



UNIVERSIDADE CATÓLICA PORTUGUESA

Towards ERP Success: Effects of Culture on Decision Making

in the Fashion Industry

Maria Moreira Correia

Católica Porto Business School
2024



UNIVERSIDADE CATÓLICA PORTUGUESA

Towards Enterprise Resource Planning Success: Effects of Culture on Decision Making

in the Fashion Industry

Master's Final Assignment – Written Assignment
to *Universidade Católica Portuguesa*
to obtain a Master's Degree in Management

by

Maria Moreira Correia

Under supervision of
Prof. Gonçalo Baptista

Católica Porto Business School
April 2024

Acknowledgements

Throughout this journey, marked by hesitant steps and rewarding achievements, the support of many was essential to reach another goal. I thank everyone who accompanied and encouraged me.

To my advisor, Professor Gonçalo Baptista, I express my deepest gratitude for the exceptional guidance, the knowledge shared, and the trust placed in me.

To my parents, I dedicate the deepest gratitude for the unconditional love, unwavering support, and for believing in my dreams since the beginning.

To my sister, I thank you for being my haven and my biggest motivator to achieve all my goals.

To my boyfriend, I thank you for the daily love and encouragement. Your constant presence was the compass that guided me through the uncertainties, and your unconditional support was the force that drove me to overcome each obstacle.

To my cousins, Juliana, and André, I thank you for being an endless source of support and friendship. Thank you for helping me overcome obstacles with lightness and companionship.

I dedicate this academic degree to my grandparents, who, with their love and wisdom, always supported me.

I thank everyone who, directly or indirectly, contributed to me getting here. Without the support and encouragement of each one, this dream would not have come true.

With eternal gratitude,
Maria Correia

Abstract

Adopting ERP in the fashion domain is a complex process that involves integrating technology and organizational culture. Analyzing the influence of culture is critical to successful implementation and maximizing ERP benefits. The fashion industry, characterized by a strong dynamism and competitiveness, presents specific challenges that an ERP can mitigate.

This study aims to examine the influence of culture on organizational decision-making supported by Enterprise Resource Planning (ERP) systems within fashion companies. To achieve this, a novel theoretical model was developed, combining earlier frameworks proposed by Ruivo et al. (2014) and Côte-Real et al. (2019), and tested using SEM with data from European fashion professionals.

The research sheds light on a previously understudied area, emphasizing the impact of cultural dimensions like individualism/collectivism, masculinity/femininity and long-term/short-term orientation on ERP value. Our study emphasizes that fostering collaboration, leveraging data analytics, and considering cultural contexts are crucial for maximizing the value of ERP systems in fashion. These factors lead to improvements in both financial performance and strategic decision-making. It offers valuable insights for both fashion industry practitioners and researchers. For businesses, fostering collaboration, leveraging data analytics, and considering cultural contexts are crucial for successful ERP implementation. Researchers can build upon this study to explore the influence of technology adoption and organizational change on ERP systems within fashion, and the broader implications of cultural factors across various industries.

Keywords: ERP, Organizational culture, Decision-making, Fashion industry, Implementation, Success

Resumo

A adoção do ERP no domínio da moda é um processo complexo que envolve a integração de tecnologia e cultura organizacional. Analisar a influência da cultura é crucial para que a implementação seja bem-sucedida, maximizando os benefícios do ERP.

Foi desenvolvido um novo modelo teórico que combina dois estudos existentes, estudando assim a influência da cultura na tomada de decisão organizacional relativo ao ERP nas organizações. Para alcançar os resultados desejados, um modelo teórico inovador foi desenvolvido, combinando modelos teóricos propostos por Ruivo et al. (2014) e Côrte-Real et al. (2019), e testado através do SEM com as respostas de profissionais da moda Europeus. O estudo enfatiza que fomentar a colaboração, aproveitar a análise de dados e considerar contextos culturais são cruciais para maximizar o valor dos sistemas ERP na indústria da moda. Esses fatores levam a melhorias tanto no desempenho financeiro, como na tomada de decisão estratégica.

A pesquisa aborda também a Cultura, enfatizando o impacto de dimensões culturais como individualismo/coletivismo, masculinidade/feminilidade e orientação de longo prazo/ curto prazo no valor do ERP. Esse conhecimento leva a uma melhor compreensão nas empresas da indústria da moda, de modo a fomentar a colaboração, aproveitar a análise de dados e considerar contextos culturais para a implementação bem-sucedida do ERP. Pesquisadores podem também basear-se neste estudo para explorar a influência da adoção de tecnologia e mudança organizacional de sistemas ERP no setor da moda, e as implicações mais amplas dos fatores culturais em várias indústrias.

Palavras-Chave: ERP, cultura organizacional, tomada de decisão, indústria da moda, implementação e sucesso.

Contents

<i>Acknowledgements</i>	<i>iv</i>
<i>Abstract</i>	<i>vi</i>
<i>Resumo</i>	<i>vii</i>
<i>Table of figures</i>	<i>x</i>
<i>Table of Tables</i>	<i>xi</i>
1. Introduction	12
2. Theoretical background/Literature Review	15
2.1 ERP (Enterprise Resource Planning)	15
2.2 Culture and Effect on Decision Making	18
2.3. Fashion industry	20
3. Research model and hypotheses	23
4. Data collection research methodology	28
5. Data analysis and results	32
5.1 Measurement model	33
5.2 Structural model and hypotheses testing	36
6. Discussion	39
6.1 Supported findings:	40
7. Implications for research and practice	44
8. Limitations and future research	46
9. Conclusions	48
Bibliography	50
Appendices	60

Table of figures

Figure 1 - Theoretical research model.....	23
Figure 2 - Structural model results	36

Table of Tables

Table 1 - Descriptive statistics of respondent's characteristics	29
Table 2 - Quality criteria and factor loadings	34
Table 3 - Fornell-Larcker criterion.....	35

1. Introduction

In an era of increasing globalization and interconnectedness, the fashion industry is not immune to the winds of change. As fashion enthusiasts and industry insiders know, it is a sector characterized by rapid shifts in consumer preferences, trends, and market dynamics (Crane, 1997). For decades, fashion has been a melting pot of creativity, innovation, and style, reflecting not only the preferences of consumers but also the intricacies of culture. The global fashion industry is as diverse as the cultures it serves, ranging from the vibrant and trendsetting streets of Tokyo to the chic and timeless elegance of Paris. Culture, a multidimensional concept encompassing values, beliefs, norms, and behaviours (Hofstede, 1984), plays a pivotal role in shaping the fashion industry's dynamics (Crewe & Beaverstock, 1998; Davenport, 1998a). In this work, we delve into the heart of this ever-evolving world of fashion to explore how culture influences decision-making processes in the industry.

This study's main objective is to understand how the influence of culture affects decision-making supported by Enterprise Resource Planning (ERP) systems within the fashion industry. ERP is known to be a pillar within organizations (Olhager & Selldin, 2003). Enterprise Resource Planning (ERP) supports various critical business processes in companies, such as production, sales, finance, and logistics. The decision to explore culture's impact on decision-making within the fashion industry is rooted in a profound passion for fashion and a recognition of the industry's ever-evolving nature. The unique characteristics of the fashion industry, such as its rapid product life cycles and consumer-driven trends, make it an intriguing subject of study. Earlier studies on the fashion sector at firm level are scarce, sometimes providing ambiguous

results and requiring further investigation, a gap in literature that we want to overcome with this study. Euromonitor forecasts a 6.8% growth in fashion industry sales in 2024, to 1.79 trillion euros, and it is expected to reach 1.91 trillion euros in 2025 (LeRolland, 2024). If the forecast is confirmed, this will represent a growth rate of 14% between 2023 and 2025. This market research specialist company also anticipates that per capita consumption should reach 222.2 euros in 2024 (Economic Bulletin Issue, 2023), which will represent a growth of 5.8%, representing a total of 253.3 euros in 2025 (equivalent to an additional 5.9% compared to 2024) (LeRolland, 2024). The clothing and footwear industry produced an 8.2% increase in retail sales, to 1.68 trillion euros, resulting in pre-pandemic levels (LeRolland, 2024).

Moreover, in a world where cultural dynamics shape consumer preferences and market behaviours, understanding how culture influences decisions within the fashion industry is paramount (Hofstede, 1984). Culture is a lens through which we view the world, and it is this lens that often guides the fashion industry's choices and strategies. This study takes a significant step in shedding light on the complex interplay between culture and decision-making in fashion, with a specific focus on a European business perspective, not yet well explored in literature.

To achieve a comprehensive understanding of ERP success in fashion, we propose a novel model that leverages established frameworks. Our model integrates the strengths of Ruivo et al., (2014) and Côté-Real et al., (2019) to capture the interplay between collaboration, data analysis, and ERP value. Recognizing the growing importance of cultural considerations in a globalized business environment, we integrate Hofstede (1984) cultural dimensions to explore their impact on decision-making and ultimately, ERP success. This combined approach provides valuable insights for tailoring ERP implementation

to an organization's unique culture, maximizing its benefits in the dynamic and competitive world of fashion.

To ensure a strong foundation for this research and contribute to the ongoing development of knowledge in this field, a comprehensive literature review is presented in the following chapter. This review will draw upon a wide range of existing studies and theories relevant to the influence of culture on decision-making within the fashion industry, particularly in the context of ERP systems. Building upon this foundation, the subsequent chapters will delve deeper into the specifics of this research. Chapter 3 will introduce the core of the investigation by presenting the developed model and the hypotheses it aims to test. Chapter 4 will then detail the methodology employed for data collection, providing a step-by-step explanation of the research process. Chapter 5 will present the data analysis and the resulting findings from the study. Chapter 6 will then engage in a thorough discussion of these findings, unpacking their significance and implications for the fashion industry. Chapter 7 will explore the broader impact of this research on both theoretical frameworks and practical applications within the fashion industry. Finally, Chapter 8 will acknowledge the limitations inherent to the study and suggest potential avenues for future research endeavours to build upon this work.

2. Theoretical background/Literature Review

2.1 ERP (Enterprise Resource Planning)

Enterprise Resource Planning (ERP) systems have become a cornerstone of modern business operations, transforming the way organizations manage their diverse processes and functions. These comprehensive software solutions integrate various aspects of a company, from financial management and human resources to supply chain management and customer relationship management (Davenport, 1998b; Haddara & Moen, 2017; Li et al., 2017).

ERP systems debuted in the mid-1990s with the core objective of standardizing and unifying business procedures across all organizational sectors. This comprehensive approach ensures consistent execution of tasks and processes throughout the entire enterprise (Costa et al., 2016).

