of time. Additionally, unexpected software issues and simultaneous client migrations forced the sources to spend considerable amount of time to do other things than training.

*I think that this quiet period lowered motivation. Probably on both sides. I didn't want to start to create any examples myself but rather teach via real examples.* (Source C)

In the later stages, as the researcher was in the target location, the differences in what the recipients wanted and what the sources wanted came more present. Some of the recipients had difficulties in fitting the role that the sources had assigned, and the recipients were more motivated to learn certain tasks than others. This resulted in a situation, where the recipient team had gaps in their knowledge regarding certain tasks. While almost all the recipients could process certain tasks, an inadequate amount of the recipients possessed required knowledge to process other tasks. It seemed that the sources and the management failed to communicate the needs of the future team to the recipients clearly enough. Therefore, the recipients were not able to prioritize the tasks correctly. Additionally, motivational issues resulted in some personnel transfers between units in the target location.

During the knowledge transfer process, the training was mostly conducted as one-to-one training with few team lessons about the software. One-to-one training was effective, but it focused largely on certain tasks, while some tasks were given less attention. Communication with the management was an issue during the phase when the source team members were in the target location, as it was unclear for the sources what kind of mandate, they had over the recipient team. Also, the recipient team manager was often not available, making it more difficult to react to the issues of the knowledge transfer. Additionally, the manager would be changed few days before the end of the transition.

*Sometimes it was unclear who is actually in charge. […] It was catastrophic that a team as important as this is transitioned, and the new manager of the recipient team joined the transition in the final moments and immediately left for vacation.* (Source D)

During the transition process the recipients efficiently shared knowledge and constructed transactive memory system to support each other, however this led to a situation, where the recipients only reached the sources for help as a last resort option. Partially, this was caused by the previous experience that the recipients had. Previous experience enabled the sources to skip large portions of training on software. However, the recipients were not familiar with all the software. The sources tended to overestimate the knowledge of the recipients about the software at the beginning of the transition, thus leaving critical parts out of the training as these parts were deemed self-evident to an experienced user. Due to previous experience, the recipients had difficulties in adopting new practices and abandoning old habits. In a conversation with representatives of the management, they acknowledged it might have been beneficial to recruit new employees instead of constructing the team out of employees in other markets.

*I feel that quite a few had difficulties to drop old habits. […] When they [the recipients] had gaps in their knowledge, they used their experience instead of asking from us.* (Source D)

However, it is likely that differences in both organizational and national culture impacted the recipients' tendency to rely on each other and their previous knowledge. These differences also created social conflicts between the recipients and the sources. Also, the traditional Finnish way of socializing was seen cold and distant by the recipients, which did not facilitate engaging into the knowledge transfer. On the other hand, there were rather large age difference between the sources and the recipients, which in turn can affect the norm differences. Some of the recipients said that they hoped for some arranged activities with the sources during the training in Finland to improve relations and to get to know the sources more in person.

Overall, the result of the transition was in a relatively good state, despite the difficulties, when the researcher ended the observation and the transition was deemed complete by the organization. The recipient unit was ready to handle day-to-day operations and had received enough knowledge to overcome most common exceptions without a need to rely on other teams. However, most of the sources as well as the researcher thought that the overall quality of service had decreased in terms of response time and customer service quality. The recipients on the other hand were skeptical about their ability to handle major issues or rare cases without heavy reliance on the supportive teams in Finland.

*The recipient side's ability and knowledge to perform customer service, there is a room for improvement. But in my opinion, it was not our job to teach them that as they should have the skills if they have worked on other markets.* (Source F)

## 5.2 Knowledge transfer of tacit knowledge in an organization

Professional experience was identified as tacit knowledge by all the respondents. Answers differentiated on what type of experience can be considered tacit. Both parties highlighted the knowledge about client behavior and knowledge about complex technical systems. However, there were some differences in the perspectives. The recipients only recognized the actions they themselves need to take, while the sources considered other stakeholders as well. Interestingly, the recipients and the sources had different perspectives on what kind of knowledge was most important to transfer. The recipients valued market rules and market differences when comparing to the previous markets they had been working on. The sources instead perceived the process knowledge and service quality to be most important knowledge to transfer. Only one out of six recipients mentioned processes and one mentioned the service quality, while five out of six sources mentioned both. The researcher himself had similar views about the importance of process knowledge that the sources had. The perspective of the recipients about the market differences is slightly contradictory with their actions, due to the tendency of the recipients to be overconfident and trust that their knowledge from previous experiences could cover the gaps in their market knowledge. Thus, it was surprising to see that the recipients in general were not actively asking questions, but rather waited for the sources to approach them.

*I think it's mostly the knowledge about the market, how trades are settling. […] I think how market works that's the most important because there is always be a difference between me and you, how you understand something and how I understand something, it's obvious.* (Recipient B)

*Pretty much client related (knowledge). Something you just know… really hard to write instructions how some client behaves. Also, our software has lots of trivia, which has not been, and probably (we) should not write it down. It just comes by using and experience. […] I think there are, due to the nature of the work, two equally important (aspects). The other one is using the software and recognizing the problems […] The other is the customer service.* (Source B)

The respondents did not have a coherent view about successful knowledge transfer process. Only recurring themes were a need for adequate time to engage into the process

and a need for interaction from both parties. When regarding the methods to transfer knowledge, both parties identified that a combination of human interaction and active use knowledge repositories, such as work instructions, was the most effective method. Both parties mentioned that the best and most effective method is one-to-one training between a trainee and a trainer. Five out of six sources highlighted the importance of real-life examples, which was also pointed out by half of the recipients. Interestingly two recipients brought up that individuals learn in different ways and therefore there is a need for various types of methods, while this issue was not mentioned by the sources.

In the researcher's opinion a successful knowledge transfer process is a well planned and scheduled series of single instances of knowledge transfer. With proper planning and goals these single instances combine to create the whole knowledge transfer process. This becomes successful knowledge transfer process, if the source and the recipient are pursuing the same goal. Recipients' view of compatible ways of teaching and learning should be considered by both parties before the engaging into the knowledge transfer.

*In my opinion face-to-face conversation and teaching (is the best). E-mails, (work instructions) and electronic communication tools are good for supporting (knowledge transfer), but they are not the same thing as face-to-face (teaching).* (Source D)

*Yeah, my best way of learning is when someone shows me what they're doing and explains what and why. And then I can try by myself, but with first someone watching and approving whether what I'm doing is right or wrong, and when I'm doing something wrong, explains why and how it should be. And then that gaining more and more independence, cycle. So, I think, for me, this is what works best.* (Source A)

Knowledge transfer of tacit knowledge was considered more difficult than transfer of codified knowledge by both parties. Three out of six recipients and four out of six sources thought that transfer of tacit knowledge requires more time and human interaction, than transfer of codified knowledge would require. Interestingly two sources questioned the knowledge transfer of tacit knowledge in general and thought it can only build up with time and experience. Two respondents from both teams also highlighted the need for both parties to embed fully into the knowledge transfer process. Additionally, they felt that the process required adequate absorptive capacity from the recipient. Also, it was considered necessary to have examples and repetition in the process, so that the recipient can acquire the tacit knowledge. Partially this is because the source of the knowledge might not consider something to be relevant or does not consider some knowledge to be tacit, as it appears to be self-evident information.

From the researcher's point of view transfer of tacit knowledge was significantly harder to transfer than explicit knowledge. This was not necessarily due to inherent differences between tacit and explicit knowledge, but more due to how and when participants engage into a situation where tacit knowledge is transferred. It seemed that the sources, the researcher included, were trying to train the basics of each task and any effort to transfer tacit knowledge happened only due to initiation by the recipient. Mostly it seemed that this was the case due to not recognizing the needs of the recipient and which parts of the knowledge the recipient considers to be tacit.

*To learn tacit type of knowledge we need more time or time spent, for example, this transfer of knowledge was in my opinion too fast. It will it would be even better if we we're in Finland together as a whole team for at least three, six months. I know it could be difficult to manage it. But yeah, I see that in many cases we know how to solve some case because we hadn't enough time and we hadn't enough examples to learn.* (Source F)

*At least (tacit knowledge differs) with its availability. […] One should know to ask beforehand what you know, and it is extremely difficult. […] It is questionable whether the source wants to tell and give the information, can the source verbalize the knowledge and does the source feel that it is such knowledge what is actually relevant and someone else need it when the source is not available. The knowledge can be self-evident for the source and thus the source doesn't think that (the knowledge) explains vast number of things to someone else. […] You don't even think that you could share that knowledge.* (Source C)

When regarding other features of knowledge, complexity was considered to significantly increase the transfer time and difficulty of the transfer process. Both parties thought that human interaction should be increased when the complexity of the knowledge being transferred increases. Interestingly, both the sources and the recipients, were divided between themselves on how the specificity of knowledge impacts the knowledge transfer. Five respondents thought that specific knowledge is harder to grasp as the recipient need to be more specialized and have a larger knowledge pool about the task, while three respondents thought that knowledge that can be applied on a broad spectrum, takes more time and requires a larger knowledge pool. Two source respondents also pointed that the recipients were more willing to learn knowledge that can be applied to a broad spectrum.

In the researcher's opinion, complex knowledge requires more effort to transfer than non-complex knowledge. Additionally, complex knowledge requires more absorptive capacity from the recipient. Specificity of knowledge however did not seem to impact on the knowledge transfer efficiency. Rather it seemed that in multiple instances the recipients were not motivated to learn specific knowledge and refrained from embedding into

the knowledge transfer process. This also affected the amount of questions the sources seemed to receive, thus hindering the transfer of tacit knowledge related to specific knowledge. In researcher's opinion this was because the recipients did not understand the aim of the knowledge transfer and their role in it but regarded the knowledge transfer as a competition to get grades in the skill matrix. However, all the recipients did not have issues when engaging into a transfer of specific knowledge. Some specific knowledge seemed to be perceived in high value by the recipients while other knowledge was seen rather irrelevant. To the researcher it seemed that some of the recipients were not willing to take ownership of certain tasks. This might be either due to that the recipients did not see such tasks as relevant or due to that the tasks seemed too daunting to learn.

*Knowledge that you can apply on broad spectrum, then of course, they want to learn such knowledge and learn faster and have more motivation to learn, […] so that they can show that they know things. Because they can use it on multiple tasks. Then something specific like (certain task), you need to know a lot about certain things and its not necessarily very common task, but you need to know various specific things so the motivation to learn is not so high.* (Source D)

When comparing learning as a group to learning individually, the respondents were equally favoring individual learning as it is easier to focus on deeper level and for both parties to point out things the trainee should still learn. While two respondents out of both groups regarded group learning as an effective way to gain and share knowledge in a fast pace, they were still skeptical about the effectiveness of the method when compared to individual learning. This is due to personality compatibilities and lack of possibility to focus on points that someone might not understand. The respondents also noted, that in a group learning sessions, individuals with lower confidence might not dare to show that they need more detailed information.

*It is much more effective to teach an individual. […] I think that when you teach an individual, he/she has more time to question. If there is a group of people, then do they dare to question or think that some of the points are no-brainers? There is less questioning (in groups).* (Source F)

*I think the biggest difference is and people's character. Well, I'm the example of person who prefer to learn on my own or on the one by one with the teacher. I don't like this, you know, group learning. Because sometimes I want to just stop and focus more on one thing when the rest of people can go further.* (Recipient F)

Observations support most of the points made by the respondents about how the nature of the knowledge impacts knowledge transfer. Absorptive capacity of an individual is something that the researcher had to interpret from the answers. Respondents arguably felt that absorptive capacity impacted the knowledge transfer significantly. By observation, both actions and conversations, lack of absorptive capacity was a significant hardship for knowledge transfer regarding both explicit and tacit knowledge. This seemed to derive from two different sources: motivational factors towards the project and self-perceived skill level. Especially in the source team there were multiple occasions where such issues were brought in workday conversations. Absorptive capacity impacted both the speed of the transfer and knowledge retention. This was clearly shown in the amount of training needed for a recipient to be able to conduct certain tasks without supervision or oversight.

In the researcher's opinion such issues were present for multiple reasons. For example, the researcher realized that the training methods he used, were not suitable for all the recipients, potentially due to the different learning preferences. However, motivational issues were present in both teams, while their degree varied significantly. On the other hand, again the different views about the goals of the transition hindered the knowledge transfer, as the sources taught one way and some of the recipients performed according to their previous methods.

Respondents pointed out the need for human interaction to transfer tacit knowledge. But through observation it can be claimed that more human interaction is required than just one-to-one training for transfer of tacit knowledge to occur. There was an evident lack of communication between the parties when training, thus resulting in training where mainly explicit knowledge could be transferred. The sources expected the recipients to actively ask additional questions in order to deepen the recipients' knowledge, whereas the recipients waited for the sources to proactively provide insights about the tasks. This discrepancy was pointed out by some of the respondents. The researcher also observed such issue. However, there was not enough effort from both sides to fully engage into a one-to-one training in general. It seemed, that after initial training of a task, the recipients performed the trained tasks on their own without adequate monitoring. After receiving the initial knowledge about tasks, the recipients were reluctant to ask additional information, even in cases they did not know how to proceed, and rather relied on their previous knowledge. In the researcher's opinion, this was caused by the incompatibilities in respective cultures. It is common in Finnish culture to assume that those who need help will ask for it, but the recipients instead expected that help is actively provided to them.

