Exploring the knowledge transfer barriers and the control mechanisms in ERP consulting practice: A systematic literature review of the consultant perspective

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Abstract

In recent decades, the Enterprise Resource Planning (ERP) system has been adopted by more and more transnational companies to improve their business practice. Meanwhile, most companies introduced external expert ERP consultants to help their ERP implementation. Therefore, knowledge transfer between ERP consultants and clients has become one of the significant factors impacting the success of ERP implementation. The purpose of this dissertation is to systematically review the existing literature and classify the factors examined in previous studies that influence knowledge transfer in ERP implementation.

This research analyzes the ERP knowledge transfer barriers through a systematic literature review. It is essential to understand these factors and the mechanism to reduce the negative effects of the barriers. The study identifies knowledge transfer barriers as tacit knowledge, factors related to sources of knowledge transfer (namely sender and recipient), relational factors of consultant and client, and organizational cultural factors. This dissertation describes how these knowledge transfer barriers generate and influence knowledge transfer in ERP implementation. The dissertation also proposes a framework to overcome these barriers. It is essential to understand these factors and the mechanism to reduce the negative effects of the barriers. The results of this study will guide the ERP managers to focus on how to improve the effectiveness of knowledge transfer, select appropriate internal key users and external professional consultants, and master the development of positive organizational culture and relationships between consultants and clients.

Keywords: Knowledge transfer, knowledge transfer barriers, Enterprise Resource Plan (ERP), Consultant, Enterprise system

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Attestation of Authorship

I hereby declare that this submission is my work and that to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgments), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.

Signature：

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Chapter 1: Introduction

1.1 Overview of knowledge transfer barriers

In the past thirty years since the 1990s, ERP software systems have been broadly applied across the globe and have made significant contributions to improving management practice (Xu & Ma, 2008). Enterprise Resource Planning (ERP) is a highly integrated management software system, which adopts advanced computer technology and management ideas, and integrates mature business processes into each module to give organizational decision-makers systematic management ideas and decision-making means (Klaus, et al., 2000). Through software, ERP integrates the enterprise's human resources, accounting, costing, material management, production plan, and sales distribution in one shared system. Meanwhile, Knowledge transfer is a process of sharing or spreading information, experience, or ideas across different people or fields by certain means (Wang and Wan, 2000). This process takes place in a particular context, from the sender of knowledge to the receiver. Swan (1999) states that the purpose of knowledge transfer is the effect that knowledge senders pursue to achieve or receive. With the rapid development of the modern economy, the concept of knowledge transfer has been gradually introduced into various industries to narrow the knowledge gap between people, so that organizations and individuals can acquire and apply knowledge more efficiently in knowledge transfer. Ramkumar (2010) states that ERP consultants play a significant role in ERP knowledge transfer which further ensures the success of ERP implementation. However, research shows that ERP consultants focus too much on ERP technologies and business solutions, as well as project progress, but knowledge transfer is not given enough attention (Xu & Ma, 2008; Al-Salti, & Hackney, 2011; Wang et al., 2014). This study explores the barriers to knowledge transfer in ERP consultant's practice and attempts to understand the consultant's strategies to overcome the knowledge transfer barriers.

1.2 The benefit of overcoming knowledge transfer barriers

Most literature in this area has investigated the critical success factors that judge the success of ERP implementation. Examples of these factors include management

encouragement, system quality, users' adaptability, the standard of training, and organizational communication. However, few analyses are focusing on the influence of knowledge transfer on ERP projects from the view of ERP consultants (Xu & Ma, 2008). With the fast evolution of the knowledge economy, scholars have introduced the notion of knowledge transfer step by step to bridge the individual or organizational knowledge gap. The rapid progress and broad utilization of ERP software systems have also resulted in the growth of the ERP implementation consultation industry. As a result, ERP consultants take a primary role in knowledge transfer in ERP system implementation. However, most consultants focus on project progress and business solutions rather than a comprehensive understanding of knowledge transfer, which impacts project implementation (Wang et al., 2014). Particularly, ERP consultants lack perception about knowledge transfer in ERP implementation. Overcoming the knowledge transfer barriers is important for effective ERP implementation (Chou et al., 2013). This research theorizes the knowledge transfer barriers from the consultants' perspective and seeks to develop a framework for controlling the knowledge transfer barriers.

1.3 Research Objective

This study aims to explore the barriers to knowledge transfer and the mechanism to overcome the barriers in ERP consultant practice. Little research has been conducted thorough studies on the specific barriers and corresponding strategies of knowledge transfer in ERP project implementation. Figure 1 presents the year-wise distribution of the studies that discuss the ERP knowledge transfer barriers. It is evident from figure 1 that there is a decline in the number of studies on ERP knowledge transfer barriers.

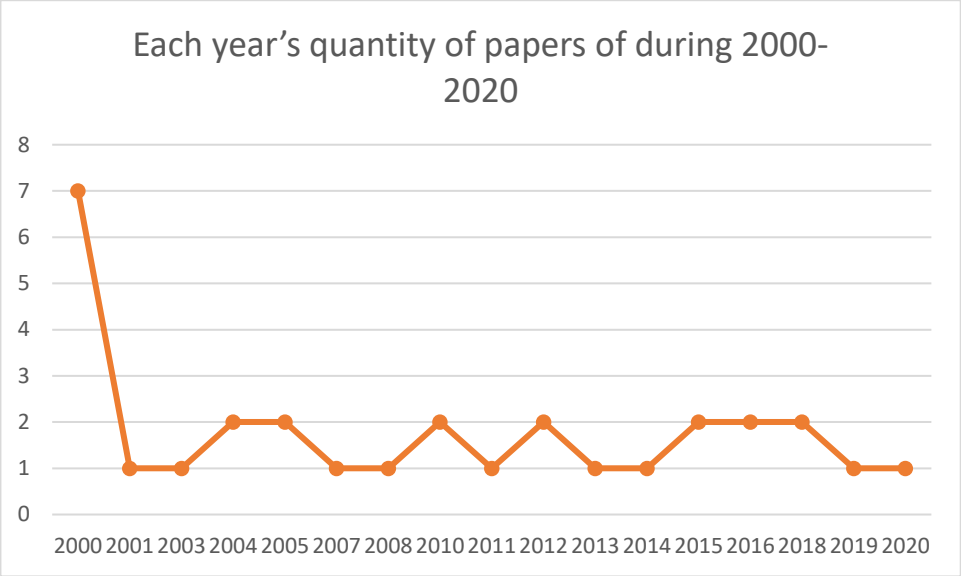

Figure 1. Year-wise distribution of studies on ERP knowledge transfer barriers (2000 to 2020).

This study addresses the following research question:

1. What are the barriers to knowledge transfer in ERP consulting practice?
2. What are the mechanisms to overcome the barriers to knowledge transfer in ERP consulting practice?

1.4 Dissertation Structure

The structure of this dissertation is as follows. Chapter one outlines an introduction to the study and presents the research question. Chapter two is about the research method and describes the systematic literature review and thematic analysis method. Chapter three presents the major themes of the systematic literature review. Chapter Four provides the discussion concerning the relationship between major themes and outlines a framework to overcome knowledge transfer barriers. The last chapter presents the conclusion.

Chapter 2: Research Method

Undertaking a review of the knowledge transfer literature is an indispensable part of this research. According to Dewey and Drahota (2016), a systematic literature review helps to critically appraise a research study and helps in the formulation of research questions. According to Wright et al. (2007), the literature review methods contain narrative review, theoretical review, critical review, descriptive review, comprehensive review, systematic review, and meta-analysis. Denyer and Tranfield (2009) state that a systematic review is a specific approach that locates existing research, selects and evaluates contributions, analyzes and synthesizes data, and reports evidence in a way that enables reasonably clear conclusions to be drawn about what is known and unknown. A systematic review should not be seen as a literature review in the traditional sense, but rather as an independent research project that draws on existing research to explore a specified question, often deriving from a policy or practice issue. Unlike traditional literature reviews, systematic literature reviews aim to provide as complete a list as possible of all published and unpublished research relevant to a particular area of research. While traditional reviews attempt to summarize the results of many studies, systematic reviews use clear and rigorous criteria to identify, critically evaluate, and synthesize all the literature on a particular topic. It will minimize the impact of errors and help eliminate confusion in interpreting information.

According to Xiao and Watson (2019), the purpose of a systematic literature review is to detect as much relevant research literature as possible on a particular research question and to use clear approaches to determine which of these studies can be relied upon for further research. Methods should not only be clear, but systematic, to produce different and reliable results. In this way, systematic reviews shorten biases that may happen in other approaches to reviewing research proof. The purpose of a systematic literature review is to help create a knowledge repository that can be further analyzed, and appropriate conclusions can be drawn about the research.

As Okoli and Schabram (2010) suggested, the main steps in conducting the systematic literature review are as follows:

1. **Identify the purpose:** In this step, the aim and goals of the review will be identified by the reviewer. This can help readers be clear about the purpose of the research, namely why to do this research.

2. **Draft protocol and train the team:** If the review involved multiple people, a common protocol document needs to be understood and confirmed by all to ensure consistency of multiple reviewers' operations. Given that this research is undertaken by one person, there was no need to develop a training protocol for the team.

3. **Apply practical screen:** In this step, screening criteria for inclusion and exclusion need to be explicit. The reviewer must be clear about what kind of literature will be considered to be included and what literature to be excluded for the next steps.

4. **Search for literature:** The details of the literature search will be described in this step. An explanation needs to be made to ensure the search will be comprehensive.

5. **Extract data:** Useful and appropriate information from all included studies needs to be extracted in this step.

6. **Appraise quality:** Every paper needs to be estimated with quality in this step. Included papers need to be marked while unqualified papers need to be excluded based on the criteria.

7. **Synthesize studies:** Information extracted from included papers needs to be combined and analyzed.

8. **Write the review:** The detail of the systematic literature review process need to be recorded and written.

Following the above guidelines, I choose to conduct the systematic literature review using the following five steps namely *develop a research question, define the inclusion*

and exclusion criteria, develop the search strategies, extract the research studies for analysis i.e. the data, and evaluate the quality of the chosen studies. Each of these steps is described below.

2.1 Developing the research question

In this step, a research question is formulated that guides the literature review. I have included the two research questions in the introduction chapter. In summary, this research is related to ERP knowledge transfer barriers from the consultant's perspective. ERP research is a cross-disciplinary field that involves general knowledge transfer and information system knowledge transfer to meet practitioners' requirements in ERP implementation. To satisfy the practitioners' demand, research is required to focus on a variety of academic and practitioner resources. Additionally, this research is helpful to understand the characteristics of knowledge transfer barriers of ERP systems. Although much research has been conducted on knowledge transfer in other fields such as human resources, business management, etc., there are few contributions to the field of ERP implementation's knowledge transfer. This research will focus on what are the barriers to ERP knowledge transfer and what is the control mechanism in ERP consulting practice.

2.2 Defining exclusion and inclusion criteria

Since only one reviewer is involved in this review, the step of 'draft protocol and train the team' is skipped. The purpose of this step is to explicitly lay down the inclusion and exclusion criteria for shortlisting the research studies for analysis. One important inclusion criterion is that papers should be published between 2000 and 2020. I selected a twenty-year time frame because of two reasons. Firstly, ERP has developed since the 1990s but most failed cases occurred before 2000 while more and more ERP implementation projects succeeded from 2000 to now (Xu & Ma, 2008; Fuller, 2018). Therefore, this twenty-one-year frame can help this research cover the whole period of

the ERP industry's successful years. Secondly, most studies have used a smaller time frame (Like Reference), but I have decided to do a twenty-one-year study. For the exclusion criteria, conference papers and papers not in English need to be excluded. In addition, the papers that only focused on knowledge transfer of a certain other industry than information systems will be excluded.

