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The role of near and far knowledge transfer on the job performance of the employees in MNCs

Master's thesis
in International Business

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Abstract

Nowadays the main economic resource for companies is organizational knowledge, it gives competitive advantage and value to productivity and innovation. However, the knowledge that is not applied does not become productive and stays in information form. The management of knowledge includes the process of being transferred and applied.

This thesis aims to explore how the utilization of different dimensions of knowledge transfer between employees reflects on their job performance. This research focuses on a dichotomy, near and far knowledge transfer, that depending on the form it can affect the performance of the individual on their job performance.

The main findings of the empirical research complement the synthesis of the literature review of knowledge transfer between employees were three, first the inclusion of a hybrid knowledge transfer, second, include the motivation as part of the individuals involved in the exchange of knowledge and last, include important aspects or characteristics that are part of the knowledge transfer and affect the quality and efficiency of the transference.

Key words: organizational knowledge, knowledge transfer, dimensions of knowledge transfer near knowledge transfer, far knowledge transfer, job performance, task performance, contextual performance.

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1 Introduction

This thesis intends to analyze whether the dimension through which knowledge is transferred affects the individual job performance, with an emphasis on the knowledge transfer process among employees in multinational companies. This section includes the research background, research gap, research questions, and the structure of the thesis.

1.1 Background

Society has evolved from a manufacturing-based sector to a service, and recently into information; The sectors are based on knowledge and the companies have become knowledge creators (Nonaka & Takeuchi 1995, 43). Knowledge is both a justified true belief (Zagzebski 1999, 100) and a set of practical skills and expertise gained through experience over time, enabling someone to perform a task or activity smoothly and efficiently (Kogut & Zander 1992, 386). The creation of knowledge in organizations requires the capacity to spread it, and incorporate it into the products, services, and systems of the organization to gain competitive advantage (Nonaka & Takeuchi 1995, 3). Organizations continuously create knowledge by modifying current perspectives, frameworks, or premises; in other words, they develop the skill to adapt and change over time (Nonaka & Takeuchi 1995, 46).

The main economic resource has changed for the companies; Initially, the main means of production were capital, followed by natural resources and labor; However, nowadays, the most valuable resource is knowledge; Value is created through productivity and innovation, both of which are applications of knowledge to work; The knowledge society is led by knowledge workers who know how to put capital to productive use with the help of knowledge professionals and employees (Drucker 1993, 8). Knowledge and intellectual capital are one of the main competencies and a key to finding a competitive advantage (Lubit 2001, 164).

At this point, the knowledge workers own their knowledge and can take it with them everywhere, the challenge with it, is called management revolution. Knowledge is not only a tool to achieve social and economic outcomes but also a utility itself. The management of knowledge transformation involves supplying knowledge systematically and purposefully to enable both the effective use of existing knowledge to produce results and the development of new knowledge. (Drucker 1993, 42.)

Transferring knowledge across borders is a complicated process that depends on the sender and the recipient's willingness, ability, and capacity to absorb information. Additionally, effective knowledge transfer necessitates a shared language between the two parties. International knowledge transfer can be successful when companies use a variety of methods and mechanisms to transfer knowledge. The timing of these mechanisms is also crucial to ensure that knowledge is transferred effectively. (Kahn et al. 2022, 7.)

Organizational knowledge management includes the creation, transfer, and exploitation and is set as a critical process to the survival and success of corporations; Knowledge is an asset, and it resides in a particular agent and the transfer of it refers to being communicated from one agent to another (Hedlund & Nonaka 1991, 2). Knowledge is incorporated in a person, and the person becomes the one who carries, creates, improves, applies, teaches, and transfers it (Drucker 1993, 210).

To turn knowledge into productivity it requires using what is known. There is a need for a methodology, discipline, or process to turn knowledge into performance. If it is not used it does not become productive and stays in an information form. This productivity of knowledge is a determining factor for the competitive position of an organization. (Drucker 1993, 192-193.)

Knowledge transfer is reflected in different aspects of performance. Knowledge transfer makes a substantial contribution to work performance (Xiong et al. 2012, 541) and by committing to knowledge transfer throughout the organization high performance can be achieved and applying it effectively can allow the usage of improved practices increasing individual and group performance (Lloyd, 1996, 577 – 578).

Organizations face challenges and re-evaluate the efficacy and effectiveness of knowledge management, Covid-19 pandemic was unprecedented with a far-reaching impact on different levels of organizations. It brought internal changes and working from home became the only way that the companies could continue (Apte et al. 2022, 254). Employees had access to different platforms for knowledge sharing, creation, and exchange; Knowledge Management improved throughout the pandemic as there was a need for capture, use, transfer, and adaptation in a collaborative form as face-to-face interactions were not available (Apte et al. 2022, 263).

1.2 Research gap and research questions.

A successful training strategy is effective; Regarding software training in the long term, it has the same level of effectiveness synchronous or asynchronous virtual training as face-to-face training; on the other hand, in the short-term face-to-face training seems more effective than online training (Chen & Shaw, 2009, 99). The continuous growth of e-learning has raised discussions around virtual learning environments, and it has been found that it has significant learning outcomes (Hayashi et al. 2004, 139).

At a project level, managing knowledge sharing including communication and knowledge flows is one of the key themes to manage open innovation projects (Lappalainen et al. 2023, 8). A collaborative virtual cross-border training project in May 2021, in the middle of the Covid-19 peak, showed insights into effective knowledge transfer using digital technology to mitigate knowledge and skills gaps for better clinical outcomes, and this project left potential flexibility for education and training needs (Mattukoyya et al. 2022, 2).

At an organizational level, during and after the Covid-19 pandemic a knowledge crisis happened, a massive knowledge failure that ended up in an old normal and covid-19 strategies that developed competencies using technologies, face-to-face, or hybrid that changed people dynamics and competencies with new knowledge strategies (Tomé et al. 2022, 77). For multinational enterprises knowledge sharing, transfer of skills, and best practices among employees maintain standards and competitiveness (Chatterjee et al. 2023, 77).

Employees' commitment to knowledge sharing with their peers has a positive impact on the organization´s financial performance. Knowledge sharing attracts ongoing interest for researchers yet there has been relatively little empirical research about the link of individual-level or intra-organizational knowledge sharing to organizational performance. Moreover, most empirical investigations exploring this connection have approached knowledge sharing as a single concept, failing to differentiate between horizontal and vertical knowledge exchanges. Instead, their focus has been on broad knowledge sharing within or between firms. (Shahnawaz & Halil 2020, 2455.)

Knowledge types such as inter-unit transfer: horizontal knowledge transfer (HKT), conventional knowledge transfer (CKT) and reverse knowledge transfer (RKT), or single

unit transfer as intra-unit knowledge transfer (IKT), have been investigated (Castro & Moreira 2023; Lee et al. 2024; Fjellström et al. 2023; Murtic et al. 2024). So future research should focus on unexplored topics as relevance, timing, and codification; regarding knowledge transfer and the complexity of the research theme, the employment of qualitative methods should be used to bring out repercussions of knowledge transfer dispersed in time, space, or cultural difference as due the predominance of quantitative research methods is not possible to have convincing conclusions regarding barriers of knowledge transfer in multinational companies (Castro & Moreira 2023, 21).

Multinational corporations depend on successful internal knowledge transfer that is in various geographically locations that can be dispersed (Minbaeva et al. 2012, 388) and it is recommended to explore the potential negative effects of telework on knowledge sharing within the organization (Taskin & Bridoux 2010, 2504). Overall, researchers propose that transfer of knowledge varies in different dimensions (Huang et al 2017, 560) for example, the difference between temporal proximity and physical similarity can be near or far knowledge transfer (Barnett & Ceci 2002, 620).

More research is needed to understand how the knowledge transfer reflects on the job performance. The motivation to understand this phenomenon is based on how the environment of knowledge transfer nowadays is changing. After a pandemic and new ways of inter-relations between team members, new processes and solutions of communication have started being within the operation of the organizations.

The main research question is to investigate How the utilization of different dimensions of knowledge transfer between employees reflects on their job performance in MNEs?

Following the sub-questions:

- How near knowledge transfer reflects on the job performance?
- How far knowledge transfer reflects on the job performance?

The main research question is addressed through the examination of two sub-questions. The analysis of the dichotomy between near and far knowledge transfer is divided as follows: the first sub-question covers one dimension of knowledge transfer, which is near knowledge transfer, and examines whether job performance is affected when knowledge is transferred within that dimension. The second sub-question addresses the other aspect

of the dichotomy by aiming to determine whether the usage of the far knowledge transfer dimension reflects on the job performance. By answering these questions can enhance understanding of knowledge transfer implications on job performance from the perspective of the environment that the knowledge is transferred.

The limitations of the thesis include the following. The focus of this study is only in one dichotomy of knowledge transfer dimensions and the impact only in the individual job performance rather than other dimensions of knowledge transfer and other possibilities of company performance. Other limitation of the study is that the research does not consider other aspects that involve knowledge transfer as attitude, aptitude, willing of the people involve, or capabilities regarding the utilization of technology. Also, a limitation is that this research the focus on knowledge transfer in non-managerial jobs or entry level kind of jobs rather than in higher c-level or managerial knowledge transfer. The final limitation is the scope of the interviews and the variety of types of companies, it is not only focus in one sector of the industries or same size companies so the result cannot be generalized to all multinational companies.

The structure of this thesis is divided in to six sections that will be explained bellow. The first section is the introduction, it explores the research background, research gap and research questions. The second section is the literature review that consist in the theoretical part that ends in the synthesis, illustrated and summarised, for the research. The second chapter introduces and explains the concepts that are part of the synthesis as: organizational knowledge, knowledge transfer, and job performance. Next section is the research design and follow the structure to explain the research approach, data collection, data management plan and the evaluation of the study. The design of the research is based on semi-structured interviews coded in themes justified in this chapter. Fourth section include the findings of the research presenting the empirical results of the coded interviews followed by the conclusion section that includes the discussion of the theoretical contributions, managerial implications, and limitation and future research suggestions. The last section includes the summary of the research.

2 Literature Review

This section describes key concepts that are part of the research. It includes definitions and examples based on the existing literature by dividing the section into four sub-sections. The first sub-section explains what organizational knowledge is. The second sub-section describes knowledge transfer, and it is divided in four parts: characteristic, internal knowledge transfer, external knowledge transfer, and near and far knowledge transfer. The subsequent sub-section explores job performance within the organization. Finally, the las sub-section synthesizes the literature review with a figure and explanation of the knowledge transfer between employees reflecting on their job performance.

2.1 Organizational Knowledge

Knowledge is an intangible concept that can have different definitions (Wang et al. 2023, 765). From a philosophical point of view, it can be seen as a greater variety of knowledge that covers ethics, aesthetics, and intellectual virtues as know-how is the ability knowledge, or know-what as experiential knowledge, and religious knowledge, meanwhile in opposition, the scientist approach claims the primary type of knowledge is the propositional one as the only kind (Chappell 2012, 175).

At its core knowledge can be seen as information that individuals absorb for a particular action, knowledge is not simple, as it is a mixture of diverse elements as experience, values, information, and insights that are applied in the minds of knowers and the organizations, it is not only in documents but also in routines, processes, norms, and practices (Davenport & Prusak 2000, 5). Throughout the literature there are different kinds of knowledge as tacit and explicit, procedural, and declarative, or component and architecture I will explain in detail below.

2.1.1 Types of knowledge

The first two types of knowledge are tacit and explicit, these two are not dichotomous states, they are codependent as tacit knowledge is the structure that forms the background needed to elaborate and interpret explicit knowledge (Liyanage et al. 2009, 119)[1]. Explicit knowledge is codified, and objective, and it can be expressed in words and numbers (Nonaka 1994, 16; Wang & Chin 2020,3) [2]. Explicit knowledge is know-that, and is conscious (Lubit 2001, 166).

[1] Polanyi, M. (1975) *Personal Knowledge: Towards a Post-Critical Philosophy*. University of Chicago Press, Chicago, IL

[2] Polanyi, M. (1966) *The Tacit Dimension*. Routledge & Kegan Paul, London.

Tacit knowledge is the information hard to express, share, or formalize. It is know-how and it is experienced more as an intuition than facts or instructions. It can be divided into four categories, first seen as a skill that needs practice, and feedback so it can be understood and "seen", like understanding when we hit the ball in golf how it moves. The second category refers to mental model or schema used to try to understand a situation, determine the cause-effect to give meaning to the events, judge risk, or see an opportunity. Third is the problem-solving strategy and how the decision-making approach can be different for everyone. Last is that knowledge within routines, those actions that are regular and predictable that dictates the way of producing things as they can develop standard operation procedures. (Lubit 2001, 166.)

Other types of knowledge are procedural and declarative. The know-how is called procedural knowledge, it includes the organizational skills as special manufacturing skills, unique combinations of business experience, and teamwork. Declarative knowledge refers to the information that the company has that is not available to others as know-that, facts, and theories, that gives to the company competitive advantage over the competitors. (Barney 1986, 1239.)

Additional categories of knowledge include body and mind, as a dichotomy in the epistemology where the knowledge in the mind is known as systems thinking and true knowledge; the focus of the learning organization is with the mind and not the body; in contrast, the importance of the bodily experience is an important powerful learning, it is learning by doing. Both are equally valuable either personal and physical experience, and intellectual abstraction. (Nonaka & Takeuchi 1995, 238.)

The last types of knowledge are component and architecture. These types of knowledge apply mainly for innovation processes and product development. Component knowledge focuses on the core design parts of the product, for example a fan has blade, and motor and any change in the parts is innovation in the component knowledge. Architecture knowledge approaches how the components are integrated and work as a whole. This two knowledge together creates a system with and specific purpose in case the fan moves the air in a room. (Henderson & Clark 1990, 10-11.)