*We had to actively seek for knowledge and ask for the knowledge and ask a very particular questions. […] So, most of the time we were learning by analogy, and we were trying to apply this and just verifying whether it is the same or different. But sometimes*

*we might not have thought of questions, the correct questions to ask because of not knowing the context with the new person doesn't know what they don't know.* (Recipient A)

*After we had taught them the basic knowledge about something, we noticed that they are silent and do not ask more, so we thought that they already know this stuff.* (Source D)

The respondents had mixed feelings about utilization of knowledge repositories as tools for knowledge transfer. In general, they were regarded as a useful supportive tool for knowledge transfer. The sources thought that tool reservoirs, such as work instructions, require human interaction with them to be able to transfer knowledge. The recipients thought that it is important to stockpile knowledge embedded in tool reservoirs into one place which is easily accessible and well indexed. The sources did not consider a method where recipients recreate work instructions an effective method for knowledge transfer but acknowledged that the method deepened knowledge of the recipient creating it. The recipients considered the method a good way to create transactive memory networks within the new team and considered that the method was beneficial for sharing knowledge among the new team. The recipients also considered that reuse of knowledge was easier while using tool reservoirs as support.

*Well, I just mean that for example, what I've noticed this that if somebody created some work instruction, for example, that that person is usually the one who other people rely on when they do that. So, in my mind that means that he kind of helped with the knowledge transfer because that created another like a member who can share the knowledge easily. But it also might mean that it only then the real knowledge is in that place only and nobody else knows how to do it.* (Recipient F)

*For example, SharePoint was pretty good, but in my opinion knowledge transfer starts from the human interaction and working with people. That's the best method. But after something is taught its good to have the info in electronic form. I think that no matter how much we promoted the use of SharePoint and that everything needs to be covered in there we still noticed that the recipients did not use the instructions even if they existed. I think it is a sign that face-to-face is the best method but electronic tools support that well.* (Source D)

Observations support some of the claims. For example, the recipients' transactive memory system was enhanced by the recreation of work instructions, and the recipients created a network to share the knowledge they gained from the process. Less experienced team members often sought support to perform some tasks from those individuals that

had recreated the instructions for that task. The recipients also created their own electronic reservoir for instructions and other tips. More experienced team members tend to often rely on their own skills and memory or the existing instructions rather than their team members. This was somewhat an issue in cases that things worked differently in their previous market than the Finnish one. Work instructions and recreating them also required certain absorptive capacity and ability to retain that knowledge. If an individual lacked those skills, the work instructions were not useful and recreating them was suboptimal. In cases where the recipient recreating the work instruction lacked absorptive capacity, or had biases towards the knowledge of the sources, focus should have been more on how well the task had been understood, instead of the accuracy of the work instruction. Because of the tendency of the recipients to rely on each other, the oversight could have avoided spread of misinformation.

All the respondents thought that members who possess knowledge are an effective tool to transfer knowledge in general. However, most of the respondents pointed out that utilization can be hard due to incompatibilities in teaching and learning methods and skills of the source and recipient. Also, four out of six recipients and five out of six sources considered relations between individuals to have a significant impact on the effectiveness of knowledge transfer by either facilitating transfer of tacit knowledge or by hindering knowledge transfer in general.

*In my opinion trust is in a huge role. In this team [source team] we have been able to share knowledge really well, because it is out bread and butter. […] Human interaction is one of the best methods for knowledge transfer and we should have had more of it. We should have had something like similar projects had that we are working in pairs. Of course, individuals are different, and some pairs manage to share vast amounts of knowledge and some pairs do not get far from the start even though there were multiple months to do so.* (Source C)

*I think it's the best in my opinion. When you when you're explaining something… you are explaining everything, but you can pay attention to someone. Something that this part is the most important thing which you need to remember. And when you have something in written, basically everything is important to us. And it's very hard to stress which part of handbook information… I don't know internally, which is really important which is the relevant but when you are teaching, you can stress which part is the most important thing.* (Recipient B)

Observations support respondents' views about the efficiency and that the utilization of member reservoirs was highly dependent on the human characteristics of both parties.

Relations between individuals are hard to observe, unless they are openly brought to public. It seemed that there was certain level of mistrust between some of the sources and some of the recipients, which might have caused social conflicts. The researcher noticed the sources did not actively pursue to improve relations with the recipients during the time the recipients were in Finland. Some recipients considered this slightly uncomfortable and wished for some extra activities outside of working hours. In the researcher's opinion some extra activities arranged by the organization could have improved relations. During the time the researcher was in the target location, the recipients arranged such activities. For improving relations between teams, it would have been beneficial to have the recipients in Finland as a group instead of pairs.

Most of the respondents did not consider that the tools, such as software, had a lot of embedded knowledge in them which can be learned. Both parties thought that tools for communication alleviated constrains caused by the offshoring concept and different location. All the recipients thought that tools also promoted knowledge sharing among themselves. Interestingly few of the sources who had excessive knowledge about certain software thought that these contain embedded knowledge that can be transferred. However, they questioned the possibility to transfer such knowledge at all without a teacher being present. In the researcher's opinion tools had a significant amount of knowledge embedded into them, which was tacit in a sense that there were no instructions readily available. The fact that some of the software were relatively new for the sources as well, meant that they often were not aware of all the knowledge embedded in the tools. There were other units in the organization which possessed more knowledge about these software and those units could have been utilized more in the training.

*In my opinion kind of transfer that doesn't include human interaction is more challenging. For example, corporation level trainings are pretty well handled when everyone learns by themselves, but in this type of operative job software alone is not enough, but there needs to be both work instructions and a teacher.* (Source B)

*So, we actively used short instructions that were not formal handbooks and they're nowhere on SharePoint, but a person specialized in some areas would write on OneNote certain description of how to go about something. Whether it's a technical issue or client service related, doesn't matter what but for these cases that have been happening and they work.* (Recipient A)

All the recipients and four out of six sources considered transfer of knowledge via tasks and routines an effective method for transfer. Similarly, all the recipients thought that such method mitigated knowledge gaps and was an effective method to generate broader knowledge about the job. The sources were divided on the subject. Half of them

thought that task-based training was a mitigating factor to occurrence of knowledge gaps, while the others considered task-based training to cause such knowledge gaps. Routines were mostly regarded as an effective way to transfer knowledge but implementing routines into a new context was regarded to be difficult or next to impossible. Some recipients thought that it is difficult to adopt new routines which would replace already existing routines from the previous teams. Some of the sources were surprised about the fact that experienced workers fail to adopt routines when they already have an understanding about the basic concepts of the job.

*In my opinion, in this job, that [via task and routines] is the best method to transfer knowledge and learn to do those tasks. And its good to have someone to show and then follow when the trainee learns to do the by themselves. The more you can explain the system and the background functions while teaching the more you can enhance transfer of knowledge.* (Source B)

*To me it was a surprise how ineffective the knowledge transfer via routines was. We need to constantly monitor some tasks and it is not enough that you put into some control that it is done for today. People need to understand that you have to follow certain tasks and reports throughout the day. It has a big effect that you receive less questions from clients when things are working properly. […] To me it is a mystery that these were experienced workers so I thought that they would have understood the complete picture, well some did, but some always needed a friendly reminder.* (Source E)

Observations support the claims made by the respondents as it was evident that task-based training enhanced broader knowledge of recipients in most of the cases. Ineffectiveness of task-based training was a result of the same problems that caused ineffectiveness in other methods as well, which are related to individual characteristics. Degree of compatibilities between teaching and learning methods as well as level of absorptive capacity and retention capability had a significant impact on the knowledge transfer. Overall task-based training seemed as an effective method to transfer knowledge.

In the researcher's opinion task-based training was negatively impacted by the lack of thorough planning beforehand. The sources did not actively plan the trainings beforehand, but such activities were not encouraged either. The researcher noticed that the effectiveness of task-based training he organized himself increased towards the end of the transition. This might be because the methods were refined after each separate iteration. This would support the importance of planning.

When regarding the effectiveness of knowledge reservoir network utilization as a knowledge transfer method, the respondents' answers deviated significantly. While networks that did not include any member components were regarded effective, significant

issues with the utilization of networks such as member-task or member-tool networks were pointed out. The sources believed that the networks could have been utilized better. Four of the sources thought that the recipients were knowledgeable about such networks and they had needed who-knows-what knowledge but did not want to utilize such networks. Similarly, the sources thought that member-member networks between different parts of the organization could not be utilized well due to the reluctance of the recipients to contact other units. The recipients, however, felt that they did not have enough who-knows-what knowledge and did not receive such information when they asked for it, which decreased the ability to utilize networks that included members of the organization. The recipients also felt that implementing existing networks that included members, such as member-task networks, hindered knowledge transfer as they felt that instead of specialization, members of the team should have equal knowledge about all the tasks.

In the researcher's opinion, the utilization of knowledge reservoir networks as knowledge transfer method tended to be effective when no members were included in that network. For example, task-tool networks were usually learnt quickly by the recipients and the recipients were able to start to perform such tasks on their own without issues. However, while networks that included members were observed to be rather effective method to transfer knowledge, there were significant issues in efforts to implement such networks to new context. Most importantly there was an evident discrepancy in communication about the goals of the project, which was revealed in the final online meeting for feedback. In the meeting the transition manager talked about the transition was supposedly a 'drag-and-drop' -transition where all existing processes and routines are transferred to the new location as they existed in the Finnish team. However, the recipients and several sources had not viewed the transition in such way, which explains the issues brought up in the interviews about transferring networks between the teams. The sources' view about the sufficient information about who-knows-what is somewhat debatable as it evidently was not clear for the recipients from where and from who to ask from in different situations, in fact such information was not always clear for the researcher either, even though he had worked with the team for much longer period of time.

*No, it will not work on us with us. Because we all need, well, especially in in this team, we need to have knowledge about everything. […] So, in my opinion, the setup, which is in Finland will not apply, and it was hard to learn, also from our side, not only because you are different, but… You get used to that you get used to this setup and it's okay. It was hard for us to understand how your [setup] works and we had to also leave our setup which we had here into so, it is hard for us to understand how it works and forget how we were how we worked here.* (Recipient B)

*Well we informed them about who can they approach with what and get things done. How they contacted other units in practice, probably that did not realize in an optimal way. […] I'm not really sure how willing they are to create contacts to other parts of the organization. There is a need for encouragement since such contacts do not come as given.* (Source F)

Overall, the nature of knowledge seemed to have an impact on knowledge transfer and the results are mostly in line with the previous literature. Similarly, the mechanisms of knowledge transfer worked as could have expected based on the previous literature. However, in the researcher's opinion, hindering factors related to these aspects were mostly amplifying underlying issues. Mainly the issues were caused by incompatibility of cultures, different views on the goal of the knowledge transfer and inexperience to treat issues that followed these. Therefore, impacting significantly on the effectiveness and level of engagement to the knowledge transfer.

## 5.3 Impact of offshoring to the knowledge transfer

The respondents varied with their answers on how offshoring impacted this knowledge transfer. Two major themes were pointed out: resource allocation and cultural differences. Both parties considered cultural differences to be the main source of impact to the knowledge transfer. Interestingly, sources considered the impact of cultural differences to be significantly larger to the knowledge transfer than the recipients did. Two respondents from both groups felt that there was no impact at all due to the offshoring. Cultural differences were shown to the sources as communication issues and different norms and habits, which resulted in suboptimal knowledge transfer. Majority of the differences were related to the attitude and prioritization towards tasks and clients. The recipients identified similar differences, but they felt that the largest differences were in training methods and habits and expectation differences between the parties.

In the researcher's opinion offshoring had a significant impact to the knowledge transfer. Communication had issues mainly due to the different expectations on who should approach and initiate the knowledge transfer. As discussed before, both sides expected the other to initiate knowledge transfer. While there were clear differences in norms and habits, arguably these differences were not the actual cause for ineffective knowledge transfer. The fact that the recipients primarily sought for different knowledge than what the sources wanted to provide was mainly linked to problems in communication of the goals of the knowledge transfer. Another impacting aspect is the internal power struggle within the receiving team, which resulted in the recipients to seek knowledge that they

can show their importance with. The sources considered the recipients' tendency to receive feedback with a defensive attitude to be an issue, which to the sources was shown as a cultural difference, but in the researcher's opinion this was rather tied to the individual characteristics and the previous experience that the recipients had rather than the cultural differences. The previous experience placed the recipients in a position, in which they needed to accept that their previous knowledge might not be adequate, which to some might be difficult. Additionally, the issues when regarding feedback became apparent few days before the interviews of the sources, which might cause the sources to evaluate such incidents with more weight as the memory of the incident was recent.