2.3 Developing the search strategies

The search was conducted across Scopus which is the largest abstract and citation database of peer-reviewed literature including scientific journals, books, and conference proceedings. Scopus is not only reputed but also provides facilities such as title search, keyword search, abstract search, etc (Martín-Martín et al., 2018). Scopus, as a newcomer, is challenging the dominance of the Web of Science (WoS) in an increasingly broad range of applications, such as meta-analysis in health/medical-related areas, Information Science, and Library Science (Zhu & Liu, 2020). Moreover, Google Scholar is another main source of information for this study because Google is a widely accepted database and there are plenty of articles complementing this field. According to Martín-Martín et al. (2018), compared with other databases, Google Scholar indexes documents with academic characteristics through an automated method of crawling the web, making it possible for GS to cover academic literature more comprehensively. For example, GS has been proven to have good coverage of disciplines and languages, which is weak in the Web of Science (WoS) and Scopus.

"Knowledge transfer" "knowledge transfer barriers" "ERP" "ERP implementation" or "Enterprise resource plan" have been set as keywords to be searched in Scopus and google scholar to find related articles to build a knowledge base for literature review. In addition, the asterisk * wildcard symbol is used to search on consul* which will find consultant, consultation, consulting, and so on. "Enterprise system" has also been searched replacing "ERP".

Keywords
Knowledge transfer
knowledge transfer barriers
ERP
ERP implementation
Enterprise resource plan
consul*
Enterprise system

Table1: Key search terms used in library databases (or search engines), etc.

My initial search which was conducted from July 15, 2021, to July 31, 2021, help me get a set of possible appropriate sample articles.

2.4 Extract data

After searching using the key terms, I was able to shortlist an initial data corpus that comprised 105 research articles. To ensure that only eligible articles were selected from the 105 papers the researcher considered such as checking for keywords, abstracts, titles, and full texts, excluding duplicates, and removing papers with incomplete texts. Finally, 93 articles were shortlisted for review. The above 93 papers' main information has been extracted for analysis in the next step. This step has been done from August 1, 2021, to August 31, 2021.

2.5 Evaluation of the quality of chosen studies

Any minor error can lead to a misinterpretation of the study during the analysis phase, seriously affecting the conclusions (Templier & Pare, 2015). From the above 93 studies, 63 studies were removed as low-quality papers. For example, the article "Community of practices, knowledge transfer, and ERP project (ERPP)" was removed as it did not have enough citations. The article "Lech, P. (2011). The article "Knowledge transfer procedures from consultants to users in ERP implementations" was removed as it had no citations even after many years of publication.

This process left the researchers with 30 related studies which are presented in the appendix: Annexure B: Summary of the included articles. This appendix lists the title, author, year of publication, and topic of the research paper of all 30 shortlisted articles. This work has been finished from September 1, 2021, to September 30, 2021.

This is a summary table here that shows how many articles belonged to which year.

Year	Quantity of included papers
2000	7
2001	1
2003	1
2004	2
2005	2
2007	1
2008	1
2010	2
2011	1
2012	2
2013	1
2014	1
2015	2
2016	2
2018	2
2019	1
2020	1

Table 2: Year-wise distribution of articles for final review

2.6 Synthesize the data

At this step, the researcher has an exhaustive list of articles for final review. This is a significant step because it is where the relevant data is synthesized. Synthesizing involves drawing insights from the data. The insights are obtained by undertaking a thematic data analysis that is described in the next subsection.

Figure 1 summarizes all the steps in the process.

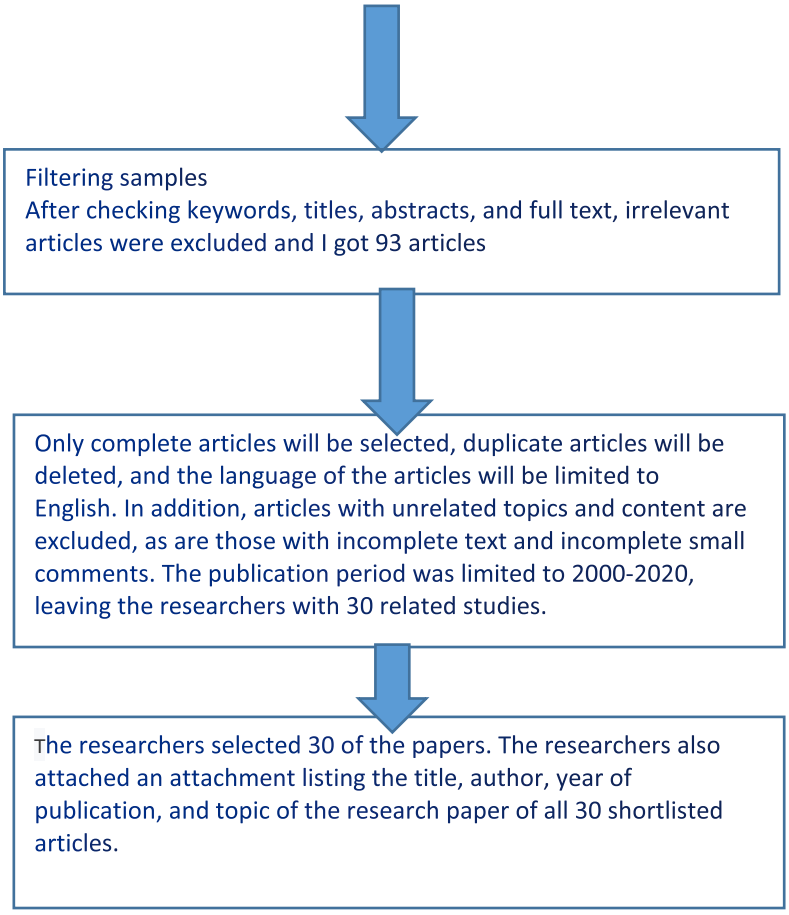

Figure 2: Filtering criteria of the attained articles

2.7 Thematic Analysis

Thematic analysis is a method of analyzing qualitative data and can be used to analyze a set of texts. With this approach, researchers can identify common themes by scrutinizing the data. Individuals' views, opinions, knowledge, experiences, or values can be found in the collected data. Thematic analysis is a flexible approach to many different types of research, including systematic literature reviews. Six-step procedures of thematic analysis developed by Braun and Clarke (2014) guide this study's analysis of themes. These six steps are as follows:

Step 1. Familiarization

Step 2. Coding

Step 3. Generating themes

Step 4. Reviewing themes

Step 5. Defining and naming themes

Step 6. Writing up findings

The themes analyzed for this study has presented in the appendix: Annexure A: Thematic Analysis. The theme, summary of the findings, comments, and references have been listed there.

Chapter 3: Literature Review

This section describes the major themes that were obtained from thematic analysis. These themes are the concept of knowledge transfer, knowledge transfer in ERP consultant's practice, knowledge transfer barriers, types of knowledge transfer, knowledge transfer sender's and receiver factors, ERP consultant-client relationship, organization's culture for ERP knowledge transfer, etc. Each of the themes is described below.

3.1 Overview

Argote and Ingram (2000) affirm that more and more organizations realize the importance of knowledge transfer since knowledge transfer has become the basis of their competitive advantage. Through knowledge transfer, enterprises absorb and generate new knowledge and use it in the production and operation of enterprises, which not only realize the value appreciation of assets but also promotes the development of knowledge. Therefore, knowledge transfer is a crucial way of realization of the knowledge's value and the sustainable growth of enterprises. Nowadays, more and more organizations have implemented ERP systems to improve their business management and obtained external experts to help their ERP implementation. As a result, knowledge transfer occurs among consultants and clients, and this effect of this knowledge transfer has become a significant element in the success of the ERP system implementation. However, barriers exist in the procedure of knowledge transfer including tacitness of knowledge, knowledge transfer's willingness and competence, knowledge transfer recipient's willingness and ability of absorption, the consultant-client relation, and the organization's culture for knowledge transfer. Consequently, overcoming these barriers has become an effective measure to improve the success rate of ERP system implementations.

Thus, this study will be committed to answering the following questions:

What are the barriers to knowledge transfer in ERP consulting practice?

What are the control mechanisms to overcome the barriers to knowledge transfer in ERP consulting practice?

3.2 Concept of knowledge transfer

Knowledge transfer has been defined as the procedure of transferring knowledge sources to other individuals or sections of an organization (Davenport & Prusark,1998). Szulanski (2000) defines knowledge transfer as a process that which information is transferred from the knowledge source unit to the receiving unit under certain circumstances. Particularly, the receiving unit digs the knowledge to make the transferred knowledge a part of its knowledge. Swan et al.(1999) pointed out that knowledge transfer is a process in which individuals or teams in an organization reuse knowledge. The purpose of knowledge transfer is to make an organization absorb new knowledge and make efficient utilization of new knowledge and then accelerate the application of beneficial knowledge to gain a competitive advantage (Martinez et al., 2016). As a consequence, enterprises or other types of organizations that can efficiently do knowledge transfer have stronger competitiveness than those who are not good at it (Argote & Ingram, 2000).

Wang and Wan (2000) state that knowledge transfer consists of two processes of knowledge sending and receiving, and is performed by the sender and recipients. Continuous research on knowledge transfer finds out that only when the knowledge is understood, digested, and absorbed by the knowledge recipient into their knowledge base and then the knowledge recipient applies the new knowledge into production, can the knowledge transfer happen. (Cummings & Teng, 2003; Haldin-Herrgard, 2000; Luo & Lee, 2015; Peter et al., 2005; Szulanski, 2000).

Vito et al.(2004) concluded four frameworks of knowledge transfer including transfer subject, transfer situation, transfer content, and transfer media. Firstly, the subject of knowledge transfer can be either an individual or an organization. Secondly, the transfer situation of knowledge transfer can be divided into the internal situation and

external situation from the organizational level. Thirdly, transfer content refers to the data, information, or content of knowledge transferred by knowledge. Finally, transfer media refers to any method used to shift data as well as information.

In a conclusion for this part, it suggests that various conceptualizations have some common elements such as a sender, a receiver, the presence of a communication channel, and the sender-recipient relationship for knowledge transfer.

