

**THE IMPACT OF CULTURAL DIFFERENCES ON
MANAGEMENT OF GLOBAL ERP IMPLEMENTATION
PROJECTS: CASE VALMET**

**Jyväskylä University
School of Business and Economics**

Master's Thesis

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Subject: Accounting
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In this master's thesis, AI-based tools, Microsoft Copilot and ChatGPT, have been used for language editing and occasionally for refining sentence structures. However, the text has been written by the researcher, and AI has only been utilized to enhance the quality of the language.

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ABSTRACT

Author Leevi Voutilainen	
Title The Impact of Cultural Differences on Management of Global ERP Implementation Project: Case Valmet	
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Date 15.12.2024	Number of pages 74
Abstract <p>The objective of this study was to examine the impact of cultural differences and to identify solutions to challenges they cause in multinational ERP projects, with a particular focus on project management and financial management. While ERP implementations have been extensively researched over the past decades, studies addressing specifically the effects of cultural differences remain limited. Particularly case studies including multiple countries have been relatively rare. This master's thesis began with a literature review, which provided the basis for a qualitative case study. The theoretical framework was constructed using Geert Hofstede's dimensions of national culture and a selection of the most cited critical success factors (CSFs) in ERP literature.</p> <p>The study was conducted as an assignment for the Finnish multinational corporation Valmet, focusing on the company's global ERP program Leap Forward. The research examined ERP implementations in the selected target countries China and the United States by interviewing individuals who had participated in ERP projects in these countries. More than half of the interviewees had been involved in ERP projects in both target countries, enabling not only a detailed analysis of each country but also a comparison of the two cultures.</p> <p>The findings highlight the influence of cultural differences on multinational ERP projects. Additionally, the study revealed the remarkable cultural differences between China and the United States and their impact on ERP implementations. As an example, the best practices for change management differed considerably between the two countries: in China top management was the primary target for change management, whereas in the United States, change management was important to implement at all levels of the organization. The results of this research highlight the importance of including cultural considerations into multinational ERP projects.</p>	
Keywords ERP, CSF, cultural differences, culture, case, project management, financial management	
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TIIVISTELMÄ

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<p>Tämän tutkimuksen tavoitteena oli tarkastella kulttuurieroja ja löytää ratkaisuja niiden aiheuttamiin haasteisiin monikansallisissa ERP-projekteissa erityisesti projektinhallinnan ja taloushallinnon näkökulmista. Vaikka ERP-käyttöönottoja on tutkittu laajasti viimeisen vuosikymmenten aikana, kulttuurierojen vaikutuksiin liittyvää tutkimusta on toistaiseksi tehty rajallisesti. Erityisesti useita maita kattavia tapaustutkimuksia on julkaistu varsin vähän. Tässä pro gradu -työssä aihetta lähestyttiin kirjallisuuden avulla ja toteuttamalla laadullinen tapaustutkimus. Tutkimuksen teoreettinen viitekehys rakentui Geert Hofsteden lanseeraamista kansallisen kulttuurin ulottuvuuksista sekä joukosta ERP-tutkimuskirjallisuuden siteeratumpia kriittisiä menestystekijöitä (CSF).</p> <p>Tutkimus toteutettiin toimeksiantona suomalaiselle suuryritykselle Valmetille, ja sen kohteena oli yrityksen globaali ERP-ohjelma Leap Forward. Tutkimuksessa tarkasteltiin kohdemaiksi valikoituneiden Kiinan ja Yhdysvaltain ERP-käyttöönottoja haastatteleamalla näiden maiden käyttöönotoissa työskennelleitä henkilöitä. Haastateltavista yli puolet oli osallistunut molempien kohdemaiden ERP-projekteihin, mikä mahdollisti paitsi maiden kulttuurien erillisen tarkastelun, myös niiden keskinäisen vertailun.</p> <p>Tutkimuksen tulokset korostavat, kuinka merkittävä rooli kulttuurieroilla on monikansallisissa ERP-projekteissa. Lisäksi tutkimuksessa nousi esiin Kiinan ja Yhdysvaltain kulttuurien suuri erilaisuus ja sen vaikutus ERP-käyttöönottoihin. Esimerkiksi muutosjohtamisen parhaat käytännöt erosivat huomattavasti maiden välillä: Kiinassa muutosjohtaminen oli syytä kohdistaa erityisesti ylimpään johtoon, kun taas Yhdysvalloissa muutosjohtamista oli tärkeää tehdä kaikilla organisaation tasoilla. Tutkimuksen tulokset osoittavat, että kulttuuriset tekijät on tärkeää ottaa huomioon monikansallisissa ERP-hankkeissa.</p>	
Asiasanat ERP, CSF, kulttuurierot, kulttuuri, case, projektinhallinta, taloushallinto	
Säilytyspaikka Jyväskylän yliopiston kirjasto	

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1 INTRODUCTION

1.1 Background and justification of the research

Enterprise Resource Planning (ERP) systems are company-wide information systems that allow businesses to manage all critical aspects of their operations in an integrated manner, such as accounting, HR, manufacturing, sales, supply chain management, and distribution (Bingi, Sharma & Godla 1999). Since the 1990s, large corporations in particular have adopted ERP systems, and today, small and medium-sized enterprises have also transitioned to ERP systems as system providers have developed solutions suitable for smaller-scale companies as well (Ahmad & Cuenca, 2013).

Despite their popularity, ERP systems have also caused challenges since their foundation: their implementation projects are very expensive and risky, and when unsuccessful, they can lead to significant business difficulties and even bankruptcy in the implementing company, as in the case of FoxMeyer Drugs, which was once the fourth-largest pharmaceutical distributor in the United States in the mid-1990s. Although ERP implementations have been actively studied since the development of ERP systems, they remain highly challenging projects, with a significant portion of them failing. (Davenport, 1998.)

ERP implementations have been extensively researched over the past decades, but there is relatively limited research directly related to the effects of cultural differences on ERP implementations. For example, Ji & Min (2005) studied ERP implementations in China, focusing on cultural and organizational factors. Shanks & Parr (2000) conducted a comparative study on critical success factors between ERP implementations in China and Australia, while Moohebat, Asemi & Jazi (2010) explored the differences in critical success factors between ERP implementation projects in developing and developed countries. These studies, along with others I have found that examine different countries and, to some extent, the cultural differences between them, are mostly quite dated and

do not cover multiple countries. Therefore, it is justified to further investigate the impact of country-specific and cultural differences on ERP implementations. The role changes of accounting professionals related to ERP implementations will also be studied and compared to for example Järvenpää's (2007) research on changes of management accounting and Grabski, Leech & Schmidt (2011) paper of the future of accounting profession.

In the research section of this thesis, the focus will be on the ERP implementations of the case company, Valmet, a large Finnish company, in China and the United States. China and the United States are interesting case countries because they are culturally quite different from each other, and due to their large size, both countries are culturally diverse in themselves. From a business perspective, they are also highly significant markets for Finnish and other European companies and belong to the world's biggest economies.

1.2 Objective and scope of the research

The objective of this research is to identify challenges arising specifically from cultural differences in multinational, large-scale ERP implementations and to explore potential solutions to these challenges especially from the perspectives of project management and financial management. The results may also be linked with the role changes of accounting professionals in target countries of this study. The research aims to answer the following questions:

1) *What types of challenges related to cultural differences arise during the implementation of a global and large-scale ERP project in the case organization?*

2) *How can cultural differences be addressed, and related challenges be resolved from the perspectives of ERP project management and financial management?*

To answer these research questions, relevant literature on the subject will be reviewed to identify appropriate approaches to the topic. Culture and cultural differences are broad concepts, and patterns of thinking and behavior that are considered part of a culture can be studied in many contexts: for example, related to nationalities, organizations, workplaces, or other population groups.

This research focuses specifically on challenges related to both organizational and national cultures, as well as the interactions between them. A multinational company operates in multiple countries, and often, the majority of employees at a particular location are citizens of that country. In such cases, national cultures influence the multinational company's workforce and can lead to conflicts when people from different offices around the world work together.

Significant differences can also exist between the organizational cultures of different offices in a multinational company, and these differences are often largely shaped by the national cultures that employees have absorbed since childhood. On the other hand, practices related to financial management may be influenced by local regulations concerning accounting and taxation. Differences arising from these regulations in operational activities can lead to confusion,

especially when planning the implementation of new systems. This can result in the need of system adjustments to ensure they are suitable for use and to enable the automation of processes related to tasks such as invoicing and taxation.

As will be highlighted in the “Results & Findings” section of this master’s thesis, cultural differences can also emerge in ERP projects concerning the changes brought by new systems and processes to work roles and practices. For instance, as Järvenpää’s (2007) paper predicted, accounting tasks and roles may undergo significant transformations as the implementation of a new ERP system and associated practices lead to substantial changes in working roles and, consequently, in the nature of individuals’ job descriptions.

Cultural differences can be particularly important to take in account in ERP implementations. For example, in the case organization, the ERP implementations are carried out in collaboration between the global ERP program team, which consists largely of Scandinavians, and the staff of the business unit being implemented (for example in China or United States), which is primarily composed of the local population.

1.3 Structure of the thesis

This master’s thesis consists of seven chapters. The first chapter provides a brief background to the research topic, explains the necessity of studying the subject, and outlines the objectives and scope of the study. Chapter 2, the first theoretical chapter, introduces ERP systems, explores their development and implementation, discusses their impact on financial management, and examines critical success factors identified in the literature on ERP implementations. These success factors form the foundation for the interview themes used to collect data and for the analysis of the research material.

The second theoretical chapter, Chapter 3, focuses on culture as a concept and presents Hofstede’s widely recognized five-dimensional model of national cultures, which is also applied in the analysis of the research findings.

Chapter 4 introduces the case company, Valmet, its business operations in the research’s target countries, China and the United States, and provides an overview of the development and practices of Valmet’s global ERP program, Leap Forward. Also Valmet’s Finance vision will be described briefly. Chapter 5 explains the research methodology, the methods used for data collection and analysis, and provides a description of the interviewees.

Chapter 6 presents an analysis of the research data, highlighting interesting findings and recurring themes related to culture in its various forms. Finally, Chapter 7 summarizes the research findings, evaluates the study’s limitations, and proposes potential topics for future research related to this study.

2 ERP SYSTEMS

2.1 Preface

This chapter introduces the concept of ERP system, explores their development, examines their impact on management accounting, and reviews ERP implementation strategies. It also highlights some of the most well-known critical success factors identified in the field, with a particular focus on those that are especially critical for multinational ERP projects with people from different cultures.

2.2 ERP Systems as a Concept

Enterprise Resource Planning (ERP) systems have raised significant interest and discussion since their development in the early 1990s. During this time, numerous definitions have been proposed, most of which share broad similarities, though details may vary. ERP systems have also evolved and transformed over this period, which is reflected as a change in definitions. In this chapter, I will present some widely cited definitions from various authors and attempt to synthesize their key ideas and insights.

Bingi et al. (1999) define an ERP system as an enterprise-wide information system that integrates all aspects of a business. With one integrated system, functions such as HR, accounting, sales, manufacturing, supply chain management, and distribution can all be managed. The competitive advantages enabled by ERP systems include, among others: the ability to respond quickly to increasing competition and market changes, the potential to reduce inventory levels and associated costs while making the the supply chain more efficient, and,

because of these factors, the ability to offer improved customer service. However, ERP implementations have numerous risks, and a failed ERP project can even lead to bankruptcy. An ERP system is such a complex and extensive system that its implementation can cost millions and often takes years to complete. One significant risk is the tendency to view an ERP project purely as an IT initiative when it should be seen as a company-wide business transformation project. Insufficient preparation is also highlighted as a major reason why a significant portion of ERP projects fail. (Bingi et al., 1999.)

Ehie and Madsen (2005) state that budget overruns in ERP projects are often due to the assumption that project costs are primarily related to system implementation. However, more than half of the project expenses may stem from business process re-engineering and the necessary consulting, as well as end-user training (Ehie & Madsen 2005).

Blackstone & Cox (2010) define ERP-system to be a framework, rather than just a system, as follows: "Framework for organizing, defining, and standardizing the business processes necessary to effectively plan and control an organization so the organization can use its internal knowledge to seek external advantage". This definition reflects the wide range of applications that can be classified under the ERP label (Jacobs & Weston, 2007).

Davenport (2000) suggests that to understand the risks and opportunities associated with ERP systems, one must first understand the fundamental concept of ERP. According to Davenport (2000), the primary purpose of ERP systems is to reduce the fragmentation of information within large organizations. Prior to ERP systems, it was typical for the data collected by a large company to be scattered across dozens, or even hundreds, of different systems. This fragmentation led to significant costs and made it more challenging to utilize data effectively in decision-making. The core objective of an ERP system is, therefore, to consolidate all the data collected by an organization into a single database. When successful, an ERP implementation is said to result in cost savings, support decision-making, and generally enable a business to become more dynamic and profitable. However, a major risk lies in selecting the right system and whether the company can successfully adapt its business processes to align with the processes facilitated by the ERP system. ERP systems come with certain built-in business processes, and companies should aim to adopt these processes when implementing the system. While customization – modifying the code and thus being able to modify the processes – is possible, it tends to diminish the system's upgradability and can introduce other issues, such as performance issues (=for example slowness), within the system. (Davenport, 2000.)

Umble, Haft & Umble (2003) argue that an ERP system offers two major advantages that non-integrated enterprise systems cannot provide: "a unified enterprise view of the business that encompasses all functions and departments and an enterprise database where all business transactions are entered, recorded, processed, monitored, and reported." This is described as enabling improved collaboration and coordination across departments, thereby enhancing communication and cooperation with stakeholders. (Umble et al., 2003.)

Jagoda and Samaranyake (2017) approach ERP systems as an opportunity and necessity to re-engineer business processes at the operational level, as these systems incorporate the vendor company's perspective on the current best business practices and processes within the industry. In addition to integrating various business functions and enabling the efficient sharing of real-time data and information within the company, they also highlight the potential of ERP systems to automate business processes that have been previously executed manually. (Jagoda & Samaranyake 2017.)

The previous five definitions illustrate the various ways and perspectives from which ERP systems can be approached. While many of the well-known articles in the field of ERP are from a couple of decades ago, the issues they highlight—such as the risks and opportunities associated with ERP implementations—remain relevant today.

2.3 Evolution

This subsection introduces the development of ERP systems. The first full-scale ERP systems were developed in the early 1990s, but the system development that led to the first ERP systems began several decades earlier. As computers became more widespread in the 1960s, companies started developing information systems designed to track inventory levels, assist in ordering raw materials, and produce finished goods (Goldston, 2020). Around this time, the concept of "inventory control (IC)" was also introduced, signifying companies' efforts to systematize the operational aspects of their business using (Jacobs & Weston 2007, Goldston 2020). These IC systems were designed and implemented by companies themselves using programming languages such as COBOL and ALGOL (Rashid, Hossain & Patrick 2002).

In the late 1960s, the first MRP (Material Resources Planning) system was developed through a collaboration between the tractor manufacturer J.I. Case and IBM. At that time, MRP systems were cutting-edge in the industrial sector and can be considered predecessors to MRP II and ERP systems. MRP systems enabled companies to systematize purchasing, forecasting, and production scheduling. (Goldston, 2020; Jacobs & Weston, 2007.) Although the first MRP systems were advanced for their time, they were large, clumsy, and expensive compared to modern standards. However, data storage technology was rapidly evolving during that period, which enabled the continuous development of increasingly sophisticated business information systems (Beleț & Purcărea, 2017).

In the 1970s, organizations began to demand more from MRP systems in order to reduce their overhead costs. As a result, J.D. Edwards enhanced their MRP system with additional features, including closed-loop scheduling, enhanced shop floor reporting, and forward scheduling, leading to the development of the first MRP II system. (Goldston 2020.)