*Yes, in my opinion some culture they have is different, some working culture, which in my opinion [the company] should have informed us more, since it came as a surprise for many that how different working in fact is in there. […] I would have liked to know more about that these people are really quiet and really sensitive to critique which is very rare in Nordic countries. […] It made teaching surprisingly difficult.* (Source D)

*So, the same with the trainers, especially that I think this is a little bit different culture of work that you had in Finland. […] The trainers might not know the if all issues were covered either. We didn't experience the situation that someone would be sitting by us and just checking if we know what we're doing. So, it's based on assumptions. […] So then asking more questions I got to the point, more or less about the specifics if there is or there isn't, or why they are so special, but only a little bit and only asked by asking questions. This is probably every one of us had a different method for this training, but we had to work it out. It took me a week to understand that nothing will happen if I will not be active.* (Recipient A)

None of the respondents thought that the cultural differences were present due to the different organizational cultures or sub-cultures, but rather due to the differences in national cultures of the countries. However, while the respondents might not identify these differences to originate from differences in organizational cultures, from some of the answers can be identified that this was the case. Also, observations suggest that the differences in national cultures rather amplified the differences in the organizational cultures. The differences in national cultures caused challenges in communication between the teams. Especially different languages caused some issues as the knowledge transfer was conducted in English, but none of the participants was a native English speaker. As the recipients were sharing knowledge in their native language, it was impossible for the sources to verify that the knowledge shared was accurate. One of the sources thought that the sources should have forced all the communication to happen in English. But since the sources were speaking Finnish between each other, such efforts would have been futile.

There were significant differences in working habits in the target country's organization and how they affected working and prioritization. There were significant differences in response times to the clients and how professional tone the replies to the clients had. It could be possible that differences in national cultures create the differences in working habits. However, the other team which was transitioned simultaneously had no difficulties adopting the norms and habits of their respective source team. In that transition the receiving unit only had new employees. Those source respondents, who participated in training of both teams felt that there were no significant differences in national cultures regarding working.

*I have an image that they [other recipients] act more cautiously. That they ask more and act less on their own. They [our recipients] have pretty nasty role that they are being told to and trained but have to maintain professional pride and professionalism. But one just must be receiving and hearing [person].* (Source F)

*I think it is completely different. I think. Like, for example, in my previous team, we were all used to chaos and seeing things happening and we knew, that we should like we, I think we could divide it, things that we have to care about, and things that we don't really have to care about, at least right now. I think here it was like you care about everything and I don't know which is better. I think it depends on how you can work, and in what kind of environment.* (Recipient D)

In the researcher's opinion offshoring affected significantly on the availability of the resources. Firstly, offshoring meant that it was significantly harder to transfer personnel between the two locations. Therefore, the recipients could not be trained as a unit in Finland. Additionally, there was a need for more sources in the target location, but due to the geographical distance, most of the sources did not want to go to train the recipients in the target location. There was an additional need for more sources in the target location during the middle of the transition. This was due to a need for additional training for some recipients. This required a significant amount of time from those sources that were in the target location, thus allowing less input from the sources in other areas. It can be argued, that if the transition would have been domestic, such additional training would have been rather trivial to arrange.

While the recipients did not consider resource allocation issues to be a result of offshoring, four out of six respondents considered resource allocation to have an impact in the project. Only two of the sources considered that offshoring created difficulties regarding the resource allocation. The recipients felt that it was difficult when they were trained in Finland only two at a time. This resulted in situations where they were supposed to train a task, which some recipients have already learned and are performing in the new

location. This decreasing the examples available, which the recipients in Finland were supposed to use to train such tasks. While the arrangement of training personnel in pairs was not considered to be related to the offshoring, it can be claimed that picking employees from functioning teams to be trained in a different country is a factor that resulted in such arrangement of pair training. The sources did not consider this as an issue but acknowledged that there was a need to have more employees in the target location.

*I think, I don't know, I think that it would be easier if, for example, all of us in here could fly to Finland in the same time and be trained at the same time by the same trainers. Because sometimes even for us, it was hard to communicate. If we had some people here and some people there in Finland, and we had to divide tasks, and we didn't really know what to do, and we basically like here didn't do anything because of that people have to learn in Finland. So, I think, I think that was very stupid and that was a waste of time. I think now that we all are here, I think now it's much easier to learn something new and to like, divide those tasks and know what people are responsible for what?* (Recipient E)

*I feel that if more sources would have had the opportunity to go there [target location] that would have had positive impact. In my opinion, in here there were plenty of those who received the knowledge. In my opinion we made it possible for the recipients to receive the knowledge.* (Source A)

The fact that the recipients did not train as a cohesive unit created some issues, especially in terms of communication. Similarly, because the market activity was low and there was a lack of examples, there was no possibility to train multiple recipients at the same time with the limited examples the sources had. Also, it was significantly harder to keep track on the progress of the recipients, as they were in different locations, thus hindering the usefulness of the skill matrix.

## 5.4 Challenges of knowledge transfer

Motivation was not regarded as a major barrier to the knowledge transfer. Both parties recognized that there were individuals in the recipient team that experienced motivational challenges towards the transition, thus significantly hindering the knowledge transfer process. Only two of the sources noticed any motivational issues within the source team and most of the respondents considered motivation to be exceptionally high in these circumstances where the sources might lose their jobs. However, four of the recipients noticed motivational issues among the source team. All the respondents who mentioned motivational issues thought that the eagerness to engage into the knowledge transfer was limited

by the lack of motivation even though the quality of knowledge transfer was not hindered. One of the sources thought that the general lack of market activity was decreasing motivation as real life examples were scarce. Similarly, it was pointed out that the source team lacked the trust towards the recipient team and thus feared the future of the business once they are not operating it any longer.

*In my opinion there were noticeable motivational barriers in both sides. In here obviously the situation that people are losing their jobs, it doesn't motivate to teach. I don't believe that the quality of teaching was any different, but maybe we were not proactively approach the trainees. On the other hand, the other team had problems to ask for teaching and bring up the need for additional teaching in something.* (Source B)

*I think that there was one person in the team that lacked motivation. And I think there was problems, both with the trainers and the recipient. It was difficult to teach that person because that person didn't want to learn. But it also brought some issues within, like our team, because we noticed that and we also tried to teach that person as well as we could, even if we didn't know the whole process yet but the main issue was that that person did not want to learn.* (Recipient E)

In the researcher's opinion the lack of market activity and motivational issues decreased the engagement of both the sources and the recipients to the knowledge transfer. However, the significant issues concerned only few individuals in both parties. Observations suggest that these motivational issues were not related to the transition. It was a common attitude among the sources that some proactivity to engage in the knowledge transfer is required from the recipients. Some of the sources refused to initiate knowledge transfer themselves. Motivation in general decreased the effectiveness of knowledge transfer and resulted in suboptimal use of time but did not pose a major barrier to knowledge transfer.

In the researcher's opinion previous experience of the recipients, however, became a significant barrier to the knowledge transfer. In the researcher's opinion the recipients had significant issues to abandon old methods. The recipients tended to modify the methods and the processes based on the experiences from the previous markets they had worked on, even in situations where the same basics could not be applied. Additionally, there was some reluctance to adopt certain habits, especially those that were customer service related. The sources became frustrated about the reluctance to adopt the habits they tried to implement. Reoccurring mistakes by the recipients, which the sources tried to correct earlier, decreased the trust of the sources towards the recipients. Similarly, the recipients felt that the sources do not trust them with the tasks. After the recipients received critical feedback about these mistakes, the relations between some of the recipients

and some of the sources became more distant. This decreased the engagement into the knowledge transfer process.

Previous experience of the recipients was also regarded as a major barrier for knowledge transfer by the sources. Four out of six sources thought it was mainly negative. The two other sources thought that previous experience enhanced the speed of knowledge transfer but had a negative impact on the quality of knowledge transfer. The sources felt that the previous experience hindered transfer of routines and habits, thus leading to a suboptimal use of time when trying to implement certain routines and division of labor into the receiving team. Two of the recipients also noticed such issue and regarded previous experience as a barrier. Other recipients did not notice the barrier but regarded existing routines and working habits as an issue and did not want to implement existing division of labor in their team. Three recipients also thought that previous knowledge about the work was vital for the knowledge transfer as they thought it was crucial to have information about the software being used. In the researcher's opinion this was not the case. Some of the software were still unfamiliar for the recipients. While the main software was familiar for some, the differences between the markets made large portion of the previous experience invalid.

*Previous experience showed when the recipients had learned something and started to compare to the old ways of working. When they had confidence to act on their own, they used the earlier experience to cover the fact that they do not know something and used previous market knowledge on how things have been done so they do not need to ask when something goes wrong. I feel like many had problems on giving up old habits and compared with the old methods. […] They gained the basic information from us and when they encountered gaps in their knowledge, they used knowledge from the previous market instead of asking us to help.* (Source D)

*I think that our experience here could be a barrier here because if you have completely new people that don't know, a way of working at all, then it's easier to pass some habits or something. But I think that as we already know, how to work with a different market, but still it is similar, then I think we didn't want to learn your ways of working that much. We wanted our own. I think that could be the problem here.* (Recipient E)

The recipients thought that insufficient structuring and poor planning were major barriers to the knowledge transfer. They felt that the communication from the organization was not clear, the goals of the knowledge transfer were vague or not known at all. The recipients mentioned that the information they received before they were sent to Finland to train was inadequate. They also felt that it would have been more beneficial to send all

the recipients simultaneously instead in pairs. The insufficient communication and information about the training resulted in the recipients not using their time in Finland optimally. The recipients thought that the training was not well scheduled, and it was not clear for the sources with who and how they should transfer the knowledge. The recipients felt that the decision to go to Finland in pairs was ineffective and those who came first benefitted more than those who came later. This was due to that some of the sources from who the recipients felt they needed information from were already in the target location.

Additionally, some of the tasks had been transferred as well, which some of the recipients felt that was unfair, as they wanted to gain knowledge in all the tasks. The sources, however, were divided on whether the goals for the knowledge transfer were clear or not. Four of the sources thought that the goals were clear for the source team, but they could not tell if the goals were clear for the recipients. The sources thought that there should have been more checkpoints about the progress and more monitoring of the knowledge transfer. Additionally, the measurement used for knowledge transfer, which was a task-based skill matrix, was not effective measuring tool and drove recipients to focus on wrong things.

Observations support the claims that there was a lack of communication between the recipients and the organization. After the final feedback meeting there was an open discussion within the recipient team that they did not know that processes and certain division of labor was supposed to be retained after transition. While the researcher was in the target location the recipients also complained about the lack of information, they received prior the transition and the decision that they were sent to Finland in pairs. Those who came to Finland earlier or did not come at all seemed to have more positive overall feeling about the transition than those who came later. Those sources who had prior experience about previous transition were more satisfied about the information and planning of the knowledge transfer than those who did not. For the researcher it seemed that there was a need for the sources to plan the teaching methods they should use in advance and schedule the training more thoroughly.

To the researcher the fact that it was not completely clear for either side that the transition was supposed to be conducted without the modification of the processes, and that the recipients were not informed about the goals of the transition and their roles, shows that communication between the different parts of the organization was not adequate. This resulted in multiple issues and amplified the issues that were present in the transition. In the researcher's opinion the skill-matrix used to measure the progress was flawed in a way that the recipients had access to it and could see the progress of other recipients as well. The number of relatively simple technical tasks made it look like those who were trained to do these tasks were given more responsibility due to the recipients' lack of understanding of the prioritization and the relative importance of different tasks.

*Well, the biggest barrier I noticed was the bad planning, how to transfer knowledge from Finland to here. […] It should have been more structured. […] I think specific fully detailed schedule for each person. […] Well, I hadn't the specific plan on what should I learn. It created that chaos and made this transfer longer because if I knew I have to do on the beginning I wouldn't waste two weeks, because I think something started happening after the third week being in Helsinki. So yeah there was one main goal, transfer the knowledge, but there were no specific instructions how to do it. Who should I contact at the start. And which processes I should learn, or which clients will be mine. […] It's not only me. I know that many of us heard something different in here, something different in Helsinki in the change multiple times.* (Recipient F)

*Goals were clear from the beginning. Production has to be transferred as it is and with the same quality as it was. At least for the source team the goals were clear. There have been clear framework and transitions have been done before, so there is nothing new.* (Source C)

*The goals were not very clear. I noticed that someone somewhere have had conversations and decided that this and this thing has to be transferred. I don't know if our managers had knowledge about what and how knowledge exactly should be transferred. The period was quite short. […] It would have been much easier if we would have known how things are planned so we could have prioritized things differently.* (Source F)

Timeframe of the transition was generally considered too short. All the sources thought that timeframe was challenging and five out of six thought that it was too short, while one thought that better results could have been obtained with longer transition but questioned if it would have been cost effective to continue. The sources thought that the transition should have lasted at least six months. Another issue with the timeframe was that the transition happened during the fall, which typically means less active market than during springtime. Sources thought that timing the transition from January to June would have been better, as it would include practice period from January to March, peak season from April to May and then full integration in the June. Timeframe set barriers for the participants to fully engage into the knowledge transfer, and sources thought there was no time to completely cover more difficult tasks and cases. The sources also thought that transfer of tacit knowledge takes longer period that they had available, and the lack of market activity further hindered progress, as there were times with no examples at all.