These systems offer a unified and centralized platform for data storage and management, eliminating data silos and redundant tasks, thereby fostering increased efficiency and productivity (Davenport, 1998b; Li et al., 2017). ERP systems are specifically designed to streamline and automate business operations across various departments, encompassing finance, human resources, procurement, and supply chain management (Haddara & Moen, 2017). They function as software solutions that seamlessly integrate diverse business processes and functions into a single, cohesive system, thereby enhancing overall efficiency and productivity (Chou et al., 2014). Notable examples of ERP systems include SAP ERP software and Oracle's E-Business Suite (Chou et al., 2014).

ERP systems offer a multitude of advantages, including cost reduction, quicker customer response times, and overall performance enhancement (Costa et al., 2020). They represent a pivotal managerial tool and technology that

necessitates a multidisciplinary focus spanning operations management, information systems, finance, marketing, organizational behavior, and human resources (Botta-Genoulaz et al., 2005).

According to Chen (2001), when effectively deployed, ERP connects every facet of a company, integrating order management, manufacturing, human resources, financial systems, and distribution with external suppliers and customers. This creates a tightly interconnected system characterized by shared data and visibility. Organizations benefit from ERP systems by gaining access to a unified and centralized platform that enables real-time access to critical data and facilitates seamless information flow between departments (Laudon et al., 2004). ERP's efficiency lies in eliminating data silos and redundant tasks, thereby enhancing overall productivity (Laudon et al., 2004).

However, research on the connection between ERP systems and organizational performance reveals mixed findings, with some studies reporting a positive and significant relationship while others have found a negative association (Al-Dhaafri et al., 2016). Selecting the appropriate ERP system for small and medium-sized enterprises (SMEs) is critical, and the selection process can be challenging (Kilic et al., 2015). ERP represents a demanding technology that can impose substantial challenges on organizations (Boersma & Kingma, 2005; Mayeh et al., 2016).

Enterprise Resource Planning (ERP) systems act as a central nervous system for businesses, streamlining and integrating critical functions across various departments. From finance (Umble et al., 2003) to human resources (Ulric J. Gelinas et al., 2017), supply chain (Ralph Stair & George Reynolds, 2020), and customer relationship management (Efraim Turban et al., 2018), ERP facilitates efficient operations, data-driven decision making (O' Brien & Marakas, 2006), and improved performance. Additionally, ERP systems are customizable to specific organizational needs, though successful implementation often requires

adjustments and restructuring (Hustad et al., 2016). While ERP technology offers significant benefits, its implementation can encounter hurdles in developing countries, encompassing economic, cultural, and fundamental infrastructure concerns (Huang & Palvia, 2001).

While ERP systems offer significant advantages, implementing them can be a complex undertaking. Several key challenges can hinder a smooth rollout. Cost is a major concern, encompassing software licensing, hardware upgrades, and ongoing maintenance fees (Markus & Kitayama, 1991). Training employees on the new system can be a significant time and resource investment (Holland & Light, 2001). Perhaps the most significant hurdle is changing management. ERP systems often necessitate significant changes in workflows and established business practices, which can lead to resistance and disruptions (Al-Jabri & Roztocki, 2015).

Fortunately, a well-defined strategy can mitigate these challenges and increase the likelihood of successful ERP implementation. Critical success factors include thorough planning that considers the organization's specific needs and goals (Etame & Atsa, 2018). User involvement throughout the selection and implementation process is crucial for ensuring system adoption and maximizing user satisfaction (Markus & Kitayama, 1991). Additionally, strong executive support from leadership plays a vital role in driving change management initiatives and ensuring resource allocation (Holland & Light, 2001).

Culture also plays a significant role in ERP implementation, particularly in a globalized business landscape. Cultural factors such as risk aversion, decision-making styles, and communication preferences can influence how readily organizations embrace new technologies (Markus & Kitayama, 1991). This can be particularly relevant when considering ERP implementation in developing countries. Research by Huang & Palvia (2001) highlights the additional challenges these countries face, including economic limitations, infrastructure

deficiencies, and cultural resistance to change. Understanding and addressing these cultural nuances is essential for successful ERP implementation across diverse organizational settings.

The future of ERP is bright, with emerging trends continuously shaping the landscape. Cloud-based solutions offer increased scalability, flexibility, and cost-efficiency (Chen, 2001). Artificial intelligence (AI) integration holds immense potential for streamlining processes, automating tasks, and generating data-driven insights (Zhao et al., 2022). As technology continues to evolve, ERP systems will become even more sophisticated and adaptable, further empowering organizations to optimize operations, enhance performance, and gain a competitive edge.

2.2 Culture and Effect on Decision Making

Culture is a complex and dynamic system encompassing shared beliefs, values, customs, behaviors, and artifacts that characterize a group or society (Triandis, 2001). It shapes individual and group behavior, influencing how people perceive the world, interpret information, and make decisions (Isaacson et al., 2018). Culture transcends national boundaries, existing at both national and individual levels (Triandis, 2001).

Several cultural dimensions influence decision-making styles. Hofstede (1984) identified power distance, which reflects the acceptance of unequal power distribution, and individualism versus collectivism, which highlights the prioritization of individual or group goals. In collectivist cultures, decisions often prioritize the collective good (Hofstede, 1984), while individualistic cultures may emphasize personal achievements (Triandis, 2001). Cultural backgrounds also influence attitudes towards risk. Societies with higher uncertainty avoidance tend to be more risk-averse (Morrison & Schwartz, 1992), while cultures with

lower uncertainty avoidance may exhibit greater risk-taking tendencies (Hofstede, 1984).

Cultural biases can influence decision-making through implicit stereotypes (Chang & Lin, 2015). Understanding these biases is crucial for objective decision-making. Triandis (2001) suggests that cultures differ in their decision-making styles, with some relying more on intuition and emotions, while others favor analytical approaches. ERP systems rely on data-driven decision-making (O'Brien & Marakas, 2006). However, cultural factors can influence how effectively this data is interpreted and utilized. For instance, communication styles and time orientation (Hall, 1959, 1976) can impact how readily users embrace and interact with the system.

Culture plays a significant role in shaping decision-making processes, impacting the success of information systems like ERP. By understanding cultural nuances, organizations can develop more effective strategies for system implementation and utilize data insights more effectively within a diverse workforce and customer base (EstradaCruz et al., 2019; Scherr et al., 2022; Zabihzadeh et al., 2022). Culture's influence extends beyond decision-making and directly impacts information system design (EstradaCruz et al., 2019). User interfaces, for instance, might require adaptation to accommodate different communication styles. As noted by Hall (1976), high-context cultures, where implicit communication prevails, might benefit from interfaces that offer more context clues and visual cues. Conversely, low-context cultures accustomed to direct communication might prefer simpler, more text-driven interfaces (Hall, 1976). Additionally, cultural norms regarding privacy can influence data storage practices. Cultures with a high emphasis on individual privacy might necessitate stricter data security measures within information systems, as highlighted in the work of EstradaCruz et al., (2019).

Real-world examples illustrate the significance of cultural considerations. For instance, a colour scheme employed in a financial trading platform might hold positive connotations in one culture but convey negative meanings in another, hindering user adoption (Scherr et al., 2022). Similarly, a time management system designed for a culture with a monochronic time orientation (Hall, 1959), emphasizing strict schedules, might prove frustrating in a polychronic culture with a more flexible approach to time (Zabihzadeh et al., 2022).

Looking ahead, cultural sensitivity in information system design is likely to gain even greater importance. Globalization and the increasingly interconnected world necessitate systems that cater to diverse user bases (EstradaCruz et al., 2019). Advancements in artificial intelligence might pave the way for systems that can dynamically adapt interfaces and functionalities based on user location and cultural background. However, challenges remain. Balancing cultural sensitivity with maintaining core system functionalities and ensuring cost-effectiveness will be crucial considerations for the future of information system design, as addressed by Carvalho Garcia (2023).

2.3. Fashion industry

Fashion is a dynamic and ever-evolving mode of expression that significantly influences society and culture (Hanges et al., 2006). It encompasses not only clothing and accessories but also artistic expression through innovative designs (Johnson & Paris, 2002). Iconic figures like Coco Chanel have left a lasting mark on the fashion world, revolutionizing women's attire and empowering them through their creations (Marcel Haedrich, 2008).

The contemporary fashion industry thrives in a complex environment shaped by technology and social media. Social media influencers have become powerful voices, influencing trends and consumer behaviour (Chopra et al., 2021). Fashion

forecasting, a multi-million-dollar industry, utilizes various tools to predict trends and guide production (Carvalho Garcia, 2023). However, some argue for a shift towards a more values-driven and sustainable approach to fashion forecasting (Carvalho Garcia, 2023).

The environmental and ethical implications of the fashion industry are receiving increasing attention. Research is ongoing to develop eco-friendly materials and minimize the industry's ecological footprint (Lee et al., 2012). The adoption of circular economy models, emphasizing recycling and waste reduction, is gaining traction as a path towards a more sustainable future (Dissanayake & Weerasinghe, 2022; Hultberg & Pal, 2021).

The fashion sector is highly competitive, with rapid product turnover and a constant need to adapt to changing consumer preferences (Silva et al., 2023). Designers play a crucial role in driving innovation, pushing boundaries, and creating art forms through fashion (Johnson & Paris, 2002). Clothing choices are intricately linked to social identity. Akdemir (2018) explores how garments and accessories are used to express cultural and social belonging, highlighting the connection between fashion and social strata, gender, and cultural nuances. The global fashion industry relies on a complex supply chain involving designers, manufacturers, retailers, and consumers (Demyanova et al., 2023). However, it is also one of the most polluting industries. Researchers are exploring ways to mitigate this impact by applying circular economy principles (Dissanayake & Weerasinghe, 2022; Johnson & Paris, 2002; Karaosman et al., 2020).

The emergence of fast fashion, offering trendy and inexpensive clothing with rapid production cycles, has significantly transformed the industry since the 1990s (Bhardwaj & Fairhurst, 2010). The fashion industry transcends geographical boundaries, yet regional variations play a significant role. Haute couture, meticulously crafted garments by hand in Parisian ateliers, stands in stark contrast to ready-to-wear fashion with wider production scales

(Demyanova et al., 2023). The rise of fashion in developing countries like India and China is another facet to consider, with these regions establishing themselves as important manufacturing hubs and emerging fashion destinations (Demyanova et al., 2023).

Economically, fashion is a powerhouse. It generates significant revenue and employment opportunities across the globe (Demyanova et al., 2023). Counterfeiting, however, poses a major threat, causing financial losses and undermining brand value. Additionally, trade policies and import/export regulations can influence production costs and international competitiveness within the fashion industry (Demyanova et al., 2023).