In the 1980s, companies' management began to increasingly utilize information systems in their daily decision-making processes, and partly in

response to these needs, many leading ERP manufacturers were founded – such as SAP and Baan (Razzhivina, Yakimovich & Korshunov 2015).

At the turn of the 1980s and 1990s, technology advanced rapidly, and competition intensified in many markets, tempting companies to seek competitive advantages. The first ERP systems were developed during this time, and their popularity began to grow rapidly (Goldston, 2020; Bhuiyan, Chowdury & Ferdous 2014). The approaching turn of the millennium (Y2K) further accelerated this trend, particularly for large companies, as they rushed to implement ERP systems before the year 2000 (Goldston, 2020; Brumberg et al., 2016).

During this period, the ERP market was highly competitive, with major players including SAP, IBM, J.D. Edwards, Baan, PeopleSoft, and Oracle. Shortly after the turn of the millennium, the technology sector experienced a significant downturn with the bursting of the dot-com bubble, leading to multiple bankruptcies in technology sector and led many large companies in the ERP industry to scale down. The ERP market also saw significant changes, with Oracle acquiring J.D. Edwards and PeopleSoft, and newcomer Infor Global Solutions purchasing Baan and IBM's MAPICS. As a result, SAP, Oracle, and Infor emerged as the three largest players in the ERP market, in that order (Goldston, 2020; Verdouw, Robbemond & Wolfert 2015; Banerjee, 2015).

In the 21st century, ERP systems have continued to evolve, and especially since the 2010s, cloud-based ERP systems have gained popularity. Cloud-based ERP systems can help companies reduce IT infrastructure costs, as cloud ERP is a Software as a Service (SaaS) solution that operates on a platform hosted by the system provider. (Goldston 2020; Bento, Bento, & Bento 2015.) Cloud-based ERP also offers better accessibility compared to on-premises systems, as it can be easily accessed from anywhere and on any smart device (Belet et al., 2017).

By the 2010s, ERP systems had reached a level of technical maturity where both vendors and users had a solid understanding of these systems. ERP vendors are now developing increasingly customized solutions tailored to the size and industry of the target company. These systems are more efficient and intelligent, enabling more versatile and nearly real-time utilization of data (Belet et al., 2017).

2.4 Effects on Management Accounting

ERP systems have significantly influenced the development of management accounting in companies. For instance, due to ERP systems, data is now more readily available, standardized, and real-time compared to the era before their development. As a result, company management can utilize data more efficiently in daily decision-making, allowing businesses to operate more proactively with real-time forecasts. In contrast, decision-making was previously based primarily on historical data and past events (Goldston 2020; Razzhivina et al. 2015). Specifically, the management accounting interest in acquiring up-to-

date and reliable data has been one of the key reasons why companies eagerly adopted ERP systems in the 1990s and 2000s (Davenport 2000).

Grabski, Leech & Schmidt (2011) view ERP systems and the integrated technologies within them as a transformative force for the entire accounting field's development. With business evolution, accounting professionals are now expected to provide reports on non-financial metrics, conduct information system audits, implement management controls into information systems, and offer management consulting services. (Grabski et al. 2011.)

From a management accounting perspective, it is important to note that ERP systems are fundamentally standardized systems. In a study by Teittinen, Pellinen & Järvenpää (2013), it was found that while the new ERP system was able to collect financial data in a standardized manner from all profit centers and offer top management a set of comparable reports on the activities of profit centers that fulfilled the top management's strategic information needs, these reports were of little use in managing the operative, daily actions of profit centers. They did not provide beneficial profitability analyses that could have been used for practical operational improvements. The reason for this was identified as a lack of time and system expertise to update and develop the ERP system after its initial implementation. The study suggests that ERP systems may even have a disintegrating effect between long-term strategic control and short-term operational control in organizations (Teittinen et al. 2013).

Dechow & Mouritsen (2005) also argue that an ERP system in itself does not necessarily help integrate management and control systems, and it may even hinder such integration. The key message of their study is that controls and control systems cannot be fully understood without recognizing the technologies, systems, and infrastructures that enable them (Dechow & Mouritsen 2005).

Järvenpää (2007) states that management accounting has been shifting from routine data reporting to a more strategic role, emphasizing decision-making support and business consultation. This evolution is driven by decentralization, advanced information systems and tools like activity-based costing and balanced scorecards, directing accounting to better support the overall goals of the business (Järvenpää 2007). Thus, it is possible that the culture of management accounting may undergo changes due to the advancements in technology, including ERP system implementations, as highlighted by the study by Järvenpää (2007).

2.5 Implementations

ERP implementations have been widely studied during the time of ERP systems, likely because they are very challenging projects, with a significant portion of them failing either partially (e.g., poor user experiences, budget overruns and/or delays) or completely (e.g., the implementation is abandoned or the ERP system is discarded after deployment, with potentially fatal consequences for the adopting company). In this section, I will introduce the stages of ERP

implementation, the most common ERP implementation strategies, the widely studied concept of critical success factors, and more.

The implementation of an ERP system is a multi-phase process that, in addition to the actual deployment, includes initial preparations and post-implementation support. Numerous variations of the ERP implementation process have been developed, with some models outlining five phases and others as many as nine. In this text, the implementation process will be presented using the five-phase model introduced by Ehie and Madsen in 2005.

As a preface, it is important to note that company management must recognize the strategic importance of ERP when aiming to modernize business processes and make them more dynamic. Bringing a new ERP system into full operation and maximizing its benefits is a challenging process, requiring special attention to certain critical success factors. The five-phase model is designed with the intention of incorporating the most valuable aspects gathered from ERP literature and interviews with experienced ERP consultants. (Ehie & Madsen, 2005.)

All five phases are crucial for the success of the process, and it is recommended to conduct a thorough review at the end of each phase, making necessary adjustments before proceeding to the next phase. This is important because going back to correct previous mistakes in the process is usually expensive and time-consuming. Before moving on to the actual five phases, it is essential to critically examine the company's strategic architecture and business processes, define the goals of the ERP implementation, and familiarize oneself with the internal and external factors that may impact the process. The technical design and implementation of the ERP system take place within the company's strategic architecture, while change management and business development focus on managing day-to-day operational activities and ensuring that changes in business processes are effectively integrated into employee workflows. (Ehie & Madsen 2005.)

In the first phase, project preparation, a comprehensive project plan is created, a project team is selected, and a steering committee is appointed to oversee the process. Additionally, a target budget is set. At this stage, it is crucial that the company's leadership is actively involved in the planning process. The second phase involves carefully analyzing the current business processes and selecting the ERP system that is believed to be the best fit for the company's operations and offers the most advanced business processes for the specific industry. (Ehie & Madsen 2005.)

When selecting an ERP system, the focus should be on the functionalities offered rather than just the cost (Ehie & Madsen 2005). It is generally advisable to adapt the company's business processes to fit the new system rather than customizing the system with code modifications, as extensive customization is typically time-consuming and complicates future system updates. It also increases implementation costs and may negatively impact other system functions, such as performance. (Beheshti, Blaylock, Henderson & Lollar 2014; Hailu & Rahman 2012.)

Once the ERP system and provider have been selected, the necessary configurations are made during implementation. It is important to emphasize that customization and configuration are not synonymous: customization involves adding or removing features from the software, while configuration refers to minor adjustments to the software to meet the company's needs, such as adding or removing fields from the system's screens. At this stage, business process reengineering is typically carried out, and if necessary, the ERP system is customized to retain old business processes that the new system does not inherently support. (Ehie & Madsen 2005.)

The third phase involves the developing of the new system, including technical tasks such as adjusting system interfaces and migrating data from the old software to the new ERP system. The system is also piloted, i.e., tested on a limited scale and with specific test scenarios, to identify the necessary actions and corrections that need to be made before the full deployment. (Ehie & Madsen 2005.)

In the fourth phase, the ERP system is finalized, necessary modifications are made, and its performance is tested under full load. During this phase, the company's staff is trained on the use of the new system and any potential upcoming changes in business processes, ensuring that business operations return to normal as quickly as possible after the new system is implemented. (Ehie & Madsen 2005.)

In the final phase, the ERP system is fully deployed in the company's operations, and support is provided to users, as pre-implementation training is rarely sufficient to address all questions arising from the changes in operations. (Ehie & Madsen 2005.)

2.6 Implementation strategies

One of the most critical factors in an ERP project is the selection of the implementation strategy. The choice of implementation strategy should consider several factors, such as the acceptable level of risk, available resources, and the project timeline (Madkan 2014). The following section introduces some of the most well-known implementation strategies as defined in the literature on ERP system implementations, along with their key characteristics.

As its name suggests, the **Big Bang** is an implementation strategy in which the transition from the old ERP system to the new one occurs all at once, in a single event. This event is known as Go-Live, and its timing is determined by the project management team in collaboration with the implementation team. (Madkan 2014.) Before Go-Live, the company prepares and tests the components of the new system, trains its personnel on the new system, and completes all necessary preparations. The Go-Live event is scheduled for a specific date or dates, such as a weekend when system users are off work, during which all modules included in the scope of the implementation are activated, and data is transferred from the old system to the new one. After Go-Live, all employees

within the unit or function undertaking the implementation begin using the new system, and the old system is run down (Okrent & Vokurka 2004).

In a **phased** implementation strategy, the modules of the new ERP system are developed and deployed according to a pre-planned schedule. As the new system's modules are brought online, the corresponding modules of the old system are gradually phased out. The company should first focus on the most critical business requirements, with initial implementations carried out for selected organizational units, either by module or business unit. This incremental strategy helps the company limit the scope of each project phase, allows for changes in smaller business units at a time, provides opportunities for interim evaluations between phases, and refines the process based on the feedback received. (Madkan 2014.)

The advantages of the phased strategy include moderate risks compared to the Big Bang approach, moderate resource requirements, and the ability for users to gradually adapt to the new system as it is implemented more slowly. However, the downsides include a slower pace of implementation and potentially higher costs due to the need to maintain resources over an extended period. (Madkan 2014.)

Malhotra & Temponi (2010) suggest that the phased implementation strategy is particularly well-suited for small and medium-sized enterprises, as it allows the ERP project to be undertaken with relatively limited resources.

Okrent & Vokurka (2004) present a similar implementation strategy under the name "Pilot," where the key aspect is that the new ERP system is first implemented in one functional area before being rolled out to other areas based on priorities. They highlight the significant need for interface programming to maintain data flow between the old system and the new modules during this transition period. (Okrent & Vokurka 2004.)

In the **parallel** implementation strategy, the old ERP system remains operational for a period of time after the new ERP system has been launched. The old system is only decommissioned once the new system is considered fully functional and ready. This strategy allows users to learn and adapt to the new system while continuing to perform some tasks on the old system. The transition phase in this strategy is longer than in the Big Bang approach but typically shorter than in a phased implementation. The key strengths of the parallel strategy include relatively low risk of business disruption due to system failures, as well as the ability to directly compare the performance of the old and new systems while both are in use. (Madkan 2014.)

However, the strategy's weaknesses include the extensive resources required for implementation, leading to higher costs, and the potential for redundancies in practical integrations. (Madkan 2014.)

2.7 Critical Success Factors

2.7.1 Critical Success Factors and Their Role in the ERP Context

Critical success factors have raised significant interest in the business world ever since Rockart introduced the concept in 1978. According to the original definition, CSFs represent a limited number of areas or "milestones" in which success is essential for the business to thrive and for executives to achieve their goals (Rockart, 1979). From the foundation, CSFs have been studied in relation to various information system projects, and research on them in the ERP context has been active since the 1990s. Over time, a wide range of CSFs has been proposed in relation to ERP implementations (Ram, Corkindale & Wu 2012).

For instance, in a comprehensive literature review of 341 relevant articles, Shaul and Tauber (2013) identified no fewer than 94 different factors that were classified as critical to success.

However, it is important to question whether all the proposed CSFs are truly critical for every ERP implementation. While the factors identified in research may be helpful for companies planning new ERP implementations, labeling a factor as critical without sufficient justification could lead to an over-allocation of resources. These resources could otherwise be directed towards fulfilling a success factor of higher criticality. (Ram et al., 2012.)

To identify the critical success factors relevant to this study, literature on ERP implementation's critical success factors was reviewed, and the factors highlighted from the literature were selected based on the following criteria: they had to be widely cited and relevant to large-scale, multinational ERP implementations, which are the focus of this master's thesis. It is noteworthy that, for instance, budgeting and a clear business vision are widely recognized critical success factors; however, analyzing them from a cultural perspective would not be particularly meaningful. On the other hand, although the ERP system selection process is one of the most acknowledged critical success factors in ERP literature, studying it in this case is not meaningful, as the target organization made its choice of system provider several years ago and also this success factor is probably not related to cultural differences.

2.7.2 Presentation of the Selected Critical Success Factors

This subsection introduces the selected critical success factors that play a significant role in this study and will be utilized both in the interviews conducted for data collection and in the analysis of the research material. Below is a table presenting some scientific references for each of the selected success factors.

Table 1: Critical success factors with references

CSF	Citations
Top Management Support	Ehie & Madsen 2005, Bingi et al. 1999, Seng Woo 2007, Hietala & Päivärinta 2021, Umble et al. 2003
Project Management	Ehie & Madsen 2005, Seng Woo 2007, Umble et al. 2003
Business Process Reengineering (BPR)	Shanks et al. 2000, Umble et al. 2003, Nah, Zuckweiler & Lee 2003
Change Management	Seng Woo 2007, Shanks et al. 2000
Cultural Adaptation	Bingi et al. 1999, Shanks et al. 2000, Hietala & Päivärinta 2021, Umble et al. 2003
User Training & Education	Bingi et al. 1999, Shanks et al. 2000, Hietala & Päivärinta 2021, Umble et al. 2003
Clear and continuous communication	Shanks et al. 2000, Hietala & Päivärinta 2021, Nah et al. 2003
Clear project scope	Seng Woo 2007, Shanks et al. 2000, Nah et al. 2003

Top management support

Top management support is one of the most commonly cited, and possibly even the most critical, success factors in the literature on ERP implementations. A successful ERP implementation requires strong leadership, commitment, and involvement from top management. (Umble et al., 2003.)

Top management must be fully committed throughout the entire ERP implementation process. A lack of leadership slows down the progress of the implementation and exposes it to employee resistance to change. Top management and the system provider should maintain close and open communication to ensure that any challenges encountered during the implementation can be resolved smoothly. (Shaul & Tauber, 2013.)

Top management must understand that ERP implementation is not just an IT project, but rather a business transformation project that affects the entire company, and they should approach the project accordingly (Bingi, 1999). For example, the resources available must be sufficient for the ERP project to succeed. Top management support is so widely recognized in the literature on ERP critical success factors that it may be a critical factor for all ERP implementations, regardless of country or context. (Ngai, Law & Wat 2008.)

Project management

Project management has been extensively studied both within the ERP context and in IT contexts more broadly. In the literature focused on ERP implementations, project management is repeatedly identified as one of the most critical success factors for the success of ERP projects (Ehie & Madsen 2005; Ngai et al. 2008).

Blackstone & Cox (2010) define project management as the application of knowledge and skills to organize, plan, schedule, direct, control, monitor, and evaluate specific activities to achieve project objectives. Due to the complexity and high failure risk of ERP projects, it is essential to use formal tools, techniques, and methodologies to ensure the success of the project (Ram & Corkindale 2013; Ngai et al. 2008).

Ram & Corkindale (2013) highlight two primary impacts of project management: transforming resources into results and ensuring that the intended benefits of the project, such as improvements in business performance, cost reductions, and other set goals, are achieved. In addition to tangible benefits, good project management is also said to generate intangible benefits, such as increased customer satisfaction and enhanced communication and information sharing within the project. However, it is noted that in order to achieve improvements in business performance and other material objectives, the ERP implementation must be successful. The research specifies that the use of project management in an ERP project has a direct positive correlation with a company's business performance and that the influence of project management on organizational performance is mediated by the success of the implementation. (Ram & Corkindale 2013.)