2.1.2 Epistemological and ontological dimensions of knowledge

Knowledge is a concept multifaceted with multilayered meanings (Nonaka 1994, 15). It can be catalogued in two dimensions (Figure 1), one axe is the epistemological dimension that varies between explicit and tacit knowledge referring to the multifaceted concept, and the other one refers to the multilayered meaning is the ontological dimension that relates to the location of the knowledge or the organizational level, it can be in the individual, group, organization, or inter-organization level (Chakrabarti 1991, 100).

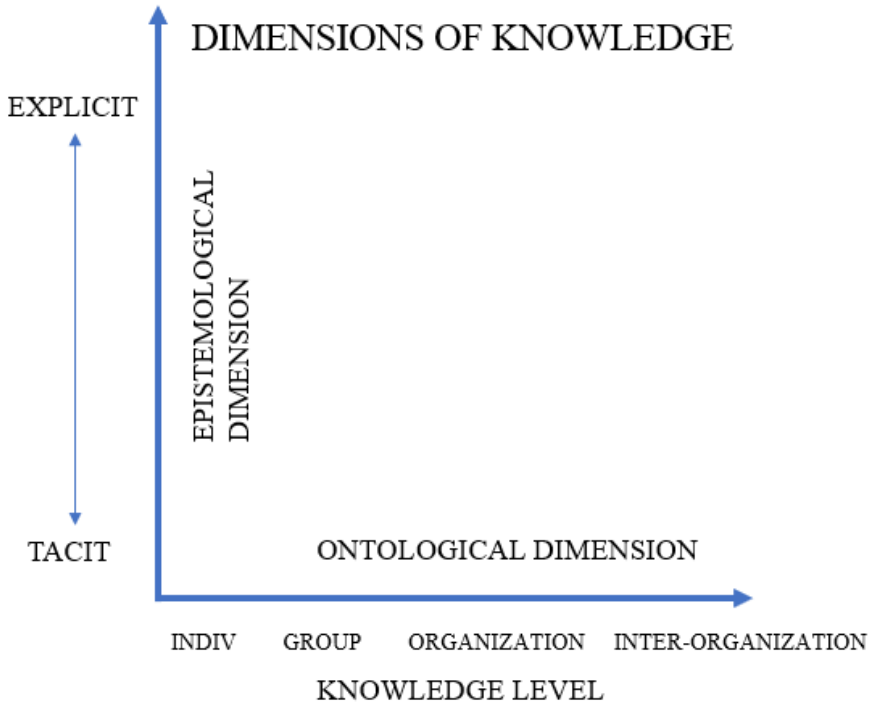

Figure 1: Illustration based on information from Nonaka and Takeuchi´s The knowledge Creating Company (Chakrabarti 1997, 100)

Above all, to consider there are specific functions for individuals on each level of organizational hierarchy divided into four groups. Knowledge operators are those that gather and produce tacit knowledge as experience-based skills. Knowledge specialists are the ones that mobilize structured explicit knowledge. The knowledge engineers close the distance between the operational individuals and top management. And last the knowledge officers can be understood as those how manage the whole process and are the top executives. (Chakrabarti 1997, 101.)

Wang & Chin (2020, 7) have synthesized the ontological and epistemological view of knowledge with a consensus of the definition of knowledge associated to the knowledge

iceberg phenomenon; this is obtained by proposing a dynamic hierarchical system of knowledge diagram in cross-cultural business model by going beyond individual subjectivity to attain a universal comprehension of the objectivity of knowledge that is divided in levels (Figure 2) which will be explained below.

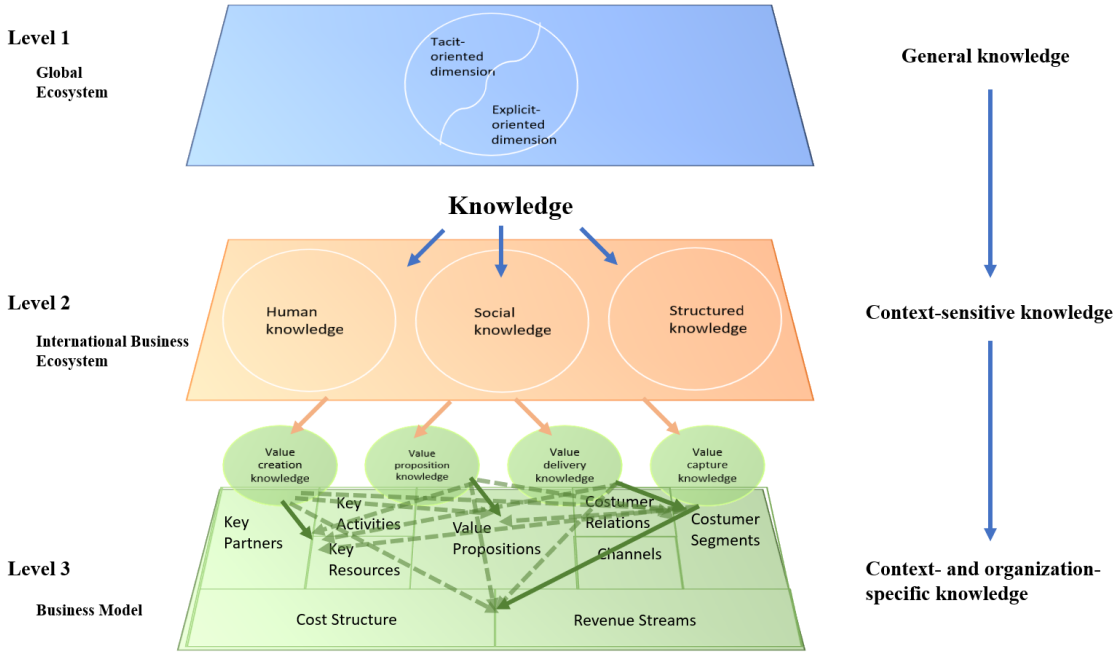

Figure 2: A dynamic hierarchical system of knowledge (Wang & Chin 2020, 7)

The first level is the global ecosystem that starts with the general knowledge, at this point there is a symbiotic co-existence of the tacit and explicit oriented dimensions of knowledge, it takes in to account the fact that knowledge cannot be separated from a person and is seen as process that is dynamic and in continuous exchange between tacit and explicit knowledge. (Wang & Chin 2020, 5-6.)

The second level approach to the International Business ecosystem with a context-sensitive knowledge, at this point some context enters in the equation and it starts to become a part of the industry context. It divides knowledge into three categories: Human Knowledge, Social Knowledge, and Structured Knowledge, which will be explained below. (Wang & Chin 2020, 6.)

Human Knowledge is the individual personal capabilities, skills, and expertise. Due to the specific intellectual and professional abilities of the person this knowledge encompasses different combinations of tacit-explicit knowledge. (Wang & Chin 2020, 8). Taskin & Brodoux (2010, 2506) describe task-related knowledge as the technical

knowledge that is necessary to perform the job including professional expertise and skills, this knowledge can be either explicit or tacit.

Social knowledge primarily exists within interpersonal connections and groups and is predominantly tacit or implicit because it thrives within the interactions between individuals and community. It is a combined knowledge of the individual and specific-collective society knowledge (Wang & Chin 2020, 8). Enhancing the previous descriptions, universal ethical claims and morality are included as characteristics of a general cultural social axiom like social knowledge (Chin et al. 2022, 95).

Structured Knowledge is related to operation processes, systems and routines on information-processing and industry resources. It is mainly explicit and rule-based on the characteristic of something that runs independent of the individual, as software that is designed to follow the logic and knowledge of a person, but it runs independently for example a statistical software. It has the distinction that it carries the cognitive biases, and experiences of the origin. (Wang & Chin 2020, 8-9; De long & Fahey 2000,95.)

The last level of the dynamic hierarchical system of knowledge is in the business model with context- and organization- specific knowledge. It embodies all the subjects of value of knowledge creation, proposition, delivery, and capture. (Wang & Chin 2020, 6-7.)

For this study, knowledge will be understood as that knowledge which encompasses the tacit and explicit dimensions of knowledge inherent to the individual and is primarily focused on the execution of tasks within the organization. The structure of the knowledge that a person owns can be described as an eco-system that includes human, social, and structured knowledge linked to the tacit-explicit knowledge that once is applied it has an outcome for the organization.

2.2 Knowledge transfer

To enhance the understanding of the theoretical background, this section explains the definition of what knowledge transfer is, characteristics, types of streams as internal and external knowledge transfer to understand the flow process of knowledge that can be found within companies and ends with the explanation of near and far knowledge transfer as dimensions of when and where knowledge can be transferred.

Knowledge transfer is not a unique concept and there are various terms, including “knowledge sharing”, “knowledge flows”, and “dissemination of knowledge”, which refers to the same phenomenon (Similä & Western 2022, 26). According to Liyanage et al. (2009, 122), the transfer of knowledge is done from one location, individual, system, or ownership to another, and it is successful when the receiving entity effectively acquires and incorporates new knowledge. It can be also understood as teaching that is the action from a source entity that imparts to a receiving entity knowledge, skills, or a mindset either individually or collectively (Zhen & Jaideep 2009, 963) or training that is perceived as the transfer of explicit or tacit knowledge from the mind of someone who knows to the mind of someone who does not (Brown & Duguid 1991, 47).

2.2.1 Characteristics of knowledge transfer

The transfer of knowledge is not a static process; rather, it is dynamic and integral to a continuous learning process; it is breakable into a series of subprocesses (Gilbert & Corday-Hayes 1996, 303); it should not just be about passing information from one person to another, instead, it should aim to encourage and contribute to a collaborative process of creativity (Castellano et al. 2016, 254) and to have changes in the understanding or capabilities of the receiving unit (Inkpen & Tseng 2005, 150). There are influential factors from the psychology perspective for knowledge transfer. These are three aspects that are important for improving work performance: (1) motivation, (2) opportunity, and (3) ability (Minhyung & Byoungsoo 2017, 217).

The motivation is needed in both ways, from the sharer the willingness to transfer the knowledge to a person and from the receiver the motivation to absorb new knowledge, it can be understood as the close emotional relationship that strengthens the trust between them. The second factor is the opportunity as the frequency of interaction, it is the environment and the availability needed to be able to transfer the knowledge. And last is the ability, meaning a source with appropriate expertise helpful for the receiver. (Minhyung & Byoungsoo 2017, 217.)

The previous factors describes the antecedents for the knowledge transfer and the five-stage knowledge transfer model (Figure 3) outlines how organizational processes achieve knowledge transfer by dividing the process in five stages named: (1) Acquisition, (2) communication, (3) application, (4) acceptance, and (5) assimilation. (Gilbert & Corday-Hayes 1996, 304) that will be explained in detail in the paragraphs below.

The first stage of the model is acquisition and relates to that subprocesses of knowledge transfer before of being able to transfer it, it is essential to acquire it. The source of knowledge can be internal or external from the company. If it is internal it can come from the experience by doing from the past, knowledge coming from coworkers or other areas within the company, or if it is external, it can be borrowed or obtained from external sources, or enroll individuals with new knowledge. (Gilbert & Corday-Hayes 1996, 304.)

The second stage is communication and refers to the process of distribution of knowledge, it can be written, or verbal and it is important, so the opportunities of transferring are effective within the company. (Gilbert & Corday-Hayes 1996, 304) It is critical for the success of knowledge transfer the motivation of competent employees to transfer the knowledge and the creation of an environment where the knowledge can be transferred at work (Minhyung & Byoungsoo 2017, 214)

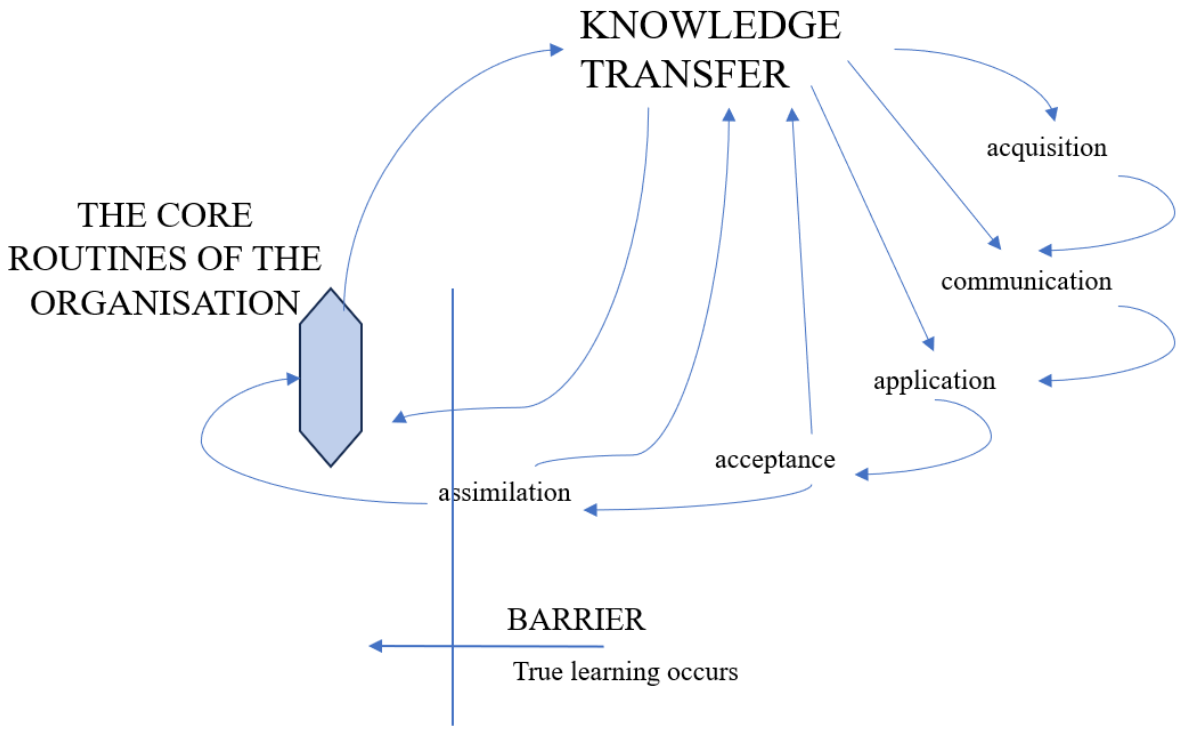

Figure 3 The five-stage model (Gilbert & Corday-Hayes 1996, 309)

The third stage is application and alludes to the knowledge that must be applied to be able to be retained, the result of this stage allows the organization to learn (Gilbert & Corday-Hayes 1996, 305). The next stage is acceptance after learning the new procedure is accepted to be applied in the organization routines; and the last stage is assimilation where

the effect of applying the knowledge gained is introduced into the routines of the organization, it implies the notion of change in individuals (Gilbert & Corday-Hayes 1996, 308).