Technology is rapidly transforming the fashion landscape beyond the influence of social media. In the design realm, 3D printing allows for faster prototyping and exploration of intricate designs (Silva et al., 2023). Automation is increasingly integrated into manufacturing, aiming to improve efficiency and potentially address ethical labour concerns (Silva et al., 2023). The retail sector is witnessing a boom in online shopping platforms, offering greater convenience and global reach for consumers (Silva et al., 2023).

Looking ahead, the future of fashion promises exciting possibilities. Personalization and customization are gaining traction, with consumers seeking garments tailored to their unique preferences (Imran Amed et al., 2023). Technological advancements might introduce new materials with superior functionality and sustainability. Embracing these trends will be crucial for fashion businesses to navigate the ever-evolving landscape and cater to a more demanding and environmentally conscious consumer base (Dissanayake & Weerasinghe, 2022).

3. Research model and hypotheses

To gain a thorough understanding of the critical success factors for ERP implementation in the fashion industry, this research adopts a comprehensive and robust approach that leverages quantitative analysis methods. An innovative conceptual model, specifically designed for this research and not yet evaluated in existing literature, will be employed. This model integrates Ruivo et al., (2014) and Côte Real et al., (2019) models, alongside cultural variables drawn from the rich context of Hofstede (1984), as seen in **Figure 1**. This novel model offers a fresh perspective on the interplay between these various elements and their influence on ERP success in the fashion industry.

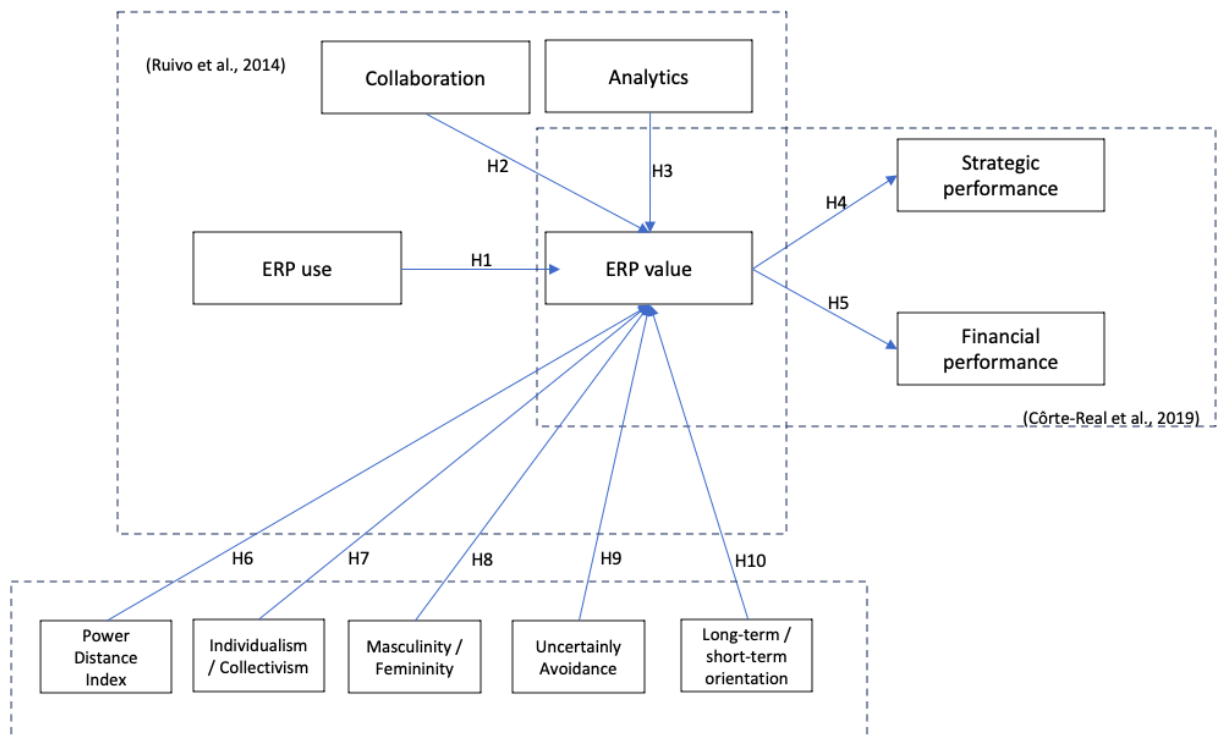


Figure 1 - Theoretical research model

This research proposes a novel conceptual model that explores the critical factors influencing Enterprise Resource Planning (ERP) success within the fashion industry. The core argument of this model centres on ERP Value acting as a mediator between the implementation of an ERP system and its ultimate

impact on a company's performance. This impact is further divided into two key areas: Strategic Performance and Financial Performance. The model delves deeper by proposing two additional mediating factors that influence the value derived from an ERP system. These factors are Collaboration and Analytics. The model posits that effective collaboration across departments and the strategic use of data analytics play a crucial role in maximizing the value gained from an ERP implementation, leading to improved strategic and financial performance within the fashion industry.

In addition to the aforementioned factors, the model incorporates cultural dimensions derived from Hofstede's framework to further investigate their influence on ERP Value. Hofstede's framework captures national cultures along five key dimensions: Power Distance Index (PDI), Individualism versus Collectivism (IDV), Masculinity versus Femininity (MAS), Uncertainty Avoidance Index (UAI), and Long-Term versus Short-Term Orientation (LTO). By integrating these cultural variables, the model acknowledges the potential impact of cultural contexts on how organizations approach collaboration, utilize data analytics, and derive value from their ERP systems. This comprehensive approach allows for a nuanced understanding of ERP success factors that transcends individual companies and considers the broader cultural environment within the fashion industry.

A substantial body of research supports the positive impact of Enterprise Resource Planning (ERP) systems in ERP Value. Studies by Fui-Hoon Nah et al. (2001) and Esteves & Pastor (2000) demonstrate that effective ERP implementation leads to improved organizational performance, efficiency, and decision-making capabilities. This translates to a significant increase in the overall value derived from ERP systems. Therefore, our first hypothesis posits:

H1: The impact of ERP Use on ERP Value will be positive.

Collaboration within organizations has been consistently linked to enhanced ERP value. Studies such as those conducted by Esteves & Pastor (2000) and Al-Mashari et al. (Al-Mashari et al., 2002) have highlighted the positive relationship between collaboration among employees and the effectiveness of ERP systems. Collaborative efforts foster knowledge sharing, streamlined processes, and better utilization of ERP functionalities, contributing to increased ERP value. Therefore, we hypothesize:

H2: The impact of Collaboration on ERP Value will be positive.

The incorporation of analytics into ERP systems has been shown to significantly enhance ERP value. Research by Ruivo et al.(2020) and Niu et al. (2017) has demonstrated that leveraging analytics within ERP platforms enables organizations to derive actionable insights from their data, leading to improved decision-making, forecasting accuracy, and operational efficiency, thus positively impacting ERP value. Therefore, we hypothesize:

H3: The impact of Analytics on ERP Value will be positive.

Various empirical studies provide evidence supporting the positive impact of ERP value on strategic performance. Research by Al-Mashari et al. (2002) and Gupta et al. (2006) has shown that organizations with higher ERP value tend to exhibit improved strategic alignment, agility, and competitiveness, resulting in enhanced strategic performance outcomes. Therefore, we hypothesize:

H4: The impact of ERP Value on Strategic Performance will be positive.

Empirical evidence suggests a positive relationship between ERP value and financial performance. Studies by Holland & Light (2001) and Esteves & Pastor (2001) have indicated that organizations with higher ERP value experience

improvements in financial metrics such as profitability, revenue growth, and cost reduction, underscoring the positive impact of ERP systems on financial performance. Therefore, we hypothesize:

H5: The impact of ERP Value on Financial Performance will be positive.

Skoumpopoulou & Moss (2018) and Hofstede (1984) suggests that in cultures where hierarchical structures are respected and authority is unquestioned, the adoption and utilization of ERP systems are more effective, leading to higher perceived value among individuals. Therefore, we hypothesize:

H6: Power Distance influence ERP Value in such a way that the relationship will be stronger amongst people with higher power distance cultural values.

Studies by Isaacson et al., (2018) and Hofstede (1984) indicate that in collectivist cultures where group cohesion and collaboration are valued, ERP systems tend to be more beneficial, enhancing their perceived value among individuals. Therefore, we hypothesize:

H7: Individualism / collectivism influence ERP Value in such a way that the relationship will be stronger among people with collectivism cultural values.

Research by Yates & de Oliveira (2016) and Hofstede (1984) suggests that in cultures emphasizing assertiveness, competitiveness, and achievement (masculine), the acceptance and utilization of ERP systems may face resistance, leading to lower perceived value among individuals. Therefore, we hypothesize:

H8: Masculinity / femininity influence ERP Value in such way that the relationship will be weaker amongst people with masculine cultural values.

Studies by Boersma & Kingma, (2005) and Hofstede (1984) indicate that in cultures where tolerance for ambiguity and risk-taking is low, individuals may

be less inclined to embrace ERP systems, resulting in lower perceived value. Therefore, we hypothesize:

H9: Uncertainty avoidance influence ERP Value in such way that relationship will be weaker among people with higher levels of uncertainty avoidance.

Research by Boersma & Kingma, (2005) and Hofstede (1984) suggests that in cultures where immediate results and short-term gains are prioritized over long-term investments and planning, the perceived value derived from ERP systems may be diminished. Therefore, we hypothesize:

H10: Long / short term influence ERP Value in such a way that the relationship will be weaker amongst people with long-term cultural values.

4. Data collection research methodology

A questionnaire in English, based in the theoretical model, was meticulously crafted by leveraging established research. Questions were meticulously crafted by leveraging established research from Ruivo et al. (2014) and Côte-Real et al. (2019), anchoring them in the theoretical frameworks presented earlier. This approach guarantees the questionnaire content validity, meaning it accurately measures the intended constructs. Additionally, the exploration of cultural influences was guided by Hofstede's (1984) well-regarded five cultural dimensions. Each item was measured using a seven-point Likert scale, ranging from “strongly disagree” (1) to “strongly agree” (7) (Appendix A).

To ensure the questionnaire's quality and reliability across languages, a meticulous translation process was undertaken. The initial English version was translated into Portuguese. Subsequently, a local academic reviewed and corrected the Portuguese version for accuracy and cultural nuances. Finally, the revised Portuguese version was back translated into English and validated by a different local academic to ensure consistency and validate the translation process. Since studies have traditionally been conducted using survey research (Venkatesh et al., 2003), an on-line survey with both version of the questionnaire, in English and in Portuguese, was built and hosted in a well-known service provider for collecting the necessary data. The data collection was conducted in a European country from December 2023 until January 2024, targeting adult population that: (i) work in fashion industry, (ii) use or intend to use an ERP system, (iii) have a user in a professional social media, and (iv) have one or more email addresses. Leveraging the power of social media, the survey link was strategically disseminated through targeted posts on LinkedIn, Instagram, and WhatsApp. Three posts per week were published across these platforms, specifically reaching out to professionals working within the fashion industry.