The recipients were divided on the timeframe as half of the recipients thought that it was too short of a period to effectively transfer tacit knowledge. Others however, thought that the period was long enough but the time was not used effectively. They thought that, with the previous experience there was no need for longer period, but if the recipients

would have had no previous experience, there would be more need for training the basics. One of the recipients pointed out that the timeframe did not allow the modification of the processes. He/she considered that it was a mistake that the recipients tried it on their own, but they should have done so only after the transition. Recipients also felt that there was no time to achieve similar level of specialization that there was in the Finnish team, which they thought to cause problems in future.

In the researcher's point of view the timeframe was too short for the knowledge transfer. As discussed before, in this timeframe basic knowledge was successfully transferred and the recipients were ready to perform daily operations. However, the transfer of tacit knowledge was not as successful as intended. The recipients had gaps in their knowledge at the end of the transition, which the recipients identified themselves as well. On the other hand, difficulties in other areas decreased the effectiveness of knowledge transfer, thus it is difficult to evaluate whether the timeframe could have been sufficient in other circumstances. However, it is natural to assume that some difficulties will be encountered in a transition project, therefore it necessary to have longer than minimum available period for knowledge transfer.

In this case the timeframe caused severe issues. There was not enough time to train individuals to do all the tasks properly. Also, transfer of tacit knowledge was difficult as the timeframe only allowed brief embedding into the processes. This situation confronted the desires of the recipients who wanted to learn all the tasks while in this timeframe a clear division of labor and specialization was needed to create a functioning team and keep the production running after the production had been fully transferred. Overall the challenges caused by the challenging timeframe resulted in decreased motivation for both sides, though due to different reasons. This shifted the aim of the knowledge transfers for the source team to ensure that the recipients are able to handle daily operations and successful transfer of tacit knowledge was regarded more as a bonus.

*I think we don't know how to handle maybe some more difficult cases because there weren't any because there wasn't enough time and also, maybe some problems with explaining things properly because you have like, what, three months to pass the knowledge.* (Recipient E)

*I think the timeframe should be longer. The previous transition was almost a year long, we planned it in fall and the recipients were here for six months. Therefore, I think we are not in such a good situation.* (Source B)

*Short timeframe caused that when we started, we could not point out the goals in good detail. We should have had more people to go to the target country or maybe the recipients should have been here more. Time ran out when we noticed that someone clearly doesn't learn. We should have had more time to take such individual to basic training and start from the beginning. There was no time for that.* (Source D)

In the researcher's opinion, individual-level challenges were related to relations between individuals and lack of competency of the individuals. Observations suggest that most of the barriers caused by poor relations between sources and recipients were caused by clear misunderstanding of aims and goals of the knowledge transfer. This is due to that these barriers started to become more significant towards the end of the transition, as there was a discrepancy between what the recipients wanted and thought they need, and what the sources provided and thought the recipients need. Lack of absorptive capacity and lack of the ability to take constructive criticism cannot be considered widespread barriers, while they did create some challenges. However, for example, the researcher should have planned the training he conducted himself beforehand and after reviewing personal mistakes adequate competency was acquired only after the researcher returned to Finland. Therefore, it is hard to argue that the participants were ready for the transition. There was certain dislike between members of the recipient team shown, which could affect the knowledge sharing among the team, but since the recipients shared knowledge primary in their native language, situations where knowledge was shared were hard to observe.

The views on individual-level challenges that respondents noted were divided largely. Both teams identified challenges were not widespread among the teams but rather isolated cases. The challenges regarded lack of absorptive capacity and personal relations. Sources felt that the lack of absorptive capacity hindered the learning significantly in few occasions. Sources also felt that relations were hampered by the attitude of the recipients and lack of ability to receive constructive criticism. Sources felt that the poor relations decreased trust toward the sources and thus certain recipients refrained from asking help from certain sources, which in turn led to excessive workload for some sources. Interestingly, while the recipients regarded relations to be significant barrier for knowledge transfer between the sources and the recipients, they also pointed out that relations could have been a barrier for knowledge sharing within the recipient team.

*I think that, if the trainer feel comfortable with the person who [he/she] was sitting with, they would provide more details, more examples and the trainer has more patience to answer for more questions. […] Knowledge was shared a lot. Because of course not all details are involved in the handbooks or instructions or in OneNote. Sometimes for example, teaching somebody you would show them and go through examples. And for the*

*person who is not your favorite or don't want to be the part of the team, this information will be, you know, short, quick.* (Recipient D)

*Lack of absorptive capacity stopped the whole training session, and you have to obviously report that to the manager, and we have to think what to do next and shall we continue trying this further. It slowed the process and caused discomfort between the sources and the recipients. There was clearly disappointment in both parties. Underperformance is not so nice to see.* (Source C)

The respondents were largely divided when regarding the team level challenges. The recipients considered the existing division of labor and the high specialization of the Finnish team to be a significant challenge to the knowledge transfer. They thought that due to the specialization it was hard to get training in certain tasks that they felt were necessary skills for each of the members. The existing division of labor created a challenge as the sources trained the recipients to process different things that they did not feel comfortable with. The recipients felt that the workload was uneven. While the recipients acknowledged the differences in team norms, they did not consider the differences to be a barrier to knowledge transfer. The sources however, considered the differences in norms to be a significant barrier, partially due to their aim to implement the processes as they existed and a similar division of labor as there was in the Finnish team. Overall reluctance of the recipients to adopt methods of working were considered a major barrier. Another difference in norms that the sources considered difficult to treat with was the difference in attitudes toward customer service. All the sources considered the recipients' style of answering to client inquiries to be unprofessional or casual and uninformative.

*They wanted to change so many methods on team level, which are methods we agreed on as a team. This created conflicts that that they as a team thought that this is weird how we do things, but in this type of situation when we face a tight schedule for the project, you should not focus on criticizing how things are done previously..* (Source D)

*Well you had different setups and we got used to work on different setup. So, it is a kind of barrier because we needed to fill the setup which you are expecting from us for now. And for me personally, it's really hard to fit into that because I don't want to be a specialist on a part of a process. I want to know the whole production and the bigger picture.* (Recipient B)

The researcher's opinion is mostly in line with the respondents' views. High specialization of the sources created certain bottlenecks in the training, but this is also true due

to the lack of diversification in the training of the recipients. There was too much emphasis on the technical tasks and those seemed to be the ones that interested the recipients rather than market knowledge and client behavior. The recipients actively rotated tasks after the sources tried to implement a division of labor into the recipient team. This negatively affected the efforts to specialize the recipients, as they did not spend enough time with the tasks assigned to them. While there were efforts to slow down the rotation, but retrospectively this was not enough, which is partially the researcher's fault.

The recipients' reluctance to adopt existing methods created barriers in multiple cases and certain processes needed to repeatedly train due to this reluctance. Partially this issue was a result of planning of the transition. One of the recipients revealed that he/she was not interested at all about the role that he/she was supposed to fill and thought that other persons in the team would fit in that role better. The roles were determined by the source team members to reflect the availability of resources, but the recipients were not asked which role they would like to fill.

Different norms in of the recipients also created some social conflicts. For example, the recipients' tendency to listen music and take simultaneous breaks were considered bad habits. Such habits hampered the communication during work. Some members of the source team considered such habits rude and unprofessional. Potentially such norm differences further hindered relations between the sources and the recipients. Additionally, all the respondents thought that any differences in norms are a result of different cultures in Finland and in the target country rather than the differences in organizational cultures in those locations. However, as mentioned, there were no signs of such major differences in working methods in the other simultaneous transition, which included only new employees on the receiving side of that knowledge transfer. On the other hand, those employees who were part of the earlier transitions mentioned that certain habits and norms that were transferred successfully have now been replaced or abandoned in the other market teams in the target location. Therefore, it is questionable what is the cause of such deviation.

# 6 CONCLUSIONS

## 6.1 Theoretical contribution

### *6.1.1 Knowledge transfer within an organization*

Knowledge transfer when offshoring knowledge-intensive business services, is recognized to be of great importance to success of the offshore project and to maintain the performance (Chen et al. 2013; Massini & Miozzo 2012). However, as discussed before executing knowledge transfer efficiently requires careful and accurate approach, as there are multiple factors influencing the success (see e.g. Argote & Ingram 2000; Easterby-Smith et al. 2008; Cuervo-Cazurra & Rui 2017). In this study the aim was to identify methods to enhance knowledge transfer and mitigate challenges of knowledge transfer during intra-organizational offshoring. This was done via three sub-questions: knowledge transfer in organizations, impact of offshoring to knowledge transfer and identifying the challenges of knowledge transfer.

Knowledge resides in reservoirs within an organization. Knowledge transfer of tacit knowledge is most efficient when the methods for knowledge transfer combine human interaction and knowledge repositories (tools) such as work instructions. (see e.g. Argote & Ingram 2000; Balint et al. 2016). In this context human interaction is the most effective way and addition of knowledge repositories was increasing effectiveness of knowledge transfer. Interestingly, knowledge transfer of explicit knowledge, at least in this context, seems to require human interaction in some degree as well. When processes are complex the instructions tend to be more subjective leaving details up for interpretation and room for error.

Absorptive capacity and learning habits of individuals also affect on how well individuals can transform written information into knowledge and skill confirming what is widely considered to be reality in previous literature (see e.g. Easterby-Smith et al. 2008). Similarly, according to previous literature (see e.g. Easterby-Smith et al. 2008; Simonin 1999) tacitness, complexity and non-specificity are hindering factors to the effectiveness of knowledge transfer. In this context, tacitness and complexity were hindering factors, however it should be pointed out, that, like in previous literature, there was no clear evidence in which way specificity impacts knowledge transfer.

In this context, human interaction can be highlighted as the most important factor of knowledge transfer overall. While utilization of knowledge reservoir networks that include members was found difficult, human interaction in knowledge transfer process is vital, and considering these results it is questionable if knowledge transfer of complex

process information can be transferred at all without human interaction. At very least, human interaction is needed to ensure the accuracy of the transferred knowledge. As Balint et al. (2016) suggest, these results support that other knowledge reservoirs should be used in conjunction with human interaction in knowledge transfer and support members in it.

As human interaction has a significant impact on knowledge transfer, the importance of relations between sources and recipients should be highlighted. In this context, the relations had a significant impact on the knowledge transfer as they largely determined the engagement into the knowledge transfer, but also with who the recipients chose to engage into the knowledge transfer. Which in turn resulted in an unbalanced utilization of the member resources. The importance of relations is widely considered to be a significant factor of knowledge transfer in previous literature as well (Hansen 1999; Minbaeva 2007).

### *6.1.2 Knowledge transfer in offshoring context*

Cultural differences in the context of intraorganizational offshoring of KIBS evidently have a significant impact on the knowledge transfer but quantifying the impact of differences in national cultures is tricky due to the evident differences in organizational cultures. Different national cultures do set certain obstacles to efficient knowledge transfer. These difference complicate communication and engagement into effective knowledge transfer. However, in this context the compatibility between organizational sub-cultures should be considered with similar importance. Incompatibilities between the sub-cultures seem to result in social conflicts which are shown to hinder the effectiveness of knowledge transfer. Therefore, the results are in line with the previous literature that offshoring sets up certain challenges and negatively impacts on knowledge transfer (see e.g. Chua & Pan 2008; Cuervo-Cazurra & Rui 2017).

Resources and their allocation also have an impact to knowledge transfer, which, in offshoring context especially, can cause challenges for efficient knowledge transfer. Time is a relevant factor for success and organizations should consider allocating enough time to complete offshoring transitions. (Tsai 2001; Chua & Pan 2006.) Additionally, previous literature promotes the utilization of members of the organization to facilitate knowledge transfer (Argote & Ingram 2000; Gruenfeld et al. 2000). The results indicate that knowledge transfer of tacit knowledge would require longer period than the given four months, which is in line with the previous literature (Chua & Pan 2006; 2008). Results also indicate that it is paramount to utilize the resources correctly, since the bottleneck for member utilization was not necessary only the amount of resources, but how they

were used. In this case, for example would have been more beneficial to send the recipients as one group to Finland. This has few benefits. Firstly, it allows the future team to start creating their transactional memory system about the obtained knowledge, thus enhancing specialization. Secondly organization and planning of the training as all the human resources are in the same location. It can also be assumed that possible unknown incompatibilities in team norms and cultures are easier to notice as both teams work as teams.

### *6.1.3 Challenges of knowledge transfer*

Motivation of the sources in this context does not seem to be a significant issue and does not create a major barrier to knowledge transfer, however the motivation can decrease slightly, lessening the engagement to knowledge transfer. In this context, decrease in motivation did set a challenge for knowledge transfer as it lowered the engagement of the sources, thus lengthening the time required for knowledge transfer. These results are in line with previous literature (Chua & Pan 2008).