Umble et al. (2003) argue that a successful ERP implementation requires an organization to excel in project management. This entails clear goal setting, detailed work and resource planning, and meticulous monitoring of the project's progress. The project plan should be appropriately aggressive in its timeline, ensuring that objectives and deadlines are achievable while maintaining a sense of urgency. The article emphasizes the importance of precisely defining project goals and scope during the planning phase, as a poorly defined scope can lead to budget overruns, project delays, and challenges during implementation. (Umble et al. 2003.) The term "scope" refers to the totality of the products to be created by a project and resources allocated for it (Blackstone & Cox 2010). It is also recommended that the ERP package be kept as close to the standard configuration as possible, as this helps to reduce the complexity of the implementation project and keeps it on schedule. Extensive customizations, on the other hand, increase the project's complexity and make it more difficult to adhere to the timeline. (Umble et al 2003.)

Clear project scope

Another critical success factor closely related to project management is the clear project scope, which is frequently mentioned in the literature. Scope management is a key aspect of project leadership, as it helps keep the project manageable. The project scope includes elements such as the extent of the

planned implementation, the need to involve staff from business units in the ERP project, and the planned amount of business process reengineering. Furthermore, it regulates the number of required resources. For instance, when the project scope is clearly defined, it can be adjusted as needed during the project's progression, allowing for the increase or decrease of resources accordingly. (Nah, Zuckweiler & Lee 2009; Shanks, 2000.)

BPR

BPR (Business Process Reengineering) refers to the redesign of business processes and is one of the most commonly cited critical success factors in ERP implementations. ERP systems incorporate the vendor's view of the best practices for business processes in a particular industry. However, the operational business processes within the implementing company typically do not align perfectly with the default settings of the ERP system. (Shaul & Tauber, 2013.)

To synchronize the company's processes with the system, either the company's business processes must be modified, or the system must be customized. Customizations are usually slow, costly, and significantly reduce the system's upgradability. Research on ERP systems has generally found that BPR is a better option than customization. (Ram & Corkindale 2013.)

Ji and Min highlighted in their study (2005) on ERP implementations in China, that BPR is particularly important in Asian countries. This is because most ERP vendors are from the United States and Europe, and the systems they provide are designed to support the business processes of Western companies. In Asia, business processes often differ significantly, and as a result, there are substantial differences between the operational models of Asian companies and the systems provided by Western vendors. (Ji & Min 2005.)

Change management

Successful ERP implementation requires change management and a thorough understanding of the organization's corporate culture. Change management is closely related to training the end users of the new ERP system: through high-quality training, end users can adopt and accept the new system. To be effective, the training must also cover any changes in business practices and operational processes. (Ngai et al., 2008.) In practice, change management is also linked to business process reengineering (BPR), as changes in business practices result from BPR.

Umble et al. (2003) emphasize that the organization and its staff must understand that ERP implementation is not just about deploying a new system, but rather the primary goal is to improve business efficiency. Promoting this ideology is one of the key tasks of change management (Umble et al., 2003).

Shanks et al. (2000) found in their study that change management was a particularly critical success factor in the ERP implementation of a major elevator manufacturing company in China.

Cultural adaptation

Cultural adaptation as a critical success factor refers particularly to considering the target country's culture as part of ERP implementation management. The impact of culture and its consideration in ERP implementations has been highlighted especially in studies examining ERP rollouts in China. (Ngai et al., 2008.)

Shanks et al. (2000) state that culture significantly influences organizations and, therefore, ERP implementations. For instance, the criticality of certain success factors may depend on the cultural area where the ERP implementation is taking place. Similarly, Moohebat et al. (2010) found in their study that in developing and non-Western countries, cultural considerations are particularly important. This is because ERP systems, along with the theories and frameworks developed for their implementation, are often based on ERP projects in Western countries, and they may not be as applicable to ERP projects conducted in culturally different regions. (Moohebat et al. 2010.)

User Training and Education

As mentioned in some of the previously discussed success factors, an ERP implementation cannot succeed if end users are unable or unwilling to use the new system once it is deployed. Umble et al. (2003) points out that company leaders have historically tended to underestimate the time and resources required for end-user training and practice. Therefore, top management should allocate sufficient resources for training end users, potentially dedicating 10-15 percent of the entire ERP project's resources to ensure the success of the implementation. (Umble et al., 2003.)

Another common misconception is that end users will be able to use the system effectively with only pre-implementation training. In reality, a large portion of the learning occurs after the implementation, when staff begins to use the new system in their daily work. Adequate support should also be provided post-implementation to ensure that end users can quickly receive help if and when they encounter challenges with the system. (Umble et al., 2003.)

As previously discussed in the context of change management, users must be trained not only on the new system but also on the changes to practical business processes and the rationale behind them. This is crucial for gaining end-user acceptance of the new processes, which will likely require time and energy to learn, temporarily slowing down productivity after the ERP system is introduced. (Umble et al., 2003.)

Clear and continuous communication

Clear and continuous communication throughout an ERP project is one of the most commonly mentioned critical success factors in ERP research. The goals and

expectations should be communicated openly to all relevant stakeholders to ensure transparency in the project. This communication includes the formal appointment of the project team and regular updates on the progress of the ERP project at the organizational level (Nah et al., 2009).

In interviews conducted for Shanks et al.'s (2000) study, many project managers and consultants noted that, based on their experiences, an ERP project was likely to fail if the project's goals and progress were not regularly communicated to relevant stakeholders.

3 CULTURE AND CULTURAL DIFFERENCES

3.1 Overview of the concept of culture

Culture and cultural differences play a central role in this thesis, making it essential to dive into these topics within the theoretical framework.

Culture is a challenging concept to define, as there are numerous, often differing definitions, and these have evolved significantly over time. For example, Jagoda & Samarayanake (2017) conclude in their research that efforts to define culture as a concept have historically been rather insufficient. Therefore, it might be more relevant to present the aspects associated with culture as a concept rather than attempting to define it in a clear-cut manner.

One of the most renowned researchers of culture, Geert Hofstede (2010), approaches culture as a form of "mental programming": a person's environment shapes their patterns of thinking, feelings, and behaviors throughout their life. The environment has the greatest influence on a person during early childhood when they are most receptive to learning and most open to influences. Once a person has adopted certain patterns of thinking and behaving, they must first unlearn these before they can adopt new ones. These influences from the environment are referred to as culture. (Hofstede, Minkov & Hofstede 2010.) Heyes (2020) also views culture as fundamentally a form of social learning, particularly where a group of people has socially adopted similar behaviors and practices.

Culture manifests in various contexts: in hobbies, work, society, and different types of communities. Companies themselves can also exhibit various cultures; for example, Järvenpää (2007) specifically studied the culture of accounting and its transformation when a company sought to shift its accounting culture towards a more business-oriented approach. For the purposes of this thesis, the most relevant dimensions of culture are likely to be organizational culture (including accounting culture) and national culture.

Organizational culture refers to cultural dimensions specific to a particular organization, such as companies, schools, or associations. National culture, on the other hand, refers to the behavioural and thought patterns developed by people living within a specific geographical region (Hofstede, 2010). National culture is often studied at a country level, though significant variations in national cultures can exist even within the same nation (Lehtipuu, 2010).

Organizational culture and national culture are not entirely separate dimensions of culture; national culture often significantly influences the internal culture of organizations operating in each region (Hofstede, 2010). For instance, Hofstede's well-known research, which will also be utilized in this thesis, examined the national cultures of IBM employees across dozens of countries. In multinational companies, staff work across various countries, and thus, different national cultures influence the employees. Moohebat et al. (2010) identified in his research that considering national culture had a significant impact on the success of ERP implementation, particularly in developing countries, not so much in Western countries.

In this thesis, the aim is to identify cultural differences related to national and/or organizational cultural distinctions, with the focus being primarily on the implementations analysed by country. This approach is justified by the fact that there is limited research on intra-national cultural differences, and the implementations being studied may have taken place across different regions within countries like the United States and China. If intra-national cultural differences were also considered, the results would likely lack sufficient consistency, and the comparability between countries would be weak.

3.2 Hofstede's 5 dimensions of culture

Individualism

Individualism refers to the cultural orientation between individualism and collectivism. Most of the world's population belongs to cultures where collectivism and the strength of the community are emphasized. In such cultures, individuals belong to a community from birth—typically a family, which includes not only parents and siblings but also extended relatives and even others who live as part of the family, though they may not be biologically related. In collectivist cultures, belonging to the community is taken very seriously, and individuals are expected to remain a part of their core community at all costs. In these cultures, individuals are expected to prioritize the well-being of their community over their personal interests. Failing to do so may result in being exiled from the community. (Hofstede et al. 2010.)

In contrast, particularly in Western cultures, people often make decisions based primarily on their own interests, a trait referred to as individualism. In individualistic cultures, people focus more on personal achievements and rights, with less emphasis on community ties. In such cultures, people are born into a

nuclear family that typically consists of parents and possibly siblings, and extended family members are seen less frequently. Individuals strive for independence from an early age, and even relationships with one's nuclear family can become distant. (Hofstede et al. 2010.)

Individualism and its counterpart, collectivism, as cultural dimensions, also manifest in communication styles. In collectivist cultures, there is typically a strong tendency to avoid conflicts and maintain harmony, whereas in individualist cultures, even direct communication is generally not feared. The underlying reason for this difference lies in the significance of the community to the individual. In collectivist cultures, belonging to a community is highly valued, and conflicts with other members are avoided to prevent "losing face" and risking exclusion from the group. In contrast, this behavioral pattern is less prevalent in individualist cultures. (Hofstede et al. 2010.)

Finland is considered quite individualistic, with a score of 63/100 on the Hofstede scale, placing it 22nd out of 76 countries studied in this regard. Among the target countries, the United States ranks as the most individualistic country in Hofstede's research, scoring 91 out of 100. In contrast, China is characterized as a highly community-oriented nation, receiving a score of 20 out of 100 on the individualism scale, ranking 58th overall. In terms of individualism, the countries examined in this thesis are therefore quite different from each other, with China also being significantly different from Finland, which serves as a benchmark in this context. (Hofstede et al. 2010.)

Power Distance

Power distance reflects the degree of inequality or dependency in relationships between people in different positions. In low power distance cultures, there is little inequality between superiors and subordinates, and employees feel comfortable approaching and questioning their managers. Subordinates in such cultures are not highly dependent on their superiors and are willing to make decisions independently. (Hofstede et al. 2010.)

In high power distance cultures, however, there is significant inequality between superiors and subordinates, and employees are less likely to approach or challenge their managers. In these cultures, subordinates are highly dependent on their superiors, who are expected to make all major decisions independently. (Hofstede et al. 2010.)

Hofstede's research on power distance was based on surveys conducted with IBM employees, where they were asked about their attitudes toward their superiors. Two of the three survey questions focused on the respondents' current work environment, while the third explored how they would like their work environment to be. In low power distance countries, the majority of respondents favored a consultative leadership style, where the manager seeks input from subordinates before making decisions. In high power distance countries, respondents were split; most preferred that their managers continue to lead authoritatively, while, interestingly, some expressed a desire for more

democratic decision-making, which would effectively strip leaders of most of their decision-making power. (Hofstede et al. 2010.)

Like other Nordic countries, Finland is classified as a low power distance culture, scoring 33/100 and ranking 68th out of 76 countries in Hofstede's research. The United States is relatively close to Finland in terms of power distance, scoring 40 out of 100 and ranking 59th among the countries studied. In contrast to the other benchmark countries in this research, China exhibits a significantly higher level of power distance, scoring 80 out of 100 and ranking 12th. According to Hofstede et al.'s (2010) studies, employees in China are thus considerably more dependent on their supervisors compared to those in Finland and the United States, where individuals are more independent and willing to make decisions on their own.

Uncertainty Avoidance

Uncertainty avoidance refers to how members of a society perceive and handle uncertain or ambiguous situations. Throughout history, people have shielded themselves from uncertainty and anxiety through various means: technology and techniques to guard against natural uncertainties, rules to protect against uncertainties caused by other members of society, and religions to deal with uncertainties believed to be beyond human control. (Hofstede et al. 2010.)

Hofstede et al. (2010) classify countries into those that avoid uncertainty and those that accept it. In cultures that avoid uncertainty, people often appear impatient, aggressive, and hurried. These societies strictly follow both written and unwritten rules, and anything unfamiliar is viewed as a threat. In contrast, cultures that accept uncertainty tend to appear calm, relaxed, and even lazy. Such cultures have fewer rules, and those rules are not followed as strictly. Unknown factors are seen as intriguing rather than threatening. (Hofstede et al. 2010.)

It is important to note that in both types of cultures, people experience stress and anxiety, but they handle and display it differently. In uncertainty-avoiding cultures, it is acceptable to express anxiety through actions like raising one's voice or using strong gestures. In uncertainty-accepting cultures, showing emotions is often seen as a weakness, and people try to suppress their feelings. (Hofstede et al. 2010.)

In summary, it can be stated that tolerance for uncertainty is strongly tied to how truth and rules are perceived as concepts: in cultures that accept uncertainty, truth is viewed as somewhat context-dependent, and rules are considered flexible. In contrast, in cultures with low tolerance for uncertainty, truth is generally regarded as absolute, and numerous rules are created and followed strictly. (Hofstede et al. 2010.)

In Hofstede's study, Finland ranked 50th with a score of 59, placing it in the middle ground between cultures that avoid uncertainty and those that accept it. The target countries, China and the United States, fall more decisively into the category of cultures that tolerate uncertainty. China scored only 30/100, ranking 70th out of 76, while the United States scored 46/100, placing it 64th. According to Hofstede's research, the target countries are therefore nations that exhibit a

high or very high tolerance for uncertainty, with both showing greater acceptance than Finland. Practically, this could manifest as China demonstrating the greatest flexibility toward rules and truth, while Finland approaches these concepts somewhat more rigidly compared to both China and the United States. (Hofstede et al. 2010.)

Masculinity

One of the cultural dimensions discovered in Hofstede's study for IBM was masculinity (and its opposite, femininity). Although masculinity and femininity are often associated with gender, in this context, they refer to the types of behavior valued in different cultures. Hofstede's study revealed that in most of the cultures studied, men were primarily masculine and women feminine, except in the most feminine countries, where both men and women displayed what is considered feminine behavior. (Hofstede et al. 2010.)

Masculine traits identified in the study include the pursuit of high salaries, good career advancement opportunities, and challenging tasks in the workplace. Feminine traits, on the other hand, include the desire to have a good relationship with one's boss, cooperate with others, and job stability. In masculine cultures, assertiveness, confidence, material gain, and overall success are highly valued. Feminine cultures, however, prioritize modesty, living in harmony with others, and taking care of the weakest members of society. (Hofstede et al. 2010.)

Based on Hofstede's IBM study, Finland is considered a highly feminine country, scoring 26/100 and ranking 68th out of 76 countries. In contrast, the target countries, China and the United States, are more masculine: the United States scores 62/100, ranking 19th, while China scores 66/100, ranking 11th. These results suggest that in both research countries, traits such as confidence and ambition are highly valued. In Finland, however, confidence can easily be perceived as arrogance, and modesty is more highly regarded. (Hofstede et al. 2010.)

Long-term orientation

This dimension in Hofstede's study reflects how long-term or short-term oriented a culture is. In long-term oriented cultures, qualities that help achieve future rewards, such as perseverance and thrift, are highly valued. These cultures are also typically more adaptive to societal changes. Conversely, in short-term oriented cultures, the focus is more on the present and the past, with values such as appreciation for traditions and fulfilling social obligations being prevalent. (Hofstede et al. 2010.)