Knowledge transfer is a source of firms' sustainable competitive advantage (Osterloh & Frey 2000, 538 Liyanage et al 2000, 117), contributes to the organizational performance (Argote & Ingram 2000, 150), and in teams lead to the best team outcomes (Men et al. 2019, 821). The transaction of each type of knowledge is different, explicit knowledge is tradable while tacit knowledge cannot be observed, only the result can be seen in terms of output. (Osterloh & Frey 2000, 546). Depending on the kind of knowledge involved in the transference it can be relatively difficult to capture and transfer the knowledge (Davenport & Prusak 1998, 95).

There are different communication mechanisms for knowledge transfer as trainings, conference meetings, visits, telephone calls, video calls, intra- and internet, and it depends on which one to use according to the information processing capacity, and tacitness or explicitness level of knowledge (Gorovaia & Windsperger 2010, 12). Those mechanism with high level of knowledge transfer capacity are better for tacit knowledge transfer that includes attributes as teaching, demonstration and participation as face-to-face meetings, trainings, visits and/or workshops, giving the capacity of direct experience, immediate feedback, and focus; in contrast when the knowledge is explicit and codifiable, the mechanism to transfer the knowledge can be documents with quantitative nature that do not allow feedback and refer to mechanisms as written media and instructions, manuals, reports and electric media (Gorovaia & Windsperger 2010, 14).

In the literature is possible to find different streams for transferring knowledge, and some of them will now be discussed and explained, there are two main streams: internal and external knowledge transfer including within each one different subcategory; it includes also different dimensions where knowledge transfer can be done, known as near and far knowledge transfer.

2.2.2 Internal knowledge transfer

Internal knowledge transfer can be seen at different scales within the organization, either between offices of a multinational company or within one organization that will be explained below.

In multinational companies the knowledge transfer can have different directions based on the source or sender, and the receiver unit; Vertical knowledge transfer is when the knowledge flows from the headquarters to subsidiaries; or reversed vertical knowledge transfer is when the knowledge flow goes from subsidiaries to headquarters (Castro & Moreira 2023, 2). Other stream is horizontal or lateral knowledge transfer that consist in the knowledge that flows among peer subsidiaries (Castro & Moreira 2023, 3). Headquarters add value by sharing their knowledge with subsidiaries, offering valuable resources and capabilities that can be applied in local markets. Meanwhile, subsidiaries have specific advantages in developing local and contextualized knowledge, which can be utilized by the headquarters or other subsidiaries (Castro & Moreira 2023, 2).

Within companies, knowledge transfer can occur from one person to another, from a person to groups, or between groups (Castellano et al. 2016, 258). The transfer of technical knowledge from individual to individual consist in the brain and body skills of the person that can be transferred to another, it includes sharing objectives and principles of the organization, the unique terminology and specialized language used within the organization, and the established practices, customs, and narratives of the company (Taskin & Bridoux 2010, 2507) e.g. the individual task-specific knowledge that includes job specific skills and individual routines (Zheng & Jaideep 2009, 962). Transferring tacit knowledge poses challenges as it involves translating the unspoken into words. Utilizing figurative language and symbols greatly aids in transferring tacit knowledge effectively (Chakrabarti 1997, 2).

Other type of knowledge transfer is the collective-level learning that involves organizational activities where multiple members interactively share, create, and integrate their individual knowledge, e.g. interpersonal routines or inter functional routines and procedures (Zheng & Jaideep 2009, 961).

2.2.3 External knowledge transfer

There are some common network types where the transfer can be done from external sources to the companies, these are: strategic alliance or industrial districts (Inkpen & Tsang 2005, 146.)

A strategic alliance between companies can be pursued to obtain access and transfer of knowledge (He et al. 2012, 229). It consists in voluntary arrangements between

companies to exchange, share or codevelop services, products, or technology (Inkpen & Tsang 2005, 148). There are different types of learning that can occur in this specific alliance, these are learning from, learning together, learning to manage, or learning about (He et al. 2012, 238.)

Learning from an organization in a strategic alliance occurs when one company learns from the knowledge of other company (He et al. 2012, 238) e.g. the alliance between Coca-Cola and Tanzania´s medical store departments to learn about the supply chain expertise of Coca-Cola to improve the availability of medical supplies in Tanzania (Linnander et al. 2017, 1). The second type is learning together and is seen when partners of a strategic alliance develop new knowledge together (He et al. 2012, 238) e.g. when a strategic alliance provides access to complementary knowledge and skills that are not available in the firm and is costly to develop on its own (Wu & Cavusgil 2005, 87). Third type is learning to manage that occurs when the knowledge gained in strategic alliances is utilize in the management of future alliances (He et al. 2012, 238) e.g. studies show that having experience in strategic alliance is the foundation for repeated success, however with increasing experience there can be overconfidence trap (Heimeriks 2010, 57). Final one is learning about a partner of the alliance to support the operation effectively of the strategic alliance (He et al. 2012, 238) e.g. the process of partner selection with the use of codified knowledge like documents, manuals, or books; (Heimeriks et al. 2015, 462.)

An industrial district is a network of independent firms operating within the same cluster, sharing a related market segment or geographic locality. Examples include companies in Silicon Valley or universities (Inkpen & Tsang 2005, 149). When knowledge transfer occurs, it leads to the accumulation of local know-how within the district's boundaries, extending beyond individual companies. Three primary mechanisms facilitate this transfer: firstly, the movement of the workforce between companies within the district; secondly, interactions among suppliers, clients, and capital equipment makers or users; and thirdly, the emergence of new companies spurred by innovation and research efforts of established businesses, universities, and public sector research labs (Inkpen & Tsang 2005, 150.)

2.2.4 Near and far knowledge transfer

The unification of the interpretation and the understanding regarding near and far knowledge transfer allows to make sense of the vast literature of the extent to which transfer occurs by defining the terms based on what, when and where knowledge is transferred (Barnett & Ceci 2002, 612.)

Bernett & Ceci (2002, 612) provide a framework with nine dimensions that show different classifications of near and far knowledge transfer within the literature. Some examples are transferring knowledge with temporal proximity or physical similarity is a near transfer, in contrast far knowledge transfer is distant future or different work environment (Huang et al., 2017, 560). Time difference can influence transfer differently across individuals, some trainees can identify more opportunities in situations and persons to apply the knowledge acquired as the time elapses. Some can remain stable, and others may decrease the application of skills. (Huang et al. 2017, 562.)

Near and far knowledge transfers have different dimensions as near and far can have different meanings, Barnett & Ceci (2002, 621) developed the taxonomy of knowledge transfer decomposing the characteristics of transfer into two factors (Table 1). These factors are the content and the context; the content refers to what is transferred, and the context is when and where knowledge is transferred (Bernett & Ceci 2002, 621). The section A of the taxonomy classifies the first factor, the concept, into three different dimensions: Learned skill, performance change, and memory demands (Barnett & Ceci 2002, 621). Further details about section A will be provided in the following paragraph.

Table 1: Taxonomy for far transfer (Barnett & Ceci 2002, 621)

A Content: What transferred			
Learned skill	Procedure	Representation	Principle or heuristic
Performance change	Speed	Accuracy	Approach
Memory demands	Execute only	Recognize and execute	Recall, recognize, and execute

B Context: When and where transferred from and to					
	Near ←				→ **Far**
Knowledge domain	Mouse vs. Rat	Biology vs. Botany	Biology vs. economics	Science vs. history	Science vs. art
Physical context	Same room at school	Different room at school	School vs. research lab	School vs. Home	School vs. the beach
Temporal context	Same session	Next day	Weeks later	Month later	Years later
Functional context	Both clearly academic	Both academic but one nonevaluative	Academic vs. filling in tax forms	Academic vs. informal questionnaire	Academic vs. at play
Social context	Both individual	Individual vs. pair	Individual vs. small group	Individual vs. large group	Individual vs. society
Modality	Both written, same format	Both written, multiple choice vs. easy	Book learning vs. wine tasting	Lecture vs. wine tasting	Lecture vs. wood carving

As it was mentioned before the content of the knowledge has three dimensions, the first dimension is called learned skill; it refers to the acquired knowledge that can be facts or routine procedures, representations, and problem-solving strategies or principles; for example a procedure can, be a sequence of steps, while a principle reflects a deeper understanding of structures or causal relationships (Barnett & Ceci 2002, 621). The second dimension, performance change, measures expected improvement across three aspects: speed, accuracy, and approach. This encompasses the pace of task execution, the precision and quality of execution, and the approach to performing or abstaining from specific tasks (Barnett & Ceci 2002, 622). And the last dimension of the concept, known as memory demands, examines if the transferred knowledge needs to be only executed,

or select the correct procedure and apply it, or recall the skill, the applicability, and execution (Barnett & Ceci 2002, 622.)

The section B of the taxonomy classifies the context in multiple dimensions, which involves when and where learning is transferred from and to; there are six dimensions that are labelled as: knowledge domain, physical context, temporal context, functional context, social context, and modality (Barnett & Ceci 2002, 623); each of these will be explained bellow when is considered near or far knowledge transfer.

Knowledge domain is the first dimension of the context of knowledge and it refers to the base of the knowledge where the skill needs to be applied, for example, near knowledge transfer according to the knowledge domain can be considered physics to chemistry as more elements can be shared between this two sciences; in contrast far knowledge transfer can be physics to English (Barnett & Ceci 2002, 623), however there can be scenarios that stands in an intermediate level between near and far where the knowledge can be applied in a different domain that is not completely near or far, for example when math and fractions learned in the school can be applied in the analysis of dividing ingredients at a bakery (Barnett & Ceci 2002, 612.)

Second dimension, known as physical context, occurs under two aspects, one macro aspect is where the transfer phase occurs as the school, laboratory, or house; and one micro aspect as if it is done in the same or different room for example near transfer can be when the person that transfer the knowledge is in the same building and room of the person that is receiving the knowledge, and in contrast far knowledge transfer is when the location is different and it is taught in a remotely physical context (Barnett &Ceci 2002, 623.)

Third dimension is temporal context that refers to the time elapsed either between training and integration to the core routine phase, or if there is a time constraint during the transfer it can lead to a restricted application; this means that near knowledge transfer is when teaching and the application are in the same day, and far knowledge transfer is when there is a time difference or a gap of time between the transference of knowledge and the application (Barnett & Ceci 2002, 623.)

Functional context is the fourth dimension which refers to the level of usage of the knowledge into its original purpose, in this context near knowledge occurs for example

when a problem-solving tool can only be used for one purpose and it is not possible to transfer to another, and in contrast far knowledge transfer can be for example an academic activity that transfer knowledge that belong to the world outside the academia (Barnet & Ceci 2002, 623.)

The following dimension concerns the social context, examining whether a skill learned or performed in a group setting may differ in its application under different social contexts. For example, in this dimension, near knowledge transfer could involve a skill learned in groups that is possible to apply individually. On the other hand, far knowledge transfer could involve a group skill that might not be well-applied individually, or vice versa. (Barnet & Ceci 2002, 623.)

Last dimension is named modality, it refers to the means of the transfer, and if the knowledge and the task have the same aspect then is near knowledge transfer, but if they are different then is far knowledge transfer; for example some macro aspects of the task can be visual, written, spoken, or auditory; and some micro aspects are format is essay or multiple choice among others (Barnet & Ceci 2002, 623.)

As it has been found, there are different dimensions that refer to near and far knowledge transfer and might be very rare that a transfer task qualify as far on all dimensions, however, it may be more beneficial for the research to not generalize the terms of near and far knowledge transfer but instead indicate whether the transfer situation is near or far along which dimension to be able to have more accurate assessments of the study findings (Barnet & Ceci 2002, 623) so for this research near knowledge transfer will be understood as that physical context where the transfer of knowledge is done in the same room in a face to face mode, and in contrast far knowledge transfer will be that one where the skill is transferred remotely either in live communication form as video calls and phone calls, or via premade documentation and videos that can teach a skill by self-studying. With respect to the other dimensions, it will not be one-sided; rather, it will encompass flexibility in the various contextual options.

2.3 Job performance

This section starts with the definition of job performance, followed by characteristics and specific definition of the main two themes of job performance such as task performance and contextual performance.

Knowledge transfer within the organization can be seen through changes in the knowledge or the performance of the recipient (Argote & Ingram 2000, 2). It has become the key for outstanding performance (Lubit 2001, 580) and the effectiveness of knowledge transfer performance has a necessary condition that relies on the application of the newly acquired knowledge (Huang et al. 2017, 561.)

Organizational performance can be seen as the financial and business performance (Castro & Moreira 2023, 24). The efficiency of the organization as an open system is understood as the company survives if all the energy input creates value and returns to the ecosystem as the core of the business, a product, or a service. A unit of measurement on this efficiency is evaluating how much outcome is obtained for a given input or how much input is needed to obtain certain output, and how it can be compared to the peer companies or products. (Katz & Kahn, 1978, 226.) At the end is the aggregated value for the organization made by the employee that contributes to the organizational goals (Rich et al. 2010, 617).

2.3.1 Characteristics of job performance

Job performance includes those activities that contribute to an organization (Rich et al. 2010, 620) and related to the employee, it means the proficiency to perform the organizational tasks (Shah et al. 2018,185). It can be ranked in the degree of individual task performance or the level as a member of a team behaves for the good of the group work (Ozcelik & Barsade 2018, 2353). Job performance means aggregated value to the organization, and it is considered behavioral, episodic, evaluative, and multidimensional (Motowidlo et al. 1997, 72).