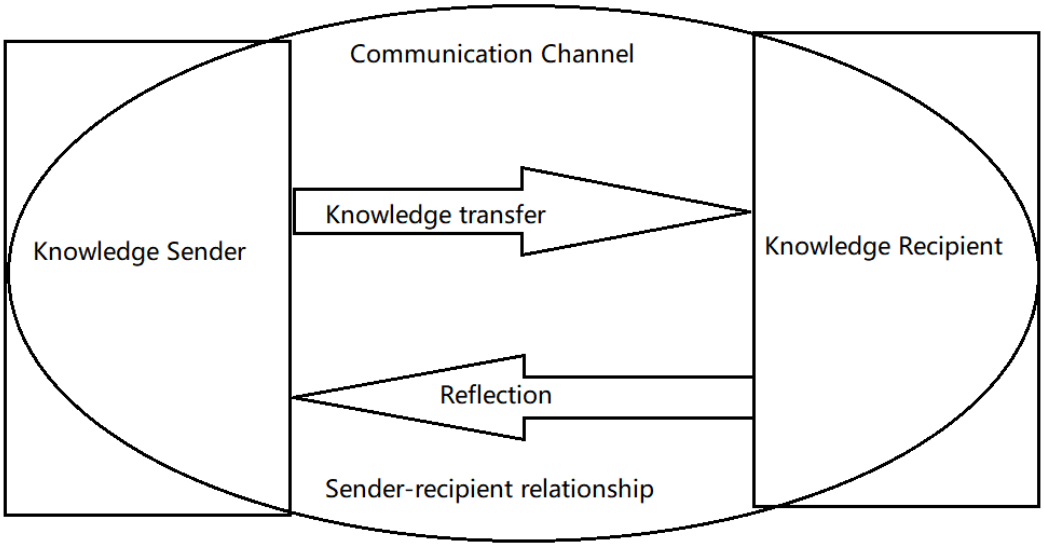

Figure 3: Elements of knowledge transfer

3.3 Knowledge Transfer in ERP consultant's practice

In recent years, more and more organizations choose professional consulting companies, and consultants provide professional knowledge and skills that help improve organizational competencies. Martinez, et al. (2016) point out organizations uses these expert recommendations to diagnose themselves, develop behavior plans, and develop their change and innovation strategies for better development.

According to Gou et al., (2019), ERP knowledge transfer can be separated into two steps. In the first step, ERP design experts transform and embed advanced management concepts and process knowledge into the ERP software, forming the technical architecture model of the ERP system. In this phase, they emphasize how to strengthen the function of ERP software. In the second step, the ERP consultants teach ERP management processes, ERP system features, detailed operations, and business processes contained in the software to the customers. Meanwhile, clients transfer knowledge of as-is business processes and new requirements to the ERP implementation consultants.

Xu and Ma(2008) proposed that the effective transfer of knowledge from consultants to users is a key element for the success of ERP implementation. Meanwhile, users' transfer of enterprise-specific business process knowledge to implementation companies in the form of business requirements and implementation consultants also constitute an important factor for ERP implementation. Due to this work, the ERP consultants can provide software systems that better meet customers' needs. Wang et al. (2007) suggest the competitiveness of ERP consultants and clients' knowledge absorptive capacity constitutes the primary success factors of ERP implementation and knowledge transfer. Effective knowledge transfer from the consultants makes the system match the client's business processes, while customers' high level of absorptive capacity for knowledge to make them better apply knowledge to their business processes.

In a conclusion for this part, it suggests that ERP knowledge transfer has some specific elements such as ERP consultant, ERP key user, and presence of a communication channel, consultant-client relationship, ERP knowledge such as skills and experience transferred from consultants to key users, as well as business processes and requirement transferred from key users to consultants.

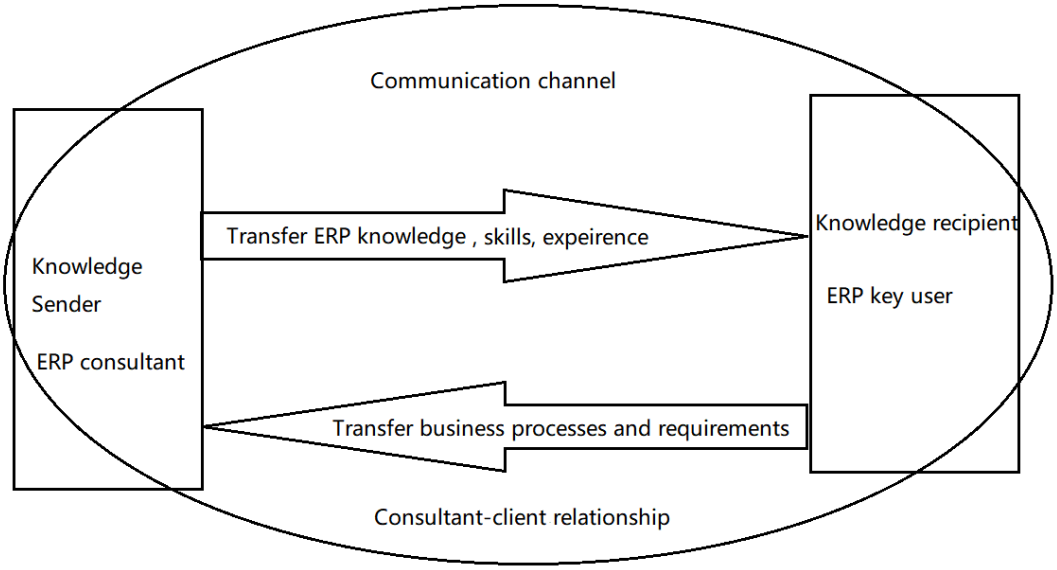

Figure 4: Elements of ERP knowledge transfer

3.4 Knowledge transfer barriers

According to the literature review, there are barriers to knowledge transfer, which impede ERP knowledge transfer. Reducing these elements that hinder knowledge transfer and increasing the elements that promote knowledge transfer will play an important role to lower costs and increase profit for the organization's operation. Meanwhile, eliminating knowledge transfer barriers has become the key factor for the sustainable development of enterprises. Marshall (2020) states that important knowledge transfer barriers include ambiguity, unproved knowledge, senders and recipients lacking motivation, recipients lacking absorptive and retentive ability, organization context, and relationships.

Szulanski (2000) investigates the stickiness of knowledge transfer for best practices within an organization. The researcher proposes a process model of knowledge transfer, which divides the knowledge transfer process from source to receiver into four steps: the initial step, the implementation step, the ramp-up step, and the integration step. In the initial step, tacit knowledge recognition can satisfy the requirements of the

recipient. In the implementation stage, the two sides establish channels for knowledge transfer. Additionally, the knowledge senders adjust to meet the need of the recipients. In the adjustment stage, the recipients adjust knowledge's adaptation to the updated environment. In the consolidation step, only the recipients make the received knowledge part of their new knowledge. Szulanski (2000) analyzes the viewpoints of the above four elements that impact the best practices of knowledge transfer. Therefore, the difficult factors in knowledge transfer are recognized as tacitness, causal ambiguity, complexity, integrity, the knowledge sender's reliability of motivation and perception of knowledge transfer, the knowledge receiver's knowledge absorption ability, and the ability to keep for knowledge.

To better understand the barriers and their distribution across the studies, I cross-tabulated the 30 studies with the barriers identified in each study. Table 3: 'Relation of barriers and authors' presents the cross-tabulation. It is evident from the table that seven researchers have argued ambiguity and unproved knowledge as one knowledge transfer barrier, while ten authors have discussed with tacitness of knowledge. Additionally, both parties' ability to knowledge transfer has been mentioned in fourteen articles. Moreover, the lack of mutual trust within the team has been discussed twelve times, while the lack of clear training for customers has been argued 3 times in all articles. Meanwhile, organization context and culture appear in twelve papers while the arduous relationship has been mentioned as a knowledge transfer barrier within fifteen studies. By comparison, arduous relationships, as well as both parties' ability to knowledge transfer, have the highest frequency with the former appearing in fifteen articles and the latter appearing fourteen times. The factor of lack of clear training to customers has the least frequency with three times appearance in all articles. Other factors including organization context and culture, lack of mutual trust within the team, tacitness of knowledge, ambiguity, and unproved knowledge have the middle frequency of occurrence, between seven and twelve times. This result illustrates that the arduous relationship and both parties' abilities have attracted the attention of more researchers because they can directly affect knowledge transfer. The factor of organizational context and culture has also become a barrier that has

been paid attention to and discussed frequently. This shows that although organizational culture does not directly affect knowledge transfer, as a basic barrier to knowledge transfer it can indirectly affect the effect of knowledge transfer by influencing another obstacle.

Serial Number	Author	Ambiguity and unproved knowledge	Tacitness of knowledge	Both parties' ability to knowledge transfer	Lack of mutual trust within the team	Lack of motivation to knowledge transfer	Organization context and culture	Arduous relationship
1	Sun and Scott (2005)				√	√		√
2	Gou et al. (2019)		√					
3	Marshall, (2020)	√		√			√	√
4	Martinez et al. (2016)			√				√
5	Kim et al. (2015)			√	√	√		√
6	Chou et al. (2013)			√				√
7	Wang et al. (2007)	√		√				
8	Ko et al. (2005)			√				√
9	Xu and Ma (2008)	√	√	√	√			
10	Al-Salti and Hackney (2011)	√					√	√
11	Wang et al. (2014)	√		√			√	√
12	Xu and Cybulski (2010)		√	√				√
13	Ramkumar (2010)	√		√	√	√	√	√

14	Hung et al. (2012)						√	
15	Jou (2012)			√			√	
16	Banjarnahor et al.(2016)				√		√	
17	Lahti and Beyerlein (2000)			√				
18	Dhanaraj et al. (2004)		√					
19	Haldin-Herrgard (2000)		√					
20	Holste and Fields (2010)		√		√			
21	Lubin (2001)		√					
22	Fuller (2018)		√		√			√
23	Gruber (2000)				√		√	
24	Szulanski (2000)	√	√	√				
25	Argote and Ingram (2000)				√			√
26	Argote et al. (2000)			√	√			
27	Cummings and Teng (2003)						√	√
28	Luo (2015)				√		√	√
29	Vaghefi et al. (2018)				√		√	√
30	Osterloh (2000)	√	√					

Table 3: Relation between barriers and authors

3.4.1 Ambiguity and unproved knowledge

Lahti and Beyerlein (2000) find out that ambiguity and unproved knowledge can fewer receivers' willingness to knowledge transfer, and the lack of such willingness constitutes the barriers to knowledge transfer. Marshall (2020) examined ambiguity and unproven knowledge as barriers to knowledge transfer. Ambiguity means an unclear understanding of knowledge. Unproved knowledge presents the knowledge that may be questioned by recipients, which results in difficulty to be transferred. Wang et al. (2014) examine that the causal ambiguity of the new system, the using habit of the existing system, and the pressure of technology significantly weaken the willingness of the recipients to learn.

3.4.2 Tacitness of knowledge

This review finds that knowledge transfer has a couple of primary classes, namely explicit knowledge transfer and tacit knowledge transfer. Many types of research divide knowledge into tacit and explicit knowledge according to whether knowledge is codifiable or not (Dhanaraj et al., 2004; Fuller, 2018; Haldin-Herrgard, 2000; Holste & Fields, 2010; Lubit, 2001; Szulanski, 2000). Tacit knowledge is inarticulate, hard to express, and hard to transmit, while explicit knowledge can be coded.

Xu and Cybulski (2004) examined that knowledge tacitness is one of the barriers that impact knowledge transfer in ERP implementation. Xu and Ma (2008) state that tacitness is the barrier to the knowledge transmission process. Transforming tacit knowledge into explicit knowledge, or at least being able to share it, can provide greater value to an organization (Haldin-Herrgard, 2000). However, tacit knowledge sharing has different difficulties in perception, language, time, value, and distance. Tacit knowledge is transferred mainly through interpersonal communication and experience exchange. Comparatively, tacit knowledge is not easy to be learned from competitors, and it is easier to become the core competitiveness of organizations. ERP

information system is a kind of tacit knowledge because ERP information system contains a very high level of tacit knowledge, and it is not easy to learn and master. Its development, implementation, and problem-solving in the process of its use cannot be directly expressed by language. In addition, it is difficult for the recipients of knowledge to understand and master directly without systematic explanation, instruction, and gradual observation and participation. For example, the implementation methods and processes of ERP systems need the full participation of customers to understand and master. ERP consultants solve each technical problem in various situations analysis, testing, and application of complex knowledge systems based on years of experience. Therefore users must participate in the training provided by consultants and repeated testing guided by consultants, or they will feel difficult to understand or master the related knowledge.