Previous experience of the recipients, however, was a significant barrier to knowledge transfer. In previous literature, previous experience of the recipients is acknowledged to be a source of barriers to knowledge transfer as it might lessen the willingness of the recipients to value and adopt the knowledge the sources provide (see e.g. Argote & Ingram 2000; Minbaeva 2007). However, Chua and Pan (2008) argue that previous technical knowledge mitigates barriers of knowledge transfer. Balint et al. (2016) argue that transitions should be conducted in a way that the processes and methods are kept intact during the transition and the modification can be done after the desired effectiveness and quality of production is reached. Previous experience seems to be a significant barrier for reaching these goals, as recipients have issues to abandon old habits and methods.

The study shows a couple of reasons why such barriers occur. Firstly, as experienced workers have confidence in their own ability and knowledge, they are keen to utilize existing knowledge and do not realize the gaps in their knowledge. This might also be unconscious as new and old information get mixed. Secondly, it seems to be hard for employees who take pride in their work to admit that their own professionalism is either nullified in the new context or is not as high as they thought it would be. The resulting reluctance to adopt new methods and habits, hinders sources' ability to pass the knowledge and creates frustration which hinders overall process. Previous experience seems to also gate sources from engaging in certain knowledge transfer situations, as they can believe that the recipients are aware of such information, thus decreasing overall communication and knowledge transfer.

While previous literature (Gupta & Govindarajan 2000; Easterby-Smith et al. 2008) highlights the importance of the perceived value of the knowledge in the eyes of the recipient, there are rather limited knowledge about how to increase the perceived value of knowledge. In this context, the perceived value of knowledge was a significant source of barriers, as the recipients valued knowledge differently to the sources. Communication between the recipients and the organization was not clear enough before the training, thus the recipients had difficulties on adopting their new roles. This influenced the recipients' willingness of adopting new habits, as they did not have a clear understanding on the prioritization order of processes in the new context. On the other hand, certain power struggle between the members of the recipient team created competition inside the team and drove the recipients to focus their learning on irrelevant things. This was somewhat amplified by the measuring system, skill matrix, where gradings of skill were given on each task regardless of the task's importance.

Another aspect that is not discussed in previous literature is the importance of planning and execution of the training. Especially the recipients viewed that there were significant shortcomings in the planning and execution of the training in Finland, while some of the sources also felt that the training was rather improvised and chaotic. This resulted in time wasting, further distancing of the relations between the parties and loss of motivation among the recipients.

Challenges that were found in this study are mostly in line with the previous literature, however some deviations were found. This might be due to the context of the study, as intraorganizational knowledge transfer is quite unique in previous literature as a research setting. However, it can be argued that these results reflect the viewpoint of the employees more accurately than most of the previous literature.

Overall, the framework for knowledge transfer in offshoring and KIBS contexts, proposed in chapter 3, seems to explain well the sources of challenges that the personnel transferring knowledge face during the process. However, it should be noted that the contexts of offshoring and KIBS do not act as separate layers and their effects are not static, but rather all the contexts are intertwined, and they have different impact on knowledge transfer depending on other variables. For example, offshoring probably created different impact to knowledge transfer in this context than it would in case in which heavy industry process would have been transferred from Finland to Eastern Europe. In the next chapter, the main research question will be answered with potential managerial implications.

## 6.2 Enhancing knowledge transfer and mitigating challenges

The challenges to knowledge transfer are numerous and arise from various factors. Therefore, a careful approach to planning and executing knowledge transfer is crucial for the

success. However, there are multiple ways to enhance the knowledge transfer and mitigate the challenges and their impact to the process. Balint et al. (2016) argue that during a transition, processes should be kept intact, and any modifications should occur only after full integration to maximize the effectiveness of knowledge transfer. Results of the study show that this should be the aim of offshoring projects, thus requiring actions from the organization to ensure this outcome. It is advisable to communicate clearly with the recipients before the start of their training so that the recipients understand their role and the future division of labor, thus guiding their learning to master the processes required from each individual. Additionally, to achieve this goal it is advisable to measure the progress of knowledge transfer in a way that the recipients cannot see each other progress to limit chances of internal competition. This goal should be communicated to the source team clearly as well, so the source team is able to plan accordingly and structure the training, which should be easier when the processes or division of labor do not need to be modified.

However, as the previous experience can be considered a significant barrier to knowledge transfer, and arguably a barrier to achieve the goal that processes are not modified during the offshoring, it is advisable to recruit only employees outside the organization. Therefore, the recipients would not have strong biases towards the knowledge of the sources and would have less difficulties to adopt the norms and methods of the source team. It can also be argued that new employees are not impacted by biases created by organizational culture or sub-cultures. Therefore, depending on how well the organizational culture facilitates or hinders knowledge transfer, the creating the recipient team out of new or old employees is justified.

On the other hand, it is advisable to train the recipients as a unit, even if the training is mainly one-to-one training as suggested. As the recipients train in the same location at the same time, they are able to construct their transactive memory system from the beginning, thus enhancing knowledge sharing among the team. Moreland and Myaskovsky (2000) argue, that the transactive memory system is important factor in unit's performance. This should also improve the recipients' ability to modify processes to match the new context once the transition is completed.

As can be seen from the results different cultures and motivation impact significantly on the knowledge transfer and in this context, especially to the degree of engagement into knowledge transfer. Von Briel et al. (2019) argue that improvement in social relations between the sources and the receivers positively impact on the engagement and thus to the knowledge transfer. Therefore, it is recommended to arrange social situation, where the participants could improve social ties between each other. Alternatively, it is advisable to create other incentives for the sources to engage fully and enhance the transfer of tacit knowledge, to which, the limited engagement affects the most. Additionally, encouraging

the recipients to actively try to engage into knowledge transfer with the sources should bare similar benefits.

Lastly, the organization should consider thoroughly the timeframe of the transition. As discussed, both the previous literature and the results indicate that in order to achieve transfer of tacit knowledge, the transition should last at least six months, if not longer. Therefore, it is safe to assume that knowledge loss will occur increasingly as the timeframe is shortened. The organization must be able to decide to what degree knowledge loss is acceptable, as well as the cost of preventing knowledge loss and balance these aspects. Naturally, knowledge loss cannot be completely avoided.

## 6.3 Managerial implications

It has been established in the previous literature, that a successful knowledge transfer provides many advantages and can be considered a vital part of any offshoring project. Especially in KIBS context, knowledge is in a key role determining the performance of a unit, therefore emphasizing the importance of knowledge transfer. Knowledge transfer has a significant impact on the success rate and outcome of offshoring projects, and as knowledge often is a source of competitive advantage it is in the interest of the offshoring organization to maximize the effectiveness of knowledge transfer and minimize the eventual knowledge loss. While enabling knowledge transfer might seem trivial, an organization conducting offshoring needs to fully understand the complexity of the topic and the factors that impact the knowledge transfer in order to succeed.

The first managerial contribution is to *understand the importance of communication between the organization and the participants*. Individuals have different needs and motives for their actions. The organization must be able to clarify both transferring parties about the goals of the offshoring project and the role of the individuals should fill. Especially, it is important to clarify how processes should be transferred and will modification take place during or after the knowledge transfer, if modification should happen at all. Clear understanding of the goals of the organization will help the participants in knowledge transfer and mitigates the barriers caused by potential biases of the recipients towards the knowledge of the sources.

Another aspect of knowledge transfer emphasized in this study is the *importance of planning and involvement of the sources to the planning phase*. Planning and structure provide multiple benefits to the knowledge transfer and facilitate it. When the knowledge transfer is well scheduled, and the execution is planned the sources are more able to engage into the knowledge transfer process thus reducing the time wasted. Additionally,

measuring the progress of the knowledge transfer is easier when the schedule and structure are in place, thus also allowing the sources to intervene earlier if problems occur or progress is not as fast as intended.

*Informing the participants about the cultural differences and encouraging them to engage into the knowledge transfer.* Cultural differences have an impact on the manner how individuals communicate and thus on the engagement into the knowledge transfer. Different expectations and cultural norms can prohibit engagement and block individuals from initiating knowledge transfer. In context of Finland to Eastern Europe -offshoring, the organization should encourage both parties to approach each other when this is not typical for the national cultures. The organization should also encourage the recipients to actively ask the sources for further information, while also encouraging the sources to actively share more than just the basic information and not consider any knowledge to be self-evident. Transfer of tacit knowledge is difficult and takes more time and effort to transfer than explicit knowledge. The sources often view some piece of information as self-evident and the recipients might not know what to ask. Therefore, it is arguably beneficial for the knowledge transfer of tacit knowledge to encourage the participants to ponder if there is more knowledge to be obtained, while they are transferring knowledge.

*Understanding how the experience of the recipients' impact knowledge transfer*. Experience allows more rapid pace of knowledge transfer, especially transfer of technical knowledge, as the recipients are familiar with how processes should function, and they do not have to learn every detail. However, experience might cause the recipients to have biases towards the knowledge of the sources and experienced recipients have created habits and norms which can be hard to abandon in case they are not applicable in the new context. By understanding how the experience impacts on the knowledge transfer, the organization is able to take precautions to avoid such issues and can emphasize the importance of relearning.

## 6.4 Limitations and further research

The study, while providing interesting results, has its limitations. Firstly, this study is by largely limited to its context. While knowledge transfer follows the same mechanisms in general, the context of offshoring is an aspect that heavily influences the results of the study. Similarly, the results are heavily affected by the respective cultures and how they interact with each other. Therefore, the results should not be generalized to cultures that differ significantly from either Northern European or Eastern European cultures. While these areas include multiple different cultures, they still have much more similarities between themselves, than for example if the offshoring would have been from Finland to

South East Asia. As the impact of different national cultures are evident, but hard to quantify, the results of the study should not be applied without caution to other contexts.

Additionally, the context of intra-organizational offshoring sets certain limitations, as offshoring services to a foreign subsidiary or to a third party creates additional organizational boundary for the knowledge transfer and thus additional challenges. The context of knowledge-intensive business services, however, should not be as limiting. The level of tacitness in knowledge being transferred due to the KIBS context increases, but fundamentally it does not differ significantly from other knowledge transfer processes.

On the other hand, the choice of the researcher to select employees as the approach for the study, can be considered a limitation. As a hindsight, the study would have needed interviews from the management as well to provide more detailed results. However, this can also be considered a strength as the rich data set focusing on the employees provides broad picture on the actual challenges that are present in knowledge transfer process and thus provides valuable information to solve such issues.

For future research there are multiple approaches that could further deepen the understanding on the knowledge transfer phenomenon. While the subject is quite thoroughly researched, there are still gaps in the research. The same study could be conducted with in another context where the respective cultures are different. This would potentially allow wider generalization of the results of this study or could possibly confirm that the results are context or culture dependent. On the other hand, a similar setting in a situation where the recipient team would be formed out of new employees could confirm the impact of organizational culture or provide more support for the difficulties to adopt new habits for experienced individuals. Quantitative research about the cultural differences and their impact on knowledge transfer is an intriguing option as well, and it would provide valuable information about the cultural differences. However, feasibility of such research is questionable.

# 7 SUMMARY

This study has analyzed knowledge transfer in offshoring context, where the production of a KIBS unit of a Nordic MNC was transferred from Finland to Eastern Europe. In previous literature knowledge transfer is considered a complex process. Knowledge transfer is affected by various factors that determine the effectiveness and the outcome of the knowledge transfer. These factors, on the other hand, are impacted by the setting and the context. Therefore, knowledge transfer requires correct actions to be taken for the process to be effective and successful.

Characteristics of the knowledge being transferred have significant impact on the knowledge transfer process. Tacit knowledge especially tends to negatively impact on the effectiveness of the knowledge transfer. Therefore, knowledge transfer in KIBS context is generally difficult, as tacit knowledge is in a vital role for KIBS companies. Characteristics of the participants of the knowledge transfer similarly have an impact to the knowledge transfer. Absorptive capacity of the participant, for example, determines largely how effectively knowledge can be transferred. On the other hand, the mechanisms of knowledge transfer determine the knowledge flows in an organization and affect on the way knowledge will transfer. By affecting the mechanisms, an organization can guide the knowledge transfer process to fit the organization's needs.

Knowledge transfer is a crucial part of success of offshoring projects. Offshoring on the other hand, sets a unique setting for knowledge transfer as offshoring means that knowledge will be transferred across cultural, national and organizational boundaries. These boundaries create additional challenges for knowledge transfer as they affect the communication between the sources of the knowledge and the recipients. Similarly, different cultures, both organizational and national cultures, impact on the norms of the participants, thus either facilitating or hindering knowledge transfer. Additionally, offshoring sets constrains on resources used for the knowledge transfer, which in turn creates a challenge for knowledge transfer and often forces the organization to prioritize either the outcome or the pace of the knowledge transfer.