Additionally, to encourage wider participation, the survey link was shared within relevant professional networks. Furthermore, a targeted email campaign was conducted. Fashion industry professionals were identified through online directories and company websites. Personalized email invitations were sent, outlining the study's purpose, and providing clear instructions on how to access the survey. This multi-pronged approach ensured a wider audience reach and a more representative sample of the fashion industry professionals.

A pilot test with twenty respondents not included in the final data set was conducted to assess the questionnaire's reliability and validity. Based on the pilot test results, minor refinements were made to the questionnaire before full-scale deployment. At the end of this period, a total of 195 valid responses were obtained. The responses were acquired by a homogeneous target audience, with no significant disparity between genders, as seen in **Table 1**. 50.26% of the responses were answered by women and 49.74% by men. In terms of age, the age groups with the most responses were 18-24 and 25-29, with 19.49% and 18.46%, respectively. The age group with the fewest responses was 65-69, with only 1.03% of responses. In terms of academic profile, most respondents have a bachelor's degree (50.77%), followed by high school / 12th grade (27.69%). In terms of countries, 99.49% of the respondents are from Portugal.

Table 1 - Descriptive statistics of respondent's characteristics

Measure	Value	Frequency	%
Gender	Male	97	49,74%
	Female	98	50,26%
Age	18-24	38	19,49%
	25-29	36	18,46%
	30-34	29	14,87%

Measure	Value	Frequency	%
	35-39	22	11,28%
	40-44	25	12,82%
	45-49	10	5,13%
	50-54	21	10,77%
	55-59	7	3,59%
	60-64	5	2,56%
	65-69	2	1,03%
Education	High school / 12th grade	54	27,69%
	Bachelor's degree	99	50,77%
	Master's Degree	24	12,31%
	Doctorate	9	4,62%
	Professional Training	9	4,62%
Country	Portugal	194	99,49%
	Swiss	1	0,51%

Prior to analysis, it is crucial to address potential common method bias (CMB), which can arise when data is collected using an only source (i.e., the questionnaire) and potentially inflate the observed relationships between variables. This research employed a two-pronged approach to mitigate CMB concerns. Firstly, Harman's single factor test (Harman, 1976) was conducted. This test involves analysing the unrotated factor loadings from an exploratory factor analysis (EFA). If a single factor emerges explaining a majority of the variance (typically above 50%), it suggests potential CMB issues. In this study, Harman's single factor test revealed that no single factor explained a dominant portion of the variance, indicating a low likelihood of CMB (refer to Appendix B for detailed results). Secondly, the random dependent variable method (Lindell & Whitney,

2001) was implemented. This technique involves creating a random, unrelated variable and correlating it with the other study constructs. If the correlations between the random variable and the constructs are statistically non-significant, it suggests an insignificant risk of CMB. The random dependent variable method was applied in this study, and the correlations between the random variable and the constructs were found to be statistically insignificant, further supporting the absence of significant CMB (refer to Appendix B for detailed results). By employing these two established methods, this research has addressed potential common method bias concerns and ensured the validity of the subsequent statistical analyses.

5. Data analysis and results

This study utilizes structural equation modelling (SEM) to analyse the hypothesized relationships among the constructs. SEM is a powerful statistical technique that allows for the simultaneous examination of multiple relationships while accounting for the interdependencies between constructs. Within the SEM framework alternatives, this study utilizes partial least squares (PLS) for parameter estimation and hypothesis testing. PLS is a variance-based SEM approach that offers several advantages particularly relevant to this research. Firstly, PLS is known for its robustness with smaller sample sizes compared to covariance-based SEM methods. This characteristic makes PLS a strong choice for analysing the dataset collected in this study, as it mitigates concerns arising from potential limitations in sample size. Secondly, PLS offers flexibility regarding data normality assumptions. Unlike other SEM approaches, PLS does not require strict normality in the data. This is crucial because real-world data often deviates from perfect normality, and PLS provides a reliable approach even in such scenarios. Finally, PLS has demonstrated high predictive accuracy in various contexts. This characteristic aligns well with the research objective of assessing the model's predictive power in explaining the critical success factors for ERP implementation in the fashion industry. By employing PLS, this study benefits from both its robustness and its focus on prediction.

The data analysis will be conducted in a two-stage process to ensure the robustness and validity of the findings, according to best practice (Anderson et al., 1988). The first stage focuses on the measurement model, which establishes the quality of the questionnaire in capturing the intended constructs. This assessment involves evaluating the internal consistency (reliability) of the measures and their ability to represent the underlying constructs (validity). Techniques like Cronbach's alpha and factor analysis will be employed to assess these aspects. Once the measurement model is established, the analysis proceeds

to the second stage, examining the structural model. This stage focuses on testing the hypothesized relationships between the constructs outlined in the research framework. PLS path coefficients will be estimated to determine the strength and direction of the relationships between. Additionally, statistical significance testing will be conducted to assess the validity of the hypothesized relationships. By following this two-step approach, the study ensures a solid foundation for interpreting the model's explanatory power and its implications for successful ERP implementation in the fashion industry.

5.1 Measurement model

This section assesses the measurement model's reliability, consistency, and validity to ensure the quality of the data and the accuracy of the measurement instrument.

One key indicator of item reliability is the factor loading, which reflects the strength of the relationship between an item and its underlying construct. Hair et al. (Hair & Alamer, 2022) recommends a minimum threshold of 0.7 for factor loadings to ensure reliable items, as shown in Table 2. Based on this criterion, three items (PD4, MF1, and MF4) fell below the threshold and were removed at this stage. This decision ensures items accurately capture the intended constructs. Internal consistency refers to the extent to which the items measuring a particular construct are interrelated. Two commonly used measures of internal consistency are Composite Reliability (CR) and Cronbach's Alpha. Both CR and Cronbach's Alpha values for all constructs exceeded the recommended minimum of 0.7 (Hair & Alamer, 2022), confirming the model's internal consistency. This suggests strong relationships between the indicators and their respective constructs. Convergent validity assesses the degree to which items within a construct measure the same underlying concept. Average Variance Extracted (AVE) is a

key indicator of convergent validity. Fornell and Larcker (1981) and Henseler et al. (2009) suggest a minimum AVE threshold of 0.5. To ensure convergent validity, the FP3 item was removed at this stage, as its AVE value fell below the recommended threshold. These refinements collectively ensure a more robust and reliable measurement model for subsequent analysis.

Table 2 - Quality criteria and factor loadings

Construct	AVE	Composite reliability	Cronbach's Alpha	Item	Loadings	t-value
ERP Use (EU)	0.900	0.891	0.889	EU1	0.946	72.389
				EU2	0.951	97.576
Collaboration (CL)	0.817	0.891	0.888	CL1	0.898	32.369
				CL2	0.920	53.013
				CL3	0.893	41.944
ERP Value (EV)	0.851	0.942	0.942	EV1	0.929	57.552
				EV2	0.924	55.710
				EV3	0.911	44.551
				EV4	0.925	64.418
Financial Performance (FP)	0.931	0.926	0.926	FP1	0.965	125.948
				FP2	0.965	132.905
Power Distance (PD)	0.695	1.541	0.841	PD1	0.971	3.430
				PD2	0.800	3.289
				PD3	0.708	2.627
Individualism / Collectivism (IC)	0.699	0.879	0.858	IC1	0.800	5.078
				IC2	0.842	5.773
				IC3	0.841	5.062
				IC4	0.859	5.386
Masculinity / Femininity (MF)	0.860	1.587	0.866	MF2	0.983	4.986
				MF3	0.868	4.376
Uncertainty Avoidance (UA)	0.728	0.914	0.875	UA1	0.768	7.659
				UA2	0.894	12.278
				UA3	0.914	14.556
				UA4	0.826	9.703
Long / Short Term (LT)	0.603	0.809	0.794	LT1	0.811	10.803
				LT2	0.786	10.367
				LT3	0.723	11.372
				LT4	0.785	9.395

Discriminant validity, which ensures the distinctiveness of the constructs in the model, was evaluated using three key measures: cross loadings, the Fornell-Larcker criterion, and the heterotrait-monotrait ratio (HTMT). As detailed in Appendix 2, each indicator's loading on its intended construct is demonstrably higher than its cross-loading on any other construct (Hair & Alamer, 2022). Following the Fornell-Larcker (1981) criterion, the square root of AVE for each construct, as seen in the diagonal of the Table 3, is demonstrably greater than the correlations between that construct and any other construct, further supporting discriminant validity.

Table 3 - Fornell-Larcker criterion

	AN	CL	EU	EV	FP	IC	LT	MF	PD	SP	UA
AN	1.000										
CL	0.801	0.904									
EU	0.702	0.777	0.949								
EV	0.843	0.819	0.772	0.922							
FP	0.644	0.661	0.646	0.751	0.965						
IC	0.028	0.069	-0.014	0.135	0.126	0.836					
LT	0.215	0.210	0.221	0.329	0.323	0.373	0.777				
MF	0.015	-0.038	-0.077	-0.029	-0.017	0.328	0.152	0.927			
PD	0.052	0.038	0.015	0.073	0.062	0.224	0.141	0.622	0.834		
SP	0.542	0.611	0.604	0.702	0.824	0.193	0.407	-0.010	0.083	1.000	
UA	0.096	0.127	0.070	0.172	0.221	0.561	0.610	0.180	0.154	0.258	0.852

Discriminant validity, ensuring the constructs are truly distinct, was further assessed using the Heterotrait-Monotrait ratio (HTMT) criterion (Hair & Alamer, 2022). As detailed in Appendix 3, all HTMT values fall below the recommended threshold of 0.9. To achieve this, four items (SP1, SP2, AN2, and AN3) were strategically excluded from the analysis. By fulfilling both the Fornell-Larcker criterion and the HTMT criteria, this research establishes strong evidence of discriminant validity for the measurement scales. This confirms that the constructs are distinct and capture unique aspects, not simply overlapping

variance. With this assurance, we can now confidently proceed to the structural model analysis.

5.2 Structural model and hypotheses testing

Collinearity, which can occur when predictor variables are highly correlated and affect the model's stability, was assessed by examining the Variance Inflation Factor (VIF) for all items. As detailed in Appendix 4, all VIF values fell below the recommended threshold of 5 (Hair et al., 2017), indicating no significant multicollinearity concerns.

The examination of relationships between hypotheses and constructs relied on analysing standardized paths. Significance levels of these paths were determined through the bootstrap resampling method (Henseler et al., 2009) employing 5,000 iterations (Chin, 1998). A summary of the results can be found in Figure 2.