The process of knowledge transfer is influenced by the implicit and explicit features of knowledge, which mean the writability, teachability, complexity, and system dependence of knowledge. According to Szulanski (2000), as highly personalized knowledge, tacit knowledge has specific significance and difficulties being standardized when it is transmitted to others. Dhanaraj et al., (2004) find out that tacit knowledge is cumulative, helps to explain explicit knowledge, and is embedded in a lot of social things. Haldin-Herrgard (2000) examines that the experience possessed by individuals within an organization constitutes tacit knowledge that is hard to encode and difficult to directly shared as explicit knowledge. Meanwhile, explicit knowledge is easy to be transferred and shared, while tacit knowledge is hard to be transferred and shared. Zander and Kogut (1995) believe that tacit knowledge has not enough transferability and the tacit character of knowledge is an important reason hindering knowledge transfer. As a result, this type of knowledge is the most difficult to transfer. Tacit knowledge and explicit knowledge cannot be completely split but can be transformed into each other, and knowledge sharing and knowledge appreciation can be realized in the process of transformation. In practice, the natural attribute of tacit knowledge forms

obstacles to knowledge transfer, while explicit knowledge requires accurate coding to realize effective knowledge transfer. Therefore, both explicit knowledge and tacit knowledge have their obstacles in the process of transfer.

Gou, et al. (2019) propose that subdividing knowledge into tools knowledge, management process knowledge, and operational technology knowledge improves the efficiency of knowledge transfer and solidifying management models also benefits knowledge transfer. In addition, providing clear training to customers can improve the efficiency of knowledge transfer. Ko, et al., (2005) examine that the less extent of shared understanding, the less ERP knowledge transfer. As a result, reducing the tacitness of ERP knowledge will promote the users' understanding of ERP knowledge.

3.4.3 Both parties' ability to knowledge transfer

Ko et al. (2005) prove the lack of absorptive ability of ERP knowledge recipients is a barrier to ERP knowledge transfer. Chou (2013) finds out ERP consultants' encoding competence, has an indirect impact on ERP implementation's success. Encoding competence means ERP consultants' competence to express their ideas clearly. In addition, Xu and Ma (2008) propose that the ERP consultant's communication encoding competence is positively related to the ERP knowledge transfer. Ko et al., (2005) also justified that ERP consultants' strong communication coding ability can make the relationship between consultants and clients easier and further contribute to the success of ERP knowledge transfer. Wang et al., (2007) suggest the competitiveness of ERP consultants constitutes one of the primary success elements of ERP implementation and knowledge transfer because effective knowledge transfer from the consultants makes the system match with clients' business processes.

Xu and Ma (2008) examine that communication decoding capacity, and absorptive capacity of key users, namely ERP knowledge recipients, are positively correlated with the ERP knowledge transfer effect. The study confirms that the capability of knowledge recipients' absorption is a crucial determinant of the success of ERP projects, which

have a significant positive relationship. Martinez et al.(2016) consider ERP clients as kind of “recipients” who accept knowledge from consultants. Chou (2013) finds out knowledge factors such as shared understanding and absorptive capacity of recipients have a positive direct influence on knowledge transfer and ERP implementation success. Moreover, intrinsically or extrinsically motivated clients have a significant positive influence on ERP knowledge transfer. Ko et al. (2005) also examine the better a client's communication decoding capability the less arduous the consultant-client relationship.

Chou(2013) examines that recipients' decoding competence has an indirect influence on ERP success and knowledge transfer through knowledge factors. Decoding competence means clients' listening, understanding, and responding. Wang et al. (2007) suggest the competitiveness of clients' knowledge-absorbing ability constitutes one of the primary success elements of ERP implementation and knowledge transfer as a result of that customers' high level of absorptive capacity for knowledge to make them better apply knowledge to their business processes. Ko et al.(2005)'s research results reveal less absorptive capacity is one barrier to ERP knowledge transfer. ERP key users' communication decoding capacity, acquirement, and absorptive capacity are negatively correlated with the ERP knowledge transfer effect (Xu & Ma, 2008).

Xu and Cybulski (2004) examined that a low recipient's absorptive capacity is one barrier that impacts knowledge transfer in ERP implementation. In addition, Lahti and Beyerlein (2000) state only the recipients must have previous experience so that they can know what instructions the ERP consultant will impart to them before they receive the knowledge, which is extremely crucial because it determines the knowledge transfer effect.

Chou (2013) examines that recipients' decoding indirectly impacts ERP knowledge transfer. Decoding competence means clients' listening, understanding, and responding. Wang et al., (2007) suggest the competitiveness of clients' knowledge-

absorbing ability constitutes one kind of primary success factor of ERP knowledge transfer as a result of that customers' high level of absorptive capacity for knowledge to make them better apply knowledge to their business processes. Ko et al.,(2005)'s research results reveal less absorptive capacity is a kind of barrier to ERP knowledge transfer. ERP key users' communication decoding capacity, acquirement, and absorptive capacity are negatively correlated with the ERP knowledge transfer effect (Xu & Ma, 2008).

Szulanski (2000) believes that only when transferred knowledge is retained by knowledge recipients can it be regarded as an effective knowledge transfer. His studies show that knowledge transfer will be affected if the knowledge recipient lacks absorptive capacity. He also demonstrated that knowledge transfer is easier when the receptor is ready to receive the knowledge and that the receptor without such knowledge may feel difficult to recognize the value of transferred knowledge, even to reserve and reuse it.

3.4.4 Lack of mutual trust within the team

Banjarnahor et al., (2016) also found that in ERP implementation, knowledge transfer occurs through two paths: consultant transfer ERP knowledge to customer and customer transfer business knowledge to ERP consultant. Whether the employees within the organization are willing to transfer the existing business process knowledge of the organization to the ERP consultant plays a significant positive role in the ERP system implementation. Holste and Fields (2010) find out that the degree of trust based on emotion and trust based on cognition will affect the willingness of people in the organization to share and utilize tacit knowledge. Ko et al., (2005) examine the more credible the ERP consultant, the better the knowledge transfer effect, and intrinsically or extrinsically motivated the consultants are positively related to ERP knowledge transfer. Whether the employees within the organization are willing to transfer the

existing business process knowledge to the ERP consultant has a positive relationship with the success of the ERP implementation.

3.4.5 Lack of motivation for knowledge transfer

Based on the above discussion, it can be seen that the lack of reliability of the transfer content and the lack of mutual trust will further reduce the motivation of both parties to transfer knowledge to each other. Also, Marshall (2020) finds out knowledge senders lacking motivation is one of the important knowledge transfer barriers. Meanwhile, individuals' fear of losing their exclusive rights to knowledge also hinders their ability to transfer knowledge to others (Sun & Scott, 2005). Lahti and Beyerlein (2000) also propose that the knowledge source's awareness of knowledge protection also constitutes one of the barriers to knowledge transfer.

3.4.6 Organization context and culture

Abou-zeid (2002) believes that an organization or team's culture also affects knowledge transfer, ERP teams that encourage and support ERP consultants to build personal relationships with users performed significantly better than teams that do not. Jou (2012) finds out that the effect of transferring climate in knowledge transfer procedure significantly influences the knowledge transfer process in ERP implementation. Marshall (2020) argues that organizational context is an important knowledge transfer barrier. Ramkumar (2010) affirms that organizational culture influences knowledge transfer in ERP system implementation. Hung et al. (2012) propose knowledge transfer's climate has a positive relationship with the effect of ERP implementation. Vaghefi et al. (2018) define the organizational support culture as group characteristics, behaviors, and values that promote the development of knowledge transfer to increase interaction between individuals. Gruber (2000) finds out that cultural factors affecting organizational knowledge transfer include openness, trust, use of communication channels, high-level support, as well as a reward system. Gruber (2000)'s research results prove that these cultural factors exist and influence

knowledge transfer, especially the reward system plays a crucial role. Therefore, organizations should pay more attention to understanding and supporting the organizational culture that is conducive to knowledge transfer, which is more important than technical factors. Therefore it is important to establish a climate that encourages participants to be willing to share and exchange knowledge. The factors that impact establishing a good knowledge transfer climate contain 1, interdepartmental coordination, 2, support from top management and 3, the implementing firm's incentive mechanism, 4, the consultants' industry experience, 5, project management ability, and 6, the consultants' reward system.

3.4.7 Arduous relationship

Xu and Ma (2008) believe that knowledge transfer in ERP implementation occurs in two paths as consultants transfer ERP knowledge to key users and key users transfer business process knowledge to ERP consultants. The quality of the consultant-client relationship will further decide the success of the ERP knowledge transfer (Martinez, et al.,2016). Xu and Ma (2008) justify that communication is positively correlated with ERP knowledge Transfer.

Chapter 4: Discussion

This chapter proposes to discuss the control mechanism which provides solutions to facilitate knowledge transfer in ERP system implementation. As mentioned in the previous chapter, the factors hindering ERP knowledge transfer in consultant practice contain ambiguity and unproved knowledge, tacitness of knowledge, both parties' ability of knowledge transfer, lack of mutual trust within the team, lack of motivation, organization context and culture, and arduous relationship. For knowledge transfer both parties' capabilities, elements need to be considered such as the knowledge senders' and recipients' lack of motivation, the knowledge sender's lack of credibility, the knowledge sender's lack of communication encoding competencies, the knowledge recipient's lack of decoding competence, and recipients' lack of absorptive and retentive ability. To reduce these barriers, related solutions (i.e. control mechanisms) are discussed below. In table four each control mechanism is listed.

Barriers	Control mechanism
Ambiguity and unproved knowledge	Provide clear training, improve consultant's credibility
Tacitness of ERP knowledge	Create a close relationship and users' full participation in the ERP project
Knowledge sender's lack of capability for knowledge transfer	To select consultants with good ERP skills and communication skills, select eligible key users who have good communication skills and related fundamentals and experience to join the team.
Lack of mutual trust within the team	Create a close relationship, improve the consultant's credibility
Knowledge senders' and recipients' lack of motivation	To create a climate and incentive policy to promote the motivation of consultants and users
Organization context and culture	Create a culture that encourages knowledge transfer
Arduous relationship	Create effective communication channel and close relationship, improve both parties' ability

Table 4: Barriers and related control mechanism

One important control is to create a close relationship. Some controls are related to skills, such as ERP skills, communication skills, etc. Some controls are related to organizational environment/ culture, such as culture, climate, policy, etc.

There are some broad categories of controls:

1. Trust relationships

2. ERP Capacity Building (Skills and Training)

3. Organizational Culture (Policy, culture, etc.)

4. Selection of eligible consultants and key users

5. Effective communication channel and close relationship

4.1 Trust relationships

Chou et al.,(2013) affirm that tacitness and explicitness of knowledge co-exist in the knowledge transfer process of ERP projects, but tacit knowledge takes a more important role in the success of project implementation than explicit knowledge. Because of this, most ERP projects last from a few months to one year, during which the key users need to work closely with the consultant rather than only having the consultant deliver a software system and attached documents. Due to the complexity of ERP system knowledge, key users need to be ready to turn to consultants' help for in-depth understanding whenever they encounter new problems. Meanwhile, key users can understand and master ERP implementation methods only after they have experienced the whole process of ERP implementation. This process consists of five stages, namely, the preparation stage, blueprint stage, system implementation stage, test stage, and go-live stage (Xu & Ma,2008). A lot of knowledge is transferred to key users from consultants in these processes. For example, the consultants need to analyze the problems that may occur in the process of launching the project in advance based on their rich experience and the complex situation of the current project. Then effective solutions could be provided to prevent similar problems from happening again. This knowledge cannot be described in simple words but requires deep interaction and communication between project managers, key users, and consultants. In addition,

after obtaining the ERP system operation manual, users need to carry out repeated system tests under the guidance of consultants to truly grasp the application of the system. When the situation changes slightly, it is difficult for users to cope with and solve problems only by relying on documents because of the tacitness of knowledge.