Behavioral – this characteristic refers to the actions that people do while at work and it is included in job performance as people are affected not only by conditions on the performance but also by other factors not under the individual control (Motowidlo et al. 1997, 73).

Episodic – this means that the behavior of a person is a stream inherent to the individual that is continuous, however, during the work-day people can do things that do not accomplish its goals for the organization and do not influence their job performance (Motowidlo et al. 1997, 73).

Evaluative – this is the form to decide if the behavior has positive or negative effects to accomplish companies' goals. The organization have multiple goals unrelated to each other, so it is possible to recognize behaviors in the workplace that are considered more or less desirable by the organization, and to measure the extent to which they are seen as desirable with enough accuracy to differentiate between them.(Motowidlo et al. 1997, 74.)

Multidimensional – the domain of job performance can be one dimension when is seen as the comparison between the real behavior versus the standard interval that the organization considers for a task, this can be interpreted as the contribution value. Or it can be multidimensional as there are different kinds of behaviors so the performance domain that aggregates value can be analyzed in different homogeneous categories of behavioral episodes that prove to be related to job performance . (Motowidlo et al. 1997, 74-75.)

Job performance incorporates two themes, task performance and contextual performance (Motowidlo et al. 1997, 72) that will be explained below. The main difference between these two themes refers to their focus either on tasks or interpersonal factors; task performance focuses on proficiency and motivation to effectively complete one's assigned tasks, and contextual performance focuses on interpersonal skills and motivation to interact with others in a manner that promotes positive working relationships and assists them in their tasks (Van Scotter & Motowidlo 1996, 530).

2.3.2 Task performance

Task performance are the requirements in job descriptions of the employee that includes the execution of activities necessary for a role (Williams & Anderson 1991, 606), or it can be seen as activities directly related to the core of the job (Rich et al. 2010, 620). It is called in-role performance, defined as the outcomes or behaviors required to directly contribute to the goals of the organization (Bakker et al. 2004, 84-85). The primary precursors for task performance are ability and experience, that add to the job-specific behaviors and core job responsibilities (Conway 1999, 3).

There is a difference between task performance in managerial and nonmanagerial jobs, in the case of managers, they accomplish goals through the work of others by executing two components in their job: technical-administrative task performance and leadership task

performance. The first component includes tasks such as technical ability, business assessment, planification, organization, and management, alternatively, leadership task performance task includes guidance, direction, and motivation of the subordinates in their job including providence of feedback. (Conway 199, 4-5.)

For nonmanagerial employees a task requires to ‘know-why’ and ‘know-how’ as part of the understanding and development of practical skills (Letmathe et al. 2012, 222) in other words degree to which a person meets the requirements that are described in the job description of the individual job (Carpenter et al. 2021, 322). The application of these skills directly obtains goods or services by transforming materials (Balca er al. 2021, 296).

2.3.3 Contextual performance

These behaviors are a broader environment including the organizational, social, and psychological aspects in which the technical core, task performance, function (Motowidlo & Van Scotter1994, 476) such as coworkers’ cooperation or show of dedication to work (Conway 1999, 3). Contextual performance is included in job performance criteria as working in an organization can differ from working alone (Van Scotter & Motowidlo 1996, 525).

This extra-role performance includes those behaviors that promote effective functionality of the organization without involving direct task performance (Bakker et al 2004, 85) and it has two sub-constructs, interpersonal facilitation, and job dedication. Some specific behavioral elements for interpersonal facilitation are acts to assist coworkers’ performance such as cooperative, considerate, and helpful behaviors ; or job dedication includes acts to support company objectives such as self-discipline, work hard, take initiative, and follow the rules. (Van Scotter & Motowidlo 1996, 525.)

2.4 Synthesis

The structure of the knowledge flow (Figure 4) contain various aspects to consider. The primary actors are two distinct entities: one acts as a knowledge sharer, and the other as a knowledge receiver. In other words, it represents the transfer of knowledge between employees within a company in which case depending on the scenario one can act as a sharer while in other context the same employee can be the receiver of the knowledge.

The focus of this research is to understand how different dimensions of knowledge transfer, categorized as near and far transfer, influence individual job performance.

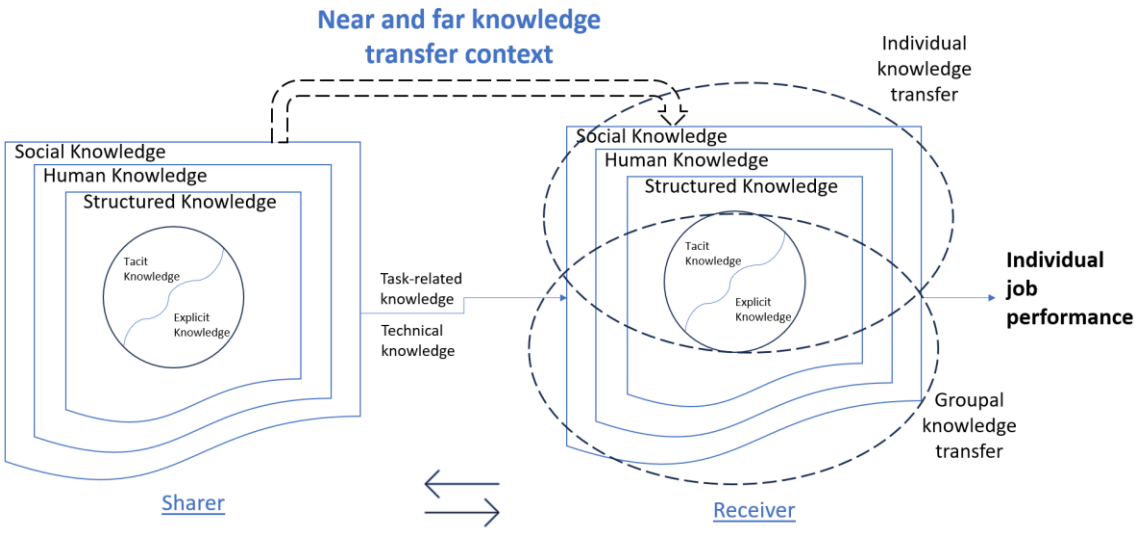

Figure 4: Knowledge transfer between employees reflecting on their job performance.

The structure of the actors includes the knowledge that is already in each person before the new knowledge is transferred. It encompasses different levels, such as social, human, and structured knowledge, with a foundation or core of tacit and explicit knowledge as all these types of knowledge can either be tacit or explicit knowledge. The three different levels of knowledge will be explained below.

First, Social knowledge integrates the interpersonal connections that includes ethical and moral characteristics between individuals in certain groups or communities. Next, human knowledge includes the individual capabilities and specific intellectual abilities to develop professional activities, this is the main knowledge to be analyzed during the research. This study centers the attention on task-related knowledge or technical knowledge needed to develop a role within the company, this types of trainings in the companies can be either individually or in groups that might also affect the learning and job performance. And last, structured knowledge is more related to the organization including operation processes or usage of software that run independently but based on the logic and knowledge of a person.

In this structure the transfer of knowledge is analyzed in two dimensions, 'near knowledge transfer' refers to situations where knowledge is exchanged in close physical proximity, typically through face-to-face interaction within the same room. Contrary, 'far knowledge

transfer' involves remote transfer of skills, either through live communication methods such as video calls and phone calls, asynchronous communication as chats or messages, or through pre-made documentation, repositories and videos that facilitate self-study.

The outcome of this knowledge flow is the job performance of the individual. As a whole job performance includes the development of the activities that contribute to the organization including two themes such as task performance and contextual performance. Task performance focusses on the assigned task while contextual performance focuses on interpersonal skills that promote positive relationships within the working context.

The aim of this research is to analyze how the individual job performance is, if it might be easier for the person to apply what is learned or there is need of reinforce or clarification on the task-related or technical knowledge based on the context that is used for the transference.

3 Research Design.

The research design is the methodology followed on the study with a goal of answering the research questions. This chapter intends to explain the chosen procedure and the justification of it. This part is divided into subchapters which consist of first, the research approach that is qualitative research. Second, data collection, that describes the tools used and interviewees' description. Third, data analysis to describe what was done with the data collected. And finally, the evaluation of the study establishes the evaluation criteria of the research.

3.1 Research approach.

Research is pursued to enhance knowledge about what is already known or extend the knowledge about a new phenomenon. It requires the identification of a problem, understanding it, identifying the source of the data, and how to collect and analyze data. (Adams et al. 2007, 2). There are two main domains of research, quantitative and qualitative, and each methodology has different principles, in one side quantitative is based on standards and strict design with statistical analysis; while in the other side qualitative research is based on different theoretical principles for exploration and description of the reality as it is experienced (Adams et al. 2007, 6).

The research approach chosen for this paper was qualitative as the idea was to deeply understand the subject and identify how the job performance is affected. There are different forms of conducting qualitative research depending on the types of data and analysis (Tomaszewski et al. 2020, 1) and synthetic strategy has a predictive power that takes the data to construct global measures from the detail to describe it (Langley 1999, 704).

There are four qualitative common approaches: case study, ethnography, narrative, and phenomenology. The first type of approach, case of study, is useful as it provides a description of interrelated factors of a case. Second, ethnography relates to the study of the culture and patterns of a group of people. Third, narrative inquiry describes stories that people tell to identify the meaning that the person gives to an experience. And last, phenomenology focuses on the essence of a phenomenon that can be observed by different people with the goal to describe the meaning by the people who live it. (Tomaszewski et al. 2020, 1-3.)

The process of this research included a scientific method that takes into account five key aspects of the method such as organization, planning, conduction, analysis, and report of the findings; these were applied in the research cycle (Figure 5) that consisted in a loop divided into six stages: formulate, research question, research design, collect data, code and analyze, and report findings.

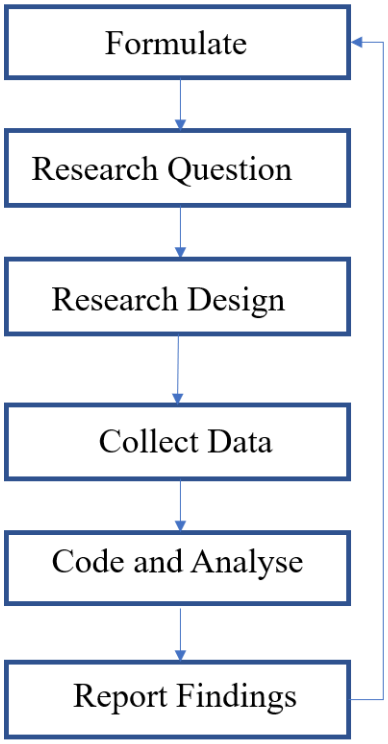

Figure 5: Overview of the research process followed in this study. (Adapted Adams 2007, 27)

As stated before, the research cycle had six stages that will be explained to understand the details of each step. The cycle started with the formulation of the research, this stage included the theoretical background and research gap. The second stage was the research question, which included the research proposal and theoretical understanding of the phenomenon with the literature review. Once the second stage was done, it was followed by the research design where was established the category for the research, it included the tools that were used, and processes followed to collect the data and analysis. The next stage was the collection of the data and after that the data was coded and analyzed, to reach the final stage which ended with the report of the findings. The process turned into a cycle as after the findings there was a possibility that with the results there were items to include in any of the stages of the cycle.

3.2 Data collection

Adams et al. (2007, 97) establishes that in business and management to know how the things are, why a phenomenon occurs or what are the intentions, an interview is important to obtain the research data and the source is held by people where qualitative data helps to understand in-depth motivations for behavior or feelings of the people. Methodological components of data collection for a narrative study can be done with different types of interviews as: unstructured or semi-structured (Tomaszewski et al. 2020, 4).

Often semi-structured interviews are the chosen approach, and it is structured as a road map of questions that work as a guide though the interview with open possibilities to have follow up questions. In business and management for successful research it is important to involve relevant stakeholders such as: managers, employees, or customers. (Adams et al. 2007, 143-144.)

As general guideline for the interview, the operationalization table (Table 2) was structured with the themes and sub-themes discussed in the interviews to answer the sub-questions and main research question. Interviews rarely take longer than an hour or less than twenty minutes, it is important to make a pre-test with key aspects such as: comprehension of the list of questions, appropriate language, identify problems as double meaning or multiple topics in one question, and have the structure to motivate the respondents (Adams et al. 2007, 146).

Table 2: Operationalization table

Research question	Sub-questions	Theme	Sub-theme	Interview theme
How the utilization of different dimensions of knowledge transfer between employees reflects on their job performance in MNEs?	How near knowledge transfer reflects on the job performance ?	Near and Far Knowledge transfer	Face-to-face enviroments	2, 4
			Virtual training	2, 4
			Asynchronus transfer	2, 4
	How far knowledge transfer reflects on the job performance?	Job Performance	Task performance	1, 3, 4
			Contextual performance	1, 3, 4

The themes of the interview were the dimensions of knowledge transfer, near and far knowledge transfer, and job performance, these two themes were sub divided into sub-

themes. For near and far knowledge transfer the research approached with three sub-themes; the first one was face-to-face environments that means non virtual and on-site type of knowledge transfer; the second one was virtual training that considers virtual meetings or phone calls on the training sessions; and last sub-theme was asynchronous transfer that takes into account repositories, videos and documentation that the company has with knowledge that the employee can self-study.

The theme of job performance was divided into two sub-themes to analyze the key aspects that the company includes when evaluating job performance of the employee. The first sub-theme was task performance that focuses on all the task-related knowledge and skills; and the second sub-theme was contextual performance that approaches the behavior of the employee.

After having structured the themes and sub-themes that were considered for the interviews, the development of the interview guide (Appendix 1, Appendix 2) included the questions given to the interviewee. The guide was in English (Appendix 1) and in Spanish (Appendix 2) as there were some interviewees that spoke Spanish. Before starting with the interviews, a pre-test was done to identify possible double meaning problems and that the questions were clear for the interviewee.