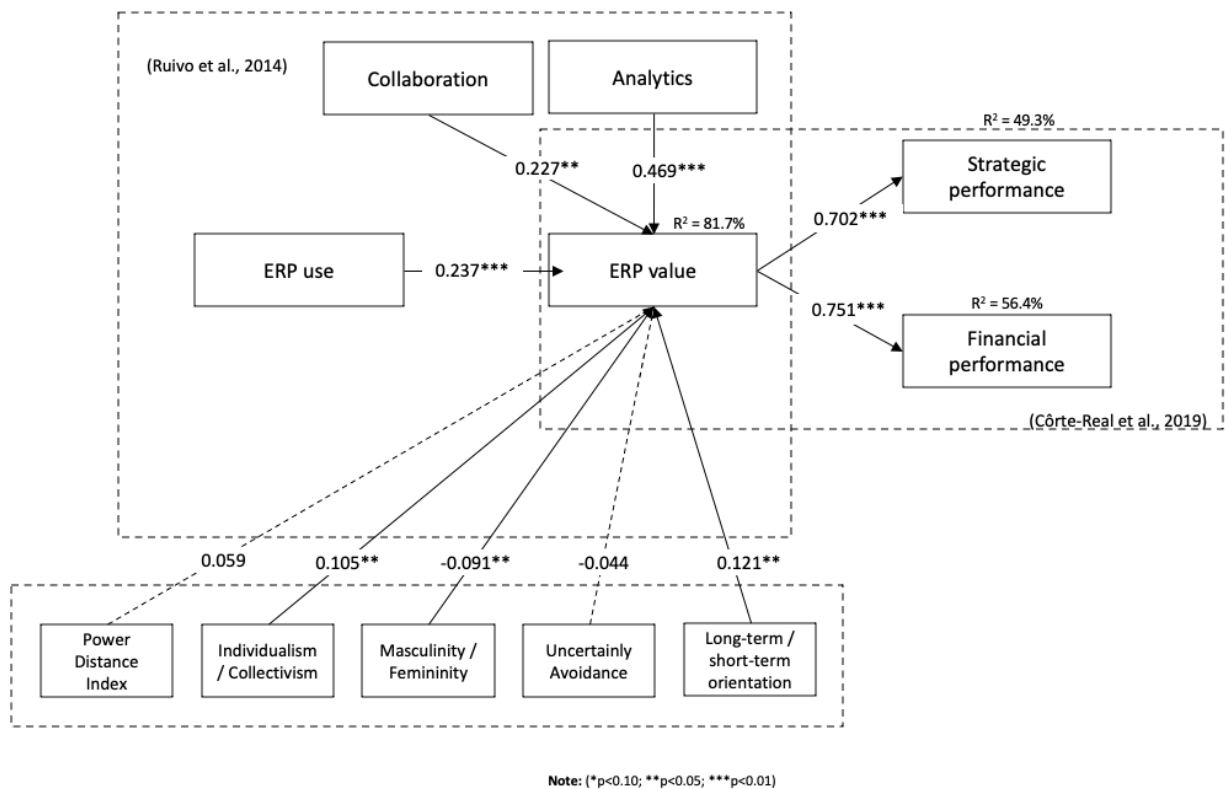


Figure 2 - Structural model results

The model explains 81.7% of the variance in ERP Value, 49.3% of the variance in Strategic Performance, and 56.4% of the variance in Financial Performance.

There is a strong positive relationship between Analytics and ERP Value, with a path coefficient of 0.469 ($p < 0.001$), as seen in Table 4. This finding supports Hypothesis 1, which postulated a positive relationship between these two constructs. In other words, for every one-unit increase in Analytics, there is an expected 0.469-unit increase in ERP Value. This suggests that organizations that leverage analytics effectively can experience significant improvements in their ERP value. ERP Value also has a strong positive impact on Strategic Performance, with a path coefficient of 0.702 ($p < 0.001$). This result supports Hypothesis 2, indicating that a one-unit increase in ERP Value is associated with an expected 0.702-unit increase in Strategic Performance. This finding highlights the potential of ERP systems to contribute to an organization's strategic goals. ERP Value has a positive and significant impact on Financial Performance, with a path coefficient of 0.751 ($p < 0.001$). This result supports Hypothesis 3, suggesting that a one-unit increase in ERP Value leads to an expected 0.751-unit increase in Financial Performance. This finding aligns with expectations that effective ERP implementation can enhance an organization's financial standing.

The analysis also examined the relationships between cultural dimensions and ERP Value. The results indicate that the cultural dimensions Individualism/Collectivism, with path coefficient of 0.227 ($p < 0.05$), Masculinity/Femininity, with path coefficient of 0.091 ($p < 0.05$), and Long-Term/Short-Term Orientation, with path coefficient of 0.121 ($p < 0.05$), have moderate relationships with ERP Value, as seen on Table 4. However, Power Distance and Uncertainty Avoidance do not have statistically significant relationships with ERP Value. These findings suggest that cultural aspects can influence the way organizations derive value from ERP systems, but the specific cultural dimensions at play may vary.

Table 4 – Hypotheses testing

Hypothesis	Relationship	Path Coefficient	p-value	Statistically Supported?
H1	ERP Use -> ERP Value	0.237	< 0.001	Yes
H2	Collaboration -> ERP Value	0.227	<0.05	Yes
H3	Analytics -> ERP Value	0.469	< 0.001	Yes
H4	ERP Value -> Strategic Performance	0.702	< 0.001	Yes
H5	ERP Value -> Financial Performance	0.751	< 0.001	Yes
H6	Power Distance Index -> ERP Value	0.059		No
H7	Individualism / Collectivism -> ERP Value	0.105	<0.05	Yes
H8	Masculinity / Femininity -> ERP Value	-0.091	<0.05	Yes
H9	Uncertainty Avoidance -> ERP Value	-0.044		No
H10	Long / Short Term Orientation -> ERP Value	0.121	<0.05	Yes

Out of a total of ten hypotheses (H1 - H10), 8 were statistically supported, what can be considered as a very interesting result. This means that the data provides evidence for a positive relationship between the hypothesized factors and ERP Value. Specifically, Analytics (H3), Collaboration (H2), ERP Use (H1), Individualism/Collectivism (H7), Long-Term/Short-Term Orientation (H10), and Masculinity/ Femininity (H8) all have statistically significant relationships with ERP Value. However, Power Distance Index (H6) and Uncertainty Avoidance (H9) do not show statistically significant relationships with ERP Value.

6. Discussion

This research builds on existing knowledge by integrating two established models and examining the influence of cultural dimensions on Enterprise Resource Planning (ERP) value. We integrated the model by Corte-Real et al. (2019), which examines the influence of collaboration and analytics on strategic performance, with the model by Ruivo et al. (2014), which explores the relationship between ERP use, ERP value, strategic performance, and financial performance. This combined approach allows for a more comprehensive understanding of these factors influencing financial performance. This multifaceted perspective provides a more comprehensive understanding of these factors alongside with the effects of cultural dimensions, as reflected by Hofstede (1984).

This model explains a significant portion of the variance in key areas, with 81.7% for ERP Value, 49.3% for Strategic Performance, and 56.4% for Financial Performance. These strong results align with previous research that highlights the positive impact of ERP systems on organizational outcomes (Ruivo et al., 2014).

This study reveals a statistically significant positive relationship between ERP value and both strategic and financial performance (H4, H5). Higher perceived value from ERP systems translates to better overall performance for organizations. This research introduces a novel perspective by examining the influence of cultural dimensions on ERP value (H6-H10). While previous studies haven't extensively explored this area, our findings suggest that cultural aspects play a significant role in the ERP value perception. We identified moderate relationships between Masculinity/Femininity, Individualism/Collectivism, and Long-Term/Short-Term Orientation and ERP value (H7, H8, H10).

6.1 Supported findings:

Prior research suggests that companies prioritizing collaboration and data analysis practices experience a greater perceived value from their ERP systems (Côte-Real et al., 2019). This aligns with the idea that knowledge sharing, and data-driven decision-making are crucial for optimizing complex systems like ERP (Popovič et al., 2012). Collaboration fosters knowledge sharing and a collective understanding of business processes, which is essential for navigating the intricacies of ERP systems.

The findings support the established notion that collaboration and data analytics work together to enhance the perceived value of ERP systems (Côte-Real et al., 2019). When employees from different departments collaborate (Alavi & Leidner, 2001), they can leverage each other's expertise. This collaborative approach leads to a more efficient and effective use of ERP functionalities. For example, collaboration can identify areas for system customization to fit specific workflows or business needs (Sadrzadehrafiei et al., 2013). Data analytics can then be used to evaluate the effectiveness of these customizations and identify further areas for improvement. This iterative process fosters a sense of ownership and transparency among users, motivating them to maximize the system's potential (Hasan, 2018). The strong positive relationship (path coefficient = 0.469) between Analytics and ERP Value in our study confirms this synergy. Our data suggests that for every unit increase in Analytics scores, there's a nearly half-unit increase in perceived ERP Value. This result is aligned with research by Côte-Real et al. (2019) and others (Alavi & Leidner, 2001; Popovič et al., 2012; Thirathon et al., 2017) who emphasize the importance of knowledge sharing and data-driven decision-making. By fostering collaboration and leveraging data analytics, organizations can optimize their ERP system and unlock its full potential.

Our findings also support the concept of a virtuous cycle where enhanced ERP value leads to improved organizational performance (Ruivo et al., 2014). This positive feedback loop strengthens as companies extract greater value from their ERP systems. Effective ERP utilization streamlines and automates business processes like inventory management, order processing, and financial reporting. This translates to real-world benefits, as evidenced by a strong positive relationship between ERP Value and both Strategic Performance (path coefficient = 0.702) and Financial Performance (path coefficient = 0.751) in our study. These findings align with research by Davenport (1998) and Markus & Kitayama (1991) who highlight the efficiency gains associated with ERP systems. Reduced lead times, lower operational costs, and improved resource allocation contribute significantly to improved performance.

ERP platforms provide a holistic view of organizational data, empowering informed strategic decision-making. By leveraging advanced analytics functionalities, companies gain valuable insights into market trends, customer behaviour, and competitor activity. This data-driven approach equips leaders to make strategic decisions that maximize market opportunities and optimize resource allocation for long-term goals (Markus & Kitayama, 1991). Modern ERP systems often include collaborative tools and communication features. As companies derive more value from these functionalities and integrate them into workflows, collaboration and communication across departments improve (Markus & Kitayama, 1991). This enhanced collaboration leads to better problem-solving, faster response times, and improved overall organizational agility (Esteves-Sousa & Pastor-Collado, 2000). The efficiency and data-driven insights gained from maximizing ERP value empower companies to be more innovative. Streamlined operations and access to rich data allow organizations to identify new market opportunities, develop innovative products and services, and gain a competitive edge in the marketplace. This aligns with prior research highlighting

the potential of ERP systems to improve overall organizational effectiveness (Davenport, 1998b; Markus & Kitayama, 1991).