Long-term orientation is considered to be one of the enablers of advanced civilizations. Studies suggest that time orientation also correlates with social class: for example, children from lower-income families often seek immediate rewards, whereas children from middle-class families are more likely to focus on delayed gratification. (Hofstede et al. 2010.)

In the workplace, time orientation shows in different ways. Individuals from long-term oriented cultures tend to adapt to changes quickly and are willing to work persistently toward achieving results. In short-term oriented cultures, conservatism is more common, adapting to change can be challenging, and the focus is often on achieving results as quickly as possible. (Hofstede et al. 2010.)

Long-term orientation was not measured in Hofstede's original study but was later analyzed separately. According to Hofstede's (2010) findings, Finland ranks 51st out of 93 countries, with a score of 38. Among the research's target countries, China ranks near the top at 4th with a score of 87, while the United States ranks near the bottom at 69th with a score of 26. Based on Hofstede's (2010) study, the research countries are almost opposites in terms of time orientation: in China, the focus is on long-term success and adaptability, while in the United States, there is a strong emphasis on achieving results quickly, with a more skeptical attitude toward change. (Hofstede et al. 2010.)

4 VALMET AND LEAP FORWARD PROGRAM

This chapter introduces Valmet as a company and briefly outlines its business areas and business lines, as well as Valmet's Leap Forward global ERP project. All material regarding Valmet's operations is publicly available and has been sourced from Valmet's website or materials used in Valmet's public presentations.

4.1 Valmet as a company

Valmet is the world's leading supplier of technology, automation, and services for the pulp, paper, and energy industries. Its roots trace back to the 1700s, with the establishment of a dockyard in Viapori (known today as Suomenlinna) and Tamfelt, which became one of the leading suppliers of technical textiles. Today, Tamfelt's operations are part of Valmet's Services business line.

Over the decades, Valmet has undergone several transformations, with changes in its business focus. The company in its current form was established at the end of 2013 when Valmet demerged from Metso, and Metso's pulp, paper, and power business lines were transferred to the new company, Valmet Corporation. Valmet was listed on the Helsinki Stock Exchange in early 2014, and at the start of 2015, it acquired Metso's Automation business line. In 2022, Valmet merged with Neles, adding a new business line, Flow Control.

Currently, Valmet's business is divided into five business lines and five geographical regions. The business lines are Pulp and Energy, Paper, Services, Automation Systems, and Flow Control. In terms of revenue, Valmet's most significant business line in 2023 was Services, which accounted for approximately 32% (€1.784 billion) of Valmet's total revenue. The second-largest line is Paper, followed by Pulp and Energy in third place, Flow Control in fourth, and Automation Systems in fifth.

Geographically, Valmet's operations are divided as follows: EMEA (Europe, Middle East, and Africa), North America, South America, China, and Asia Pacific. Valmet employs over 19,000 people globally, with the majority, about 60%, working in the EMEA region. EMEA is also the most significant region in terms of revenue, though not as dominant as in employee distribution—about 40% of Valmet's revenue is allocated to the EMEA region. North America is the second-largest region by revenue and number of employees.

Valmet's mission is to create sustainable results by transforming renewable raw materials and making industrial processes reliable and efficient. Strategically, Valmet focuses on developing and delivering competitive and reliable technologies, services, and automation to its customers. Enhancing the competitiveness of its customers appears to be at the core of Valmet's business strategy. Valmet identifies its "must-win" targets as succeeding with customers, driving technological innovation, improving process efficiency, and operating as a "winning team."

Valmet's vision is to become the best in the world at serving its customers and advancing the industries it operates in. In its business operations, Valmet emphasizes the importance of global megatrends, such as resource efficiency to mitigate climate change, the development of digitalization and technology, and societal changes.

In summary, Valmet is strongly focused on serving its customers, striving for excellence in all its operations, prioritizing people, and embracing innovation and renewal.

Next, a brief overview of Valmet's operations in the regions studied in this master's thesis will be presented: the United States (covering the entire North American region for business operations, as specific public information on U.S. operations alone was not available) and China.

4.2 Valmet in China

Valmet delivered its first paper machine to China in 1933, and particularly over the past three decades, it has continuously expanded its operations in the country. Today, all five of Valmet's business lines are represented in China, and the company employs approximately 2,400 people there. Highlighting the scope of operations, Valmet has seven production units, seven offices, and five service centers located across China. Notably, the distance between the company's most geographically distant units, Beijing and Beihai, is approximately 2,300 kilometers.

From a finance perspective, it is significant that one of Valmet's three Global Financial Operations centers, responsible for centralized financial services, is located in Shanghai, China. Valmet's customer base in China includes numerous major players in the pulp, paper, energy, and process industries. For instance, Valmet delivered the world's largest fine paper production line to Sun Paper Beihai in 2021.

In general, Valmet has supported its customers in China by improving production processes, increasing manufacturing capacities, reducing energy and water consumption in production, and enhancing product quality and production cost-efficiency.

Valmet has also prioritized sustainability in its Chinese operations, achieving a reduction of approximately 35% in carbon dioxide emissions between 2019 and 2023. Additionally, the company has maintained an exceptionally low accident rate. Valmet also screens all new suppliers for sustainability and addresses any deficiencies in their operations.

4.3 Valmet in North America

Although this master's thesis focuses on the United States within North America, the business overview will cover the entire North American region, as detailed, readily available data specific to the U.S. was not available.

North America is Valmet's second-largest business area after EMEA in terms of both revenue and workforce. The region employs approximately 2,500 people, and its revenue in 2023 amounted to €1.272 billion. While Valmet's North American region comprises three countries— the United States, Canada, and Mexico— the United States is the most significant market among them. Canada also hosts operations, particularly in major cities such as Toronto, Montreal, and Calgary, while Mexico has significantly less business activity.

Altogether, Valmet operates 33 service centers, 10 production units, 7 sales offices, and one research and development unit across North America. In the North American markets, Valmet holds a 67% market share in paper, 29% in services, and 25% in pulp and energy.

4.4 Leap Forward Program

In the previous subsection, one of Valmet's must-win areas, Excellent Processes, was introduced. A key driver of the Leap Forward ERP-enabled business transformation program is precisely the development and global harmonization of Valmet's business processes. This objective is pursued by implementing the Infor LN ERP system and deploying it across Valmet's various business and support functions, including financial management and accounting, thereby improving the company's operational capabilities to better serve its customers. The project aims to bring all over 19,000 Valmet employees under a single, unified ERP system.

The Leap Forward program was started with the design of global operating models and frameworks beginning in 2016. The first Infor LN rollouts were carried out in 2017 when Valmet's service business in Finland adopted the new ERP system, and by 2018, the system covered its first 1,000 end-users. In 2019,

Infor LN was deployed not only in the service business but also in the paper, pulp, and energy businesses in Finland and Sweden. The first go-lives outside Finland and Sweden were implemented in 2020, as the French Services business line transitioned to Infor LN. By this time, the number of end-users had increased to nearly 3,000. From 2021 onward, deployments have taken place across all of Valmet's geographical areas, including EMEA, China, North America, Asia-Pacific, and South America. Currently, Infor LN covers over 8,000 end-users out of Valmet's approximately 19,000 employees. The goal is to increase the number of end-users to at least 11,000 by the end of 2026.

The following section delves into the business benefits Valmet seeks to achieve through the Leap Forward program. By standardizing and harmonizing processes, the program aims to ensure that all business lines utilize unified systems and operate according to shared processes. This is intended to create a consistent customer experience and reduce response times to customer inquiries. Improved transparency will enable better monitoring of deliveries and quality. Production planning and execution are also expected to become more efficient.

The implementation of a global ERP system and the integration of all business operations into a unified logistics system aim to facilitate multinational business projects and simplify Valmet's internal trade. Leap also enhances internal efficiency by providing global visibility into material availability and flow, as well as automating internal order processes. Furthermore, a unified master data system offers the capability to better analyze and predict customer behavior, while enabling professional organization and processing of master data quality. Alongside the Leap Forward program, Valmet is also modernizing business tools and adopting industry benchmark solutions. The intention is to ensure the global deployment of uniform tools and to improve transparency through new project management and reporting tools.

The ERP rollouts of Leap Forward require the collaboration of various stakeholders. This section briefly outlines the contributions needed from different groups to ensure a successful ERP implementation at Valmet. In general, the rollouts involve personnel from the core Leap Forward program team, the Rollout Center of Excellence (ROCE), Global Financial Operations (GFO), Valmet IT, Data teams, and representatives from the business lines and the regional business leadership of the deployment target. Members of the Leap core team are involved in various aspects of the program, from the ERP implementation itself to system development. ROCE focuses specifically on practical rollout functions, such as user training, infrastructure mapping, and the implementation of financial processes. GFO specializes in driving global financial processes into ERP deployment targets, while IT personnel provide support on technical matters. The Data team focuses on tasks such as managing master data, while business line and regional personnel address local business processes and functions related to financial planning and analysis.

As can be concluded, Leap ERP-program at Valmet is invariably a multinational initiative that requires seamless collaboration among diverse

stakeholder groups. In practice, this means that the various stakeholders often work across different time zones and continents for most of the rollout period.

Leap Forward employs the Rollout Model framework for its deployments, with the latest version at the time of this thesis being Rollout Model 3.1. This model is briefly introduced here without delving into extensive detail. The model includes a Rollout Strategy consisting of three phases (A, B, and C), preceded by the Enabler phase.

The Enabler phase focuses on planning and resourcing the ERP implementation and identifying the necessary enablers for deployment. During this phase, tasks such as preparing the project plan, defining the rollout scope, assessing resource requirements, analysing existing financial processes, and understanding local taxation requirements are carried out.

Phase A is dedicated to paving the way for the rollout. Key activities include training the local rollout team by Leap Forward program personnel, finalizing the rollout project plan and governance, and initiating adaptation work. This involves identifying gaps between current and future operating processes.

In Phase B, the adaptation continues, with significant tasks such as training local end-users on the new system and processes, conducting change management activities, and preparing for go-live. Toward the end of this phase, the new ERP system is officially taken into business use. After go-live, a hypercare period follows, during which the success of the implementation is monitored, lessons learned are documented, and support is provided to end-users in using the new system.

Phase C involves conducting a post-implementation review of the ERP rollout, running down legacy systems, and collecting valuable lessons from the implementation to avoid previous mistakes and leverage best practices in future ERP projects.

4.5 Valmet's Finance Operational Model

Valmet's financial operations have undergone significant restructuring as part of the Leap Forward, leading to the establishment of Global Financial Operations (GFO). This chapter briefly outlines the key areas of Valmet's financial functions, with further details on GFO and its impact on financial management, as well as the role of Business Finance, presented in Chapter 6.

The primary role of Business Finance is to remain closely aligned with operational business activities, providing analysis that supports decision-making processes. Business Finance evaluates operational performance at the local level, manages customer project controls, and handles forecasting, budgeting, and the implementation of business strategies.

Group Finance is responsible for managing Valmet's corporate-level financial operations. Its scope includes group accounting, financial reporting, financial development, internal controls, and taxation. These functions are centralized to ensure consistency and accuracy across the organization. Group

Finance reporting comprises both public external financial reporting and management reporting. As listed company, the role of financial reporting is to provide reliable, consistent information on time on Valmet Corporation's financial performance to shareholders, investors and other stakeholders.

Global Financial Operations (GFO) oversees Valmet's operational finance and accounting on a centralized basis, serving all business lines and operations. Its activities are organized into three main process areas: Order to Cash, Purchase to Pay, and Record to Report. GFO's mission is to own and perform best in class end-to-end financial processes, which defines the core purpose of GFO. Additionally, Valmet utilizes external consultants for specialized tasks, such as taxation-related matters.

5 DATA AND METHODOLOGY

5.1 Research methodology

This master's thesis was conducted as a qualitative case study. Qualitative research is particularly well-suited for studying phenomena that are difficult or impossible to measure quantitatively (Denny & Weckesser, 2022). Additionally, qualitative methods are appropriate when the subject is researched little, the context is poorly understood, the nature of the research problem is unclear, or the researcher believes the phenomenon should be reassessed (Klopper, 2008). A distinctive characteristic of qualitative research is its flexibility and responsiveness to context, allowing the study to adapt as the research progresses (Fossey, Harvey, McDermott & Davidson 2008). This flexibility has been utilized in the planning and execution of this thesis, with the scope and approaches adjusted to optimize the research design for the studied topic.

ERP implementations, along with their challenges and benefits, are inherently difficult to measure directly, making qualitative methods an excellent fit for their study. Even if changes occur in business operations during or after an ERP project, these changes could be result of factors other than the success of the implementation. For example, the ERP projects examined in this study were carried out in recent years, a period affected by the COVID-19 pandemic and the Russian offensive war against Ukraine, both of which likely influenced the business operations under study. Furthermore, this research focuses on challenges arising from cultural differences in global ERP projects, an area not quite suitable for quantitative investigation.

The study was conducted as a case study, with the chosen case company being a Finnish multinational corporation introduced in a previous chapter. Case studies have been criticized for their limited generalizability, as they typically focus on one or a few selected cases. However, case studies also offer significant strengths, as they can provide in-depth, applicable data on the subject and enable

researchers to gain a detailed understanding of the studied phenomenon. Additionally, case studies may offer partial generalizability for contexts similar to the studied case (Noor, 2008). For instance, the findings of this thesis regarding the influence of local cultures on ERP projects in China and the United States may not be generalizable to all ERP projects worldwide. However, they could be highly relevant for multinational companies planning ERP implementations or other business transformation initiatives in China or the United States, as the cultural characteristics identified in this study are likely to repeat at least partially across similar contexts within these countries.

In the case of the selected company, the ERP program is such a vast undertaking that it was reasonable to focus the research on ERP implementations in specific geographic regions. China and the United States were chosen as the focus countries because the company has already completed several ERP implementations across various sites and business lines in these regions over the past few years. The two countries differ significantly in terms of culture, allowing for comparative analysis during data collection and interpretation. This approach provided concrete insights into how cultural differences influenced the studied ERP implementations.

5.2 Data Collection and Analysis

The research data for this thesis was collected through interviews, specifically theme interviews. Interviews are a common method of data collection in qualitative research, as they enable the researcher to obtain extensive and multifaceted data about the subject. In qualitative research, the sufficient amount of data is not typically predetermined; instead, data collection continues until similar concepts emerge repeatedly, and additional data no longer provides significant new insights into the studied phenomenon. However, the amount of data used in qualitative studies is generally significantly smaller than in quantitative research (Denny & Weckesser, 2022).

Theme interviews were chosen as the most appropriate interview format because the expertise and job roles of the interviewees varied significantly. Although the interview was nearly identical for all participants, some questions were tailored to their specific areas of expertise. For example, participants working in financial management roles were asked additional questions about the transformation of financial processes in the context of Valmet's global ERP project. These questions were not relevant to participants in other roles, who were unlikely to have insight into such topics. The interviewees' country of residence also influenced the questions to some extent: Finnish interviewees were asked about their experiences of cultural differences with colleagues from the target countries, while those residing in the target countries were asked about their experiences with Finnish colleagues.

From an analytical perspective, it was important to examine specific themes in every interview to enable comparisons among participants' responses. This

also allowed the study to gather comprehensive data on the implementation of critical success factors identified in the theoretical framework. Hirsjärvi and Hurme (2015) describe theme interviews as an excellent option in situations where interviewees have experienced a shared event, and the researcher aims to collect their subjective views on predefined themes using a structured interview guide. In this case, not all interviewees had participated in the exact same ERP projects. However, all had been involved in Valmet's ERP projects in either China or the United States, and most had participated in projects in both countries.