The semi-structured interviews were run individually giving the opportunity to express the ideas freely and confidentially. The interviews were conducted virtually between April first and April fifth using zoom account from the University of Turku; this software allowed to have virtual meetings without affecting the quality of interview, and it also permitted to record and download the interview for future analysis.

A total of six interviewees were selected from five different organizations. The profile of the interviewees was based on a strategic role responsible for the training of the employees in a multinational company to analyze different dimensions of knowledge transfer and the impact on the job performance. The organizations where the interviewees currently work operate in different countries and belong to different types of industries such as manufacturing, service, and hospitality industry. The details of the conducted interviews (Table 3) are listed including current position, country region, length of the interview, and date.

Table 3: Conducted interviews

Interview	Position	Country region	Length (min)	Date (dd.mm.yyyy)
1	Technical service leader	Latin america region	48	01.04.2023
2	Technical support manager	Brazil	70	01.04.2023
3	Team lead	Finland, Poland, and Sweden	30	03.04.2023
4	General Manager	Colombia, Mexico, USA	40	03.04.2023
5	Training officer	Finland, Estonia	60	04.04.2024
6	Software engineer	Chile	45	05.04.2024

All the informants were contacted via WhatsApp or google chat, and via email; the first contact via text was to inform about the research topic and interview themes beforehand aiming to agree on a date and time to run the interview, after that the informed consent and zoom link for the meeting was sent in advance to the email so all the documents were ready to proceed with the interviews. During the interview the informants had free discussion time to share about the topic's knowledge transfer and job performance within the companies they currently work, it is important to emphasize that this research followed the guidelines of the data management plan (Appendix 3) and the general data protection regulations and the Finnish data protection act detailed in the informed consent (Appendix 4) and the privacy note (Appendix 5). These documents were handed to the participants via email and asked to be signed beforehand.

Mayer & Steneck (2012, 9) states that research integrity is ensured when there is no plagiarism, falsification, or fabrication of data. This research used proper citations, quotations, and reference lists to use information from others. The data management plan (Appendix 3) ensures the ethics utilized to assure no falsification or fabrication of the data, all the interviewees received the informed consent (Appendix 4) and privacy notice (Appendix 5) to be read and signed prior the interviews. In this case, all 6 interviewees signed the documents accepting voluntarily to be video and audio recorded, they accepted the identification with the current position, pseudonym, and impersonal attribution. Only one person did not consent to use their full name, therefore the list of conducted interviews does not include any full name.

3.3 Data analysis

After collecting the data in qualitative research, when conducting data analysis, it is needed to code, sort, and identify the themes and the relationship with the data focusing on what was said during the interviews regarding a description of the phenomenon (Tomaszewski et al. 2020, 4-5). To start the data analysis some preparation is needed, the data must be ready for the analysis in written form (Adams et al. 2007, 153), in this study initially it was used *Otter.ai* free version to transcribe the interviews audio into text but as this application only works with English audios, maximum 30 mins records and only 3 transcription per account; there was a need to find other option for the interviews that were done in Spanish or lasted more than 30 minutes; in this case I had used *tldv.io* on the premium version that support several languages and it has no restriction for the length of the interview.

After the data was transcribed, the process for the data analysis followed four phases, beginning with reading what the interviewees had said and listening to the interviews to double check that the transcription file was complete, then identified meaning units, third, transformed meaning units in main themes by making explicit what was hidden or implicit and found general ideas through all the research. And last, went over the themes to find the essence of the phenomenon research over the central themes. (Tomaszewski et al. 2020, 4-5). Some important aspects for the first two phases, read the transcripts and identify meaning units, are that for the first phase starts with re-reading the transcribed interviews and familiarization of the data and for the second phase, identifying units, it involves the application of codes to the data, these can be either numerical or alphabetical with names that represent the theme (Adams et al. 2007, 158). For this study was used a coding tool called *Nvivo*. This software is a text analyzer that allows the user to classify several texts according to pre-established themes to easily visualize the findings under each theme.

The last two phases of the data analysis were transforming meaning units into themes and finding the essence of the phenomenon over the central themes by a content analysis approach. Adams et al. (2007, 159) refer to content analysis as a popular approach for qualitative research. The purpose is to classify and describe the content of the interviews and for semi-structured interviews present representative findings (Adams et al. 2007, 159).

3.4 Evaluation of the study

To assess the research, the main lineament was to know what kind of data was needed to collect and how to be analyzed to make sure that the research preserved the rigor, and it was aligned with the research approach. This must be ensured during all the process from start to finish and since design to the evaluation of the research (Tomaszewski et al. 2020, 5). According to Lincoln & Guba (1985, 300) there are four criteria widely used in qualitative research used to assess trustworthiness and rigor of the research such as credibility, transferability, dependability, and confirmability. Following this each criterion was addressed and related to this research.

Credibility - In research it was explicit which methods were used to establish the credibility of the data analysis (Cutcliffe & McKenna 1999, 379). In other words, to support credibility, engagement, methods of observation, and audit trails were demonstrated in the qualitative study (Cope 2014, 89). Credibility was determined by the capacity of the researcher to provide reality to the result (Lincoln & Guba 1985, 296). To promote methodological progress and quality improvement in the evaluation of the studies, awareness, informative use, and reporting of credibility techniques were necessary (Liao & Hitchcock 2018, 164).

Liao & Hitchcock (2018, 158) divided the techniques needed to give credibility of a research study into two categories (1) primary design techniques and (2) additional credibility techniques. The first category had those fundamental techniques needed in the qualitative design, implementation, and findings (Liao & Hitchcock 2018, 158). These techniques were the basic approach to carry out qualitative research and those were design, sampling, data collection, analytic details, thick description, reflexivity, and limitation and delimitations (Liao & Hitchcock 2018, 159). The second category techniques, additional credibility techniques, were optional strategies that promoted credibility such as: triangulation, audit trail, expert checking, prolonged engagement, or comparison and contrast, among others (Liao & Hitchcock 2018, 159).

In this research the primary design techniques started with the design, in this stage the thesis was structured based on the background, research gap, literature review, and research approach. Before the empirical study, the background, research gap and literature review were used to create a base giving support and credibility to ensure high quality, at this point some technological tools were used such as *UTU Volter* as a database

to find scientific articles and books considered reliable, *Google scholar* to find relations between articles and the cited by option, and lastly, Artificial Intelligence like *ChatGPT* was used to look for synonyms or clarify concepts in English for the redaction of the text. The research approach was structured as a cycled process to ensure a scientific method by justifying the qualitative research and the overview of the research process.

Following the techniques, sampling, and data collection, were included considering the operationalization table, profiling the interviewees approached with a triangulation by combining multiple sources data, drafts of the interview guides of a semi-structured interview, data management plan, informed consent, and privacy notice. For these, the technological tools that were used were *DMPTuuli* to structure the data management plan and *Zoom* to run and record the virtual interviews. The technique of the analytic details was considered in the data analysis utilizing *tldv.io* for the transcription of the interviews and *Nvivo* to code and familiarization of the data.

The next technique was thick description to achieve transferability by providing details describing processes and use quotes to present real data (Liao & Hitchcock 2018, 159). Throughout the research, the description of the process was elaborated to achieve a deep understanding of the scientific research, and in findings, there are quotes from the data collected to support the findings. And last two techniques, reflexivity and limitations and delimitations, included critical awareness of getting to know the proper process to run research and describe the contributions, implications, and limitations of the study.

Transferability - In qualitative research, assuring transferability meant putting together qualitative findings that were directly applicable or readily usable, so the research did not end in a disparate investigation (Finfgeld-Connett 2010, 246). This criterion was met when the results could be associated by the readers with their own experience, or when they had meaning for third parties not involved in the research (Cope 2014, 89). This criterion assured providing broad evidence to apply findings in similar or different contexts (Lincoln & Guba 1985, 316). For this research, the source of the data collection came from different backgrounds and organizations, aiming to find themes even though it was not possible to generalize due to the quantity of interviews. However, the study sought findings that went beyond a single company and focused more on the experience and point of view of the dimensions of knowledge transfer and how this affected job performance.

Dependability - This criterion referred to the details that explained the decision trails and justifications at each stage of the study so that other researchers could follow a similar path (Cope 2014, 89). Also, it involved establishing an audit trail that enabled external checks by documenting the assessment process and conducting a dependability audit using external auditors for quality assessment (Driessen et al. 2005, 216). All in all, dependability was the building of a truthful and reliable explanation of the methodology of the research and the phenomenon (Lincoln & Guba 1985, 299). In this thesis, each section had the details and justifications of the usage. This meant the audit trail relied on the descriptions and appendices that provided the path details of this research to be used in future research or to support the trustworthiness of the research. There is an important limitation for future researchers to consider as two languages were used for the interviews, English and Spanish, so in the Appendix 1 and Appendix 2 have been detailed questions in both languages. Additionally, the dependability audit and the support of the supervisors as external auditors in the quality control procedure gave quality assurance to the research.

Confirmability - This criterion assessed the objectivity of the research and the subject of the study managed by the researcher (Lincoln & Guba 1985, 300). Confirmability could be demonstrated by providing, in each emerging theme, the proper quotes from the participants and by describing the nexus between the interpretation and the conclusion with examples directly from the data (Cope 2014, 89). For this research, all the interviews were recorded on *Zoom* and transcribed in *tldv.io* to ensure confirmability. These files were saved following the data management plan, informed consent, and privacy notice; and in the findings section, direct quotes were used to assure objectivity at the time of presenting the results of the research.

4 Findings

This section compounds the empirical part of the research, this aims to investigate a dichotomy on dimensions of knowledge transfer and how its application affects the job performance of the employees in multi-national companies. To explore the topic further two sub-questions, guided the research: (1) how near knowledge transfer reflects on the job performance, and (2) how far knowledge transfer reflects on the job performance. This section reviews findings of the study, first introducing what is organizational knowledge for the interviewees, followed by the themes near and far knowledge transfer, and job performance. Finally, the study synthesis is elaborated and compared with the preliminary synthesis proposed on the literature review.

4.1 Organizational knowledge

At its core knowledge can be seen as information that individuals absorb for a particular action, it is not only in documents but also in routines, processes, norms, and practices (Davenport & Prusak 1998, 5). To understand the process of knowledge transfer it is important to explore what knowledge is for companies and categorize it according to the literature review. Only one interviewee referred to the basic form of knowledge and stated:

> "Knowledge has, I would say, some sort of basis in the truth. So basically, the more knowledge you have, the more certain of truth, more truth in life. Knowledge is a very, very important thing in any type of situation that you find yourself in and I would say it's a necessity for life." (Training officer)

In this statement, the interviewee refers to knowledge as the core and basic form of truth as a justified true belief (Zagzebski 1999, 100). Also, within knowledge there is a symbiotic co-existence of the tacit and explicit oriented dimensions of knowledge, it takes in to account the fact that knowledge cannot be separated from a person, and it is seen as a process that is dynamic and in continuous exchange between tacit and explicit knowledge. (Wang & Chin 2020, 5-6) Tacit knowledge is the information hard to express, share, or formalize (Lubit 2001, 166.), an interviewee said:

> "Knowledge subjective to the person, as if it had to be transmitted, which may be difficult to express in words. There are topics that already involve a part that goes combined between a personality and some logic, processes and applications are available, but in addition to that there must be a logical part

> that may be associated with the basic personality of the person or may be a training issue or even cultural issues." (Technical service leader)

This type of knowledge was not described by other interviewees, mainly as this knowledge is hard to "see", and for this interviewee it is related to that logic that is not the same for everybody but important for the execution of tasks. Companies mainly focus on explicit knowledge that is structured and is related to operation processes, systems and routines on information-processing and industry resources (Wang & Chin 2020, 8-9). An interviewee describes knowledge as the theoretical and practical processes applied in a role, in interviewee words:

> "For me the word knowledge is what we acquire not only in the theory part. I believe that theory is very good for you to know, but practice is a very good complement to theory. Because you see, many times we look at the theory, but in practice there are some things a little bit different, that maybe the theory is a rule. And when you go to practice, not necessarily the rule is going to work. So, knowledge in general must be theory and practice. And so, the two come together" (Technical support manager)

Task- related knowledge such as technical knowledge is the necessary one to perform the role, it includes skill and procedures (Taskin & Brodoux 2010, 2506). The informants described knowledge as processes, documentation and procedures related to the role.

> "Knowledge refers to processes and it is, therefore, how people know what to do and how to do it within the company. We do some things called knowledge bases. We use them for internal processes of the company is how we document processes within the company so that when there is a rotation or something, the person who enters the process, well, can be effective in the company very quickly." (General manager)

> "We have a lot of, well, IT -wise documentation is maybe the biggest part. So, for each bigger part of IT work, we have some documentation" (IT Team lead)

> "I would say knowledge would be like information management, in the sense of how things are detailed, how they work, how they are described. Based on my position and the tasks I do, the knowledge is technical, mainly about how the platform works." (Software engineer)

Overall, throughout the interviews the standardization of the processes is detailed in documents within the company. Therefore, the first code of the interview is organizational knowledge divided into three sub-codes such as social knowledge, structured knowledge, and human knowledge.

Social knowledge refers to the interpersonal connection between the individual and the community (Wang & Chin 2020, 8) and includes ethical and moral claims as general cultural social axiom (Chin et al. 2022, 95). According to the literature review this type of knowledge was included in the framework or synthesis of the research but this type of knowledge was not expressed by the interviewees when it was inquired about what knowledge is for the companies. Later in this section I will discuss separately the other sub-codes, structured knowledge, and human knowledge, as these were found during the interviews.