Aladwani (2002) points out that an ERP system is composed of multiple modules, which are closely related and integrated. In general, most organizations' implementation of ERP mainly applies accounting, cost, sales, material management, production plan, and quality management, as well as HR module. When providing a solution for a certain requirement, all module consultants must discuss it together and give full play to their strengths and experience. Therefore, it is a team working together to produce highly tacit knowledge. Users of each module must be deeply involved and communicate with each other to absorb and understand this tacit knowledge and apply it to their business environment. Thus, a good relationship between consultants and users also plays an important role in the transmission of tacit ERP knowledge as shown in table five. While consultants transfer tacit ERP knowledge to key users, the latter also transfer business process knowledge to consultants. The effect of one party passing on knowledge will encourage the other party to pass on its knowledge to the other party, thus enhancing the relationship and trust between them.

4.2 ERP Capacity Building (Skills and Training)

As Szulanski (2000) proves that it is impossible to completely separate tacit knowledge from explicit knowledge, but tacit knowledge can be transformed into explicit knowledge, which improves the effect of tacit knowledge transfer. This transformation can be realized by more clear training by consultants, repeat testing, and proactive participation in the projects by key users as shown in table five. Meanwhile, better consultants' motivation and credibility, users' absorption capability, the relationships between consultants and users, and organizations' climate of encouraging knowledge transfer can also reduce barriers to tacit knowledge transfer. Of course, these factors

will be discussed separately as barriers to the whole concept of ERP knowledge transfer in the following paragraphs.

Knowledge receivers' barriers to knowledge transfer in ERP implementation contain low motivation, lacking absorptive and retentive ability, and low decoding competence (Argote & Ingram, 2000). The knowledge recipient is the receiver of knowledge transfer. The recipient should have absorption consciousness, incentive degree, foreseeing capability of new knowledge, the capability to accept new knowledge, and the capability to keep knowledge. These capabilities are positively related to the effect of knowledge transfer. The degree of knowledge transfer will be directly influenced by the recipient's level of comprehensive quality, such as the ability to decode, learn, comprehend, and communicate.

Through the literature review, it is found that knowledge transfer is not only an ordinary procedure of knowledge transfer but also the procedure of reconstruction and reuse. Most scholars also emphasize the complexity and stages of the knowledge transfer procedure, the understanding of the knowledge recipient, the reconstruction process of knowledge transfer, and the process of knowledge absorption and reuse. The act of absorbing and reconstructing knowledge is transferred by the sender of knowledge, then the knowledge receiver has a feedback effect on the knowledge source. Also, many scholars focus on the study of distortion factors in the transmission process, as well as the absorption and understanding of the error of the knowledge receiver. However, they do not notice that the knowledge recipients not only incorporate new knowledge into their knowledge base but also have a feedback effect on the knowledge source. Knowledge transfer is not one-time, it is a continuous cycle of sending knowledge from a knowledge source to a knowledge receiver, and receiving knowledge back to a knowledge source.

4.3 Organizational Culture (Policy, culture, etc.)

Cultural factors comprise openness, trust, communication channels, high-level support, and a reward system for knowledge transfer (Gruber, 2000). Cultural factors play more significant roles than technical factors in knowledge transfer. Organizations should establish a climate to promote participants to share and receive knowledge with others as shown in table five. For example, project managers should schedule more out-of-work workshops and events that involve ERP consultants and users. This will give the consultants and the users more opportunities for intimate communication, promoting the relationship between both sides.

People are the owners of knowledge. Under the protection of the intellectual property system, people's awareness of self-protection of knowledge keeps improving, which also hinders knowledge transfer imperceptibly and becomes an important knowledge transfer obstacle. From the angle of economic interests and social identity, it is understandable and reasonable for people to pursue the return of fame and wealth. The recipient of knowledge transfer should pay a fee to the sender to show that the knowledge is valuable. Therefore, in the procedure of ERP knowledge transfer, an incentive mechanism should be introduced. The subjects who contribute knowledge not only get corresponding spiritual rewards but also need economic satisfaction as rational people living in a competitive environment. Therefore, individuals and organizations must be able to obtain their desired benefits, otherwise, there will be no motivation to engage in such knowledge production and dissemination activities. To protect the interests of knowledge owners, an organization that implements an ERP system should formulate a corresponding compensation system to drive knowledge sharing with interests. Some of the more successful incentives include salary increases or equity grants, to give a promotion to a position or rank, taking employee knowledge contribution as a part of the performance appraisal index.

4.4 Selection of eligible consultants and key users

Fuller (2018) proves that the knowledge sender's motivation, absorptive capability, encoding competence, and awareness of knowledge protection are the main elements impacting the success of ERP implementation. In many ERP projects, most consultants are willing to transfer their knowledge to users. But a few consultants hold back on the knowledge they impart to users, perhaps because of their fear that giving it all away would make them less competitive. But it turns out that transferring knowledge to users without reservation is the only way to get them recognized, otherwise they would be considered incompetent or distrusted. In addition, as ERP knowledge is unlimited, improving the competitiveness of consultants depends on the consultant's learning ability and knowledge accumulation in more projects. As a result, in numerous literature reviews, the intention and motivation of ERP consultants' knowledge transfer are one of the transfer barriers, but it is not the main one.

Comparatively speaking, the encoding ability, credibility, and communication ability of ERP consultants are positively correlated with the effect of ERP knowledge transfer. ERP consultants must have encoding ability, which means that they can express complex knowledge and ideas concisely and clearly so that users can easily absorb and understand the knowledge. ERP consultants must also demonstrate that they have more professional knowledge and experience so that users can trust them. Otherwise, users will question the consultant's ability, which will inevitably reduce the ERP knowledge transfer's effect. In addition, the ability of the ERP consultant to communicate with other consultants and users also determines whether the implementation of the ERP project can proceed according to the plan. These ERP consultant factors, if not controlled properly, will be one crucial barrier to knowledge transfer in ERP implementation projects. Therefore, the project manager must conduct a comprehensive assessment of the above abilities of the consultants when looking for and determining the consultants of each ERP module to ensure that the candidates with corresponding abilities and qualifications serve as consultants as shown in table five.

4.5 Effective communication channel and close relationship

The arduous consultant-client relationship is a kind of important barrier to ERP knowledge transfer. Creating favorable relationships between consultants and customers can facilitate the ERP knowledge transfer in two directions from consultants to clients and from clients to consultants as shown in table five. The relational communication channel is easier to transfer knowledge than non-relational communication, that is to say, a good relationship between the two sides will be conducive to the construction of a smooth knowledge communication channel and promote the transfer of knowledge. Hence, both sides of Knowledge transfer should establish a channel of contact with each other, that is, set up the path of communication between both sides. Without contact, both parties will lack the trust necessary for knowledge exchange and cannot establish further communication channels.

Based on the above analysis, in my framework for addressing the barriers changes are required at levels of trust relationships, skills and training, organizational culture, selection of eligible consultants and key users, and effective communication channel. Figure five shows the control mechanisms' weight to address barriers to ERP knowledge transfer. This pie chart is calculated based on the frequency of the above factors present in the selected literature articles.

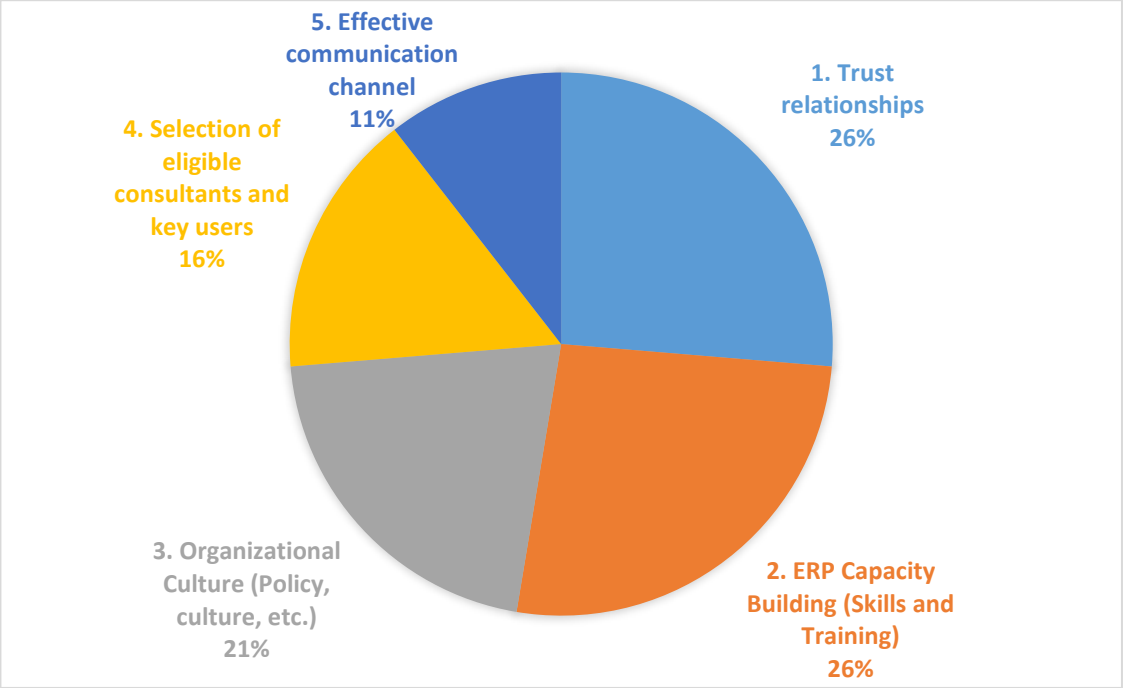

Figure 5: Control mechanisms weight to address barriers of ERP knowledge transfer

Chapter 5: Conclusion:

This chapter presents key solutions derived from this study to facilitate ERP knowledge transfer and explains this study's limitations and contribution, as well as a suggestion for future research.

As analyzed in the previous chapters, organization context and culture is a fundamental barrier to ERP knowledge transfer since it impacts the consultant-client relationship if the organizational culture is not encouraged to create a favorable relationship between consultants and clients (Marshall, 2020). It can also decrease the consultant's motivation to transfer knowledge to customers if there is not a good reward system. As a consequence, an organization's management level should increase its support to create a culture that is significant to resolving this issue (Wang et al., 2014).

Arduous relationship between ERP consultants and clients impedes double sides' willingness to share knowledge, even impacting their trust in others (Sun and Scott, 2005). Without a good relationship, the effect of knowledge transfer between the two parties is bound to decrease. To address this problem, creating a good team culture that encourages knowledge transfer is the first thing that needs to do (Ko et al., 2005). In addition, selecting consultants and key users with eligible competence will help increase trust within each other, then promote a favorable relationship (Wang et al., 2014).