From previous literature, a framework was constructed that visualizes the knowledge transfer as a process. In an organization, knowledge resides in three knowledge reservoirs: in members, in tools or in tasks and routines. From these reservoirs, knowledge is transferred through three levels, individual-, team- and organizational-levels, or through junctions of these levels. The factors that impact knowledge transfer, impact this transfer in two stages. Firstly, from which reservoir knowledge is transferred from. And secondly, through which point in the organization the knowledge is transferred. This process and its factors act in the context of offshoring and in context of KIBS, both of which impact on the process itself and how the factors impact the process.

The research was conducted as an ethnographic research by using participant observation method. The method was chosen due to the active role that the researcher had in the offshoring project. After constructing the theoretical framework for the study, the empirical research was conducted by gathering data through observation during the transition of the KIBS unit as well as interviewing twelve participants. The observation lasted through the offshoring project from September 2019 until the end of December 2019. The interviews were semi-structured interviews, based on the theoretical framework. Interviews were transcribed and merged with the data from observation for analyzing. Through thematic analyzing the dataset was analyzed thoroughly. Empirical evidence reinforced the existing theories while providing slightly deviating results from a fresh approach.

Human interaction was identified as the most effective method for knowledge transfer, but the supporting role of other knowledge reservoirs in an organization should not be neglected. Previous experience of the recipients was found to be a major source of barriers to knowledge transfer, as it hinders the ability of the recipients to adopt new habits and set a bias towards the knowledge of the sources. Otherwise, the results mainly confirmed earlier theories and that they can be applied to context of this case as well.

Organizations should aim to communicate clearly about the goals of an offshoring project to the participants, so that the participants are able to fulfill their role properly. Clear communication can also mitigate potential social conflicts. Therefore, organizations should aim to maximize the richness of communication channels between the sources and the recipients, as well as aim to improve the relations between the participants. Additionally, for organizations it is important to understand how previous experience of the recipients affect the knowledge transfer. Previous experience can enhance knowledge transfer in certain cases but can also cause significant barriers to knowledge transfer.

Lastly, further research options were suggested to gain more knowledge and deeper understanding on the phenomenon in similar or other context. Such research would be able to broaden the understanding or further confirm the results of this and previous studies.

# REFERENCES

Aaltio, I. & Puusa, A. (2011) Laadullisen Tutkimuksen Luotettavuus. In: *Menetelmäviidakon Raivaajat. Perusteita Laadullisen Tutkimuslähestymistavan Valintaan*, eds. Anu Puusa & Pauli Juuti, Johtamistaidon Opisto, Helsinki; Hansaprint, Vantaa.

Albertoni, F., Elia, S., Massini, S. & Piscitello, L. (2017) The Reshoring of Business Services: Reaction to Failure or Persistent Strategy. *Journal of World Business*, 52(1), 417-430.

Argote, L. & Hora, M. (2017) Organizational Learning and Management of Technology. *Production and Operations Management*, 26(4), 579-590.

Argote, L. & Ingram, P. (2000) Knowledge Transfer: A Basis for Competitive Advantage in Firms. *Organizational Behavior and Human Decision Process*, 82(1), 150-169.

Attride-Stirling, J. (2001) Thematic Networks: An Analytic Tool for Qualitative Research. *Qualitative Research*, 1(3), 385-405.

Baker, L. (2006) Observation: A Complex Research Method. *Library Trends*, 55(1), 171-189.

Balint, B., Forman, C. & Slaughter, S. (2016) Effectiveness of Knowledge Transfer Mechanisms for Implementing Process Improvement Frameworks in Services Offshoring. *Journal of Management Information and Decision Sciences*, 19(1), 19-53.

Barney, J. (1991) Firm Resources and Sustained Competitive Advantage. *Journal of Management*, 17(1), 99-120.

Bathelt, H., Malmberg, A. & Maskell, P. (2004) Clusters and Knowledge: Local Buzz, Global Pipelines and the Process of Knowledge Creation. *Progress in Human Geography*, 28(1), 31-56.

Betz, S., Oberweis, A. & Stephan, R. (2014) Knowledge Transfer in Offshore Outsourcing Software Development Projects: An Analysis of the Challenges and Solutions from German Clients. *Expert Systems*, 31(3), 282-297.

Blinder, A. (2006) Offshoring: The Next Industrial Revolution? *Foreign Affairs*, 85(2), 113-128.

Blomkvist, K. (2012) Knowledge Management in MNCs: The Importance of Subsidiary Transfer Performance. *Journal of Knowledge Management*, 16(6), 904-918.

Bock, S. (2008) Supporting Offshoring and Nearshoring Decisions for Mass Customization Manufacturing Processes. *European Journal of Operational Research*, 184(1), 490-508.

Braun, V. & Clarke, V. (2006) Using Thematic Analysis in Psychology. *Qualitative Research in Psychology*, 3(1), 77-101.

Cabrera, E. & Cabrera, A. (2005) Fostering Knowledge Sharing Through People Management Practices. *The International Journal of Human Resource Management*, 16(5), 720-735.

Cavusgil, S., Calantone, R. & Zhao, Y. (2003) Tacit Knowledge Transfer and Firm Innovation Capability. *Journal of Business & Industrial Marketing*, 18(1), 6-21.

Chen, J., McQueen, R. & Sun, P. (2013) Knowledge Transfer and Knowledge Building at Offshored Technical Support Centers. *Journal of International Management*, 19(1), 362-376.

Chiva, R. & Alegre, J. (2005) Organizational Learning and Organizational Knowledge: Towards the Integration of Two Approaches. *Management Learning*, 36(1), 49-68.

Chua, A. & Pan, S. (2006) Knowledge Transfer in Offshore Insourcing. In: *Proceedings of the 27th International Conference on Information Systems (ICIS)*, 1039-1054.

Chua, A. & Pan, S. (2008) Knowledge Transfer and Organizational Learning in IS Offshore Sourcing. *Omega*, 36(2), 267-281.

Cohen, W. & Levinthal, D. (1990) Absorptive Capacity: A New Perspective on Learning and Innovation. *Administrative Science Quarterly*, 35(1), 128-152.

Connell, N., Klein, J. & Powell, P. (2003) It's Tacit Knowledge but Not as We Know It: Redirecting the Search for Knowledge. *Journal of the Operational Research Society*, 54(2), 140-152.

Cowan, R., David, P. & Foray, D. (2000) The Explicit Economics of Knowledge Codification and Tacitness. *Industrial and Corporate Change*, 9(2), 211-253.

Creswell, J. (2013) *Qualitative Inquiry & Research Design: Choosing Among Five Approaches* (3rd ed.). Sage Publications London; Thousand Oaks, California.

Crossan, M., Lane, H. & White, R. (1999), An Organizational Learning Framework: from Intuition to Institution. *Academy of Management Review*, 24(3), 522-537.

Cuervo-Cazurra, A. & Rui, H. (2017) Barriers to Absorptive Capacity in Emerging Market Firms. *Journal of World Business*, 52(1), 727-742.

De Long, D. & Fahey, L. (2000) Diagnosing Cultural Barriers to Knowledge Management. *Academy of Management Perspectives*, 14(4), 113-127.

Di Mauro, C., Fratocchi, L., Orzes, G. & Sartor, M. (2018) Offshoring and Backshoring: A Multiple Case Study Analysis. *Journal of Purchasing and Supply Management*, 24(1), 108-134.

Drucker, P. (1993) The Rise of the Knowledge Society. *Wilson Quarterly*, 17(2), 52-70.

Easterby-Smith, M., Lyles, M. & Tsang, E. (2008) Inter-Organizational Knowledge Transfer: Current Themes and Future Prospects. *Journal of Management Studies*, 45(4), 677-690.

Epple, D., Argote, L. & Murphy, K. (1996) An Emprical Investigation of the Microstructure of Knowledge Acquisition and Transfer Through Learning by Doing. *Operations Research*, 44(1), 77-86.

Eriksson, P. & Kovalainen, A. (2016) *Qualitative Methods in Business Research* (2nd ed.). Sage Publications, London; Thousand Oaks, California.

Eriksson, P. & Koistinen, K. (2005) *Monenlainen Tapaustutkimus*. Kuluttajatutkimuskeskus; Savion Kirjapaino Oy, Kerava.

Eskola, J. & Suoranta, J. (1998) *Johdatus Laadulliseen Tutkimukseen*. Vastapaino, Tampere.

Eskola, J. (2001) Laadullisen tutkimuksen juhannustaiat. Laadullisen tutkimuksen analyysi vaihe vaiheelta. In: *Ikkunoita tutkimusmetodeihin II. Näkökulmia aloittelevalle tutkijalle tutkimuksen teoreettisiin lähtökohtiin ja analyysimenetelmiin*, eds. Juhani Aaltola & Raine Valli, PS-kustannus, Jyväskylä, 133-157.

Farell, D. (2005) Offshoring: Value Creation Through Economic Change. *Journal of Management Studies*, 42(3), 675-683.

Fabriek, M., van den Brand, M., Brinkkemper, S., Harmsen, F. & Helms, R. (2008) Reasons for Success and Failure in Offshore Software Development Projects. In: *Proceedings of the 16th European Conference on Information Systems (ECIS)*, 1-13.

Galbraith, C. (1990) Transferring Core Manufacturing Technologies in High-Technology Firms. *California Management Review*, 32(4), 56-70.

Gaur, A., Ma, H. & Ge, B. (2019) MNC Strategy, Knowledge Transfer Context, and Knowledge Flow in MNEs. *Journal of Knowledge Management*, 23(9), 1885-1900.

Gersick, C. & Hackman, R. (1990) Habitua Routines in Task-Performin Groups. *Organizational Behavior and Human Decision Processes*, 47(1), 65-97.

Ghauri, P. & Grønhaug, K. (2005) *Research Methods in Business Studies: A Practical Guide* (3rd ed.). Financial Times Prentice Hall, Harlow.

Goh, S. (1998) Toward a Learning Organization: The Strategic Building Blocks. *SAM – Advanced Management Journal*, 63(2), 15-22.

Goh, S (2002) Managing Effective Knowledge Transfer: An Integrative Framework and Some Practice Implication. *Journal of Knowledge Management*, 6(1), 23-30.

Gorman, G. & Clayton, P. (2005) *Qualitative Research for the Information Professional* (2nd ed.). Facet, London.

Grant, R. (1996) Toward a Knowledge-based Theory of the Firm. *Strategic Management*, 17(1), 109-122.

Gregory, R., Beck, R. & Prifling, M. (2009) Breaching the Knowledge Transfer Blockade in IT Offshore Outsourcing Projects – A Case from the Financial Services Indusry. In: *Proceedings of the 42nd Hawaii International Conference on System Sciences 2009*, 1-10.

Grote, M. & Täube, F. (2006) Offshoring the Financial Services Industry: Implications for the Evolution of Indian IT Clusters. *Environment and Planning*, 38(1), 1287-1305.

Gruenfeld, D., Martorana, P. & Elliott, T. (2000) What Do Groups Learn from Their Worldliest Members? Direct and Indirect Influence in Dynamic Teams. *Organizational Behavior and Human Decision Process*, 82(1), 45-59.

Guba, E. (1981) Criteria for Assessing the Trustworthiness of Naturalistic Inquiries. *Educational Communication and Technology*, 29(2), 75-91.

Guo, J., Li, N., Lyu, T., Lyu, X. & Zhang, Z. (2019) Barriers of Knowledge Transfer and Mitigating Strategies in Collaborative Management System Implementations. *Journal of Information and Knowledge Management Systems*, 49(1), 2-20.

Gupta, A. & Govindarajan, V. Knowledge Flows within Multinational Corporations. *Strategic Management Journal*, 21(4), 473-496.

Haasis, T., Liefner, I. & Garg, R. (2018) The Organization of Knowledge Transfer in the Context of Chinese Cross-Border Acquisition in Developed Economies. *Asian Business & Management*, 17(1), 286-311.

Hansen, M., Nohria, N. & Tierney, T. (1999) What's your strategy for managing knowledge? *Harvard Business Review*, 77(2), 106-116.

Hirsjärvi, S., Remes, P. & Sajavaara P. (1997) *Tutki ja Kirjoita*. Kirjayhtymä Oy, Tammer-Paino Oy, Tampere.

Huong, N., Katsuhiro, U. & Chi, Dam. (2011) Knowledge Transfer in Offshore Outsourcing: A Case Study of Japanese and Vietnamese Software Companies. *Journal of Global Information Management*, 19(2), 27-44.

Jaeger, A. M. (1983) The Transfer of Organizational Culture Overseas: An Approach to Control in the Multinational Corporation. *Journal of International Business Studies*, 14(2), 91-114.

Jahns, C., Hartmann, E. & Bals, L. (2006) Offshoring: Dimensions and Diffusion of a New Business Concept. *Journal of Purchasing & Supply Management*, 12(1), 218-213.