Qualitative data analysis involves processing, synthesizing, and interpreting research data to explain and describe the studied phenomenon (Fossey et al., 2002). In this study, the data was analyzed using content analysis, with a focus on identifying recurring themes and other significant findings from the interviews. Hsieh and Shannon (2005) classify content analysis into three types: conventional, directed, and summative. In the conventional approach, coding categories are derived directly from the data being analyzed. The directed approach uses predefined categories based on a theoretical framework, while the summative approach emphasizes counting keywords and repetitions within the data. (Hsieh & Shannon, 2005.)

Due to the nature of this research, a directed content analysis approach was selected. This method is well-suited for analyzing data that addresses themes derived from a theoretical framework. In practice, data from each interview was categorized under the relevant themes, and the categorized data was synthesized in the Analysis and Results chapter. This thematic approach enabled comprehensive answers to the research questions, using the themes identified through the theoretical framework as a foundation.

5.3 Presentation of the data

The research data was collected through nine interviews with individuals involved in Valmet's ERP implementations in China and the United States. Interviewees were selected based on their roles to ensure the study could comprehensively examine cultural differences and approaches to managing them from both project management and financial management perspectives.

While most interviewees could provide insights into project management and the other selected themes, four interviewees (Interviewees 1, 4, 6, and 7) working in financial management duties were particularly suited to address questions related to the financial transformation within Valmet's global ERP program. Many of the participants had extensive prior experience in financial and project management roles, and all had worked on Valmet's ERP projects for at least two years. At least five interviewees had been involved for over five years. A table summarizes the interviewees, their most recent roles, their experience with the Leap Forward, and whether they had worked on ERP implementations in one or both target countries.

Table 2: Roles of the interviewees

Interviewee number	Latest Role in Leap Forward	Experience in Leap (years)	Countries involved in (China/USA)
1	Global Implementation Owner	7	Both
2	Area Program Manager	2	USA
3	Global Program Manager	7,5	Both
4	Area Head	5	Both
5	Manager	3	China
6	Global Process Owner	2	USA
7	Director	6	Both
8	Core Rollout Manager	5	China
9	Global Process Owner	6	Both

To provide the reader with an understanding of the interviewees' roles within the ERP program, a brief description of these roles is necessary. The titles "Director" and "Manager" do not directly refer to ERP implementation roles but rather indicate the interviewees' positions as leaders of entire organizations (Director) or middle management (Manager). Nevertheless, these individuals were heavily involved in Leap-related tasks and provided valuable perspectives for the study.

The role of a Global Implementation Owner (GIO) involves coordinating business transformations globally within ERP projects and introducing global practices to regional operations. The Area Program Manager oversees the entire Leap Forward program and all associated implementation projects within a specific business area, from project planning to full business transformation. This role also represents the business area's interests in Leap Forward. A Core Rollout Manager leads individual ERP implementation projects and is responsible for ensuring their success from start to finish. Global Process Owner (GPO) designs, manages, and oversees end-to-end processes. An end-to-end process refers to a complete business process from its start to achieving its final goal. The GPO defines *what* the process should be and sets the strategic vision, while the GIO focuses on *how* the process is implemented and executed. The Global Program Manager is globally responsible for the ERP rollout portfolio of a specific business line (e.g., Paper or Services), ensuring rollouts stay within budget and on schedule, while also addressing challenges collaboratively with other stakeholders. Lastly, the Area Head leads the Leap Forward organization within a specific business area, with responsibilities including ERP implementation oversight, global process implementation, training, and communication.

Most of the interviewees held global roles within the Leap Forward program and were involved in ERP implementations in both China and the United States. This allowed the majority to provide insights into both target

countries. Specifically, seven participants had experience with ERP projects in the United States, and seven had experiences in China. Five of the nine interviewees had experience in both countries, while the remaining four had worked exclusively on projects in either the United States or China. During the interviews, cultural differences and their impacts became particularly evident when participants could draw comparisons between the two countries based on their experiences.

Of the interviewees, seven were native Finns, and two were originally from China. One of the Chinese interviewees still resides in China, while the other has lived in Finland for many years. Therefore, the perspective on cultural differences is predominantly Finnish. This Finnish-centric approach is justified, as both target countries are important markets for Finnish industrial companies. It is valuable to gain a deeper understanding of the cultures and practices of these two significantly different countries. Moreover, from a research quality perspective, conducting interviews with Finnish participants in Finnish language minimized potential misunderstandings or misinterpretations between the researcher and interviewees that could arise from differences in the levels of English proficiency. Accordingly, seven interviews were conducted in Finnish, while the two interviews with Chinese participants were conducted in English.

The next chapter analyses the collected research data, focusing on the key findings derived from the themes established in the theoretical framework. This approach aims to provide comprehensive answers to the research questions.

6 ANALYSIS AND RESULTS

6.1 Introduction to the Results

This chapter presents the research findings based on the collected data. The results are organized by themes, focusing on the target countries, China and the United States. The findings include both comparative analyses between the two countries and separate observations specific to each. Although the study specifically examines cultural differences and their impacts on multinational ERP projects, the findings also highlight universally effective practices identified by the interviewees. These practices are not only relevant in particular geographical locations but could have broad applicability.

In addition to national cultures, the chapter touches upon the transformation of accounting and finance at the case company, Valmet, during Leap Forward. This transformation has influenced the roles of personnel in financial management overall.

It is important to note that, while project management is also treated as a distinct theme in the interviews, all interview themes ultimately fall under the umbrella of project management. As emphasized in the interviews, the project manager is ultimately responsible for the entire project and all factors influencing its success. For instance, obtaining top management support and successfully managing change are critical to the success of an ERP project. Since the project manager is accountable for the project as a whole, they are also ultimately responsible for achieving success in these critical factors.

The findings are first analyzed by themes using content analysis, followed by a more theory-driven synthesis. This synthesis compares the results to the critical success factors selected as themes for the study, and to the literature, with particular reference to Hofstede's (2010) cultural dimensions framework.

6.2 Top Management Support

The interviewees consistently highlighted that the top management has provided strong support for Leap Forward in both the United States and China. This support was deemed essential for a business transformation project of this size; such a project would not be possible to implement without strong backing from the highest levels of business leadership. Interviewee 4 stated:

Both China and the USA are such significant (business) areas for Valmet that without top management support in one way or another, this kind of initiative would be impossible to execute.

Many interviewees noted that the Leap Forward and its associated transformation efforts are one of Valmet's flagship initiatives and are included in the organization's "must-win" objectives. Consequently, the program has received commitment across all business areas. However, the forms of support have varied slightly between the two target countries.

Nearly all interviewees emphasized that Valmet's various locations have historically operated with significant autonomy. For instance, older ERP systems and business processes had evolved independently over decades, often incorporating numerous local customizations based on local preferences. This starting point caused significant challenges for a large-scale business transformation and harmonization effort, and these challenges have been evident during the Leap Forward program.

In most interviews, it was noted that hierarchy is emphasized in China, with a significant power distance between individuals working at different levels. In practice, this has meant that, during ERP rollouts in China, once top management approved and directed a course of action, it was implemented without much further questioning. In China, the primary manifestation of top management support has been securing backing from the local senior business leadership for the projects in question. This has translated into access to resources and, above all, their effective deployment. Despite relatively small ERP project teams in China, projects have proceeded efficiently and smoothly, but only as long as top management clearly outlined the necessity of the project.

One particularly noteworthy example from the interviews was an ERP implementation project in China that was executed entirely during the COVID-19 pandemic. Due to travel restrictions, it was not possible to send personnel from Finland or the Nordic countries to support the project on-site. Normally, Leap Forward personnel are dispatched to assist in project execution, facilitate change management, and communicate the program's objectives. However, in this case, communication between the Leap Forward program and the local team relied almost entirely on Teams meetings. Despite these challenges, the implementation was successfully completed, and the emphasis on top

management support, as aligned with Chinese cultural norms, was considered a key factor in enabling the project to be carried out entirely remotely.

In the United States, top management support was also perceived as strong by the interviewees. However, obtaining this support required thorough preparation and careful consideration of how to communicate with senior leadership. Specifically, it was noted that matters needed to be presented in a manner suitable for a high-level audience, avoiding excessive technical details, as the technical aspects of ERP projects were usually unfamiliar to top management. It was generally considered important to identify critical issues requiring decisions and escalate them to the appropriate level, while avoiding burdening senior management with minor issues. Similarly, it was deemed important to avoid discussing significant decisions in forums without the authority to resolve them.

Interviewees also highlighted that top management support in the United States was strengthened by presenting the benefits already achieved through the Leap Forward program, such as the ability to centralize certain functions, like tax accounting and lease accounting. Interviewee 2 described the approach used in the United States based on their own experiences:

When you want a decision from top management, you should carefully plan your strategy. Present three options, no more, and ensure they can be explained in a very simplified manner. Even very complex matters need to be expressed on a single (PowerPoint) slide. You should also have a recommendation ready, including which option you suggest and the reasoning behind it. It requires thorough planning and preparation, and it's advisable to discuss the matter with the decision-makers in advance if possible."

This underscores the importance of clear and effective communication when engaging with senior business leadership in the United States.

In China, thorough preparation and advance distribution of materials were also considered critical for obtaining top management support. However, a key element in preparation was ensuring that materials were shared well in advance of any decision-making meetings. This allowed local leadership sufficient time to prepare and form positions on the matters to be decided. Interviewee 1 described the phenomenon as follows:

In China, the best way to prepare for meetings has been to send the materials and questions in advance so that they (people in China) have time to go through the matters together beforehand and prepare their joint opinion. Whoever speaks there usually speaks on behalf of everyone else as well.

Introducing decision-making topics unexpectedly during a meeting could make it difficult to obtain immediate decisions, as Chinese culture tends to favour more deliberate and well-considered decision-making compared to Western cultures.

Cultural differences in the target countries have influenced how top management support has impacted the success of ERP projects. In China, as

noted earlier, decisions made by top management are typically implemented without question. In the United States, while the decisions of senior management carry significant weight, implementing those decisions often requires more effort. Employees at all levels are generally encouraged to express their opinions, and decisions are discussed and scrutinized extensively to achieve consensus. Verbal communication plays a prominent role in the United States, where issues are often negotiated and debated openly, which some interviewees suggested might be unfamiliar to individuals from cultures such as Finland, as in Finland this kind of behavior could be perceived to be aggressive.

Interestingly, while decisions made by top management in China are not questioned, they may be adapted in practice. If gaps or unpractical aspects of the directives are identified, these may be informally addressed without direct opposition. In the United States, any ambiguities or issues are typically raised and addressed directly.

To conclude, in both target countries top management support was overall considered strong. However, gaps were identified in the support provided by middle management, particularly in the United States. In practice, this has manifested in ERP projects where middle management's commitment and ability to understand the requirements of a global project have varied. While there has been initial interest in upcoming ERP projects, once these projects have started, there was sometimes a lack of understanding of the demands of a program like Leap Forward, particularly in terms of business transformation and change management.

Engaging middle management in the United States has often required aligning their bonus targets with the objectives of Leap Forward. Furthermore, challenges have risen regarding the project's impact on day-to-day business operations. For instance, when experienced employees are allocated to ERP project teams, replacing them in the daily business operations has sometimes proven to be difficult. Resource allocation has also caused challenges in the United States; for example, executing multiple ERP implementation projects simultaneously in the same region has been problematic. Managing even two concurrent ERP projects has been difficult in the United States, as employees often struggle to work across multiple projects simultaneously. This challenge was not reported in ERP projects in China. The collectivist culture in China, where tasks are approached flexibly and efficiently as a team, was seen as an enabling factor. In contrast, interviewees felt that employees in the United States tended to be more individualistic, focusing on tasks that directly benefited them in the short term, such as bonuses or other rewards.

In China, middle management support was influenced mainly by the perception that ERP projects sometimes complicated ongoing business operations, which occasionally led to conflicts between local middle management and ERP projects.

6.3 Change Management

The interviewees emphasized that change management is a critical success factor in a global ERP program. Based on the interviews, the cultural characteristics of the target countries, the United States and China, significantly influence how change management should be conducted in each context.

One of the most prominent differences highlighted in the interviews between the two countries is related to the primary target audience of change management efforts. In China, the leadership team, particularly top management, is clearly the most important target group for change management. This is likely due to the high power distance typical of Chinese culture. Interviewee 5 summarized this by stating:

Top management in China has more power than in Western countries. The difference in change management between China and Western countries is: in Western countries, you need to convince everybody. In China, we have done (change management) to normal (system) users, but basically there is no need for this. The main thing is we need the manager or the management to accept or like this change. Then everything goes smoothly.

In practice, this means that if senior business management in China believes that a change is beneficial and actively drives, for example, an ERP project forward, the project is likely to succeed, and processes will progress smoothly. Conversely, if senior management does not believe in the value of the change and does not commit to it, subordinates will not take action to implement the change. Therefore, engaging senior management in the change is absolutely crucial for the project's success in China. However, it is equally important to push for the adoption of new processes and emphasize adherence to them across all levels of personnel in China, as there is a risk of reverting to old practices if the importance of following the new ways of working is not continually reinforced, or as some interviewees articulated, "pushed".

Another difference noted in interviews concerning China was that new operational models and processes in the finance and accounting domain were adopted relatively easily by the local Global Financial Operations teams. In contrast, those working on ERP projects with business lines found that implementing new practices required significant effort and close monitoring to ensure changes were realized and that the teams did not quietly revert to old processes.

While the importance of leadership in change management should not be underestimated in the United States either, there, the change needs to be "sold" to employees across all organizational levels. However, the example set by business management was also perceived to have a strong impact on employee motivation in the United States. For example, messages from local business leaders carried significantly more weight with local personnel than those

delivered by managers working in Leap Forward. Therefore, it is essential to involve local leadership in driving the change in the United States as well.

In general, the concept of "selling" the change was deemed important in both countries, though particularly in the United States. The way change is communicated plays a significant role in the success of change management, as noted in the interviews. It is crucial to be ready to justify in detail, why the change is necessary. In the United States, feedback on the success of this "selling" effort tends to be direct and immediate. In contrast, in China, the success of change communication may only become apparent later, when it is observed whether personnel have adopted the new practices.

An example of an effective approach to selling change was described by interviewee 1 as follows:

The psychological aspect of a project like this is that, if and when it's known how things would work best, it's about training and guiding people to find a way that helps them (people being trained) realize by themselves that they are making the right decision. It's a kind of salesmanship, where the receiving party needs to feel like they've come up with the solutions themselves. Both in China and the USA, it's important that people feel they've discovered the solution on their own, but in the USA, this is even more important.

Engaging a critical mass of stakeholders was considered important, as was understanding the stage of change within the target organization. Some individuals are more open to change than others. Many interviewees observed that people in China have generally been more receptive to change than those in the United States. This was attributed to the local culture and the fact that, in China, especially in manufacturing industries, processes are continuously improved, and employees are accustomed to constant change in the workplace and in every-day-life.

Perhaps the most critical factor in change management was deemed to be the ability to clearly articulate *why* the change is necessary and beneficial. Establishing a comprehensive "big picture" of the change before delving into details was deemed crucial. For example, interviewees noted that for finance and accounting personnel, it is essential to understand the broader impact of specific business processes and how they fit into the overall picture. It is not enough to merely follow prescribed processes; finance and accounting professionals must understand the implications of actions such as specific transactions on the company's financial reporting, rather than performing them simply because they were instructed to do so. Interviewee 6 described this as follows:

In a way, especially for finance people, what I've tried to emphasize is that there are two different things. Either you do things in a certain way according to the instructions and follow those guidelines, which is, of course, important – that's the first thing. But the essential and critical requirement is that you also understand what you are doing. For example, when you press "record," you need to understand what happens next. A finance person must understand the outcome as well, not just that they've followed

the steps in the instructions and completed their task without looking at the consequences or what actually resulted from it.

When stakeholders are not engaged in the change process, resistance is inevitable, but it manifests differently in China and the United States. As previously discussed, resistance in the United States tends to be open and explicit, whereas in China, resistance is often passive. According to interviewees, in China, resistance might take the form of initially agreeing to the changes but not actually implementing them or implementing them only partially if they are not perceived as reasonable.