Our research highlights the influence of cultural dimensions on ERP value, and Portugal presents an interesting case study. Our findings suggest a moderate statistical relationship between Masculinity/Femininity, Individualism/Collectivism, and Long-Term/Short-Term Orientation and ERP value, was explored how these dimensions might play out in the Portuguese context based on the provided data (6-D Model©) (Almutairi et al., 2021; Hofstede, 1984, 1991; Minkov & Kaasa, 2022). Portugal scores moderately high on Individualism (59), suggesting a balance between individual and group goals. This could influence ERP adoption in a few ways. Teams might be more open to collaborative approaches to ERP use, as highlighted in our research. Portugal's score of 42 on Long-Term Orientation suggests a focus on the present and short-term goals. This might influence companies' prioritization of ERP functionalities that deliver immediate benefits like improved efficiency and cost reduction. However, neglecting long-term strategic considerations could hinder the full potential of ERP systems in supporting future growth and innovation. Portugal's score of 31 on Masculinity/Femininity, according to Hofstede (1984), suggests a more feminine society that values both assertiveness and cooperation. This could influence ERP adoption in a way that employees might be more open to working collaboratively towards team objectives, through discussion, consensus, and compromise.

By understanding the cultural context, organizations can tailor their ERP implementation strategies to maximize user adoption, address potential challenges, and ultimately achieve a greater return on their investment.

While our study didn't find a statistically significant relationship with Uncertainty Avoidance, Portugal's high score (99) suggests a preference for stability and risk aversion. This could manifest in a cautious approach to

adopting new technologies like ERP systems. Training and clear communication regarding the potential benefits of ERP can help overcome these anxieties. In the same manner, our results were not able to support the Power Distance relationship with ERP Value. Portugal's score of 63 on Power Distance indicates a culture that accepts hierarchical structures and respects authority figures. Even if in Portugal, employees might be more receptive to top-down implementation of ERP systems, our study was not able to confirm this relationship.

7. Implications for research and practice

Our research offers valuable insights for researchers and practitioners. For researchers, it provides a basis for further refinement of firm models on technology value and use, as a starting point for future research on ERP value, ERP use, and firm performance. It makes a significant contribution by acknowledging the nuanced influence of cultural dimensions (Power Distance, Individualism/Collectivism, and Long-Term/Short-Term Orientation) on the perceived value of ERP systems. This groundbreaking finding paves the way for future studies to develop a more comprehensive theoretical framework that integrates cultural factors alongside collaboration, data adoption, and ERP value. Understanding how cultural contexts influence data adoption practices within ERP systems is a critical area for further research, especially in a globalized industry like fashion.

Cultural background significantly impacts how users perceive and interact with ERP systems. For instance, power distance influences user acceptance in hierarchical structures, while individualism/collectivism affects collaboration styles and data sharing within the system. Additionally, long-term versus short-term orientation can influence which functionalities are prioritized, with some cultures favouring immediate gains and others focusing on future-oriented strategies. Understanding these cultural nuances is critical for successful ERP implementation across diverse user groups. For practitioners, understanding these nuances is crucial for successful ERP implementation in multicultural environments, especially within the fashion industry. The influence of culture on ERP systems extends across all industries. However, the fast-paced, globalized fashion industry has unique characteristics that necessitate specific considerations when designing and implementing ERP systems. The fashion industry boasts a diverse workforce with varied cultural backgrounds, values,

and work styles. Ignoring these differences can lead to misunderstandings, communication problems, and resistance to change. Collaboration between different departments, teams, and suppliers is essential in the fashion industry. ERP systems should facilitate seamless communication and knowledge sharing across these diverse groups.

This research offers practical benefits for both ERP developers and fashion businesses, by understanding the importance of cultural contexts, developers can create systems more aligned with workers requirements and perceptions. This may involve offering configurable interfaces, fostering multicultural collaboration tools, and providing localized training materials. Fostering a collaborative work environment with cross-functional teams and knowledge-sharing platforms is crucial. Additionally, prioritizing data-driven decision-making by investing in employee data analysis training and integrating these functionalities seamlessly into workflows empowers users and unlocks the full potential of the ERP system.

For successful ERP implementation in multicultural environments like the fashion industry, it's vital to be mindful of cultural influences on both collaboration and data adoption. Tailoring training programs and communication strategies to each cultural context can bridge potential gaps and maximize user buy-in. Developing and tracking relevant metrics specific to the fashion industry can help organizations assess the value derived from their ERP systems, allowing them to measure progress and identify areas for improvement. By focusing on collaboration, data analytics, cultural awareness, and ongoing measurement, fashion businesses can unlock the full potential of their ERP investment. These practices can lead to improved performance, a competitive advantage, and ultimately, contribute to a more successful and data-driven fashion industry.

8. Limitations and future research

Understanding the limitations of a study is crucial for interpreting its findings accurately within the context of the fashion industry. The study relies on user perceptions of ERP value gathered through surveys or interviews. These methods can be subjective and prone to bias. Respondents may base their answers on personal experience with a specific ERP implementation, potentially overestimating the system's effectiveness due to factors like satisfaction with the implementation process or a lack of awareness of alternatives. Conversely, challenges with user resistance to change could lead to underestimating the true value of the ERP system. The research might have drawn data from a limited number of fashion organizations, limiting the generalizability of the findings. ERP implementations can vary significantly based on company size, regulations within the fashion industry, and existing infrastructure. The collaboration and data analytics practices that lead to higher ERP value in one fashion company might not be as effective in another with a different set of circumstances, requesting further studies on the matter.

Conducting research that tracks fashion companies over time can provide valuable insights into the lasting impact of collaboration and data analytics on ERP value and overall performance. Analysing changes in user behaviour, system utilization, and key performance indicators over an extended period can establish a more robust cause-and-effect relationship between these practices and ERP effectiveness in the fashion industry. While the research confirms the positive impact of collaboration and data analytics on initial ERP value, a key question remains: are these benefits sustainable in the long term? Do they diminish as companies become accustomed to the system? Future research could

investigate the long-term sustainability of these benefits within the fashion sector with longitudinal studies.

Future research should explore the unique cultural aspects of the fashion industry in more detail. Comparative studies across diverse fashion cultures could shed light on how these factors influence collaboration practices and data analytics adoption within ERP systems. The study emphasizes the importance of collaboration and data analytics in general. Future research could examine the impact of specific functionalities within ERP systems, tailored to the fashion industry (e.g., advanced trend forecasting tools, supply chain management features) on collaboration and data-driven decision making. Additionally, the introduction of new functionalities or ERP upgrades over time can alter the user experience and value proposition, providing an additional research path to follow in the future. By addressing these limitations and pursuing further research avenues, we can gain a deeper understanding of how collaboration, data analytics, and cultural considerations influence ERP value within the specific context of the fashion industry.

9. Conclusions

This research investigated the critical factors influencing the success of Enterprise Resource Planning (ERP) systems in the fashion industry, a dynamic and global sector characterized by a constant increase of sales volume. Built upon existing ERP and cultural studies, this research employed a novel model not previously tested in the literature. The findings reveal both convergences and divergences with prior research, highlighting the unique characteristics of the fashion industry. Our study demonstrates a direct and positive relationship between collaboration and data analytics with ERP value. Companies that emphasize these practices experience greater benefits from their ERP investments. ERP value, in turn, has a strong positive impact on both strategic performance (alignment with goals) and financial performance (profitability, revenue growth). Organizations that perceive higher value from their ERP systems are more likely to achieve better overall results.

Cultural dimensions play a nuanced role in influencing ERP value. Power distance, individualism/collectivism, and long-term/short-term orientation demonstrated a direct influence over ERP value, supporting the importance of the cultural variables' inclusion in our model. Fashion companies can significantly improve their ERP system usage by prioritizing collaboration and data analysis. This research also highlights the importance of considering cultural dimensions during ERP implementation. While some cultural aspects may influence the perceived value of ERP, the specific effects depend on the unique cultural context within the fashion industry. Overall, this work provides valuable guidance for fashion companies seeking to optimize their ERP systems and achieve better performance. By fostering a collaborative environment, leveraging data analytics, and maintaining a nuanced understanding of cultural

influences, fashion businesses can unlock the full potential of their ERP investments and drive success.

Bibliography

- Alavi, M., & Leidner, D. (2001). Knowledge management and knowledge management systems: Conceptual foundations and research issues. *MIS Quarterly*, 107–136.
- Al-Dhaafri, H. S., Al-Swidi, A. K., & Yusoff, R. Z. Bin. (2016). The mediating role of TQM and organizational excellence, and the moderating effect of entrepreneurial organizational culture on the relationship between ERP and organizational performance. In *TQM Journal* (Vol. 28, Issue 6, pp. 991–1011). Emerald Group Publishing Ltd. <https://doi.org/10.1108/TQM-04-2014-0040>
- Al-Jabri, I. M., & Roztocki, N. (2015). Adoption of ERP systems: Does information transparency matter? *Telematics and Informatics*, 32(2), 300–310. <https://doi.org/10.1016/j.tele.2014.09.005>
- Al-Mashari, M., Al-Mudimigh, A., & Zairi, M. (2002). Enterprise resource planning: A taxonomy of critical factors. *European Journal of Operational Research*, 146–364.
- Almutairi, S., Heller, M., & Yen, D. (2021). Reclaiming the heterogeneity of the Arab states. *Cross Cultural and Strategic Management*, 28(1), 158–176. <https://doi.org/10.1108/CCSM-09-2019-0170>
- Anderson, J. C., Kellogg, J. L., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. In *Psychological Bulletin* (Vol. 103, Issue 3).
- Bhardwaj, V., & Fairhurst, A. (2010). Fast fashion: Response to changes in the fashion industry. *International Review of Retail, Distribution and Consumer Research*, 20(1), 165–173. <https://doi.org/10.1080/09593960903498300>
- Boersma, K., & Kingma, S. (2005). Developing a cultural perspective on ERP. In *Business Process Management Journal* (Vol. 11, Issue 2, pp. 123–136). <https://doi.org/10.1108/14637150510591138>