Jasimuddin, S., Klein, M. & Connell, J. (2005) The Paradox of Using Tacit and Explicit Knowledge: Strategies to Face Dilemmas. *Management Decision*, 43(1), 102-112.

Johnson, B., Lorenz, E. & Lundvall, B-Å. (2002) Why All the Fuss About Codified and Tacit Knowledge? *Industrial and Corporate Change*, 11(2), 245-262.

Johnson-Laird, P. (1983) *Mental Models*. Cambridge University Press, Cambridge.

Kaka, N. (2008) Strengthening India's Offshoring Industry. *McKinsey Digital*, retrieved 10.11.2019.

Khan, S. & Jerolmack, C. (2013) Saying Meritocracy and Doing Privilege. *The Sociological Quarterly*, 54(1), 9-19.

Kim, D. (1993) The Link Between Individual and Organizational Learning. *Sloan Management Review*, 35(1), 37-50.

Koch, A. & Strotmann, H. (2008) Absorptive Capacity and Innovation in the Knowledge Intensive Business Service Sector. *Economics of Innovation and New Technology*, 17(6), 511–531.

Kogut, B. & Zander, U. (1992) Knowledge of the Firm, Combinative Capabilities, and the Relocation of Technology. *Organization Science*, 3(3), 383-397.

Kostova, T. (1999) Transnational Transfer of Strategic Organizational Practices: A Contextual Perspective. *Academy of Management Review*, 24(2), 308-324.

Lankford, W.M. & Parsa, F. (1999) Outsourcing: a primer. *Management Decision*, 37(1), 310-316.

LeCompte, M. & Schensul, J. (1999) *Designing and Conducting Ethnographic Research: Ethnographer's Toolkit*. AltaMira Press, Lanham.

Leonardi, P. & Bailey, D. (2008) Transformational Technologies and the Creation of New Work Practices: Making Implicit Knowledge Explicit in Task-Based Offshoring. *MIS Quarterly*, 32(2), 411-436.

Levina, N. & Su, N. (2008) Global Multisourcing Strategy: The Emergence of a Supplier Portfolio in Services Offshoring. *Decision Sciences*, 39(3), 541-570.

Levine, J., Higgins, E. & Choi, H-S. (2000) Development of strategic norms in groups. *Organizational Behavior and Human Decision Processes*, 82(1), 88–101.

Li, J. & Lee, R. (2015) Can Knowledge Transfer within MNCs Hurt Subsidiary Performance? The Role of Subsidiary Entrepreneurial Culture and Capabilities. *Journal of World Business*, 50(4), 663-673.

Massini, S. & Miozzo, M. (2012) Outsourcing and Offshoring of Business Services: Challenges to Theory, Management and Geography of Innovation. *Regional Studies*, 46(9), 1219-1242.

Mansfield, E. (1985) How Rapidly Does New Industrial Technology Leak Out? *The Journal of Industrial Economics*, 34(2), 217-223.

McAllister, D. (1995) Affect- and Cognition-Based Trust as Foundations for Interpersonal Cooperation in Organizations. *Academy of Management Journal*, 38(1), 24-59.

McEvily, S. & Chakravarthy, B. (2002) The Persistence of Knowledge-Based Advantage: An Empirical Test for Product Performance and Technological Knowledge. *Strategic Management Journal*, 23(4), 285-305.

Miles, M. & Huberman, A. (1994) *Qualitative Data Analysis: An Expanded Sourcebook* (2nd ed). Sage Publications Inc., New Delhi.

Miles, I., Kastrinos, N., Flanagan, K., Bilderbeek, R., den Hertog, P., Huntink, W. & Bouman, M. (1995) *Knowledge-Intensive Business Services. Users, Carriers and Sources of Innovation*. EIMS publication 15. Luxembourg: European Innovation Monitoring Service.

Miller, D. & Shamsie, J. (1996) The Resource-Based View of the Firm in Two Environments: The Hollywood Film Studios from 1936 to 1965. *The Academy of Management Journal*, 39(3), 519-543.

Minbaeva, D. (2007) Knowledge Transfer in Multinational Corporations. *Management International Review*, 47(4), 567-593.

Minbaeva, D., Pedersen, T., Björkman, I., Fey, C. & Park, H. (2014) MNC Knowledge Transfer, Subsidiary Absorptive Capacity and HRM. *Journal of International Business Studies*, 45(1), 38–51.

Minbaeva, D., Park, C., Vertinsky, I. & Sung Cho, Y. (2018) Disseminative Capacity and Knowledge Acquisition from Foreign Partners in International Joint Ventures. *Journal of World Business*, 53(1), 712-724.

Moe, N., Smite, D. & Hanssen, G. (2012) From Offshore Outsourcing to Offshore Insourcing: Three Stories. In: *Proceedings of 2012 IEEE Seventh International Conference on Global Software Engineering (ICGSE)*, 1-10.

Moreland, R. & Myaskovsky, L. (2000) Exploring the Performance Benefits of Group Training: Transactive Memory or Improved Communication? *Organizational Behavior and Human Decision Processes*, 82(1), 117-133.

Musteen, M. (2016) Behavioral Factors in Offshoring Decision: A Qualitative Analysis. *Journal of Business Research*, 69(1), 3439-3446.

Nguyen, T., Umemoto, K. & Dam, H. (2014) The Knowledge-Bridging Process in Software Offshoring from Japan to Vietnam. *The Electronic Journal of Information Systems in Developing Countries*, 64(1), 1-29.

Nonaka, I. (1994) A Dynamic Theory of Organizational Knowledge Creation. *Organization Science*, 5(1), 14-37.

Nonaka, I. & von Krogh, G. (2009) Tacit Knowledge and Knowledge Conversion: Controversy and Advancement in Organizational Knowledge Creation Theory. *Organization Science*, 20(3), 635-652.

Osterloh, M. & Frey, B. (2000) Motivation, Knowledge Transfer, and Organizational Forms. *Organization Science*, 11(5), 538-550.

Paalumäki & Vähämäki (2020) Havainnointi organisaatiotutkimuksessa. In: *Laadullisen Tutkimuksen Näkökulmat ja Menetelmät*, eds. Anu Puusa & Pauli Juuti, Gaudeamus, Helsinki.

Paulus, B. & Yang, H-C. (2000) Idea Generation in Groups: a Basis for Creativity in Organizations. *Organizational Behavior and Human Decision Processes*, 82(1), 76-87.

Polanyi, M. (1962) Tacit Knowledge: Its Bearing on Some Problems of Philosophy. *Reviews of Modern Physics*, 34(4), 601-616.

Polanyi, M. (1966) The Logic of Tacit Inference. *Philosophy*, 41(155), 1-18.

Polkinghorne, D. (2005) Language and Meaning: Data Collection in Qualitative Research. *Journal of Counseling Psychology*, 52(2), 137-145.

Prikladnicki, R., Audy, J., Damian, D. & De Oliveira, T. (2007) Distributed Software Development: Practices and Challenges in Different Business Strategies of Offshoring and Onshoring. In: *Proceedings in International Conference on Global Sotfware Engineering (ICGSE)*, 262-274.

Rai, A. & Sambarmurthy, V. (2006) Editorial Notes - The Growth of Interest in Services Management: Opportunities for Information Systems Scholars. *Information Systems Research*, 17(4), 327-331.

Ramadan, B., Dahiyat, S., Bontis, N. & Al-dalahmeh, M. (2017) Intellectual Capital, Knowledge Management and Social Capital within the ICT Sector in Jordan. *Journal of Intellectual Capital*, 18(2), 437-462.

Regnér, P. & Zander, U. (2011) Knowledge and Strategy Creation in Multinational Companies. *Management International Review*, 51(6), 821-850.

Rothwell, R. (1978) Some Problems of Technology Transfer into Industry: Examples from the Textile Machinery Sector. *IEEE Transactions on Engineering Management*, 25(1), 15-20.

Schneiderjans, M. & Zuckweiler, K. (2004) A quantitative approach to the outsourcing-insourcing decision in an international context. *Management Decision*, 42(8), 974-986.

Simon, H. (1991) Bounded Rationality and Organizational Learning. *Organization Science*, 2(1), 125-132.

Simonin, B. (1999) Transfer of Marketing Know-How in International Strategic Alliances: An Empirical Investigation of the Role of Antecedents of Knowledge Ambiguity. *Journal of International Business Studies*, 30(3), 463-490.

Stasser, G., Vaughan, S. & Stewart, D. (2000) Pooling Unshared Information: The Benefits of Knowing How Access to Information is Distributed Among Group Members. *Organizational Behavior and Human Decision Processes*, 82(1), 102–116.

Strasser, A. & Westner, M. (2015) Information Systems Offshoring: Results of a Systematic Literature Review. *Journal of Information Technology Management*, 26(2), 70-142.

Strasser, A., Westner, M. & Strahinger, S. (2018) Knowledge Transfer in IS Offshoring: A Delphi Study of the Offshore Coordinator Role. *Journal of Systems and Information Technology*, 21(1), 36-62

Sun, P. & Scott, J. (2005) An Investigation of Barriers to Knowledge Transfer. *Journal of Knowledge Management*, 9(2), 75-90.

Szulanski, G. (1996) Exploring internal Stickiness: Impediments to the Transfer of Best Practice Within the Firm. *Strategic Management Journal*, 17(Winter), 27-43.

Szulanski, G. (2000) The Process of Knowledge Transfer: A Diachronich Analysis of Stickiness. *Organizational Behavior and Human Decision Processes*, 82(1), 9-27.

Tate, W. & Bals, L. (2017) Outsourcing/Offshoring Insights: Going Beyond Reshoring to Rightshoring. *International Journal of Physical Distribution & Logistics Management*, 47(2), 106-113.

Teece, D., Pisano, G. & Shuen, A. (1997) Dynamic Capabilities and Strategic Management. *Strategic Management Journal*, 18(7), 509-533.

Thompson, L., Gentner, D. & Loewenstein, J. (2000) Avoiding Missed Opportunities in Managerial Life: Analogical Training More Powerful Than Individual Case Training. *Organizational Behavior and Human Decision Processes*, 82(1), 60-75.

Trampel, J. (2004) To Offshore or Nearshore IT services. An Investigation Using Transaction Cost Theory. *EconWPA Industrial Organization Papers*, Munich.

Tsai, W. (2001) Knowledge Transfer in Intraorganizational Networks: Effects of network Position and Absorvative Capasity on Business Unit Innovation and Performance. *Academy of Management Journal*, 44(5), 996-1004.

Tsang, E. & Zahra, S. (2008) Organizational unlearning. *Human Relations*, 61(10), 1435-1462.

Tsoukas, H. & Vladimirou, E. (2001) What is Organizational Knowledge. *Journal of Management Studies*, 38(7), 973-993.

Vaara, E., Sarala, R., Stahl, G. & Björkman, I. (2012) The Impact of Organizational and National Cultural Differences on Social Conflict and Knowledge Transfer in International Acquisitions. *Journal of Management Studies*, 49(1), 1-27.

Von Briel, F., Schneider, C. & Lowry, P. (2019) Absorbing Knowledge from and with External Partners: The Role of Social Integration Mechanisms. *Decision Sciences*, 50(1), 7-45.

Walsh, J. & Ungson, G. (1991) Organizational Memory. *The Academy of Management review*, 16(1), 57-91.

Wang, X., Xi, Y., Xie, J. & Zhao, Y. (2017) Organizational Unlearning and Knowledge Transfer in Cross-Border M&A: The Roles of Routine and Knowledge Compatibility. *Journal of Knowledge Management*, 21(6), 1580-1595.

Wegner, D., Eber, R. & Raymond, P. (1991) Transactive Memory in Close Relationships. *Journal of Personality and Social Psychology*, 61(6), 923-929.

Wende, E., Schwabe, G., Philip, T. & King, G. (2013 Why They Do Not Understand -- A Model of Knowledge Discourse in the Transition Phase of Globally Distributed Projects. In: *2013 46th Hawaii International Conference on System Sciences*, 396-405.

Wendling, M. (2013) Knowledge Sharing Barriers in Global Teams. *Journal of Systems and Information Technology*, 15(3), 239-253.

Wilson, T. (2002) The Nonsense of "Knowledge Management". *Information Research*, 8(1), 1-8.

Yildiz, H. & Fey, C. (2010) Compatibility and Unlearning in Knowledge Transfer in Mergers and Acquisitions. *Scandinavian Journal of Management*, 26(4), 448-456.

Zander, U. & Kogut, B. (1995) Knowledge and the Speed of the Transfer and Imitation of Organizational Capabilities: An Empirical Test. *Organization Science*, 6(1), 76-92.

# APPENDIX I: INTERVIEW THEMES AND QUESTIONS

Disclaimer: Knowledge transfer is the process when know-how is being transferred from an individual or unit in organization to another. Knowledge can be anything for clear instructions, to specific information regarding single case or a client, to general knowledge about from where and whom can more knowledge be acquired. Tacit knowledge in this case refers to any type knowledge or know-how that is not or was not in readable format in the beginning of this knowledge transfer process.