4.1.1 Human knowledge

Human knowledge refers to the personal capabilities that encompasses a combination of tacit-explicit knowledge that includes skills and expertise (Wang & Chin 2020, 8). Overall, this knowledge was discussed by all the interviewees as explicit knowledge and described as processes of what the people within the company should do. This is related to task- related knowledge or technical knowledge, and the interviewees agreed:

> "We do things called knowledge bases, which are knowledge bases. Knowledge bases is how we document processes within the company" (General Manager)

> "Either through technical documents or onboarding documents, guidance documents that allow you to gain that knowledge" (Software engineer)

Through documentation and repositories, the know-how of the role is stated for the person that is working in that position to know what to do. The idea is to develop a notion of the role, tasks, systems and how the processes are interrelated. Some of the interviewees mentioned how this knowledge is the starting point to navigate throughout the role and the organization, as it can be seen:

> "Back to Basics means putting a lot of emphasis on basic knowledge before going deeper into the knowledge and experience and understanding of the systems that the company works with, of the teams that the company works with in Latin America." (Technical service lead)

> "So you come to a certain position, then there are documents in which you read what the position has to do, what the goals are, what the objectives are, what tools you have to use, how we are going to measure you, how we know that you are being successful in the position, with which people you have to communicate, that is, everything is already very well documented." (General Manger)

As core of the organizational knowledge, this is transferred to the people within the organization and in the subchapter of structured knowledge, the transference of knowledge will be presented detailing how this knowledge is delivered and what tools the companies use for that.

4.1.2 Structured knowledge

This type of knowledge is the one used in tools or software that follow the logic and knowledge of a person but runs independently (De long & Fahey 2000,95) for some of the companies where the interviewees work the utilization of technology is part of the source of knowledge, these tools were described as bots that gave answer to questions regarding the processes or technical tools that help with the analysis of the problems. As two interviewees stated:

> "In some cases, also this Slack platform has bots that are built in that have predefined answers or also have artificial intelligence where the bot based on previous answers from people can try to answer your question without the need for you to wait for someone to read your question." (Software engineer)

> "Take advantage of these technological tools and have an added value for both the company and its customers in all diagnostic and repair work on the equipment" (Technical service leader)

This type of knowledge was only described in two of the companies and it can be related to the industry sector or related tasks for the positions as for example in restaurants as line cookers there is no need to utilize these tools for diagnosis. To continue with the finding's sections, now I will go through the dimensions of near and far knowledge transfer.

4.2 Dimensions of knowledge transfer

This section includes the perception of the interviewees about key aspects and challenges of knowledge transfer, and in detail when near and far knowledge transfer dimension was used.

4.2.1 Key aspects and challenges of knowledge transfer

The results from the coding process on the analysis of the key aspects and challenges that the companies face during the knowledge transfer process showed seven key points. These aspects are communication, timing, clarity, source, target, interaction, and willingness to share or learn. The first three aspects, communication, timing, and clarity

were mentioned in all interviews; while target, interaction, and willingness came up only in some interviews.

Communication – this was mentioned as a key aspect during the knowledge transfer process as in multicultural and multilingual teams the message that want to be delivered can have different interpretation, the interviewees' described communication as fundamental, and the language can be a barrier.

> "Language barriers" (Training officer)

> "The communication between them during the training session is important" (Technical support manager)

> "The communication is fundamental to be able to transfer the message clearly there must be a great capacity to understand the communication, both in Spanish, Portuguese and English, in such a way that a message can be transmitted in a very, very clear way." (Technical service leader)

> "The presenter is supposed to speak the language that is the target. But even if for example a person who is not a native speaker is introducing a person who could be a native speaker. Maybe slangs and things like that could appear. And it could make communication a little bit difficult. How the detail is understood and how the detail is conveyed" (Software engineer)

Overall, according to the interviewees, it is important to consider this aspect to transfer knowledge in multinational companies, it also includes hardware and software problems as one interviewee mentioned:

> "When it is a video call there are communication issues. There could be audio, video, noise issues that you may be presented with or the internet." (Software engineer)

Consider personal related communications aspect or technical infrastructure aspects can enhance the transfer of knowledge.

Timing – in this case the interviewees made a reference to the timing. Meaning the synchronization between the transfer, resources, and sharer and receiver of the knowledge. In other words, organize that all the parts are aligned is important for the transference of knowledge, as the interviewees mentioned:

> "A challenge for us is when we get to new things, and we have no knowledge, and we have to learn very quickly to teach it to the technicians or to give support to a client" (Technical support manager)

> "So, I think training at the right times is always beneficial to the company. If they become too recurrent, that they become almost a landscape, it seems to me that it takes a lot of time and energy away from the company." (General manager)

> "Resource availability when we are always looking to do the right things at the right time. But when we have a remote operation in a distant geographic location, technological or technical resources create a major constraint" (Technical service leader)

This means that giving the knowledge with the right timing facilitates the transference of knowledge by considering that the knowledge is delivered by the time is needed, it is updated under new needs, and the process does not go under saturation.

Clarity – this factor aims for clear knowledge so it can be easy to understand, the interviewees discussed about the importance of the clarity and in the interviewees' opinion:

> "Be clear about the knowledge that you want to transfer. In other words, if it is a document, it must be a document that is too punctual and too easy to understand for the knowledge to be transferred" (General Manager)

> "I could tell you that the information must be sufficiently clear, whether it is a presentation, that the presentation is not loaded, that the information is distributed accordingly" (Software engineer)

> "Simplicity of the knowledge or basically making the knowledge as simple as possible, as understandable as possible." (Training officer)

With this the interviewees emphasize about the characteristic of concise presentation of the knowledge and not saturate the process with information, so it is easier for the employee that is learning to understand the new knowledge.

Source – Other factor found during the interviews is the source the knowledge, for some of the interviewees is important the aspect of the person that is transferring the knowledge, known as sharer in the framework. This actor should have some characteristics and abilities to transfer the knowledge. This person in interviewees words:

> "The person who is conveying the information has to be enthusiastic or moti vated to actually give that information" (Training officer)

> "That we are also firmly transmitting the knowledge so that they do not generate a doubt for them when they are learning what is being passed on." (Technical support manager)

> "Who the training comes from is quite important, it works much more when they admire that person or know who that person is, than any person because people are also very competitive." (General Manager)

So, for the transference of knowledge skills from the sharer are needed to have the knowledge delivered to receiver of the process.

Target – this aspect means for the interviewees that the knowledge is applied by the receiver, also that the person that is obtaining the knowledge know why it is important and what is it for. Additionally, it is important to adjust the knowledge to the level of understanding of the receiver and that the training is needed, in other words, that the person that is going to obtain the knowledge sees this knowledge as something new to learn and see a use for it. In the interviewees opinion:

> "I do think that the more people know why something is done, the easier it is for them to do it.
> People have very short memories. And that some things that might boost your motivation might do it only for a certain amount of time… But, of cour se, at some point, it fizzles out and goes back to normal." (Training officer)

> "If there is a training in which something is introduced that is not known and is going to be used by that person, effectively an improvement is achieved because now he has a new tool that he can access and can use" (Software Engineer)

> "I think people are very resistant to change processes or ways of thinking or habits. So, changing that part is difficult. So, I think we must find a way to make people want to apply it" (General Manger)

So, the knowledge can be transferred when the knowledge is useful, used, and adjusted for the people understanding.

Interaction – In this regard, the interviewees stressed about attention to details on the knowledge to be transferred, how the human can learn easily with the interaction between the actors to solve doubts, or to see what needs to be done by following the example, as the interviewees stated:

> "It's just maybe answering follow up questions, trying to make sure that they have actually learned the things that have been part of the training" (IT team lead)

> "Try to put yourself in the shoes of the person being trained. Sometimes, when you have some experience, you consider that everybody knows a topic specifically and sometimes we omit very basic things that eventually we have

> not mentioned specifically, and they mean a very big gap in the knowledge that you are trying to deliver to that person" (Technical service leader)

> "Attention definitely. I would say that still we are still very physically connected beings. So, I do think that a personal connection is very much nee ded." (Training officer)

The mention of interaction between sharer and receiver of the knowledge involves the feedback process, attention to check if the person is understanding the knowledge and leading by example.

Motivation – described as one of the most important aspects to include in knowledge transfer is the motivation of both actors involved in the transference, it is very important for the interviewees that the person that is sharing the knowledge wants to share it and that the receiver is willing to learn, as some of the interviewees expressed:

> "Enthusiasm towards actually training and
> the person on the other side has to be open to actually take in that informatio n" (Training officer)

> "So, it's also the motivation and determination of the actual person who the knowledge is being transferred to. I think that's also important" (IT team lead)

> "I think the biggest challenge, Pauli, is motivation, especially in processes that are asynchronous or that are not face to face. So, I think it is more like the person's commitment, I think it is the most difficult thing to make this transfer effective." (General Manger)

Without willingness to teach or learn the effectiveness of knowledge transfer in any dimension gets compromised. The next subchapters detail the dimensions that are the focus of this study, either far or near knowledge transfer. It is known as physical context where the main aspect is that it is done in the same or different room for example near transfer can be when the person that transfer the knowledge is in the same building and room of the person that is receiving the knowledge, and in contrast far knowledge transfer is when the location is different and it is taught in a remotely physical context (Barnett &Ceci 2002, 623).

In the next sub-chapters will detail how each company approaches the dimension of knowledge transfer. It has been divided into hybrid and far knowledge transfer based on the literature review and the findings. According to the findings the hybrid option has replaced near knowledge transfer as a dimension as some companies follow near or far knowledge transfer depending on the case. Also, in each chapter it will be justified why

each company decides to use far or hybrid knowledge transfer and the description of the processes.

4.2.2 Hybrid knowledge transfer

After analysing the data collected none of the interviewees reported that in the companies only the dimension of near knowledge transfer is used. In this section I will give examples from the interviewees of near knowledge transfer to relate the literature with the data collected but with the emphasis that this organizations also use far knowledge transfer.

For the hospitality sector the near knowledge transfer or face-to face training is part of the onboarding process, currently for the new people that join the team the training is done by a superior, either manager or supervisor, or peer. The interviewee describes the process with a length of around one week where the person goes through all the processes, as it is stated:

> "Usually, a trainee would come into the said restaurant that they were going to work in, and they would then be trained by either the restaurant manager or
> supervisor, well, usually maybe a week or so. And they would have a very i ntensive training period for that one week. And then after that, they would b e then maybe further trained by other staff members…And our vision for th e future is that we have a two-
> week education system where basically we have trainers who are then traine d by me to train other people. Who then would train people for two weeks a nd they would then have the chance to basically specify in what way they w ant to be trained." (Training officer)

Currently the company is adjusting the training process, and it is implementing the role of specialized trainers that will have two weeks to train the person on site and the reason for that is mentioned:

> "I think the human beings are very visually inclined. So, we do remember things more from a visual basis. For instance, if you have something, if you hear something at the same time you see something that somebody is doing, you can easily put those two things together and memorize more easily. In the restaurant work, it's easier for you to just show something at the same time and tell them why you're doing something" (Training officer)

For this sector and industry as the line cooker tasks are mainly manual and preparing products the learning process has a big part with near knowledge transfer dimension, but they also use far knowledge transfer as there are different branches in two countries. The

dimension of far knowledge transfer is used via documents and technological tools as google chat and google classroom.

The manner in which the documentation is managed within the company is hierarchical way top to down from officers to restaurant managers and then to the restaurant workers, the interviewee stated:

> "I would say knowledge is managed through various types of information pa ckaging that gets sent down from the officers to the restaurant managers, from the restaurant managers to the workers in the restaurants. A very top-down kind of hierarchical way of discerning information. The basics of knowledge transfer is still Google chat. We use chat rooms with different groups" (Training officer)

Additional to this documentation the utilization of google classroom is being implemented to centralize the knowledge and that everybody in the company has access to the same information, the process is explained by the interviewee:

> "I am also using Google Classroom to make different kinds of information packages. Basically, meant to. It's still in the works. But basically, it's going to be a kind of. It's going to be a very broad kind of network of different clas srooms where you will have kitchen work and customer service. You're goin g to have different documents and videos about what to do and why you're d oing something. And there's also going to be different kind of tests.
> So, everyone has the same knowledge and the same access to that knowledg e. So, they can basically just open it up on their phone" (Training officer)

In conclusion, for the restaurant industry it is mainly used near knowledge transfer as the skills needed are practical and implemented in the production of food but there is room for the utilization of far knowledge transfer as it allows to reach different locations and timewise is faster:

> "There's no use for officers to go to other cities to tell something that basically could be done in an email. And so, it's better for us to be able to transfer that the knowledge to the supervisors or restaurant managers and then them to people. It's easier also to get information from somebody that you know, and somebody that you trust" (Training officer)

Not only in restaurants or hospitality sector has chosen to use hybrid dimension for knowledge transfer, but other case, in the interviews, is a manufacturing company in which the technical service team is trained with this dimension, the reason of this approach is stated by interviewee as:

> "We are no longer doing online training here. Virtual, online. We did, yes, in the pandemic, we did a lot of training, but we see that the training situation of the people is not very good. We can do training in some equipment centre that we have here, that we have, and there we do, we bring the technicians, we do the theory, and then the practice directly in the equipment" (Technical support manager)

> "Individual training that can be practical participating as an apprentice or assistant in real activities in the diagnosis and repair of the equipment. Virtuality, let's say, greatly optimizes travel costs, the availability of people, but it is also true that when we talk about issues, let's say, in which direct interaction with the teams is required, eventually there may be certain, certain limitations for them to train them in a more practical way, that is important" (Technical service leader)

All in all, for the organization can be efficient some times to use virtual environments but as the tasks related to the role are more practical, most of the time is better face-to-face practical environments. For this company the service technicians learn better by practicing directly in the chiller and the process is described as:

> "On job training basically is to allow that person to participate as a trainee in field work in which he may be working as an assistant and obviously knowing the specific tools for the work being done in a process adaptation fulfilling the basic part of knowledge." (Technical service leader)

This company also uses far knowledge transfer for their transference of knowledge, they use tools such as the company's platform where people can ask specific questions and found answers that have been checked by specialist, or technical bulletins with instructions for the different chillers that the company product, this was stated by the interviewee:

> "We have the technical bulletins, which are very good for certain jobs that they are going to do, so we transmit the knowledge, we make the reference of the technical bulletins. And we have a platform where everybody, all the people in the company, all the people in the company, from all over the world, come and post there, ah, I have a problem and find the solution" (Technical support manager)

In conclusion, nowadays companies can support their knowledge either in far knowledge transfer or near knowledge transfer in a hybrid mode depending on the needs of the team. Next, in the far knowledge transfer subchapter, it will be presented the findings of those companies that only use this dimension of knowledge transfer within their processes.