Tacitness of ERP knowledge is one of the main obstacles for users to acquire knowledge(Xu & Cybulski, 2010). As discussed in the discussion section, the solution to this problem is to first strengthen the close relationship between users and consultants, and select an ERP consultant with good encoding capabilities. Then the most important thing is that users need to participate in the whole implementation process of the ERP project. Only through subtle learning, users can acquire more tacit knowledge (Xu & Ma, 2008). The ambiguity of knowledge may cause users not to

understand and master the knowledge, while unproven knowledge results in users questioning the knowledge. Providing clear training to customers is an effective solution to this barrier (Ramkumar, 2010).

Lack of mutual trust within the team reduces the ERP knowledge transfer effect. Establishing a favorable relationship and selecting ERP consultants and key users with eligible capabilities can eliminate this barrier (Xu & Ma, 2008). Knowledge senders' and recipients' lack of motivation is the main barrier to ERP knowledge transfer. A good organizational reward system or encouraging policy can relieve this problem (Hung et al., 2012).

ERP knowledge transfer's double sides lacking related competencies result in low credibility, low encoding or decoding capability, and low absorbing capability. These factors cause the low communication effect during the ERP knowledge transfer process (Ko et al., 2005; Martinez et al., 2016; Ramkumar, 2010). To solve this issue, selecting a qualified ERP consultant with related capability and experience is what the ERP project managers need to do while choosing key users with related knowledge and experience is also necessary (Xu & Ma, 2008).

This study's contribution is it proposes the barriers that may occur in the ERP implementation and provide suggestions to managers with the above mechanism to control the barriers.

5.1 Limitations

Most literature searched and chosen by this research focus on the year 2000 and relatively few in recent years. This results in the study looking at problems over a large period from 2000 to 2020, rather than the most recent study within the last 3-5 years. In addition, as most of the documents searched are from Asia and Europe, there are few

studies on ERP projects in New Zealand. Therefore, this study does not target barriers and control mechanisms for ERP knowledge transfer in New Zealand.

5.2 Future research

Because of the time limitation, this study has only investigated the knowledge transfer barriers between ERP consultants and clients. However, the ERP team is comprised of many modules' consultants. Every consultant has related knowledge in his/her industry, such as accounting, logistics, human resources, etc. So, the cooperation and coordination among consultants also significantly impact the knowledge transfer among the ERP project team. This phenomenon and issue need to be done in the future by other researchers. Therefore, the future research questions could be as follows.

1. What are the knowledge transfer barriers in ERP implementation caused by the coordination of ERP consultants of various modules?

2. What is the control mechanism for the barriers caused by the coordination of different modules' ERP consultants in ERP implementation?

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Annexure A: Thematic Analysis

Theme	Summary of the findings	Comments	Reference
Tacit knowledge	This review finds that knowledge transfer include explicit knowledge transfer and tacit knowledge transfer. The former can be described by a formal and systematic language, whereas tacit knowledge cannot be expressed directly by language. Tacit knowledge has non-coding and non - structural properties. The researchers examine that the experience possessed by individuals within an organization constitutes tacit knowledge which is hard to encode and is not easy to be directly shared as explicit knowledge (Haldin-Herrgard, 2000). Meanwhile, explicit knowledge is easy to be transferred and shared, while tacit knowledge is difficult to be transferred and shared. Tacit knowledge is transferred mainly through interpersonal communication and experience exchange. Comparatively, tacit knowledge is not easy to be learned by competitors, and it is easier to become the core competitiveness of organizations. ERP information system is a kind of tacit knowledge because ERP information system has a very high level of tacit knowledge, which is not easy to learn and master. Its development, implementation, and problem-solving in the process of its use cannot be directly expressed by language, and it is difficult for the recipient of knowledge to understand and master directly	Tacit knowledge is non-encoding and not easy to be transferred. However, it is an important factor in ERP implementation.	Haldin-Herrgard, T. (2000). Difficulties in the diffusion of tacit knowledge in organizations. Journal of Intellectual Capital, 1, 357-365. Holste, J. S., & Fields, D. (2010). Trust and tacit knowledge sharing and use. Journal of Knowledge Management, 14(1), 128-140. Szulanski, G. (2000). The process of knowledge transfer: A diachronic analysis of stickiness. Organizational behavior and human decision processes, 82(1), 9-27. Argote, L., & Ingram, P. (2000). Knowledge transfer: A basis for competitive advantage in firms. Organizational behavior and human decision processes, 82(1), 150-169. Xu, Q., & Ma, Q. (2008). Determinants of ERP implementation knowledge transfer. Information & Management, 45(8), 528-539.

	without systematic explanation, instruction, and gradual observation and participation. For example, the implementation methods and processes of ERP systems need the full participation of customers to understand and master. ERP consultants solve each technical problem in various situations analysis, testing, and application of complex knowledge systems based on years of experience, therefore users can understand that only through participation in the training provided by consultants and repeated testing. Marshall (2020) examined ambiguity, unproved knowledge as the barriers to knowledge transfer. Ambiguity means unclear understanding of knowledge. Unproved knowledge presents the knowledge that may be questioned by recipients, which results in difficulty to be transferred. Xu and Ma(2008) believe that knowledge transfer in ERP implementation occurs in two paths as consultants transfer ERP knowledge to key users and key users transfer business process knowledge to ERP consultants. Their research results show that casual ambiguity and tacitness are the barriers to the above two transmission paths. Xu and Cybulski (2004) examined that knowledge tacitness is a kind of barrier that impact knowledge transfer in ERP implementation. Holste and Fields (2010) found that trust based on emotion and cognition will affect the willingness of people in the organization to share tacit knowledge.		
Sender's factors of ERP knowledge	Marshall (2020) finds out senders lacking motivation is one of the important knowledge	Knowledge sender's motivation, absorptive capability, encoding	Chou, S. W., Hung, I. H., & Chang, Y. C. (2013). Understanding the

transfer	transfer barriers. including senders and recipients lack motivation, recipients lack absorptive and retentive ability, organization context, and arduous relationship. Individuals' fear of losing their exclusive rights to knowledge also hinders their ability to transfer knowledge to others (Sun & Scott, 2005). Chou(2013) find out knowledge factors such as shared understanding as well as absorptive capacity, positively direct affect knowledge transfer and ERP implementation success. Also, ERP consultants' encoding competence, indirectly influence ERP success and knowledge transfer via knowledge factors. Encoding competence means ERP consultants' competence to express their ideas clearly. Wang et al., (2007) suggest the competitiveness of ERP consultants constitutes one main success factor of ERP knowledge transfer because effective knowledge transfer from the consultant makes the system match with clients' business processes. Xu and Ma(2008) propose that the ERP consultant's communication encoding capability has positive correlation with the ERP knowledge transfer. Xu and Cybulski (2004) examined that low source competence and source motivation are barriers that impact knowledge transfer in ERP implementation. Lahti and Beyerlein (2000) propose that the knowledge source's awareness of knowledge protection also constitutes one of the barriers to knowledge transfer.	competence, awareness of knowledge protection are the main elements impacting the ERP implementation's success.	Antecedents of ERP Implementation Success-The Perspective of Knowledge Transfer. Asia Pacific Management Review, 18(3). Marshall, N. A. (2020). An exploration of intra-organizational projects benefits knowledge transfer barriers (Doctoral dissertation, Queensland University of Technology). Sun, P. Y. T., & Scott, J. L. (2005). An investigation of barriers to knowledge transfer. Journal of knowledge management. Xu, Q., & Ma, Q. (2008). Determinants of ERP implementation knowledge transfer. Information & Management, 45(8), 528-539. Wang, E. T., Lin, C. C. L., Jiang, J. J., & Klein, G. (2007). Improving enterprise resource planning (ERP) fit organizational processes through knowledge transfer. International journal of information management, 27(3), 200-212.
Recipient's factors of ERP knowledge transfer	Marshall (2020) states that important knowledge transfer barriers include recipients' lacking motivation, recipients' lacking absorbing and	Knowledge receiver's barriers on knowledge transfer in ERP implementation contain low	Banjarnahor, W. S. A., Shinoda, K., & Samosir, E. T. (2016). The Effects of Organizational Rewards

	retentive ability. Individuals' fear of losing their exclusive rights to knowledge also hinders their capability of transferring knowledge to others (Sun & Scott, 2005). Banjarnahor et al., (2016) found that in the ERP project, knowledge transfer occurs in two paths: consultant transfer ERP knowledge to customer and customer transfer business knowledge to ERP consultant. Whether the employees within the organization are willing to transfer the existing business process knowledge of the organization to the ERP consultant takes an crucial positive role in the ERP implementation. Chou(2013) examines that recipients' decoding indirectly influence ERP success and knowledge transfer via knowledge factors. Decoding competence means clients' listening, understanding, and responding. Wang et al., (2007) suggest the competitiveness of clients' knowledge absorbing capability constitutes a main success factor of ERP knowledge transfer as a result of that customers' high level of absorptive capacity for knowledge to make them better apply knowledge to their business processes. Ko et al.,(2005)'s research results reveal less absorptive capacity is a kind of barrier to ERP knowledge transfer. ERP key users' communication decoding capacity, acquirement, and absorptive capacity are negatively correlated with the ERP knowledge transfer effect (Xu & Ma, 2008). Wang et al.,(2014) examine that the causal ambiguity of the new system, the habit of the existing system, and the pressure of technology significantly weaken the willingness of the recipients to learn.	motivation, lacking absorptive and retentive ability, low decoding competence.	on Client Knowledge Transfer Intention to Consultant during ERP Implementation. Advanced Science Letters, 22(7), 1809-1812. Chou, S. W., Hung, I. H., & Chang, Y. C. (2013). Understanding the Antecedents of ERP Implementation Success-The Perspective of Knowledge Transfer. Asia Pacific Management Review, 18(3). Martinez, L. F., Ferreira, A. I., & Can, A. B. (2016). Consultant–client relationship and knowledge transfer in small-and medium-sized enterprises change processes. Psychological Reports, 118(2), 608-625. Marshall, N. A. (2020). An exploration of intra-organizational projects benefits knowledge transfer barriers (Doctoral dissertation, Queensland University of Technology). Sun, P. Y. T., & Scott, J. L. (2005). An investigation of barriers to knowledge transfer. Journal of knowledge management. Wang, E. T., Lin, C. C. L., Jiang, J. J., & Klein, G. (2007). Improving enterprise resource planning (ERP) fit organizational processes through knowledge transfer. International journal of information management,