Effective methods for conducting change management in the two target countries differed slightly based on the interviews. In both China and the United States, being physically present has proven valuable for building trust and driving change when possible. However, in the United States, regular one-on-one discussions with local personnel were considered essential for facilitating change through direct and personal conversations. In China, interviewees found that larger group workshops were an effective way to sell change to local business personnel. This difference was attributed to cultural factors, as collectivism is central in China, whereas the United States places greater emphasis on individualism and individual-focused approaches.

Additionally, due to minor challenges with English proficiency, it has been effective in China to allow local personnel to discuss issues in smaller groups. This provides an opportunity to address uncertainties internally and seek clarification if anything remains unclear even after group discussions.

6.4 Business Process Changes and -Reengineering

The interviews revealed that Valmet's business units have historically operated with significant autonomy, adhering to their own processes and information systems. The company has also made substantial acquisitions, such as the purchase of Coldwater, a paper and pulp industry company, in the United States in 2022. Following such acquisitions, the acquired companies have often been allowed to continue operations largely under their existing models. As previously mentioned in this thesis, alongside the Leap Forward program and the implementation of the new ERP system, a comprehensive business transformation has been undertaken. Consequently, business process reengineering (BPR) emerged as a prominent topic in the interviews.

Based on the interviews, one of the key objectives of Leap Forward program regarding business processes is to implement standardized business solutions as extensively as possible. BPR has thus been widely conducted, with the goal of minimizing customizations to the new ERP system, limiting changes to essential aspects such as local legislation and taxation requirements. The overarching goal is to ensure that business operations adapt to the new standardized processes. However, this approach has presented challenges in both China and the United

States, as ERP projects must avoid significantly disrupting daily business operations or causing business interruptions.

In China, BPR was highlighted in the interviews as a central aspect of ERP projects. As discussed in the theoretical framework, research by Ji & Min (2005) indicates that BPR is particularly critical when implementing ERP systems in Asia, as these systems are typically designed based on Western business practices, while traditional Chinese business processes often differ significantly. One of the challenges identified in the interviews was the limited understanding among Leap Forward program personnel of the specific business processes used in Valmet's Chinese operations. Interviewee 3 described the differences in project challenges between China and the United States as follows:

The Chinese people base things on local requirements, and the challenge is that no one else really understands these local challenges except the Chinese themselves. Then you have to weigh whether the issue is genuinely as they describe it or not. The U.S. is clearly prouder of their own processes than the Chinese. In the U.S., people have pride over their own processes, and they are not easily willing to let go of them when global processes are introduced. That has been a challenge.

This knowledge gap made it difficult to assess which local customization requests were justified and which were not. While these process differences are not inherently cultural, they are locally significant factors in ERP projects or any business transformation initiative. The pressure to accommodate customization requests has been amplified by concerns about the potential disruption ERP projects could cause to critical business functions. According to one of the interviewees, Valmet may have previously accommodated too many non-essential customization requests in its ERP rollouts in China, resulting in insufficient alignment with Leap Forward's objectives of harmonization and standardized processes. Although this approach avoided disruptions to local business operations, it meant that the potential benefits of standardized processes sought by the Leap Forward program on a global scale were not fully realized.

In terms of change management, the need to monitor adherence to new processes and ways of operating post-implementation was emphasized to ensure that operations did not revert, either partially or entirely, to previous processes without notice. This need arises from the tendency in China to follow instructions less strictly than in countries like Finland, often relying heavily on common sense. For example, an employee might deviate from a business process step if it is not perceived as useful, unaware that the step could be linked for example to key production KPIs. Such deviations could distort reporting. Interestingly, perspectives on compliance varied among interviewees: some noted perfect adherence to instructions in China, particularly in finance and accounting, while some working with core business functions reported less strict compliance. This discrepancy suggests a contextual variation that is difficult to definitively explain. Additional challenges rose from the variety of tools developed over time in China to support business operations, some of which were even mobile-friendly. For

many, the new standardized processes and systems implemented through the ERP project felt like a step backward, as some effective tools had to be abandoned.

In the United States, resistance to change has been widespread. There is a strong sense of pride in the business processes and systems (as interviewee nr. 3 described earlier) that have evolved over time, making change particularly challenging. Similar to China, ERP projects in the United States have been approached with a focus on minimizing disruption to business operations. While this is understandable, interviewees felt that, as in China, local customization requests were sometimes excessively accommodated out of fear of causing business disruptions and facing increased resistance. Interviewees universally agreed that reengineering business processes is a complex issue, and it is not easy to predict the consequences of specific process changes.

In the United States, another significant challenge has been related to the impact of new processes and ways of operating on roles within the organization. New processes have, in some cases, resulted in an increase in responsibilities for some roles, a decrease for others, or even the elimination of some roles. Adapting to these new roles has proven difficult, as roles in the United States tend to be clearly defined, and there has been resistance to changes in responsibilities. Consequently, extensive discussions and clarifications have been necessary to address the new responsibilities associated with process changes. In contrast, roles in China have historically been more flexible, making role changes less contentious.

The challenges associated with new processes and systems in the United States have been compounded by the perception of some employees that changes to their established ways of working diminish their contributions or expertise. This contrasts with experiences in China, where employees in industries like manufacturing are accustomed to continuous improvements and change in work practices. Ultimately, managing these differences effectively in both countries has required tailoring change management efforts to align with local expectations and cultural norms, balancing the global objectives of Leap Forward with the specific needs and characteristics of each region.

6.5 The transformation of finance and accounting functions during the Leap Forward program

During the preparation of this study, it became clear that Valmet's finance and accounting operating models have undergone a significant transformation as part of the Leap Forward program, a process that continues to this day. Four of the interviewees in this study work in various financial management-related roles within Leap Forward at Valmet: one as a director, one as an area head when working at Leap Forward (currently works as senior manager), one as a global process owner, and one as a global implementation owner. Three of them work within Global Financial Operations (GFO), and one in Business Finance.

These four interviewees were specifically asked about the transformation of finance and accounting, its challenges, and its impacts during Leap Forward. This topic is particularly relevant for this thesis in the field of business studies, as it directly addresses the second research question regarding how challenges arising from cultural differences can be accounted for and resolved in a global ERP project from a financial management perspective. In addition to addressing national differences in the target countries, this section also explores challenges and impacts related to financial management and accounting cultures within the Leap Forward. While this section highlights the target countries, general observations are also presented.

The interviews revealed that the financial management transformation has been, and continues to be, a substantial undertaking. Interviewee 4 described the change of financial management as follows:

A major aspect was building the GFO. We began constructing a global finance organization with slightly different ideas about how to deliver value to Valmet's business. It has been a significant transformation of operational processes: while implementing the new ERP system, we have also centralized certain processes, updated operating practices, and launched global tools, such as Basware for handling purchase invoices, Nomentia for cash flow management, and Workday for expense management. From a financial management perspective, the ERP project has been a major operational process renewal initiative. Processes have been redesigned, financial management has been centralized, and financial management roles clarified – for example, what belongs to Business Finance, what is the role of Group Finance, and what is the role of the global GFO.

The financial operating model has been actively changed: processes, tools, and policies have been implemented strongly at the Valmet level. Business processes have been comprehensively redesigned from the perspective of financial management.

The transformation has globally rearranged financial management practices at Valmet, clarifying and streamlining the roles of Business Finance, GFO, and Group Finance. The Leap Forward program and the globally implemented ERP system were described as enablers for this transformation, facilitating the centralization of certain financial functions and the standardization of processes.

An interviewee from Business Finance described how, previously, Business Finance handled all local accounting and finance tasks, but some of these responsibilities have since been centralized to GFO. Business Finance has consequently focused more on decision-making supporting analysis and planning. In the United States, the transformation has presented specific challenges. Traditionally, Business Finance (taking care of local businesses) teams have included lots of staff members with traditional accounting backgrounds, and adapting to the new roles and new nature of job has taken time. For instance, forecasting has been particularly challenging for professionals with accounting backgrounds, as it represents a departure from calculating precise figures. Forecasting involves uncertainty, which increases over longer time horizons, and forecasts do not need to be entirely accurate to be useful. For professionals

accustomed to precise manner of traditional accounting, this shift has required a change in mindset. Similarly, understanding materiality in business cost analysis and management accounting has been challenging. Efficiency and focus on materiality are crucial, while tasks like allocating minor expenses are less relevant to the broader picture of management accounting. Interviewee 1 described the challenges:

A practical example is when there's an expense that needs to be accounted for. If someone has transitioned from an accounting role to the business side, in business, the expense is allocated across different sectors. The company is divided into various reporting directions, such as track maintenance or field service. For some, it can be overwhelming to consider the scale: for some, absolute accuracy is more important than addressing the issue through materiality. The focus should be on materiality rather than excessive precision with irrelevant costs. Efficiency is key.

For example, forecasting in finance vs. weather: if there's a 10-day forecast, uncertainty and inaccuracy increase over time. Forecasting means predicting, and a forecast doesn't have to be entirely accurate to be useful. It will likely take time to mentally adapt to the transformation in finance functions in U.S.

Previously, financial activities were more about pure bookkeeping, even within the Business Finance. Now, the focus is more on decision-supportive analysis.

The first GFO offices were opened in 2019, with a foundational goal of creating value for Valmet's business through financial management. In China and the United States, for example, local financial processes have been replaced with global processes, roles have been harmonized, certain processes have been centralized, and global financial tools have been introduced. Examples of these tools include Basware for invoice processing, Nomentia for cash flow management, and Workday for travel expense management. Interviewees highlighted that visibility into daily and period-end tasks has improved dramatically for processes within GFO's scope, which was one of the main objectives when the transformation began.

The global ERP system and processes have reduced local flexibility, requiring stricter adherence to processes not only in finance and accounting but also in business functions. For example, operational staff involved in tasks such as receiving or releasing goods perform entries that are effectively financial transactions. This means that all employees must follow processes to ensure the accuracy of financial records. However, it was noted that approximately 80% of financial tasks follow global processes, while 20% accommodate local practices. For instance, payment processing in China differs from the global process, but it is now transparent within the system. GFO also employs a wide range of internal controls that are followed globally.

GFO currently encompasses approximately 60 of Valmet's legal entities, up from 12 at its foundation. The ultimate goal is for GFO to cover all of Valmet's legal entities.

6.6 User Training and Education

The interviews revealed that Valmet's Leap Forward program employs a globally standardized model for user training, following a structured, step-by-step approach. In summary, the training begins with an overview of end-to-end processes to provide a comprehensive understanding. This is followed by progressively detailed sessions, culminating in hands-on practice with the new system, both guided and self-directed.

It is also important to note that user training is closely linked to other success factors, such as change management and business process reengineering. For instance, change management can improve future system users' attitudes toward upcoming changes, thereby facilitating training. Similarly, the extent of business process reengineering affects the degree to which the ERP system alters employees' roles; bigger changes naturally result in bigger training needs. Due to these interdependencies, similar observations and experiences may be linked to multiple success factors.

Clear differences in training needs were observed between China and the United States. In China, interviewees noted that providing extensive documentation on the new system was an effective practice. Chinese users were reported to rely heavily on written materials and were willing to read lengthy instructions. Consequently, the documentation needed to be precise and detailed to avoid ambiguities. This reliance on textual learning was believed to stem from China's demanding and competitive education system, where individuals are accustomed from an early age to learning from textbooks. Additionally, the Chinese cultural traits of long-term orientation and discipline were thought to enhance their ability to independently assimilate information through reading. Hofstede's (2010) research supports this notion, as China ranks highly in long-term orientation.

In the United States, verbal communication and "face time" were emphasized in the context of user training. According to several interviewees, training was most effective when instructors travelled to local sites to train Valmet's personnel in person. Moreover, significantly more time had to be allocated for U.S. training sessions compared to those in China. This additional time was necessary to allow sufficient discussion of the changes and to justify why certain changes were necessary. Interviewee 6 described the specific characteristics of the target countries regarding training as follows:

It's clear that the Chinese need much more detailed and documented instructions for everything we go through. It's a cultural practice, whether it's related to the organization, tasks, or anything else—it's the Chinese way to document and thereby ensure that everyone understands things the same way. On the other hand, implementation is much faster, and since they're quite quick at creating training materials and content, they've even contributed to our global content.

In contrast, North America operates differently. There, it's evident that groundwork, training, and reviews of roles, responsibilities, and concepts have been done just as

thoroughly. However, culturally, resistance to change is stronger. This means that changes take more time (in United States than in China).

Some interviewees noted that resistance to change in the United States sometimes complicated training efforts, as individuals may not be receptive to learning something they do not perceive as valuable or correct. Consequently, discussions and justifications often needed to take place before training could progress effectively. On the other hand, interviewees observed that potential ambiguities and inconsistencies were more readily identified in the United States than in China, as Chinese users were less likely to question instructions, even when they should have.

Another issue highlighted by the interviewees was the frequency of travel required by Leap Forward personnel, particularly from Finland to the United States for training or change management purposes. In some cases, this required team members to spend months each year in the U.S. to support local implementation efforts.

The interviews also revealed general differences in the quality of education systems between China and the United States. In China, the education system is consistently high in quality, with intense competition for places in higher education. In contrast, the quality of education in the United States varies significantly. According to many interviewees, this disparity in education quality somewhat affected the success of training sessions, although individual factors such as intelligence, work experience, motivation, and the time available for training were also critical.

Motivation to learn new things is likely related to attitudes toward change. In this regard, many interviewees felt that Chinese participants were generally more open to change than their U.S. counterparts. However, as noted by the interviewees, people are individuals, and it is important not to make excessive assumptions about trainees based solely on their nationality at the start of a training program.

Language also emerged as a key theme in the interviews regarding user training. In China, training materials should be available not only in English but also in Chinese. In the United States, trainers would benefit from using American English, including its specific accents and terminology, to avoid misunderstandings. This is crucial to ensure that trainees do not expend energy mentally translating the information they receive, allowing them to focus entirely on the content being taught.

6.7 Communication and Interaction

In the theoretical framework of this thesis, clear and continuous communication as a success factor was highlighted, particularly in the context of ensuring that the progress and objectives of an ERP project are consistently and effectively communicated to key stakeholders. Within Valmet's Leap Forward program,

detailed frameworks and governance models for implementation have been developed over the years. These are designed, among other purposes, to keep various stakeholders—such as Valmet’s business lines and regional management—well-informed about the progress and objectives (practically, the scope) of ERP projects. According to the interviews, these frameworks are well-established and actively utilized, ensuring that key stakeholders receive communication and reporting about project progress in line with their needs. Consequently, interviewees focused more on the practical aspects of communication and the differences between the target countries. These cultural nuances in communication are interesting in the context of this study and are discussed next.

Understanding the meaning of terms such as "yes," "no," or "I understand" in different contexts is critical especially in China. Interviewee 8 described this:

When people say yes, what do they mean? When they say no, what do they really mean? And when they say, 'I understand,' do they actually understand what they think they understood?

Of course, this also applies to the individual level because you cannot generalize too much. My point is that while the country’s cultural context should be considered, communication should ultimately be tailored to the individual level, adapting to how they are as a person and communicating accordingly.

In the United States, these terms were generally perceived to mean roughly the same as they would in, for example, Finland. In China, however, their meaning could vary significantly depending on the context and tone of expression. For instance, "yes" might indicate agreement, but not always. Similarly, saying "I understand" does not necessarily mean that the message was comprehended or agreed upon. According to the interviews, these patterns may originate from a cultural tendency in China to avoid openly admitting uncertainty or lack of understanding.