4.2.3 Far knowledge transfer

Three of the companies use only far knowledge transfer in their current operation process, two of the organizations are in the software development industry and in the other one the interviewee works in the IT support division as a team lead. The reason why this is the chosen dimension is mainly because of the location of the team members, in these companies the team is split in different cities:

> "The reason we do it virtually, because we don't have offices, we are 100% remote, so it is very difficult to be in person and normally, the people we hire are probably not in the same city" (General manager)

> "It is done virtually, as they could be people from different countries. It could be people from different offices, so the presenter does it online" (Software engineer)

As the team members are in different locations, the utilization of different methods for knowledge transfer are used, this can be divided in two categories. The first category is a virtual training in live streaming, this means video meetings or calls that are live but the people attending are not in the same room. This case is used for two of the companies as the interviewees stated:

> "We do have these training sessions. We have this, how would I say, Excel s heet of like all the different topics that we go through with each like new IT team member" (IT team lead)

> "Engineering Education basically is a series of sessions where all engineers must attend these sessions, where they show you about the time of the smaller technology or as an introduction to the tools in general. Then as it has sessions that are particular to each of the tools." (Software engineer)

The second category are repositories or documents in which the knowledge can be found and self-studied by the receiver. One of the characteristics of this type of transference is that there is not direct interaction with the sharer, so questions or feedback is given by a third. Some examples of this type of sources were expressed by the interviewees:

> "That knowledge base that I told you about is how we document internal company processes that are not necessarily transmitted by a person, they are built by people to be used by people, but not necessarily transmitted directly by people" (General manager)

> "ITwise documentation is maybe the biggest part. So, for each bigger part of IT work, we have some documentation. And when there's like certain thing s, for example, some servers that need to be used, then we do have like docu

> mentation how to do that. Also, for users, we create these guides also. So, ju st how they can complete like certain applications, certain processes." (IT team lead)

As this method of knowledge transfer does not have that interaction, the creation of a role as an onboarding buddy or channels to support any question is created within the teams, some interviewees related to it by saying:

> "You are assigned what is called in the company an onboarding buddy, which is basically a partner or a guide in the initiation, the idea is that it is like the person you can ask any kind of questions, like I have this task, I don't know where to start, how am I going to do this, etc. The idea is to have like someone on the team that you can ask questions to." (Software engineer)

In conclusion, it is possible for companies to share knowledge in a far transfer dimension, it has some key aspects as option for interaction and the utilization of the right technological tools. Next it will be discussed Job performance and how it is seen within the companies.

4.3 Job performance

Job performance includes activities that contribute to an organization (Rich et al. 2010, 620) and for the employee include proficiency in organizational tasks (Shah et al. 2018,185). Job performance can be divided two themes, task performance and contextual performance (Motowidlo et al. 1997, 72). The main difference between these two themes refers to their focus; task performance focuses on proficiency to effectively complete one's assigned tasks, and contextual performance focuses on interpersonal skills and motivation to interact with others with a positive working relationship and assists them in their tasks (Van Scotter & Motowidlo 1996, 530).

4.3.1 Contextual performance

The contextual performance was described in the interviews as the behaviour among team members, fully trust on the team, ethics, and legal aspects among others. Some of the interviewees stated:

> "Basically, your dynamic relationship with the people around you. Of cours e, the workload I think that that work - life balance is also a very necessary t hing" (Training officer)

> "Important performance in terms of ethics, legal aspects, customer relations and communications" (Technical service leader)

> "We are very much of virtual spaces, so it is a relationship of supreme trust with the people who are working with us" (General manager)

These statements are aligned with the definition of contextual performance, it is related with the working environment and corelated to the task performance. During the interviews it when it was inquiry about job performance in general it was more related to task performance that will be elaborated in the next subchapter but also a few comments came about contextual performance.

4.3.2 Task performance

Task performance is described in the interviews as management of the knowledge and apply it with confidence to approach to the daily tasks.

> "Can work in the field more confident, surer of what they are doing, surer of how to solve problems, surer of where to look for information, surer that they are doing a job, a job that I am prepared to do" (Technical support manager)

> "I would say and the time it takes for them to complete the task. In that sens e, I can kind of see myself as the baseline of like how long a certain thing ta kes" (IT Team lead)

> "Execute tasks, responsibilities and things that have been assigned to you correctly, according to what is expected, and also that those tasks are in accordance with the level you have in the company" (Software engineer)

Overall, the interviewees referend to this typer of performance as the tasks and expectations of the role, in a general point of view means do the work the best and more efficiently as possible all the time. With the quality that it is a human and a person doing the process and is not perfect or can work at a 100%

4.3.3 Reinforcement

Something additional that is part of the findings of job performance is a characteristic described as an infinite process, that regarding knowledge transfer and job performance is a process that never ends and keep ongoing as there is a need for the people to reinforce, some interviewees stated:

> "I believe that people always need to be reinforced all the time. I mean, I think it is common that people do not take things only with a very simple subject of a base, a knowledge. I mean, people need to talk to people, people need, I mean, they are not going to make everything clear with a base. I believe that this is an infinite process that will never end." (General Manager)

> "And I think usually those people who join again to those trainings, after the training session they usually have these follow -up questions, which I'm of course happy to answer. And so, that is one thing. So, there is this like discussion part at the end. And of course, I try to, you know, when I'm doing the training, you know, stop and ask like, okay, is this like clear?" (IT team lead)

In conclusion job performance is related to the contextual and tasks performance and indeed there is a constant need of reinforce and update of the knowledge withing the companies. The next subchapter synthetizes the knowledge flow within the companies.

4.4 Study synthesis

After the data collection and analysis, based on the findings the revised knowledge transfer between employees (Figure 6) has been updated according to the results of the interviews. Respondents of the interviews approached the discussion of what is organizational knowledge, knowledge transfer, and job performance within the companies and how it is affected. The suggested model shows the knowledge flow within multinational companies.

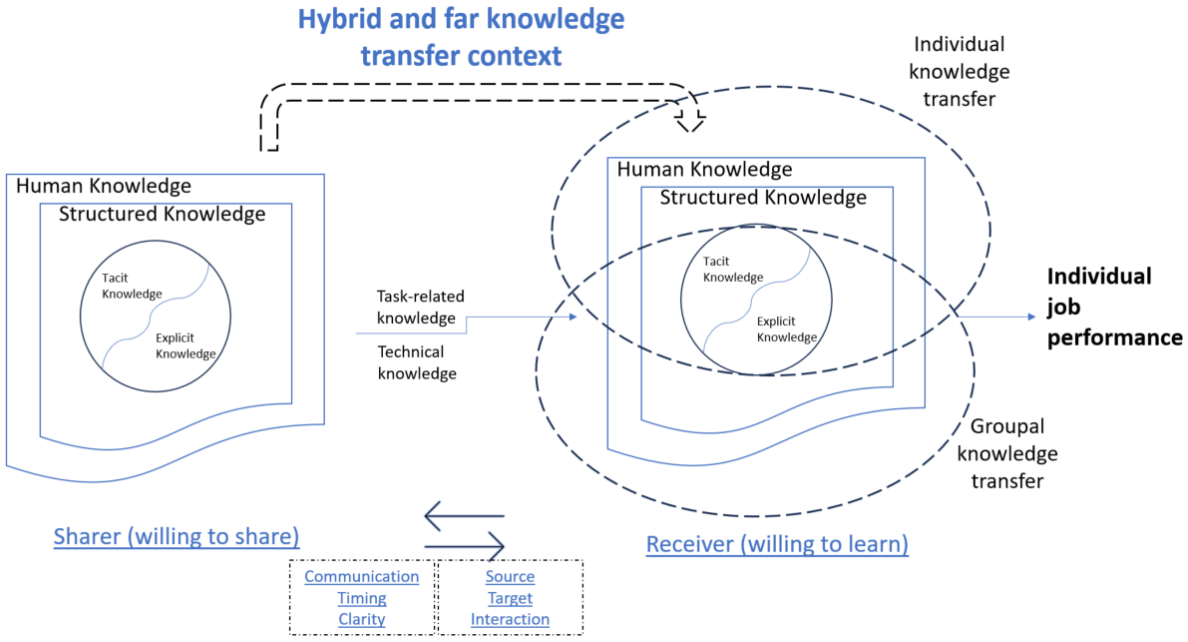

Figure 6: Revised Knowledge transfer between employees reflecting on their job performance

The model keeps the two main actors that act as sharer or receiver depending on the context, the social knowledge has been removed even though it is related to the person it

is not transferred within the company, it is more a cultural and interpersonal relations with groups like the society.

The second change is the inclusion of the motivation for both individuals, the sharer to share and the receiver to learn; this motivation is an important aspect as if any or both are lacking is not possible to effectively complete the process of knowledge sharing. It has been stated as a major aspect that impact on the knowledge transfer process.

Third change is the inclusion of six important key aspects that need to be taken in to account that are part of the process of knowledge transfer. Expanding the scenario on the aspects that are important for knowledge transfer or challenges that this process can have, enlighten the idea of can be the process effective and impact on the job performance.

And last change is the removal of the near knowledge transfer and replace it with a hybrid dimension as none of the organization where the interviewees work applies only this dimension. Overall, even the transfer of knowledge of manual and visual tasks can be supported with far knowledge transfer in multinational companies.

5 Conclusion

This section is divided into three sections. The first section is the theoretical contribution that relates the empirical results with synthesis of how near and far knowledge transfer affects individual job performance. Next section is the managerial implications present key findings of how knowledge transfer can affect job performance that multinational companies might find useful in knowledge management, especially in the process of being transferred. And last part is the limitation and future research suggestions.

5.1 Theoretical contribution

This thesis contributes to the academic discussion around the topics of knowledge transfer and job performance in multinational companies on how the dimensions of near and far knowledge transfer reflects on job performance. There are four reasons that contribute to the existing literature. First, addresses the research gap based on different definitions of the concepts introduced in the chapter 1.2. Despite the widely research on knowledge transfer and job performance there is a lack of research particularly in the dimensions of near and far knowledge transfer in multinational companies (Minbaeva et al. 2012, 388; Taskin & Bridoux 2010, 2504; Huang et al 2017, 560). This thesis serves to fill a critical knowledge gap resulting from the limited number of empirical studies. The existing literature approach to the knowledge transfer and finds that internal knowledge transfer can be dispersed in multiple locations or states unexplored topics as timing and space of knowledge transfer (Minbaeva et al. 2012, 388; Castro & Moreira 2023, 21), the finding suggest that near and far knowledge transfer are two dimensions used for companies within their processes of knowledge sharing, it includes aspects of proximity and special characteristics to enhance the transference of knowledge.

Second, aim for clarity and structured definition of the different concepts and aspects that are part of the process of knowledge transfer between employees. Existing research on near and far knowledge transfer presents definitions on these dimensions depending on the context (Bernett & Ceci 2002, 621). Such ambiguity on the definition of near and far knowledge transfer can compromise the analysis and decision making in different aspects of knowledge management within the companies. By making a more specific and clear definition of the context and inquiry about the research gap, this thesis provides clarity and specificity to the dimensions utilized by the companies.

Third, understanding how the companies are managing the knowledge nowadays updates the existing literature. Knowledge strategies are sensitive to changes in the environment of the companies, for example the pandemic Covid-19 ended up in a massive knowledge failure that developed new competencies on the utilization of technologies and dynamics (Tomé et al. 2022, 77). This thesis provides a synthesis to understand the knowledge flow and emphasize the seven aspects that are important when the transference of knowledge is between employees.

And last the empirical findings that followed a scientific method supported and completed the findings on the synthesis of the literature review. The empirical results support the literature review and widen the theoretical contribution so these results should be considered in decision making processes to determine the dimension suitable for the knowledge to be transferred within the company.

5.2 Managerial implications

This thesis offers valuable insights into knowledge transfer and job performance for multinational company management. By clarifying concepts and specifying the contexts in which knowledge is transferred, it equips decision-makers with the competence and understanding necessary for future decision-making, given the importance of knowledge within organizations. The study highlights key considerations for knowledge transfer and its impact on job performance, depending on the dimensions of knowledge utilized.

The global Covid-19 pandemic served as a stark reminder of companies' vulnerability to external changes and their ability to adapt to such situations. To mitigate risks and cope with the challenges posed by the pandemic, companies have explored new methods to maintain the industry pace and develop competencies for the future. Ultimately, companies prioritize the value of internal knowledge and take measures to preserve it for internal use.

5.3 Limitation and future research suggestions

The limitations of the thesis include the following. The focus of this study is only in one dichotomy of knowledge transfer dimensions and the impact only in the individual job performance rather than other dimensions of knowledge transfer and other possibilities of company performance. Another limitation of the study is that the research does not

consider other aspects that involve knowledge transfer such as attitude, aptitude, willingness of the people involves, or capabilities regarding the utilization of technology. Also a limitation is that this research the focus mainly on knowledge transfer in non-managerial jobs or entry level kind of jobs rather than in higher c-level or managerial knowledge transfer .The final limitation is the scope of the interviews and the variety of types of companies, it is not only focus in one sector of the industries or same size companies so the result cannot be generalized to all multinational companies.

Future research suggestions are: first, approach to different dimensions of near and far knowledge transfer to understand if the process flow follows the same aspects and actors. Other suggestions are to analyse this process in startups or local companies to compare the behaviour with multinational companies. And last instead of the analysis of job performance include organizational performance.