	At the same time, perceptual management support, relational embedding, and symbolic adoption are the key determinants of improving users' learning intention. Wang et al.,(2014)'s study investigates the phenomenon of passive knowledge transfer in-depth and extends the study of the ERP life cycle by revealing the combined influence of enablers and suppressors in the context of ERP assimilation. Xu and Cybulski (2004) examined that low recipient's absorptive capacity is a kind of barrier that impact knowledge transfer in ERP implementation. The incentive policy and intensity of the organization also influence the attitude and willingness of its employees to transfer knowledge to consultants (Banjarnahor et al., 2016). In addition, Lahti and Beyerlein (2000) state only the recipients must have previous experience so that they can know what instructions the ERP consultant will impart to them before they receive the knowledge, which is very important because it determines the effect of the knowledge transfer.		27(3), 200-212. Wang, W., Liu, L., Feng, Y., Shao, Z., & Gao, L. (2014). Comprehensive understanding the inhibitors and enablers of knowledge transfer in ERP assimilations: A multi-case study.
Consultant–client's relationship in ERP implementation	Martinez et al., (2016) measured the relationship among clients and consultants as one positive relation on ERP implementation. Marshall (2020) finds out arduous relationship is an important knowledge transfer barrier. From the perspective of the individual level, people's health, psychological status are closely related to organizational background. They form potential emotional barriers to knowledge transfer, which will hinder their transfer of information (Sun & Scott, 2005). From the perspective of the team, the harmonious relationship and the degree of	The arduous consultant-client relationship is an important barrier to ERP knowledge transfer. Creating favorable relationships between consultants and customers can facilitate the ERP knowledge transfer through two directions from consultants to clients and from clients to consultants.	Chou, S. W., Hung, I. H., & Chang, Y. C. (2013). Understanding the Antecedents of ERP Implementation Success-The Perspective of Knowledge Transfer. Asia Pacific Management Review, 18(3). Kim, J. U., Kim, H. S., & Park, S. C. (2015). The mediating effects of bidirectional knowledge transfer on system implementation success. Asia pacific journal of information

	mutual trust within the team will also become barriers to the progress of knowledge transfer within the team (Sun & Scott, 2005). Kim (2015) found that knowledge transfer in ERP implementation is two-way, not only one-way, which is reflected in the two directions of consultant transferring knowledge to customers and customer transferring knowledge to consultants. In the implementation of ERP projects, IT consultants transfer their skills and knowledge to customers determines the success of the project. Meanwhile, the effect of customers transferring their business knowledge to IT consultants also determines the success of the implementation of ERP projects. Chou(2013) find out knowledge factors such as favorable relationships are positively related with ERP implementation success. Ko et al.,(2005)'s research results reveal that arduous relationships, the less extent of shared understanding and are barriers for ERP knowledge transfer. Also, the more credible the consultant, the better the knowledge transfer. Intrinsically or extrinsically motivated the client and consultants are positively related to ERP knowledge transfer. Xu and Cybulski (2004) examined quality of the relationship impacts ERP knowledge transfer. Ramkumar (2010) affirms that arduous Relationships influence knowledge transfer in ERP implementation.		systems, 25(3), 445-472. Ko, D. G., Kirsch, L. J., & King, W. R. (2005). Antecedents of knowledge transfer from consultants to clients in enterprise system implementations. MIS Quarterly, 59-85. Marshall, N. A. (2020). An exploration of intra-organizational projects benefits knowledge transfer barriers (Doctoral dissertation, Queensland University of Technology). Sun, P. Y. T., & Scott, J. L. (2005). An investigation of barriers to knowledge transfer. Journal of knowledge management.
Organization's culture	Vaghefi et al., (2018) define the organizational support culture as Group characteristics, behaviors, and values that promote the development of knowledge transfer to increase	Cultural factors comprise openness, trust, communication channels, high-level support, and a reward system for knowledge	Gruber, H. G. (2000). Does organizational culture affect the sharing of knowledge? The case of a department in a high-technology

	interaction between individuals. Gruber (2000) found that cultural factors affecting organizational knowledge transfer include openness, trust, use of communication channels, high-level support , and a reward system. Gruber (2000)'s research results prove that these cultural factors exist and influence knowledge transfer, especially the reward system plays a crucial role. Therefore, organizations should pay more attention to understanding and supporting the organizational culture conducive to knowledge transfer, which is more important than technical factors. Jou (2012) finds that knowledge transfer climate in the procedure of knowledge transfer significantly influences the procedure of knowledge transfer in ERP implementation. Marshall (2020) argues that organization context is an important knowledge transfer barrier. Ramkumar (2010) affirms that organizational culture influences ERP knowledge transfer. The factors that impact establishing good knowledge transfer climate contain 1, interdepartmental coordination, 2, Top management's encourage, 3, implementing firm's incentives, 4, consultants' industry experience, 5, team management's ability, 6, the consultants' reward system.	transfer. Cultural factors play more significant roles than technical factors in knowledge transfer. Organizations should establish a climate to promote participants to share and receive knowledge with others.	company (Doctoral dissertation). Carleton University, Ottawa, Ontario, Canada. Jou, J. J. (2012). The Impacts of Competence and Knowledge Transfer Climate on ERP Knowledge Transfer. Hung, W. H., Ho, C. F., Jou, J. J., & Kung, K. H. (2012). Relationship bonding for a better knowledge transfer climate: An ERP implementation research. Decision Support Systems, 52(2), 406-414. Marshall, N. A. (2020). An exploration of intra-organizational projects benefits knowledge transfer barriers (Doctoral dissertation, Queensland University of Technology). Ramkumar Muralidharan, A. (2010). Studying the impacts of knowledge transfer during ERP implementation in an organization.

Annexure B: Summary of the included articles

Author	Year	Title	Findings	Reference
Peter Yih-Tong Sun and John L. Scott	2005	An investigation of barriers to knowledge transfer	From the perspective of the individual level, individuals' health, psychological status, as well as social positions are closely related to the organizational background. They form potential emotional barriers to knowledge transfer, which will hinder their transfer of information. In addition, individuals' fear of losing their exclusive rights to knowledge also hinders their ability to transfer knowledge to others. From the perspective of the team, the harmonious relationship and the degree of mutual trust within the team will also become barriers to the progress of knowledge transfer within the team.	Sun, P. Y. T., & Scott, J. L. (2005). An investigation of barriers to knowledge transfer. Journal of knowledge management.
Gou, J., Li, N., Lyu, T., Lyu, X., & Zhang, Z.	2019	Barriers to knowledge transfer and mitigating strategies in collaborative management system implementations	Gou, et al., (2019) propose that splitting knowledge into tools and management process knowledge, operational technology knowledge improves the efficiency of knowledge transfer and solidifying management models also benefits knowledge transfer. In addition, providing clear training to customers can accelerate knowledge transfer's efficiency.	Gou, J., Li, N., Lyu, T., Lyu, X., & Zhang, Z. (2019). Barriers of knowledge transfer and mitigating strategies in collaborative management system implementations. VINE Journal of Information and Knowledge Management Systems.

Marshall, Neville Alastair	2020	An exploration of intra-organizational project benefit knowledge transfer barriers	Researchers examined ambiguity, unproved knowledge as the barriers to knowledge transfer. Ambiguity means unclear understanding of knowledge. Unproved knowledge presents the knowledge that may be questioned by recipients, which results in difficulty to be transferred. Researchers also find out important knowledge transfer barriers including senders' and recipients' lack of motivation, recipients lack absorptive and retentive ability, organization context, and arduous relationship.	Marshall, N. A. (2020). An exploration of intra-organizational projects benefits knowledge transfer barriers (Doctoral dissertation, Queensland University of Technology).
Martinez, L. F., Ferreira, A. I., & Can, A. B.	2016	Consultant–client relationship and knowledge transfer in small-and medium-sized enterprises change processes.	This study measured the relationship among customers and consultants. The authors examined variables sharing of understanding, motivation, and communication are positively related with the knowledge transfer among consultants and customers.	Martinez, L. F., Ferreira, A. I., & Can, A. B. (2016). Consultant–client relationship and knowledge transfer in small-and medium-sized enterprises change processes. Psychological Reports, 118(2), 608-625.

Kim, J. U., Kim, H. S., & Park, S. C	2015	The mediating effects of bidirectional knowledge transfer on system implementation success.	Researchers found that knowledge transfer in ERP implementation is two-way, not only one-way, which is reflected in the two directions of consultant transferring knowledge to customers and customer transferring knowledge to consultants. In the implementation of ERP projects, IT consultants transfer their skills and knowledge to customers determines the success of the project. Meanwhile, the effect of customers transferring their business knowledge to IT consultants also determines the success of the implementation of ERP projects.	Kim, J. U., Kim, H. S., & Park, S. C. (2015). The mediating effects of bidirectional knowledge transfer on system implementation success. Asia pacific journal of information systems, 25(3), 445-472.
Chou, S. W., Hung, I. H., & Chang, Y. C.	2013	Understanding the Antecedents of ERP Implementation Success-The Perspective of Knowledge Transfer	Researchers find out knowledge factors such as favorable relationships and shared understanding and absorptive capacity, positively affect knowledge transfer and ERP implementation's success. Communications factors including recipients' decoding and ERP consultants' encoding competence have an indirect influence on ERP success and knowledge transfer through knowledge factors. Decoding competence means clients' listening, understanding and response, while encoding competence means ERP consultants' competence to express their ideas clearly.	Chou, S. W., Hung, I. H., & Chang, Y. C. (2013). Understanding the Antecedents of ERP Implementation Success-The Perspective of Knowledge Transfer. Asia Pacific Management Review, 18(3).

Wang, E. T., Lin, C. C. L., Jiang, J. J., & Klein, G.	2007	Improving enterprise resource planning (ERP) fit organizational process through knowledge transfer	The authors suggest the competitiveness of ERP consultants and clients' knowledge absorptive capacity constitutes the primary success factors of ERP implementation and knowledge transfer. Knowledge transfer from consultant makes ERP system match with clients' business processes, while customers' high level of absorptive capacity for knowledge to make them better apply knowledge to their business processes.	Wang, E. T., Lin, C. C. L., Jiang, J. J., & Klein, G. (2007). Improving enterprise resource planning (ERP) fit organizational processes through knowledge transfer. *International journal of information management*, *27*(3), 200-212.
Ko, D. G., Kirsch, L. J., & King, W. R.	2005	Antecedents of Knowledge Transfer from consultants to clients in the enterprise System Implementations	Results state that arduous relationships, the less extent of shared understanding, and less absorptive capacity are barriers for ERP knowledge transfer. Additionally, intrinsically or extrinsically motivated the client and consultants are positively related to ERP knowledge transfer. Good individual's communication encoding and decoding ability is conductive to better consultant-clients relationships.	Ko, D. G., Kirsch, L. J., & King, W. R. (2005). Antecedents of knowledge transfer from consultants to clients in enterprise system implementations. MIS Quarterly, 59-85.

Xu, Q., & Ma, Q.	2008	Determinants of ERP implementation knowledge transfer	Xu and Ma(2008) believe that knowledge transfer in ERP implementation occurs in two paths as consultants transfer ERP knowledge to key users and key users transfer business process knowledge to ERP consultants. Their research results show that casual ambiguity and tacitness are the barriers to the above two transmission paths. Xu and Ma(2008) propose that the ERP consultant's communication encoding capability is positively correlated with the ERP knowledge transfer. ERP key users' communication decoding capacity, acquirement, and absorptive capacity are negatively correlated with the ERP knowledge transfer effect (Xu & Ma, 2008).	Xu, Q., & Ma, Q. (2008). Determinants of ERP implementation knowledge transfer. Information & Management, 45(8), 528-539.
Al-Salti, Z., & Hackney, R.	2011	Factors impacting knowledge transfer success in information systems outsourcing	This study provides new insights and inspirations for customer organization managers by improving their understanding of the crucial elements of knowledge transfer in information system projects.	Al-Salti, Z., & Hackney, R. (2011). Factors impacting knowledge transfer success in information systems outsourcing. Journal of Enterprise Information Management.