- Botta-Genoulaz, V., Millet, P. A., & Grabot, B. (2005). A survey on the recent research literature on ERP systems. In *Computers in Industry* (Vol. 56, Issue 6, pp. 510–522). <https://doi.org/10.1016/j.compind.2005.02.004>
- Calisir, F., & Calisir, F. (2004). The relation of interface usability characteristics, perceived usefulness, and perceived ease of use to end-user satisfaction with enterprise resource planning (ERP) systems. *Computers in Human Behavior*, 20(4), 505–515. <https://doi.org/10.1016/j.chb.2003.10.004>
- Carvalho Garcia, C. (2023). Fashion futuring: Intertwining speculative design, foresight and material culture towards sustainable futures. *Futures*, 153, 103242. <https://doi.org/10.1016/j.futures.2023.103242>
- Chang, C. H., & Lin, S. J. (2015). The effects of national culture and behavioral pitfalls on investors' decision-making: Herding behavior in international stock markets. *International Review of Economics and Finance*, 37, 380–392. <https://doi.org/10.1016/j.iref.2014.12.010>
- Chen, I. J. (2001). Planning for ERP systems: Analysis and future trend. In *Business Process Management Journal* (Vol. 7, Issue 5). # MCB University Press.
- Chin, W. W. (1998). *The partial least squares approach to structural equation modeling*. <http://www.researchgate.net/publication/232569511>
- Chopra, A., Avhad, V., & Jaju, and S. (2021). Influencer marketing: An exploratory study to identify antecedents of consumer behavior of millennial. *Business Perspectives and Research*, 9(1), 77–91. <https://doi.org/10.1177/2278533720923486>
- Chou, H. W., Chang, H. H., Lin, Y. H., & Chou, S. Bin. (2014). Drivers and effects of post-implementation learning on ERP usage. *Computers in Human Behavior*, 35, 267–277. <https://doi.org/10.1016/j.chb.2014.03.012>
- Côrte-Real, N., Ruivo, P., Oliveira, T., & Popovič, A. (2019). Unlocking the drivers of big data analytics value in firms. *Journal of Business Research*, 97, 160–173. <https://doi.org/10.1016/j.jbusres.2018.12.072>

- Costa, C. J., Aparicio, M., & Raposo, J. (2020). Determinants of the management learning performance in ERP context. *Heliyon*, 6(4). <https://doi.org/10.1016/j.heliyon.2020.e03689>
- Costa, C. J., Ferreira, E., Bento, F., & Aparicio, M. (2016). Enterprise resource planning adoption and satisfaction determinants. *Computers in Human Behavior*, 63, 659–671. <https://doi.org/10.1016/j.chb.2016.05.090>
- Crane, D. (1997). Globalization, organizational size, and innovation in the French luxury fashion industry" Production of culture theory revisited. In *Poetics* (Vol. 24).
- Crewe, L., & Beaverstock, J. (1998). Fashioning the city: Cultures of consumption in contemporary urban spaces. In *Pergamon Geoforum* (Vol. 29, Issue 3).
- Davenport. (1998a). *Enterprise systems*.
- Davenport, T. H. (1998b). *Putting the enterprise into the enterprise system*.
- Demyanova, D., Colucci, M., Silva, E. S., & Vecchi, A. (2023). Assessing consumers' propensity towards product-service systems in the fashion industry: A cross-national comparison between Russia and Italy. *Journal of Cleaner Production*, 428, 139302. <https://doi.org/10.1016/j.jclepro.2023.139302>
- Dissanayake, D. G. K., & Weerasinghe, D. (2022). Towards circular economy in fashion: Review of strategies, barriers and enablers. *Circular Economy and Sustainability*, 2(1), 25–45. <https://doi.org/10.1007/s43615-021-00090-5>
- Economic bulletin issue*. (2023).
- Efraim Turban, Carol Pollard, & Gregory Wood. (2018). *Information technology for management: On-demand strategies for performance, growth and sustainability*. John Wiley & Sons.
- Esteves, J., Pastor, J., Esteves, J., & Pastor, J. (2001). Enterprise resource planning systems research: An annotated bibliography. In *ERP Communications of AIS* (Vol. 7).

- Esteves-Sousa, J., & Pastor-Collado, J. (2000). *Towards the unification of critical success factors for ERP implementations.*
- EstradaCruz, M., VerdúJover, A. J., & GómezGras, J. M. (2019). The influence of culture on the relationship between the entrepreneur's social identity and decision-making: Effectual and causal logic. *BRQ Business Research Quarterly*, 22(4), 226–244. <https://doi.org/10.1016/j.brq.2018.10.002>
- Etame, F., & Atsa, R. (2018). Survey on ERP's customization-driven requirements engineering. *Applied Informatics*, 5(1). <https://doi.org/10.1186/s40535-018-0049-6>
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. In *Source: Journal of Marketing Research* (Vol. 18, Issue 1).
- Fui-Hoon Nah, F., Lee-Shang Lau, J., & Kuang, J. (2001). Critical factors for successful implementation of enterprise systems. In *Business Process Management Journal* (Vol. 7, Issue 3, pp. 285–296). <https://doi.org/10.1108/14637150110392782>
- Galy, E., & Saucedo, M. J. (2014). Post-implementation practices of ERP systems and their relationship to financial performance. *Information and Management*, 51(3), 310–319. <https://doi.org/10.1016/j.im.2014.02.002>
- Gattiker, T. F., & Goodhue, D. L. (2005). What happens after ERP implementation: Understanding the impact of interdependence and differentiation on plant-level outcomes. In *Source: MIS Quarterly* (Vol. 29, Issue 3).
- Gupta, M., & Kohli, A. (2006). Enterprise resource planning systems and its implications for operations function. *Technovation*, 26(5–6), 687–696. <https://doi.org/10.1016/j.technovation.2004.10.005>

- Haddara, M., & Moen, H. (2017). User resistance in ERP implementations: A literature review. *Procedia Computer Science*, 121, 859–865. <https://doi.org/10.1016/j.procs.2017.11.111>
- Hair, J., & Alamer, A. (2022). Partial least squares structural equation modeling (PLS-SEM) in second language and education research: Guidelines using an applied example. *Research Methods in Applied Linguistics*, 1(3). <https://doi.org/10.1016/j.rmal.2022.100027>
- Hall, E. (1959). *The silent language*.
- Hall, E. (1976). *Beyond Culture*.
- Hanges, J., Javidan, P. J., House, M., & Hanges, R. J. (2006). Culture, leadership, and organizations: The globe study of 62 societies. In *Journal of Applied Christian Leadership* (Vol. 1, Issue 1). <https://digitalcommons.andrews.edu/jacl/vol1/iss1/6>
- Harman, G. (1976). Practical reasoning. In *Source: The Review of Metaphysics* (Vol. 29, Issue 3). <https://about.jstor.org/terms>
- Hasan, T. (2018). Impact of ERP system in business management. *International Journal of Management Studies*, V(4(4)), 24. [https://doi.org/10.18843/ijms/v5i4\(4\)/03](https://doi.org/10.18843/ijms/v5i4(4)/03)
- Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009). The use of partial least squares path modeling in international marketing. *Advances in International Marketing*, 20, 277–319. [https://doi.org/10.1108/S1474-7979\(2009\)0000020014](https://doi.org/10.1108/S1474-7979(2009)0000020014)
- Hofstede, G. (1984). *Culture's consequences: International differences in work-related values* (Vol. 5). sage.
- Hofstede, G. (1991). *Cultures and organizations: Software of the mind: Intercultural cooperation and its importance for survival*. McGraw-Hill Publishing Co.
- Holland, C. P., & Light, B. (2001). *A stage maturity model for enterprise resource planning systems use*.

- Huang, Z., & Palvia, P. (2001). ERP implementation issues in advanced and developing countries. In *Business Process Management Journal* (Vol. 7, Issue 3). # MCB University Press. <http://www.emerald-library.com/ft>
- Hultberg, E., & Pal, R. (2021). Lessons on business model scalability for circular economy in the fashion retail value chain: Towards a conceptual model. In *Sustainable Production and Consumption* (Vol. 28, pp. 686–698). Elsevier B.V. <https://doi.org/10.1016/j.spc.2021.06.033>
- Hustad, E., Haddara, M., & Kalvenes, B. (2016). ERP and organizational misfits: An ERP customization journey. *Procedia Computer Science*, 100, 429–439. <https://doi.org/10.1016/j.procs.2016.09.179>
- Imran Amed, Sarah André, Anita Balchandani, Achim Berg, & Felix Rölkens. (2023). *The state of fashion 2023*.
- Isaacson, J. I., Jordaan, Y., & van Heerden, G. (2018). The relationship between individual-level culture and consumer decision-making styles through consumer involvement. *Journal of Retailing and Consumer Services*, 41, 112–120. <https://doi.org/10.1016/j.jretconser.2017.12.003>
- Johnson, S., & Paris, F. (2002). The business of fashion: A social history. In *PROVIDENCE American Quarterly* (Vol. 54, Issue 3). <http://tirocchi.stg.brown.edu/>
- Jss Akdemir, G. (2018). Visible expression of social identity: The clothing and fashion. In *Gaziantep University Journal of Social Sciences* (Vol. 17, Issue 4).
- Karaosman, H., Perry, P., Brun, A., & Morales-Alonso, G. (2020). Behind the runway: Extending sustainability in luxury fashion supply chains. *Journal of Business Research*, 117, 652–663. <https://doi.org/10.1016/j.jbusres.2018.09.017>
- Kilic, H. S., Zaim, S., & Delen, D. (2015). Selecting “the best” ERP system for SMEs using a combination of ANP and promethee methods. *Expert Systems with Applications*, 42(5), 2343–2352. <https://doi.org/10.1016/j.eswa.2014.10.034>

- Laudon, K. C., Laudon, J. P., York, N., Francisco, S., & Kong, H. (2004). *Management information systems managing the digital firm*.
- Lee, N., Choi, Y. J., Youn, C., & Lee, Y. (2012). Does green fashion retailing make consumers more eco-friendly?: The influence of green fashion products and campaigns on green consciousness and behavior. *Clothing and Textiles Research Journal*, 30(1), 67–82. <https://doi.org/10.1177/0887302X12446065>
- LeRolland, M. (2024, April 5). *Top trends in global apparel and footwear in 2024 and beyond*. <https://www.euromonitor.com/>
- Li, H. J., Chang, S. I., & Yen, D. C. (2017). Investigating CSFs for the life cycle of ERP system from the perspective of IT governance. *Computer Standards and Interfaces*, 50, 269–279. <https://doi.org/10.1016/j.csi.2016.10.013>
- Lindell, M. K., & Whitney, D. J. (2001). Accounting for common method variance in cross-sectional research designs. *Journal of Applied Psychology*, 86(1), 114–121. <https://doi.org/10.1037/0021-9010.86.1.114>
- Marcel Haedrich. (2008). *Coco Chanel*. FeniXX.
- Markus, H., & Kitayama, S. (1991). *Culture and the self: Implications for cognition, emotion, and motivation*.
- Mayeh, M., Ramayah, T., & Mishra, A. (2016). The role of absorptive capacity, communication and trust in ERP adoption. *Journal of Systems and Software*, 119, 58–69. <https://doi.org/10.1016/j.jss.2016.05.025>
- Minkov, M., & Kaasa, A. (2022). Do dimensions of culture exist objectively? A validation of the revised Minkov-Hofstede model of culture with World Values Survey items and scores for 102 countries. *Journal of International Management*, 28(4). <https://doi.org/10.1016/j.intman.2022.100971>
- Morrison, C. J., & Schwartz, A. E. (1992). *State infrastructure and productive performance*.
- Niu, B., Chen, L., & Zhang, J. (2017). Punishing or subsidizing? Regulation analysis of sustainable fashion procurement strategies. *Transportation*