6 Summary

Knowledge management currently is one of the key processes of the companies as the knowledge has been found to aggregate value and act as part of the core of the organizations. This research focused on a subprocess of knowledge management known as knowledge transfer by studying how near or far knowledge transfect can affect in the job performance of the employee.

Organizational knowledge is an important asset of the companies that is not tangible and can be seen as know-how, know-why, and know-what. In this intangible asset relies on the formula that the companies run a business with. The transfer of the knowledge is getting importance in the literature as if it is effective the company keep the knowledge and it does not go away when the employees move to other roles.

This research followed a qualitative approach with semi- structured interviews that contribute to the existing literature. The structure starts with the introduction, research gap and research questions. Followed by the literature review, then, the structure of the research design that includes data management plan and the utilization of technological tools as *AI*, *Zoom*, *DMPTuuli*, *Nvivo* and *tldv.io*. After this, the presentation of the findings ends with a revised synthesis of the literature review. And finally, the conclusion includes theoretical contributions, managerial implications, and limitations and future research suggestions.

The three main findings of the empirical research complement the synthesis of the literature review of knowledge transfer between employees, first the inclusion of a hybrid knowledge transfer, second, include the motivation as part of the individuals involved in the exchange of knowledge and last, include important aspects or characteristics that are part of the knowledge transfer and affect the quality and efficiency of the transference.

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Appendices

Appendix 1 Interview guide in English

Theme 1 - Background

- Could you describe yourself? Include a little introduction about your career path, professional background, and current position?
- How long have worked for the company and how long have you been in this position?
- How would you describe knowledge or what is your definition of knowledge?
- How is it managed in the company?
- What does job performance mean to you?
- How is it perceived within the company?

Theme2 – Knowledge transfer

- How is the knowledge transferred or shared within the company?

  Is there any individual training or group training ?

  Do you have any on-site training or virtual training?

- Which types of tools do you use for knowledge sharing?

  Documents, repositories, premade videos, live tools as video calls or phone calls

- What is the expected impact when the knowledge transfer is done.
- Do you consider that this knowledge is applied in job performance?
- Have you had cases where after the training there is a need to reinforce the knowledge?
- What differences can you find when the knowledge is transferred face to face or virtually?

Theme 3 – Job performance

- How do you describe job performance on an individual level?
- And at a group level?
- What is your perception of job performance after a training is done.
- What are the key aspects to have so the new knowledge that is transferred has an impact in the job performance?
- Have you measured the impact of training on the job performance of the employee depending on the methodology used?

Theme 4- Reflections

- What do you think are the key aspects to have an effective transfer of knowledge, so it is applied better?
- What do you consider is a challenge when the knowledge is transferred?
- Based in this interview, can you name a couple of aspects to have a good job performance after a training is done?
- To close the interview if you have anything else in mind, feel free to share.
- I want to thank you for your time and insights and make a special emphasis on the confidentiality and data management of this research so if you decide that this interview is not used in the research you can send me an email latest April 9 so I can remove it and destroy it.

Appendix 2 Interview guide in Spanish

Theme 1 - Background

- Podrias hacer una pequeña introduccion sobre ti? Incluir un resumen sobre tu experiencia laboral y el cargo que desemepeñas actualmente
- Cuanto tiempo llevas trabajando para esta compañia y cuanto llevas en este cargo?
- Como definirias la palabra conocimiento y esta como es manejada dentro de la compañía

- Que tipo de conocimiento se da dentro de la compañia?

Theme2 – Knowledge transfer

- Cuales son las maneras como el conocimiento esta siendo transferido dentro de la compañia?

  Hay entrenamientos grupales? Individuales?
  Hay entrenamientos presenciales o virtuales?

- Que tipo de herramientas se usan para transferir el conocimiento.

  Hay entrenamientos pregrabados o documentados o un banco de conocimiento

- Cual es el impacto esperado cuando se transfiere el conocimiento

- Considera que el conocimiento transmitido es aplicado en el desempeño del cargo?

- Despues de la transferencia de conocimiento fue neccesario reforzarlo posteriormente para poderlo aplicar en trabajo?

Theme 3 – Job performance

- Que significa para ti el desempeño laboral y como este es percibido en la compañía? Como es nivel individual o a nivel grupal

- Que has percibido en tu desempeño laboral despues de un entrenamiento.

- Cuales son los aspectos claves para que el nuevo conocimiento impacte en el desempeño laboral

- Se ha medido el impacto del entrenamiento en el desempeño laboral segun la forma como se haga

- Haz notado alguna diferencia en el desempeño laboral de personas que ya vienen con o sin experiencia

Theme 4- Reflections

- Cual crees tu que es el aspectos clave para lograr una efectiva transferencia de conocimiento

- Que puede ser un reto a lo hora de transferir un conocimiento?

- Basado en esta entrevista, puede nombrar los aspectos principales para obtener un buen desempeño laboral despues de un entrenamiento
- Te invito a que si tienes algo mas en mente sientente libre para compartirlo
- Te quiero agradecer por tu tiempo e informacion, y quiero aprovechar para cerrar la session hacienda enfasis que esta entrevista sera utilizada para una investigacion que sigue los lineamientos del manejo de datos y confidencialidad de la union europea

Appendix 3 Data Management Plan

Plan Overview

A Data Management Plan created using DMPTuuli

Title: The role of near and far knowledge transfer on the job performance of the employees in MNCs

Creator: Paulina Salazar

Principal Investigator: Paulina Salazar

Data Manager: Paulina Salazar

Affiliation: University of Turku

Template: Research data management plan for students

ID: 20401

Start date: 11-12-2022

End date: 17-04-2024

Last modified: 01-04-2024

The role of near and far knowledge transfer on the job performance of the employees in MNCs

Research data

List of research data:

Research data type	Contains personal details/information*	I will gather/produce the data myself	Someone else has gathered/produced the data	Other notes
Data type 1: Name, email, and phone number	x	x		
Data type 2: Interviews recordings or videos	x	x		

Processing personal data in research

Does your data contain personal data?

- My data contains personal data

Who is the data controller?

- Student

Permissions and rights related to the use of data

Who has collected the data you use in your research?

- I have collected the data
- I use data which is collected by someone else

If you use data that you have collected by yourself you may need separate permissions to use the data you collect or produce, both in research and in publishing the results. If you are archiving your data, remember to ask the research participants for the necessary permissions for archiving and further use of the data. Also, find out if the repository/archive you have selected requires written permissions from the participants.

Necessary permissions and how they are acquired
Data type 1: This data will be collected directly from the source with the idea to approach the interviewee to join the research
Data type 2: I will send and informed consent with the meeting invitation for the interview as I will be the data controller, person gathering the information , and in charge of running the research

If you use data that someone else has collected: do you have the necessary permissions to use the data in your research and to publish the results? Are there copyright or licencing issues involved in the use of the data? Note, for example, that you may need permission to use the images or graphs you have found in publications.

Question not answered.

Storing the data during the research process

Where will you store your data during the research process?

- In the university's network drive
- In the university-provided Seafile Cloud Service
- I won't use university's data storage services

The data will be collected in the university´s one drive student account, the interviews will be recorded via Zoom with the university´s student account and for the data analysis Otter will be used to convert audios in text, and Nvivo software will be use as a qualitative analysis data tool

If you don't use University's data storage services tell, where are you going to store your data and specify how you will ensure data security and file backups?

Locally the files, records and all thesis material will be stored in my personal computer, AsusZenBook 14, it has installed the one drive university´s student account to back up the data in the cloud.

Documenting the data and metadata

Can you describe what has happened to your research data during the research process? Data documentation is essential when you try to track any changes made to the data.

If you don't use any of the above mentioned, describe, how you document your research process?

I will use different version files with a number coding to identify which is the one that has added changes, also base documents will be kept as baseline like templates, and initial conversions of the audios to text

How will you keep your data in order and intact, as well as prevent any accidental changes to it?

- I will keep the original data files separate from the data I am using in the research process, so that I can always revert back to the original, if need be
- Version control: I will plan before starting the research how I will name the different data versions and I will adhere to the plan consistently

Metadata is a description of you research data. Based on metadata someone unfamiliar with your data will understand what it consists of. Metadata should include, among others, the file name, location, file size, and information about the producer of the data. Will you require metadata?

Question not answered.

Data after completing the research

What happens to your research data, when the research is completed?

I will store all data for 5 years as a general retention recommendation period from the University of Turku. After that data will be destroyed

If you will store the data, please identify where and for how long?

Appendix 4 Informed Consent

UNIVERSITY OF TURKU
Turku School of Economics

Concerns: Consent for the Collection, Storage and Use of Data

Research Topic: The role of near and far knowledge transfer on the job performance of the employees in MNCs

Responsible researcher: Paulina Salazar

Turku School of Economics, University of Turku, Finland

Dear Research Participant,

Thank you for your interest in the details pertaining to this research and the subsequent interviews that you are participating in as part of the research.

Collection and Use of Data: The data you are providing serves a number of purposes, which include:

(1) The researcher will use data from the interviews for further processing/ analysis to gain understanding about The role of near and far knowledge transfer on the job performance of the employees in MNCs.

(2) The insights gained from the analysis are primarily used for the master's thesis. Step one in processing of data is the anonymization of all data. After this step is completed, no individual information can be traced back directly to any individuals.

Storage of Data:

(1) Storage during data collection: during the collection of data, comprising of several interviews, data is stored by the researcher. Data is stored securely in the university provided Seafile Cloud Service and in the university's network OneDrive and transcribed into texts using authorized research software. Specific data retrieval for the collected data is only directly accessible by the researcher.

UNIVERSITY OF TURKU
Turku School of Economics

(2) Storage after data collection: upon collection and during the analysis stage, data is extracted in anonymized form and stored in various formats to suit the analysis. All formats of data are stored securely in the university provided locations, and only the researcher has access to the data storage.

(3) Duration of data storage: the data collected is stored maximum 5 years upon collection to serve the analysis and reporting of the master's thesis. Data will be securely destroyed after this date.

Consent acknowledgement:

By receiving this informed consent and participating in the interviews, you authorize the collection, processing of personal data in compliance with the EU General Data Protection Regulation and the Finnish Data Protection Act (1050/2018). You can revoke your consent with effect for the future.

Withdrawal at a later stage:

Each participant can demand the exclusion of own data for further use beyond the purpose(s) of the thesis you are participating in. This is possible regardless of whether you have granted permission to use your data at the onset of data collection. If you choose to withdraw from your data to be used for or after the thesis, please send an email with this request to paulsa@utu.fi by the 9 of April 2024 at the latest. After that date, data will be anonymized, and such a request cannot be fulfilled anymore as it is unable to identify your individual responses.

The collection, storage and use of data is in line with the ethics recommendation at the University of Turku, Finland.

Privacy Notice https://www.utu.fi/en/privacy/notice

Data Security description of University of Turku

https://www.utu.fi/en/privacy/data-security-description

If you have further questions, please don't hesitate to contact paulsa@utu.fi

INFORMED CONSENT FORM for Participants

The role of near and far knowledge transfer on the job performance of the employees in MNCs

I have read and understood the Privacy Notice you have given me and I agree to participate in the project.

Each participant can demand the exclusion of own data for further use beyond the purpose(s) of the thesis you are participating in. This is possible regardless of whether you have granted permission to use your data at the onset of data collection. If you choose to withdraw from your data to be used for or after the thesis, please send an email with this request to paulsa@utu.fi by the 9 of April 2024 at the latest. After that date, data will be anonymized, and such a request cannot be fulfilled anymore as it is unable to identify your individual responses.

I understand that my participation is entirely voluntary and that I am free to withdraw at

any time without giving any reason. YES ☐ NO ☐

I agree to this interview being audio-recorded YES ☐ NO ☐

I agree to this interview being video-recorded YES ☐ NO ☐

I agree to be identified in the following way within research outputs:

Full name YES ☐ NO ☐

Current position YES ☐ NO ☐

Pseudonym YES ☐ NO ☐

[i.e. alternative name/code for participant chosen by researcher]

Impersonal attribution YES ☐ NO ☐

[e.g. by profession: student, company worker, University Lecturer/Teacher, housewife]

_____ _____ _____

Name of Participant Date Signature

Appendix 5 Privacy notice

1. Name of the register:
The role of near and far knowledge transfer on the job performance of the employees in MNCs

2. Data Controller:
Paulina Salazar, 041 3139858, paulsa@utu.fi
Student University of Turku, Rehtorinpellonkatu 3, 20500 Turku

3. Contact information of the responsible person:
Paulina Salazar, 041 3139858, paulsa@utu.fi

4. Purpose and legal basis for the processing of personal data:
The research collects people point of view regarding knowledge transfer and job performance. The interviews involve collecting information about the person, the job, role, and the performance in the job environment

The legal basis for processing personal data in the Article 6 of the EU General Data Protection Regulation is:

☒ Processing is necessary for scientific research (public interest, Point 1a of the Article 6)

☐ Data subject has given their consent to processing personal data (consent, Point 1e of the Article 6)

5. Processed personal data:
The following information of the data subjects is stored in the register:
Name, email address, position, company, and experiences and impressions on work development and knowledge transfer.

6. Recipients and recipient groups of personal data:
The data will not be transferred or disclosed to parties outside researcher or supervisors.

7. Information on transferring data to third countries:
Personal data will not be disclosed to parties outside the EU or the European Economic Area.

8. Retention period of personal data or criteria for its determination:

The recorded interviews will be transcribed into text files and the recordings will be destroyed after 5 years of completing the research. Simultaneously, the research data will be anonymized by erasing identifiable personal data. Personal data is stored for five years as the university general recommendation period, after which the data is disposed of securely.

9. Rights of the data subject:
The data subject has the right to access their personal data retained by the Data Controller, the right to rectification or erasure data, and the right to restrict or object the processing of data. The data subject has the right to lodge a complaint with the supervisory authority.

10. Information on the source of personal data:
In order to send the invitations to the interview, email address or phone number will be requested to the person for the interview. The other data is collected directly during the interview.

11. Information on the existence of automatic decision-making, including profiling:
The data will not be used for automatic decision-making or profiling.