Some interviewees noted that when communicating changes in China, it is often necessary to ask follow-up questions to ensure the message was understood. Similarly, if an opinion is sought, it may be necessary to approach the topic from multiple angles to gain a true understanding of the person's perspective. Many interviewees observed that communication in China often became easier as projects progressed, likely because both sides developed a better understanding of each other and trust began to build, lowering the threshold for asking questions or challenging ideas.

In the United States, communication was described as very direct—sometimes surprisingly so for Finnish participants in the Leap Forward, especially during initial collaborations. Regarding China, it was also noted that during meetings, often only one or two individuals from the Chinese side would speak. Interviewees interpreted this as these individuals representing their entire team with their statements. Consequently, their input carried significant weight and needed to be handled sensitively, as representing one’s team in such a setting

is taken seriously. For example, overly direct criticism could be perceived as offensive.

In the United States, communication has tended to require a more commercial tone compared to Finland. In practice, the way a message is conveyed can sometimes be more important than its technical content as interviewee 2 implied:

In the USA, the communication style needs to be more commercial than in Finland, more like advertising than in Finland. The technical content may be less important; it's more about how the content is presented.

It's also crucial to convey messages through top management. For example, if a Leap person says something, it carries a different weight compared to the same message coming from a business line or Area leader. The emphasis is very different – people in the USA prefer to hear things directly from the business.

In Finland, the focus is on the content, whereas in the USA, it's really important who delivers the message. There needs to be enough visibility and communication from top management for something to become a priority for people.

It's essential to highlight that the ERP program aims to support the business.

In both China and the United States, leveraging top management to deliver messages has proven effective in enhancing the weight of communication. In practice, who delivers a message can significantly impact how it is received, even if the content remains the same.

However, the interviewees emphasized that there are significant individual differences in communication styles in both countries. Communication is most effective when individuals are understood on a personal level. From a project management perspective, when addressing a larger group about a change, there are notable differences in communication styles between China and the United States. According to the interviews, in China, it is important to explain what is being done, why it is necessary, and what benefits can be expected. In the United States, communication should be highly assertive yet considerate. The level of assertiveness required in the U.S. might even be perceived as aggressive for example in China. While confidence is also important in China, it should be expressed more moderately.

In the United States, however, it is also critical to take all stakeholders' views into account before communicating assertively. Interviewees noted that extensive discussions and repeated validation of decisions were often required in the U.S. This tendency to deliberate and revisit issues, similar to patterns observed in change management, was seen as a trademark of U.S. communication. From a Finnish perspective, many interviewees found the highly verbal nature of U.S. working methods to be time-consuming and, at times, negative to efficiency.

6.8 Cultural Adaptation

The interviews revealed that the case company had conducted separate cultural training sessions related to Chinese culture prior to ERP implementations in China. However, no similar training had been held for the United States. Some interviewees suggested that a general understanding of U.S. culture can be acquired through media, such as movies and television. Nonetheless, the primary method of adapting to local cultures was described as learning through experience, sometimes the hard way. This section, focusing on cultural adaptation, revisits themes previously mentioned in connection with communication, change management, and project management, as cultural adaptation intersects with these areas in many ways.

Regarding decision-making, the hierarchical nature of Chinese culture, as noted in other themes, is essential to consider. In China, asking employees at the same level to execute tasks is not sufficient; approval must come from local leadership, or progress is unlikely as interviewee nr. 3 described: "What was surprising about working with China years ago was how matters and decisions should be discussed there. When we discussed something with a local colleague and said that something needed to be done, we were puzzled when nothing happened. We learnt that you need to go to the management level and get the decision from there". Interestingly, in some cases, Chinese colleagues perceived Finnish Leap Forward personnel as leaders, even when they did not hold formal leadership positions. Consequently, opinions expressed by these individuals were sometimes interpreted as decisions, even in the absence of decision-making authority. This may be because local people were accustomed to strong opinions being expressed only by those with the power to make decisions.

Collectivism also plays a significant role in decision-making in China, where the group's opinion takes precedence over that of the individual. Interviewee nr. 1 gave an example: "Valmet's cultural training contrasted Finnish and Chinese cultures through art: Finnish paintings often depict nature or solitary individuals working in fields, while one of China's most famous paintings portrays a large group of people working together. This reflects a cultural norm in China, where people are accustomed to functioning as part of a collective". While teamwork is also emphasized in the United States, interviewees noted that individuals must still be recognized as individuals to ensure effective team collaboration. The contrast between individualism and collectivism was evident in ERP projects, where Chinese teams worked collaboratively and flexibly to handle large tasks, while in the United States, employees were more focused on performing the tasks specifically outlined in their job descriptions.

In the United States, hierarchy is somewhat flatter, yet leadership is still consulted for decisions, even on minor issues, which can slow down decision-making. By comparison, the hierarchy in Finland, according to interviewees, is very flat, allowing employees significant freedom to make independent decisions

without requiring leadership approval. Additionally, the words of senior management carry greater weight in the United States compared to Finland, where the substance of what is said is often considered more important than who says it.

One of the most critical preparations for ERP projects in the United States was achieving sufficient language proficiency and verbal skills. As previously mentioned, in the U.S., one must be ready to "sell" and justify their ideas effectively, which requires fluent English communication. Being prepared for very direct feedback was also emphasized. Interviewee 3 shared an anecdote from an U.S. ERP project some years ago:

The very first Teams calls with Americans were interesting because their articulation is quite strong and direct, and they are very argumentative. In the first calls, there was one person who, to my ear, sounded quite angry. However, when we met for the first time in person, that feeling was no longer there. When he spoke in that style, his facial expressions gave away that he wasn't angry but firm, expressing himself in his own way. That's just how he talks. It was a curious observation that I remember.

Other interviewees also stressed that Finns must adapt to the U.S. communication style, which often involves extensive discussion and negotiation and may differ significantly from what they are used to in Finland.

In China, language skills among locals have varied widely, particularly among lower-level employees. Therefore, it has been important to provide training in Chinese or allow locals to discuss topics in their native language. One interviewee noted that extra time might be needed in China to confirm that messages were correctly understood. Regarding financial management, it was highlighted that since one of Valmet's GFO offices is located in China and a significant portion of its staff is Chinese, ensuring sufficient language skills has been critical. Previously, Chinese financial management only supported Valmet's Chinese entities, but as the GFO in China now holds a global role, it must also manage financial and accounting tasks for Valmet's entities in Europe, for instance. This requires the staff to speak English proficiently and be ready to adapt their operations to the cultural practices of other countries.

6.9 Project Management and Scoping

This section presents findings from the interview responses related to project management and scoping. It is important to note that project management as a success factor is an extensive subject, and earlier themes in this thesis have already addressed several critical aspects of successful project management, such as resource allocation, change management, and business process reengineering. When considering the project manager's role in an ERP project – or any project – the interviewees emphasized that, ultimately, the project manager is responsible for everything related to the project they lead. This section does not attempt to

cover all material related to project management and scoping but highlights observations that were particularly emphasized as critical to these success factors.

In terms of scope management, clear differences emerged between the target countries. Generally, changes to the project scope were reported to proceed more smoothly in China than in the United States. In the U.S., scope changes were often avoided because modifying the scope of an ERP project can affect the timeline and disrupt the entire project. However, certain changes, such as those necessitated by acquisitions, had to be made in the U.S. to ensure that new business units for instance from acquisitions could transition to the new ERP system.

In the U.S. and North America more broadly, scope planning for ERP projects has been treated as a critical success factor, with significant time invested in planning to ensure successful implementation without disrupting business operations. Attention was given to how to initiate the project effectively, with the first implementation site selected strategically. The chosen site was important to the company but of a manageable size. Successfully implementing the ERP system at this site helped build credibility for the Leap Forward program in North America and facilitated the acceptance of subsequent implementations by local stakeholders.

Interviewee nr. 9 expressed that “In China, compliance with local laws and systems, for instance taxation, is an absolute necessity”. A Chinese interviewee also highlighted the need to focus change management efforts specifically on the leadership team. While change management directed at employees is beneficial, without leadership support, other change management efforts are wasted.

In both China and the U.S., the importance of change agents emerged as a key theme in response to questions about critical project management factors. Interviewee 1 emphasized that:

It's important to note that those who challenge a lot tend to take their work quite seriously and are important. If you can sell your idea to those who challenge, they can become valuable agents to carry the message forward. The Leap Forward global team works closely with individuals who play a critical role in the project's success and its future. These individuals should ideally be turned into so-called change agents.

The significance of change agents was highlighted in terms of ensuring that Leap Forward has a local representative at the implementation site – someone trusted by the locals who can physically represent the change. Major transformations cannot be achieved simply by issuing directives from Finland or conducting remote Teams meetings with personnel in China or the U.S.

The prominence of change agents is noteworthy, as their use has been identified as a critical success factor in ERP research, including in a case study by Motwani, Subramanian & Gopalakrishna (2005). For the global ERP implementations examined in this study – often conducted partially remotely – the use of change agents appears essential. The interview responses suggest that deploying change agents has been nearly indispensable for achieving business transformation. Similarly, Motwani et al. (2005) emphasize the importance of

change agents in bridging the gap between the parent organization and local business units during ERP implementations, particularly in introducing new business processes.

6.10 Lessons Learned

In the final part of the interviews, participants were asked about the most significant lessons they had learned from their experiences with ERP projects within the Leap Forward program. At Leap Forward, such reflections are often referred to as "lessons learned." Some of these lessons are specific to the target countries of this study, while others reflect more general experiences with ERP projects. The individuals interviewed for this research hold global roles within Leap Forward and have been involved in planning and executing ERP implementations in dozens of countries. For example, one interviewee mentioned participating in ERP projects in 22 countries, with on-site visits to approximately ten of those locations. Overall, the interviewees had extensive relevant experience in areas such as ERP projects, project management, and financial operations, making the insights presented here valuable to ERP implementation research in general.

For the target countries of this study, one interviewee noted that making changes has generally been slower in the United States than in China. However, challenges are communicated more openly in the U.S., whereas in China, they are sometimes concealed, which can delay their resolution. As discussed earlier, some interviewees felt that instructions in China were followed very precisely, while others reported challenges in compliance that required close monitoring. This discrepancy may stem from individual or regional differences, although such variations seem unlikely given the scale of these projects. Definitive conclusions cannot be drawn, and cultural nuances in China may differ so significantly from Finnish culture that the Finnish researcher behind this study may not fully grasp all aspects of the Chinese context.

One of the key lessons highlighted by interviewees was the importance of recognizing that "we only know what we know." Due to their inherently complex nature, ERP projects are always somewhat unique, influenced by factors such as the people involved, organizational and national cultures, and existing business processes and systems. Experience has shown that while lessons can be learned from previous ERP projects, the team is often at its most knowledgeable by the time the project concludes, as learning happens throughout the process. In this context, interviewees emphasized the importance of not only conveying messages but also listening to and understanding communication from people of different cultural backgrounds. One finance-focused interviewee noted that while legal and accounting issues can be simply learned by reading, communication must be continuously developed and adapted in ERP projects. For example, in the United States, storytelling was identified as an effective way

to communicate changes, with an emphasis on leadership as a critical element of management.

The role of communication was universally emphasized. A functional communication model is essential to ensure that all project stakeholders have a clear understanding of how the project is structured, managed, and progressing. One interviewee summarized the issue as follows: communication should be sufficient, timely, appropriately tailored, and directed at the right stakeholders. Additionally, communication should be documented and, when necessary, shared with others to ensure that all parties are aligned on decisions. Another interviewee, working in financial management, stressed that messages should be simple and repeated frequently. The need for repetition was attributed to the challenges of internalizing complex messages associated with ERP projects, such as changes to work roles and responsibilities. These are typically not fully understood after just one explanation.

6.11 Comparison of Findings to the Theoretical Framework

In the preceding analysis of research findings, references were made to the five dimensions of national cultures identified by Hofstede (2010) and their manifestation in the study's target countries, China and the United States. These were also examined in relation to the eight critical success factors studied. This section provides a concise overview of the findings, reflecting them against the theoretical framework, particularly Hofstede's cultural dimensions.

The influence of power distance emerged clearly in the analysis, aligning with Hofstede's findings that power distance is significantly greater in China than in the United States. According to the results of this study, managerial authority, especially that of top management, is far more significant in China than in the United States. Employees in lower hierarchical positions rarely challenge decisions made by leadership. In practice, as noted in the interviews, all decisions in China had to be approved by management and were followed without question. In the United States, decisions were actively scrutinized, and some decisions could be made without consulting leadership. However, even in the U.S., management approval was often sought even for small decisions. The most notable difference from China was that decisions were challenged and required justification before being implemented.

As expected from Hofstede's (2010) research, China and the United States were nearly opposites in terms of individualism. During the Leap Forward program's ERP projects, individualism in the United States was evident in employees focusing primarily on their own tasks, with individual considerations needing to be addressed in change management. Change initiatives were often approached from the perspective of individual benefits or drawbacks. In practice, one-to-one discussions and "selling" the change were found to be effective methods for driving change. In contrast, collectivism in China was evident in the flexibility of teamwork to achieve shared goals, with the group's opinion taking

precedence over that of the individual. Change management with Chinese teams was more effective when discussions about changes were held collectively, allowing them to reach a consensus and express views as a group. Asking questions or challenging decisions individually was less natural for them.

Significant differences in time orientation were also observed between the target countries, consistent with Hofstede's findings. Long-term orientation in China was evident in their preference for detailed documentation-based learning and systematic process planning. In the United States, short-term goals were more prominent, such as bonuses and the immediate impacts of ERP implementation influencing motivation. Short-term orientation appears to be one of the reasons why change management plays such a critical role in U.S. ERP projects; in the short term, ERP projects invariably cause disruptions and create learning requirements for employees, while the benefits typically materialize only after the new system, processes, and roles are adopted.

The results regarding uncertainty avoidance were less clear and not entirely consistent with Hofstede's (2010) findings. It is worth noting that the results might differ if the interviewees were exclusively native Chinese and Americans speaking from their own perspectives, as in Hofstede's research. This study primarily examined cultural differences from an external Finnish perspective, with the exception of two Chinese interviewees. In China, uncertainty was avoided by concealing challenges, which delayed their resolution. However, the preference for detailed, documented instructions in China reduced uncertainty in work processes. Based on this sample, it cannot be conclusively stated that uncertainty avoidance in China is as low as Hofstede's findings suggest. In the United States, challenges were communicated more openly, enabling quicker problem resolution. However, decision-making in the U.S. was sometimes difficult, requiring multiple discussions to resolve issues. This indicates a willingness to accept uncertainty to the extent that unclear matters are addressed openly, but the tendency to consider extensively even on minor decisions suggests an effort to avoid uncertainty in certain situations.

Differences were also evident regarding Hofstede's cultural dimension of masculinity. In the United States, competitiveness and a focus on achievement were reflected in clearly defined roles and the need for compelling, goal-oriented justifications for changes. The emphasis on selling the change and the importance of individual rewards further align with traits of a more masculine culture. In China, masculinity was less pronounced; the prominence of collectivism and prioritization of group goals over individual objectives reflected more feminine traits. However, respect for hierarchy and adherence to management directives suggest masculine characteristics. The findings for China differ somewhat from Hofstede's results, where China scored 66/100 for masculinity, ranking 11th among 76 countries.

All eight critical success factors studied—top management support, business process reengineering (BPR), change management, project management, user training, clear scope, communication, and cultural adaptation—exhibited culturally influenced differences in the context of Leap Forward ERP projects.

The interviewees' roles influenced which success factors they had the most experience with; however, factors such as top management support and change management were universally experienced by all interviewees in at least one target country.

Top management support has been identified as one of the most frequently cited critical success factors in ERP research, as noted by Umble et al. (2003). Successful ERP implementation requires strong leadership and top management commitment. Bingi et al. (1999) emphasized that top management must view ERP projects as business transformations rather than merely IT projects. The findings of this thesis align with these observations; the interviews revealed that top management support was considered a critical success factor for ERP projects, as the absence of such support rendered large-scale business transformations impossible. Cultural differences influenced how top management support was manifested: in China, management decisions were rarely questioned, while in the United States, implementation required more employee engagement and discussion. In China, the role of management decisions in ensuring smooth project progress was emphasized, whereas in the United States, support was strengthened by demonstrating tangible achievements and benefits.