Wang, W., Liu, L., Feng, Y., Shao, Z., & Gao, L.	2014	Comprehensive understanding the inhibitors and enablers of knowledge transfer in ERP assimilations: A multi-case study.	The results show that the causal ambiguity of the new system, the habit of the existing system, and the pressure of technology significantly weaken the willingness of the recipients to learn. At the same time, perceptual management support, relational embedding, and symbolic adoption are the crucial element of improving students' learning intention. This research is an attempt to investigate the phenomenon of passive knowledge transfer in-depth and extends the study of the ERP life cycle by revealing the combined influence of enablers and suppressors in the context of ERP assimilation.	Wang, W., Liu, L., Feng, Y., Shao, Z., & Gao, L. (2014). Comprehensive understanding the inhibitors and enablers of knowledge transfer in ERP assimilations: A multi-case study.
Xu, B., & Cybulski, J.	2004	ERP implementation: A technological diffusion and knowledge transfer perspective.	Researchers examined that factors impact knowledge transfer include knowledge tacitness, the quality of the relationship, sender’s competence, source motivation, recipient's absorbing capability.	Xu, B., & Cybulski, J. (2004). ERP implementation: A technological diffusion and knowledge transfer perspective.
Ramkumar Muralidharan, A.	2010	Studying the impacts of knowledge transfer during ERP implementation in an organization	There exists some hinders to organizational knowledge transfer, such as sender’s credibility, communication ability, absorptive capacity, organization culture, arduous Relationship.	Ramkumar Muralidharan, A. (2010). Studying the impacts of knowledge transfer during ERP implementation in an organization.

Hung, W. H., Ho, C. F., Jou, J. J., & Kung, K. H.	2012	Relationship bonding for a better knowledge transfer climate: An ERP implementation research	Researchers propose that knowledge transfer climate influence ERP implementation. Therefore establishing a climate in the organization is important. The factors that impact establishing good knowledge transfer climate contain 1, interdepartmental coordination, 2, Top management's support and 3, the implementing firm's incentives, 4, ERP consultants' experience, 5, project management's abilities, 6, the consultants' reward system.	Hung, W. H., Ho, C. F., Jou, J. J., & Kung, K. H. (2012). Relationship bonding for a better knowledge transfer climate: An ERP implementation research. Decision Support Systems, 52(2), 406-414.
Jou, J. J.	2012	The Impacts of Competence and Knowledge Transfer Climate on ERP Knowledge Transfer.	The researchers found that in ERP implementation the ability of both parties to knowledge transfer has an important influence on ERP project's success. In addition, knowledge transfer climate positively influence the knowledge transfer's process in ERP implementation.	Jou, J. J. (2012). The Impacts of Competence and Knowledge Transfer Climate on ERP Knowledge Transfer.

Banjarnahor, W. S. A., Shinoda, K., & Samosir, E. T.	2016	The Effects of Organizational Rewards on Client Knowledge Transfer Intention to Consultant during ERP Implementation	Researchers find that during the ERP system implementation procedure, knowledge transfer occurs within two paths: consultant transfer ERP knowledge to customer and customer transfer business knowledge to ERP consultant. Whether the employees within the organization are willing to transfer the existing business process knowledge of the organization to the ERP consultant has an significant influence on the implementation of ERP. The incentive policy and intensity of the organization also influence the attitude and willingness of its employees to transfer knowledge to consultants.	Banjarnahor, W. S. A., Shinoda, K., & Samosir, E. T. (2016). The Effects of Organizational Rewards on Client Knowledge Transfer Intention to Consultant during ERP Implementation. Advanced Science Letters, 22(7), 1809-1812.
Lahti, R. K., & Beyerlein, M. M.	2000	Knowledge transfer and management consulting: A look at “the firm”	Researchers have found that the knowledge transfer’s sender as well as recipient must obtain the ability to transfer knowledge, and they all have the willingness to transfer knowledge. The lack of such ability and willingness constitutes an obstacle to knowledge transfer. In addition, only the recipients must have previous experience so that they can know what instructions the ERP consultant will impart to them before they receive the knowledge, which is very important because it determines the effect of the knowledge transfer. Secondly, the transferor's awareness of knowledge protection also constitutes one of the obstacles to knowledge transfer.	Lahti, R. K., & Beyerlein, M. M. (2000). Knowledge transfer and management consulting: A look at “the firm”. Vezetéstudomány-Management and Business Journal, 31(7-8), 91-99.

Dhanaraj, C., Lyles, M., Steensma, K., & Tihanyi, L.	2004	Managing tacit and explicit knowledge transfer in IJVs: The role of relational embeddedness and the impact on performance.	The results show that tacit knowledge is cumulative, helps to explain explicit knowledge.	Dhanaraj, C., Lyles, M., Steensma, K., & Tihanyi, L. (2004). Managing tacit and explicit knowledge transfer in IJVs: The role of relational embeddedness and the impact on performance. Journal of International Business Studies, 35, 428-442
Haldin-Herrgard, T.	2000	Difficulties in the diffusion of tacit knowledge in organizations.	The researchers examine that the experience possessed by individuals within an organization constitutes tacit knowledge that is not easy to encode and is hard to directly shared as explicit knowledge. So relying on personal tacit knowledge is risky. Transforming tacit knowledge into explicit knowledge, or at least being able to share it, can provide better value to an organization.	Haldin-Herrgard, T. (2000). Difficulties in the diffusion of tacit knowledge in organizations. Journal of Intellectual Capital, 1, 357-365.
Holste, J. S., & Fields, D.	2010	Trust and tacit knowledge sharing and use	This study found that the degree of emotional trust and cognitional trust affect the willingness of people to share and use tacit knowledge in the organization. In comparison, the former's influence on knowledge sharing intention is higher than the latter.	Holste, J. S., & Fields, D. (2010). Trust and tacit knowledge sharing and use. Journal of Knowledge Management, 14(1), 128-140.

Lubin, R.	2001	Tacit knowledge and knowledge management: The keys to sustainable competitive advantage.	This study examines how tacit knowledge and superior knowledge management capabilities is the fundamental to maintain sustainable competitive advantage of organization.	Lubit, R. (2001). Tacit knowledge and knowledge management: The keys to sustainable competitive advantage. Organizational Dynamics, 29(3), 164-178.
Fuller, Lajuan Perronoski	2018	Trust: A Pathway to Overcome Tacit Knowledge Transfer Barriers	Trust based on calculus as well as trust based on knowledge significantly influences employees' willingness to share tacit knowledge. They help overcome tacit knowledge transfer barriers.	Fuller, L. P. (2018). Trust: A Pathway to Overcome Tacit Knowledge Transfer Barriers (Doctoral dissertation, Trident University International).
Gruber, H. G.	2000	Does organizational culture affect the sharing of knowledge? The case of a department in a high-technology company	Researchers found that cultural factors affecting organizational knowledge transfer include Openness, trust, use of communication channels, high-level encourage for knowledge transfer, one reward system for knowledge transfer. The research results prove that these cultural factors exist and influence knowledge transfer, especially the reward system plays a crucial role. Therefore, organizations should pay more attention to understanding and supporting the organizational culture conducive to knowledge transfer, which is more important than technical factors.	Gruber, H. G. (2000). Does organizational culture affect the sharing of knowledge? The case of a department in a high-technology company (Doctoral dissertation). Carleton University, Ottawa, Ontario, Canada.

Szulanski, G.	2000	The Process of Knowledge Transfer: A Diachronic Analysis of Stickiness	The author studies the stickiness of knowledge transfer for best practices within an organization. Researchers proposed a procedure model of knowledge transfer, which divides knowledge transfer process from source to receiver into four steps: initial step, implementation step, ramp-up step, and integration step. In the initial step, tacit knowledge recognition can satisfy the requirements of the recipient, in the implementation stage, the two sides establish channels for knowledge transfer, in the adjustment phase, the receiving party to adjust knowledge to adapt to the new environment, in the consolidation stage, It is only the recipient who makes the received knowledge part of his knowledge. Researchers analyzed from the points of view of the four elements that impact the best practices of knowledge contribute to the hardness in knowledge transfer factors include the sender reliability of motivation and perception of knowledge transfer, knowledge receiver receive the power, knowledge absorption ability, and the ability to keep for knowledge, and knowledge of stealth, causal fuzzy, complexity, and integrity.	Szulanski, G. (2000). The process of knowledge transfer: A diachronic analysis of stickiness. Organizational behavior and human decision processes, 82(1), 9-27.

Argote, L., & Ingram, P.	2000	Knowledge Transfer: A Basis for Competitive Advantage in Firms	The results show how organizations can gain competitiveness through internal knowledge transfer while preventing knowledge transfer to external competitors. Therefore, embedding knowledge into interpersonal interaction is conductive to knowledge transfer.	Argote, L., & Ingram, P. (2000). Knowledge transfer: A basis for competitive advantage in firms. Organizational behavior and human decision processes, 82(1), 150-169.
Argote, L., Ingram, P., Levine, J. M., & Moreland, R. L.	2000	Knowledge Transfer in Organizations: Learning from the Experience of Others	The factors affecting organizational knowledge transfer are determined	Argote, L., Ingram, P., Levine, J. M., & Moreland, R. L. (2000). Knowledge transfer in organizations: Learning from the experience of others. Organizational behavior and human decision processes, 82(1), 1-8.
Cummings, J. L., & Teng, B. S.	2003	Transferring R&D knowledge: the key factors affecting knowledge transfer success.	Authors studies the factors which influence knowledge transfer.	Cummings, J. L., & Teng, B. S. (2003). Transferring R&D knowledge: the key factors affecting knowledge transfer success. Journal of Engineering and technology management, 20(1-2), 39-68.
Luo, S. H., & Lee, G. G.	2015	Exploring the key factors to successful knowledge transfer.	This study reveals how organizational climate affects knowledge transfer via different kinds of trust, how organizational climate as well as trust affect knowledge transfer.	Luo, S. H., & Lee, G. G. (2015). Exploring the key factors to successful knowledge transfer. Total Quality Management & Business Excellence, 26(3-4), 445-464.

Vaghefi, I., Lapointe, L., & Shahbaznezhad, H.	2018	A multilevel process view of organizational knowledge transfer: enablers versus barriers	The researchers identify the enablers and barriers of knowledge transfer. Such as knowledge sender's motivation as well as capability, receiver's motivation or capability, closeness of relation, organization's support culture.	Vaghefi, I., Lapointe, L., & Shahbaznezhad, H. (2018). A multilevel process view of organizational knowledge transfer: enablers versus barriers. Journal of Management Analytics, 5(1), 1-17.
Osterloh, M., & Frey, B. S.	2000	Motivation, knowledge transfer, and organizational forms	Compared with explicit knowledge, this study finds out what kind of motivation can promote the tacit knowledge’s diffusion.	Osterloh, M., & Frey, B. S. (2000). Motivation, knowledge transfer, and organizational forms. Organization Science, 11(5), 538-550.

Annexure C: List of articles removed from the analysis

Azan, W., Bootz, J. P., & Rolland, O. (2017). Community of practices, knowledge transfer, and ERP project (ERPP). Knowledge Management Research & Practice, 15(2), 238-256.

Costa, R. L. D., António, N., Sampaio, M., & Miguel, I. (2021). The boundaries in the area of knowledge transfer in management consulting. Gestão & Produção, 28(1).

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Lee, Z., & Lee, J. (2000). An ERP implementation case study from a knowledge transfer perspective. Journal of information technology, 15(4), 281-288.

Sedera, D., & Gable, G. G. (2010). Knowledge management competence for enterprise system success. The Journal of Strategic Information Systems, 19(4), 296-306.

Umble, E. J., Haft, R. R., & Umble, M. M. (2003). Enterprise resource planning: Implementation procedures and critical success factors. European journal of operational research, 146(2), 241-257.

Volkoff, O., Elmes, M. B., & Strong, D. M. (2005). Enterprise systems, knowledge transfer, and power users. The Journal of Strategic Information Systems, 13(4), 279-304.