**Introduction:**

0.1. What is your role in your own unit?

0.2. Are you considered to be a part of the receiving unit or the transferring unit in this knowledge transfer process?

**General questions**

1.1. What type of knowledge you consider to be tacit?

1.2. What kind of knowledge you consider to be most important to transfer for this process?

1.3. How do you think that successful knowledge transfer should work?

1.4. How should, in your opinion, knowledge to be transferred and what are the preferred methods?

1.5. What differences there are in learning alone versus learning as a team?

1.6. What kind of experience you have about teamwork and do you prefer learning and sharing as a team or learning alone? Why?

**Knowledge transfer of tacit knowledge**

Tacitness

2.1. How does learning differ between when learning codified knowledge and tacit knowledge?

2.2. How should tacit knowledge be transferred in your opinion?

2.3. What kind of methods you prefer for transfer of tacit knowledge?

Complexity

2.4. Complexity of knowledge refers to how dependent applying that knowledge is to other knowledge, individual, technology, routines. etc. How complex do you think that knowledge is what is being transferred?

2.5. How does the dependency of knowledge affect knowledge transfer?

Specificity

2.6. In what ways does it differ to transfer knowledge that can be specifically applied to a single or small number of tasks or situations, to knowledge that can be applied to a broad spectrum of situations?

2.7. How should transferring specific knowledge differ from transferring broad knowledge?

2.8. What kind of differences there are when transferring specific knowledge to the whole team versus when transferring broad knowledge to the team? Do you think it is useful to transfer specific knowledge to the whole team, and in what situations?

Availability

2.9. What would be the best ways to have sources of knowledge available?

2.10. How well were recipients informed about the availability of the sources of knowledge?

2.11. Which type of knowledge was well available and which type of knowledge lacked availability for the recipients?

3.1. In what ways does context of offshoring affect the knowledge being transferred?

**Knowledge transfer in organization**

Reservoirs

4.1. How effective it was for you and the team to have existing work instructions and other documents with information/knowledge regarding knowledge transfer?

4.2. How effective did the process of codifying and re-codifying knowledge into such documents or instructions transfer knowledge to you or your team?

4.3. How did this affect knowledge sharing within the team?

4.4. How codifying affected knowledge gaps? Do you see that it was easier to apply knowledge learnt via this method or did codifying create too specific and narrow knowledge?

Members

4.5. How effective was knowledge transfer through interaction with other individuals?

4.6. What kind of methods were used in training when interacting with individuals?

4.7. How did interaction affect the transfer of knowledge that was not previously codified?

4.8. What kind of differences there are in learning when interaction between individuals is face-to-face versus via online?

4.9. How did the learning from humans differ when whole team was involved in the situation?

4.10. How did the personal relationships with different individuals affect the learning:

4.10a. between trainers and recipients?

4.10b. when sharing knowledge among the receiving team?

Tools

4.11. What kind of technology or software was used in the knowledge transfer?

4.12. How did the technology used in the process affect the knowledge transfer?

4.13. How did the technology affect communication during the process?

4.14. How did the technology affect teamwork and sharing knowledge?

Tasks

4.15. How was knowledge transferred via tasks and routines during the process?

4.16. How effective was learning via learning and doing tasks?

4.17. How did learning via tasks affect knowledge gaps?

4.18. How effective was use of tasks as a training method to achieve goals?

Networks

4.19. Teams within an organization actively develop their own networks, for example division of labor, based on who knows which tasks best or who can use certain tools or technology best. How effective utilizing existing networks are in knowledge transfer?
4.20. How effectively were such networks utilized in the knowledge transfer?
4.21. In what ways should knowledge transfer be done utilizing such networks?
4.22. How would it affect knowledge transfer to try to implement existing networks into the new context?

5.1 In what ways does context of offshoring affect the methods of knowledge transfer?

**Barriers of knowledge transfer**

Individual level

6.1. What type of barriers for knowledge transfer you encountered when knowledge was transferred between two individuals?
6.2. What type of different barriers there were between knowledge transfer from trainer to recipient and interaction with recipient team's individuals?
6.3. How in your opinion these barriers could have been overcome?

Additional questions:
Did personal relationship with individuals set any barriers for knowledge transfer?
Did language appear as a barrier for knowledge transfer between individuals?
How did existing knowledge of individual recipients affect knowledge transfer and adopting new practices?
What type of motivational barriers you encountered among both trainers and recipients?
What kind of barriers did the reliabity of source create?
What kind of barriers did the absorbing capacity of recipients create?
Did this cause issues with relationships between individuals?

Between individual and team

6.4. What type of barriers did you notice when knowledge was transferred from an individual to the team?
6.5. What type of barriers did you notice when knowledge was transferred from team to an individual?
6.6. What type of different barriers there were between knowledge transfer from source team and individual recipient and when sharing knowledge within the recipient team?
6.7. How in your opinion these barriers could have been overcome?

Additional questions:
Did you encounter any motivational barriers that affected individuals' sharing knowledge to the team?
Do you feel that some individuals (either trainers or recipients) did not want to share all the knowledge? Why?
How well and efficient recipient team used available trainers and what sort of barriers were involved?

How did the recipients share information among their team and was there any barriers involved?
Did the recipients work and share knowledge as a group? Were these situations voluntary or structured situations? Was this helpful or harmful for sharing knowledge and knowledge transfer? Do you feel that it would be beneficial to specialize individual recipients in order to facilitate knowledge transfer or should training be more broad? Was this achieved and which barriers were encountered?

Was there any barriers with the knowledge transfer related to trainers collective approach towards individuals? What about recipient collective approach to individual trainers?
Did you encounter any collective distrust that caused barriers?
How did the communication within your team affect knowledge transfer?
How the task-oriented training affect knowledge transfer? Was it helpful for applying knowledge to other tasks or was the knowledge gained too specific and applying faced issues?
How organizational culture affected knowledge transfer?
How organizational culture affected the following: co-operation, collaboration, trust?
Do you feel that communication and decision making was open and transparent? Did you had access to all the information you wanted? If there were shortcomings, how did this affect knowledge transfer?
How did existing tools and methods for knowledge transfer, or lack of them, affect knowledge transfer?
How did the structure and schedule of the process affect knowledge transfer? Was the structure too strict and premade or rather too loose?

Team level

6.8. What kind of barriers did you notice when knowledge was transferred between teams?
6.9. How in your opinion the barriers of knowledge transfer differ when whole team is involved?
6.10. How in your opinion these barriers could have been overcome?

Additional questions:
How do you feel that high specialization of sources to certain tasks affected knowledge transfer?
Is it clear to the team who in source team knows what? (Recipient only)
How did the goals of the knowledge transfer affected the process in different phases? Was there confusion about the goals? What kind of effect this had?
How did communication between teams and feedback affected knowledge transfer? Do you feel that feedback was helpful? Was there enough opportunities to receive feedback?
How did the existing relationships and networks within the teams affected the knowledge transfer between teams?
How reliable was the knowledge share within the recipient team?
How did the different norms of the teams affect knowledge transfer?
Do you feel that these were more of a cultural differences or related to different organizational culture?
How do you feel that team climate affected the knowledge transfer between teams?
Did personal relations or the climate affect what type of knowledge was shared and how?

Organization to team

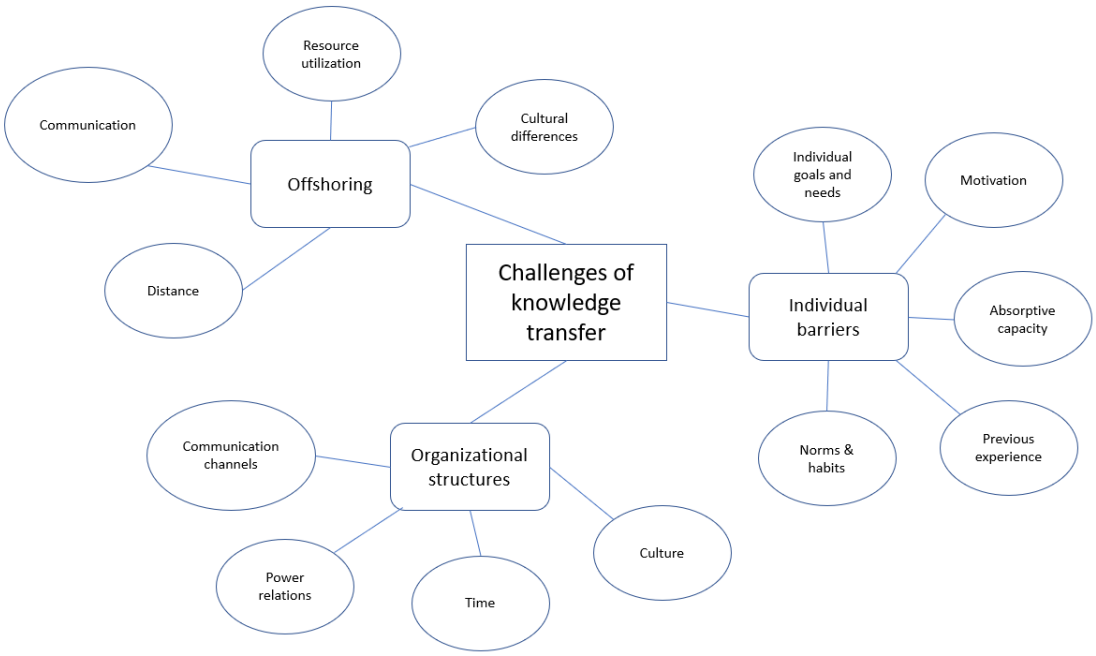
6.11. What kind of barriers did you notice when knowledge was transferred from other parts of the organization than the source team?
6.12. How in your opinion these barriers could have been overcome?

Additional questions

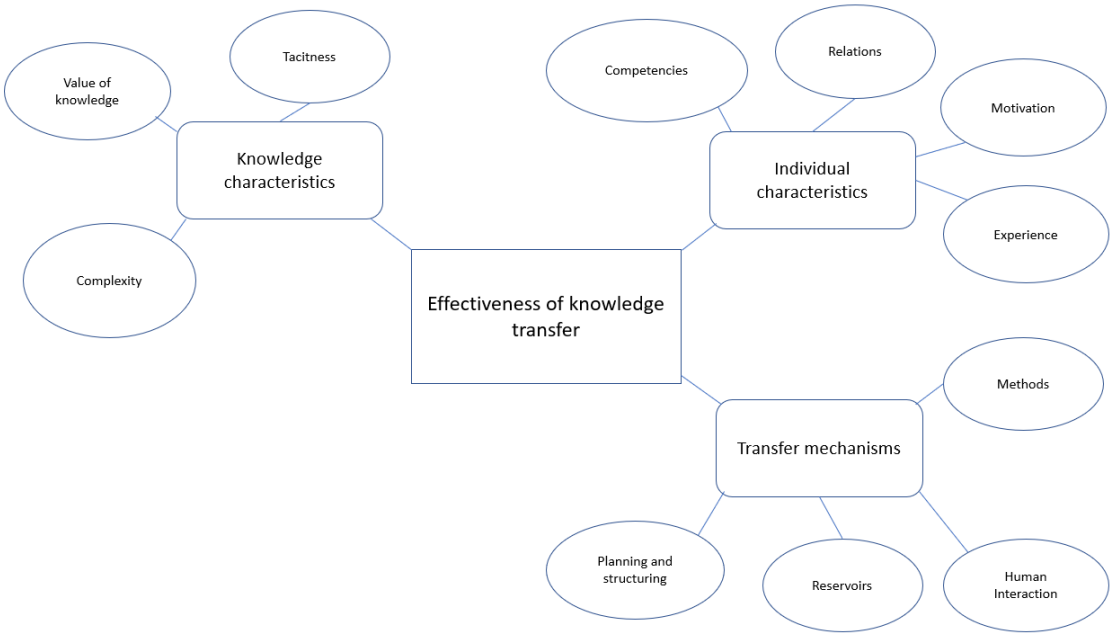
How do you feel that cultural differences in general affected knowledge transfer?
Are these differences based on organizational culture or culture in general?
How well do you think that routines and tasks fitted the new context for the recipients?
Should routines and tasks been modified to facilitate knowledge transfer?
Do you feel that there were barriers in contacting other teams in organization and gain information from larger network than the two teams involved?
Do you feel that creating more communication between other teams would have been beneficial for knowledge transfer?
How do you feel that transferring existing team structure and task networks succeeded?
How this affected knowledge transfer?
How do you feel that goals for division of labor from the organization affected knowledge transfer?
Was there confusion with the division of labor?
How do you feel that the timeframe affected knowledge transfer?
How it affected team structure and division of labor?
How did it affect the successfulness of the process?

7.1. In what ways does context of offshoring affect the barriers of knowledge transfer?
7.2. What kind of special barriers does offshoring create for knowledge transfer on different levels of interaction?

# APPENDIX 2 THEMATIC NETWORKS




Thematic Network: Challenges of knowledge transfer




Thematic Network: Effectiveness of knowledge transfer