Project management, both in this study and in the theoretical framework, encompasses a wide range of activities, including resource allocation, scheduling, and project oversight. In the United States, project management decisions often required extensive discussions and validations, which could slow decision-making but improve outcomes. In China, hierarchical structures facilitated project progress but demanded close monitoring of changes. Ram and Corkindale (2013) highlighted that the main objectives of project management are to transform resources into results and achieve the desired benefits of ERP projects. An interviewee leading ERP projects within Leap Forward identified their key responsibilities as aligning resources with desired outcomes, aligning closely with the objectives outlined by Ram and Corkindale (2013).

Clear project scoping and scope management were found to be critical for ensuring projects remained planned and manageable. Cultural differences were evident in how scope changes were handled; in China, changes were accepted more flexibly, while in the United States, they were avoided due to their significant implications. Both countries emphasized the importance of thorough planning before project initiation. Nah et al. (2009) emphasized that project scoping helps maintain manageability and regulate resource requirements. Based on this study, resource availability during ERP projects showed limited flexibility, likely to avoid unexpected disruptions to business operations.

Business process reengineering and harmonization were essential components of ERP projects. In China, the need to align processes with local laws and practices required close collaboration with local teams. In the United States, resistance to business process changes, particularly when they impacted roles or responsibilities, caused challenges for change management. The BPR goals aligned with Ram et al.'s (2013) recommendations to minimize customizations. In practice, this proved challenging, as the Leap Forward program team did not

always have a clear understanding of which local customization requests were truly necessary.

Change management was critical for gaining commitment at all organizational levels. In China, success depended heavily on securing top management's commitment, while in the United States, engaging the entire workforce was essential. Cultural differences also influenced resistance to change: in the United States, resistance was open and explicit, while in China, it was often passive and harder to detect. The findings align with the theoretical framework, as Ngai et al. (2008) noted the strong connection between change management and user training. Similarly, Umble et al. (2003) emphasized the importance of communicating business goals alongside new processes.

Cultural adaptation is inherently linked to other success factors, shaping how communication, change management, and decision-making are conducted. Collectivism in China emphasized teamwork and community, while individualism in the United States influenced employee roles and motivation. Understanding and accounting for cultural differences were essential in both countries. Ngai et al. (2008) highlighted the importance of cultural adaptation in Chinese ERP projects, which this study supports. ERP systems are often designed with a Western business perspective, and Leap Forward team was primarily of Western origin, making adaptation to Chinese culture critical.

User training was a key component of ERP project success. In China, the quality and detail of written materials were emphasized, as locals were adept at independent learning. In the United States, effective training required personal interaction and broader discussions about the benefits of changes. Language challenges were particularly significant in China, where providing training materials in the local language was often necessary. Umble et al. (2003) noted the importance of allocating sufficient time for user training and covering not only new system instructions but also the broader context and benefits of changes, a focus evident in the Leap Forward program.

Communication was particularly important for monitoring project progress and conveying objectives to stakeholders. In China, ensuring effective communication required additional follow-ups and confirmations, while in the United States, clear and persuasive communication was essential. Documentation and repetition were highlighted as necessary to ensure key messages were understood and internalized. The ERP projects in China and the United States adhered to Nah et al.'s (2009) guidelines that project objectives and progress should be effectively communicated to stakeholders.

The critical success factors often intersected with each other. For example, user training was influenced by the success of change management and the extent of business process changes. Top management support was so fundamental that ERP projects in the target countries could not have succeeded without it, regardless of success in other factors. Cultural adaptation impacted all the studied success factors, as cultural differences influenced how each was implemented in the target countries.

7 CONCLUSION

7.1 Conclusion of the Research Results

This master's thesis focused on examining the impact of cultural differences on the case company's ERP projects in the United States and China as part of a global ERP program. A qualitative case study approach was chosen as the research method, which was believed to be well-suited to the topic. Cultural differences and their influence on ERP projects are difficult to measure quantitatively, making qualitative methods, such as the content analysis employed in this study, more appropriate for analyzing the data. The research data was collected through semi-structured interviews, which allowed interviewees to share their opinions and experiences in a comprehensive manner while ensuring that pre-selected themes were thoroughly covered.

The case study was facilitated by the researcher's ability to conduct the thesis as an assignment for a Finnish multinational corporation, which made data collection via interviews seamless and ensured that the required amount of data was obtained. Additionally, the interviewees were highly experienced professionals, which positively impacted the quality of the data gathered during the interviews.

The study sought to answer the following research questions:

- 1) *What types of challenges related to cultural differences arise in the context of a multinational ERP project?*
- 2) *How can different cultures be considered, and related challenges be addressed from the perspectives of ERP project management and financial management?*

The previous chapter presented the research findings comprehensively, based on selected themes and linked to the theoretical framework. The following provides answers to the research questions. It is important to note that cultural differences are examined mainly from a Finnish perspective, as both the majority

of the interviewees and the researcher are Finnish. Attempting to analyze these differences from a culturally unfamiliar perspective would have been difficult as the researcher is also Finnish.

Communication challenges in the United States have originated from the highly direct and verbal communication style, which can be surprising to Finnish participants. For example, conducting change management in the U.S. requires allocating significant time for extensive discussions and justifications. Additionally, a high level of proficiency in English is essential to effectively engage with local personnel, who are often highly assertive in their arguments.

In China, communication styles and meanings differ significantly from Western practices. For instance, "yes" or "I understand" does not always carry the same meaning as in the West, potentially leading to misunderstandings. Ensuring that the message has been understood correctly often requires follow-up questions for clarification. Indirectness in communication can quite possibly be linked with the cultural dimension of uncertainty avoidance introduced by Hofstede et al. (2010). In other words, in China, high tolerance for uncertainty may manifest in communication styles where obscurity is not perceived as problematic, even if the communication leaves things unclear. According to Hofstede's (2010) research, in countries with lower tolerance for uncertainty, for example in Finland, obscurities are more likely to be addressed directly, thus effectively reducing uncertainties.

Regarding decision-making and hierarchy, the hierarchical nature of Chinese culture stood out, with managerial decisions playing a decisive role. Without the direct support of leadership, projects often struggle to progress. On the other hand, hierarchy can lead to informal adaptations if managerial decisions are deemed impractical by subordinates. Finnish participants may also find it surprising that all decisions must be referred to management in China. While tasks can often be delegated directly among personnel in Finland, in China, it is advisable to always seek managerial approval. In the U.S., the hierarchy is less pronounced than in China, but decisions are still frequently referred to leadership, even for minor issues, which can slow decision-making. Building consensus often requires extensive discussions, and the verbal nature of the process and occasional decision-making challenges may surprise Finnish participants.

Cultural attitudes toward change also vary. In China, changes are often received more positively, but their adherence requires close monitoring. Passive resistance, such as quietly continuing old practices, can be a challenge and may surprise Finnish participants accustomed to more visible forms of resistance. In the U.S., resistance to change is more common and direct. Selling and justifying changes is crucial, as without understanding and acceptance, users may be reluctant to adopt new systems and processes.

In the U.S., the individualistic culture is evident in employees' focus on tasks strictly within their job descriptions. Managing multiple ERP projects simultaneously has been challenging, as individual workloads are not flexibly distributed. On the other hand, for example in accounting roles, rigidity in job

roles may lead to a slower adaptation to changed job descriptions, with the adoption of new responsibilities taking more time. In China, the collectivist culture favors teamwork and efficient resource sharing, manifesting as flexible collaboration in ERP projects and, for example, in finance and accounting roles. Finnish or Western participants should note that allowing Chinese teams to work in groups, when possible, can be beneficial, as individuals may express uncertainties or question issues more comfortably as part of a group rather than individually.

In terms of language skills and training, English proficiency in China varies, which can complicate communication. Detailed documentation and the option to use native language are crucial. The high standard of local education may explain why lengthy, detailed documentation has been effective in training sessions.

In the U.S., strong language skills are crucially important, as concepts must be sold and justified clearly. Verbal training and discussions are central, requiring more time and resources than in China.

Regarding the second research question, particularly in project management, communication must be tailored to the target countries. In China, it is crucial to ensure message comprehension, supported by detailed documentation. Preparing for meetings by providing materials in advance is beneficial. In the U.S., the focus should be on persuasiveness and clear justification of changes. For example, storytelling has been effective in selling changes in the U.S. In both countries, decisions and communications should be documented to share with all stakeholders.

From a leadership perspective, change management in China should primarily target senior management, and building trust is essential. The influence of management should be leveraged to secure employee commitment. In the U.S., involving personnel across all organizational levels is critical, but the example set by leadership remains a key motivating factor. It is important to win over those most critical of the change, as they can become highly effective change agents. Utilizing change agents is particularly important in initiatives like Leap Forward, where implementations are partially conducted remotely.

Cultural competence should be enhanced through cultural training, particularly for countries with less frequent collaboration. Emphasizing learning through doing and continuous cultural learning during projects is also essential.

From a financial management perspective, striking a balance between global processes and local requirements is crucial. This involves standardizing processes globally as much as possible while accommodating essential requirements, such as those related to taxation and legislation.

Change management plays a critical role in financial transformations. It is vital to ensure that financial personnel understand process and transaction changes and their impact on the broader picture, such as reporting and accounting. In this study, the entire financial management structure was globally restructured as part of the ERP program. Explaining changes logically and repeatedly has been necessary to help personnel understand how the changes will affect their roles and responsibilities, as well as those of entire financial

departments. This has been particularly important in the U.S., where roles have traditionally been strictly defined, and strong support has been required to help personnel transition into new types of roles.

In the studied cultural dimensions, the consideration of individualism in the United States and collectivism in China proved to be highly critical for ERP projects. The acknowledgement of power distance was particularly important in China, whereas in the United States, power distance, according to Hofstede's (2010) research, is relatively close to the Finnish level, though slightly higher. For instance, the Finnish ability to tolerate uncertainty is an important observation in China, where it manifests in situations where disagreement or lack of understanding is not always openly expressed.

Other cultural dimensions, time orientation and masculinity, also proved important to consider in ERP projects, though perhaps not as critical as the aforementioned factors.

Among the success factors, top management support and communication proved to be critical in both target countries. If nuances are considered, top management support appeared to be perhaps even slightly more critical in China based on this study. However, the implementation of an ERP project would also be impossible in the United States without the support of top management.

From a cultural perspective, all the studied success factors proved to be highly important, even critical, with the possible exception of scope management. While scope management may generally be considered a critical success factor for the success of an ERP project, it was not as central from a cultural perspective as the other success factors studied.

The observations made in the empirical part of this study support many findings presented in the theoretical framework. For example, the studies by Ji & Min (2005) and Seng Woo (2007) emphasized the importance of considering local culture particularly in China, where cultural differences compared to Western countries are significant. The results of this study align with this perspective, as for example collectivism is strongly evident in ERP projects in China and must be taken into account. Most of the Western countries on the contrary are quite individualistic cultures and people are used to working and expressing their opinions even to superiors as individuals. For instance, during user training, it was highlighted that in China, it is crucial for people to have the opportunity to review the material among themselves. Additionally, the high power distance in China necessitates directing change management efforts towards top management, as without their support, all change management efforts are rendered ineffective.

In terms of accounting, the findings of this study regarding the financial transformation during Leap Forward align closely with observations made in studies for example by Goldston (2020), Grabski et al. (2011), and Dechow & Mouritsen (2005) on the impacts of ERP implementation on accounting. Both Goldston (2020) and this study found that ERP implementation improved data availability and global transparency. However, according to the interviewees in this study, improved transparency is not an automatic outcome of implementing

a new ERP system. Instead, it has required extensive process harmonization and standardization of the way to operate. As noted by Dechow and Mouritsen (2005), an ERP system alone does not inherently support the development of accounting. Instead, the advancement of accounting and financial management requires not only accounting and financial expertise but also knowledge of the new ERP system and infrastructure and technologies involved.

The target company had previously used numerous ERP systems in its different locations, and only with the introduction of a single globally deployed ERP system has financial management achieved better global transparency into the organization's operations worldwide.

Grabski et al. (2011) anticipated in their study that the development of ERP systems could lead to a shift in the role of accounting from traditional bookkeeping towards providing decision-supporting analysis. Chapter 6.5 of this study describes precisely this shift, where the local Business Finance functions of the target company have increasingly focused on producing decision-supportive analysis, while some of the transactional accounting tasks have been centralized under the Global Financial Operations function.

Järvenpää (2007) predicted that advanced information systems and tools are driving a shift in the role of management accounting, moving away from traditional bookkeeping toward a more strategic focus, including decision-support analysis and business consulting for company leadership. In line with these findings, the case company's Business Finance function has similarly evolved, increasingly focusing on producing decision-supporting analyses at a local level business.

Overall, this study provided interesting insights into the culture-specific characteristics of multinational ERP projects, particularly in the target countries of China and the United States. It is likely that, especially regarding the United States, the scope of this study was considerably broader than that of other similar studies. This is because the interviewees in the United States had participated in multiple ERP implementations, whereas most previous studies on the topic have typically focused on a single ERP implementation.

7.2 Limitations of the Study and Topics for Future Research

The impact of cultural differences and their consideration in a global ERP project is a topic that can be approached from various perspectives. Throughout this master's thesis research, several decisions had to be made regarding how to study the topic and how to keep its scope manageable for a master's thesis.

First, the study focused on two target countries, China and the United States, and the cultural observations made regarding these countries are not easily generalizable to others. While China's culture shares certain similarities with other Asian cultures, such as Japan, significant differences also exist. Similarly, while the United States shares some cultural aspects with countries like Canada and parts of Central Europe, notable differences are present as well.

Both China and the United States are geographically vast countries, and cultural observations cannot be universally applied to all regions within them. For example, there are likely considerable cultural differences between Alaska and Texas in the United States, just as people from major coastal cities in China are likely to have grown up in vastly different cultural conditions compared to those from rural areas. One interviewee suggested that the observations in the United States might also reflect the fact that a significant portion of the case company's business is located in the so-called Rust Belt, where long-standing industrial decline may have influenced the local mindset and attitudes.

It would be interesting to study the impact of cultural differences on ERP projects in entirely different countries, as well as the variations within large nations like China or the United States.

In this study, cultural differences were primarily examined from the perspective of how Finnish ERP program personnel perceived them. Since culture is deeply ingrained in individuals from childhood, it is impossible to fully see or think from another culture's perspective without fully immersing oneself in that culture first. It would be fascinating to conduct broader research from the perspective of individuals in, for example, an Asian country or another culture that differs significantly from Western cultures, exploring their experiences working with Western colleagues in an ERP project.

The impact of cultural differences on ERP projects could also be studied more narrowly, focusing, for instance, solely on financial management or a specific business line. In this study, interviewees reported notable differences in perceived cultural distinctions depending on whether they were involved in ERP implementations with local finance staff or production personnel.

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APPENDIX

Interview Structure

1. Introductions, Brief introduction of the research

2. Basic Questions

- How long have you worked at Valmet's Leap ERP program in USA/China?
- Could you briefly describe your current role? What are the most important responsibilities in your current role?
- Which of the target countries (China/USA) have you worked with in Leap Forward?

3. Exploration of each of the critical success factors

- Top Management Support
- Project Management + Clear Project Scope
- Business Process Reengineering (BPR)
- Change Management
- Cultural Adaptation
- User Training & Education
- Communication

4. Questions regarding the transformation of financial management during Leap

- Only interviewees working in finance & accounting related roles

5. Questions regarding the most important lessons learned during Leap Forward program

6. End of the interview