- Research Part E: Logistics and Transportation Review*, 107, 81–96.
<https://doi.org/10.1016/j.tre.2017.09.010>
- O' Brien, J. A., & Marakas, G. M. (2006). *Management information systems (Vol. 6)*.
- Olhager, J., & Selldin, E. (2003). *Enterprise resource planning survey of Swedish manufacturing firms*. www.elsevier.com/locate/dsw
- Popovič, A., Hackney, R., Coelho, P. S., & Jaklič, J. (2012). Towards business intelligence systems success: Effects of maturity and culture on analytical decision making. *Decision Support Systems*, 54(1), 729–739.
<https://doi.org/10.1016/j.dss.2012.08.017>
- Ralph Stair, & George Reynolds. (2020). *Principles of information systems*. Cengage Learning.
- Ram, J., Corkindale, D., & Wu, M. L. (2014). ERP adoption and the value creation: Examining the contributions of antecedents. *Journal of Engineering and Technology Management - JET-M*, 33, 113–133.
<https://doi.org/10.1016/j.jengtecman.2014.04.001>
- Ruivo, P., Johansson, B., Sarker, S., & Oliveira, T. (2020). The relationship between ERP capabilities, use, and value. *Computers in Industry*, 117.
<https://doi.org/10.1016/j.compind.2020.103209>
- Ruivo, P., & Neto, M. (2011). *Sustainable enterprise KPIs and ERP post adoption A survey study on Portuguese SMEs*.
- Ruivo, P., Oliveira, T., & Neto, M. (2014). Examine ERP post-implementation stages of use and value: Empirical evidence from Portuguese SMEs. *International Journal of Accounting Information Systems*, 15(2), 166–184.
<https://doi.org/10.1016/j.accinf.2014.01.002>
- Ruivo, P., Oliveira, T., & Neto, M. (2015). Using resource-based view theory to assess the value of ERP commercial-packages in SMEs. *Computers in Industry*, 73, 105–116. <https://doi.org/10.1016/j.compind.2015.06.001>

- Sadrzadehrafiei, S., Chofreh, A. G., Hosseini, N. K., & Sulaiman, R. (2013). The benefits of enterprise resource planning (ERP) system implementation in dry food packaging industry. *Procedia Technology*, 11, 220–226. <https://doi.org/10.1016/j.protcy.2013.12.184>
- Scherr, S., Reifegerste, D., Arendt, F., van Weert, J. C. M., & Alden, D. L. (2022). Family involvement in medical decision making in Europe and the United States: A replication and extension in five Countries. *Social Science and Medicine*, 301. <https://doi.org/10.1016/j.socscimed.2022.114932>
- Silva, A. R., Mena, R., & Coelho, F. (2023). Understand fashion consumer profile sustainable textile in Portugal - Sustainable makers marketplace case study. *International Conference on Marketing and Technologies*.
- Skoumpopoulou, D., & Moss, C. (2018). The importance of culture in ERP adoption – A case study analysis. *Athens Journal of Business & Economics*, 4(3), 259–278. <https://doi.org/10.30958/ajbe.4-3-2>
- Thirathon, U., Wieder, B., Matolcsy, Z., & Ossimitz, M. L. (2017). Big data, analytic culture and analytic-based decision making evidence from Australia. *Procedia Computer Science*, 121, 775–783. <https://doi.org/10.1016/j.procs.2017.11.100>
- Triandis, H. C. (2001). Individualism, collectivism and personality. In *Journal of Personality* (Vol. 69).
- Ulric J. Gelinas, Richard B. Dul, Patrick Wheeler, & Mary Callahan Hill. (2017). *Accounting information systems* (11th ed.).
- Umble, E. J., Haft, R. R., & Michael Umble, M. (2003). *Enterprise resource planning: Implementation procedures and critical success factors*.
- Vasconcellos, D., Davenport, T. H., & Harris, J. G. (2007). *The dark side of customer analytics*.

- Venkatesh, V., Morris, M. G., Davis, G. B., Davis, F. D., Smith, R. H., & Walton, S. M. (2003). User acceptance of information technology: Toward a unified view. In *Quarterly* (Vol. 27, Issue 3).
- Yates, J. F., & de Oliveira, S. (2016). Culture and decision making. *Organizational Behavior and Human Decision Processes*, 136, 106–118. <https://doi.org/10.1016/j.obhdp.2016.05.003>
- Zabihzadeh, A., Mazaheri, M. A., Hatami, J., Richman, M. J., & Tavakoli, M. (2022). Culture as an effective frame of reference in clinical decision-making: A comparison of Iranian, American, and Canadian psychotherapists. In *Asian Journal of Psychiatry* (Vol. 67). Elsevier B.V. <https://doi.org/10.1016/j.ajp.2021.102928>
- Zhao, C., Dinar, M., & Melkote, S. N. (2022). A data-driven framework for learning the capability of manufacturing process sequences. *Journal of Manufacturing Systems*, 64, 68–80. <https://doi.org/10.1016/j.jmsy.2022.05.009>

Appendices

Appendix 1 - Survey

ERP use	
What is the frequency of daily use of the ERP system?	(Calisir & Calisir, 2004; Gattiker & Goodhue, 2005; Ruivo et al., 2015)
What is the duration of daily use of the ERP system?	
What is the frequency of reports generated per day using the ERP system?	
Collaboration	
Please assess the level of ease in collaborating with colleagues.	(Calisir & Calisir, 2004; Gattiker & Goodhue, 2005; Ruivo et al., 2015)
According to users, please rate the degree of ease of collaboration with system.	
According to users, evaluate the level of ease in communicating with suppliers, partners, and customers.	
Analytics	
According to user feedback, assess the level of comprehensive reporting (KPIs, Dashboards, etc.)	(Ruivo & Neto, 2011; Vasconcellos et al., 2007)
Please rate the degree of real-time access to information based on user experience.	
Evaluate, according to user input, the degree of data visibility across departments	
ERP Value	
According to firm performance...	(Ram et al., 2014; Ruivo et al., 2014, 2020)
Please rate the degree of ERP impact on user satisfaction	
Please rate the degree of ERP impact on customer satisfaction	
please rate the degree of ERP impact on management control.	
Strategic Performance	
Rate the extent to which your company have gained strategic advantages over the competitors.	(Almutairi et al., 2021)
Evaluate your company's market share	
Rate the success of your company compared to major competitors	
Financial Performance	
Evaluate your company's EBIT relative to the industry average.	(Galy & Saucedo, 2014)
Assess the extent to which your organization's RÓI exceeds the industry average.	
Evaluate the degree to which your company's ROS remains above the industry average.	
Power Distance Index	
Decisions by people in higher positions should be made independently of frequent consultation with those in lower positions.	(Hofstede, 1984; Venkatesh et al., 2003)
Social interaction between people in higher positions and those in lower positions should be minimized.	
Disagreement with decisions made by people in higher positions should be avoided by those in lower positions.	
Delegation of important tasks to people in lower positions should be minimized by those in higher positions.	
Individualism vs Collectivism	(Hofstede, 1984)

Individuals should prioritize the group's interests over their own.	
Individuals should remain committed to the group, even in the face of difficulties.	
Group success is prioritized over individual success.	
Encouraging group loyalty is essential, even if it means individual goals may suffer.	
Masculinity	
Professional careers are more important for men than for women.	
Men typically employ logical analysis to solve problems, while women usually rely on intuition.	(Hofstede, 1984)
Solving difficult problems often requires an active, forcible approach, which is commonly associated with men.	
Certain jobs are consistently performed better by men than by women.	
Uncertainty Avoidance	
It is important to have instructions spelled out in detail so that I always know what I'm expected to do.	
It is important to closely follow instructions and procedures.	(Hofstede, 1984)
Rules and regulations are important because they inform me of what is expected of me.	
Standardized work procedures are helpful.	
Long-Term Orientation vs Short-Term Normative Orientation	
Respect for tradition is important to me.	
Family heritage is important to me.	(Hofstede, 1984)
I work hard for success in the future.	
Traditional values are important to me.	

Appendix 2 - Cross-loadings

Cross	AN	CL	EU	EV	FP	IC	LT	MF	PD	SP	UA
AN1	1	0.801	0.702	0.843	0.644	0.028	0.215	0.015	0.052	0.542	0.096
CL1	0.628	0.898	0.662	0.686	0.593	0.079	0.122	-0.079	-0.005	0.539	0.104
CL2	0.729	0.92	0.761	0.748	0.604	0.047	0.178	-0.061	0.011	0.551	0.139
CL3	0.802	0.893	0.682	0.78	0.594	0.064	0.26	0.032	0.09	0.564	0.099
EU1	0.634	0.735	0.946	0.716	0.603	-0.009	0.167	-0.116	-0.036	0.566	0.082
EU2	0.697	0.74	0.951	0.75	0.623	-0.018	0.251	-0.031	0.062	0.58	0.052
EV1	0.754	0.718	0.701	0.929	0.688	0.142	0.341	-0.01	0.083	0.645	0.193
EV2	0.767	0.773	0.719	0.924	0.707	0.099	0.292	-0.045	0.04	0.679	0.134
EV3	0.813	0.76	0.71	0.911	0.671	0.133	0.32	-0.006	0.092	0.608	0.171
EV4	0.778	0.769	0.72	0.925	0.705	0.124	0.263	-0.045	0.056	0.658	0.138
FP1	0.645	0.636	0.628	0.727	0.965	0.128	0.33	0.009	0.061	0.795	0.218
FP2	0.597	0.639	0.619	0.723	0.965	0.116	0.293	-0.042	0.058	0.796	0.209
IC1	-0.021	0.042	0.009	0.1	0.103	0.8	0.305	0.284	0.194	0.169	0.451
IC2	0.025	0.077	-0.022	0.118	0.102	0.842	0.323	0.206	0.116	0.187	0.452
IC3	-0.01	0.015	-0.007	0.082	0.115	0.841	0.316	0.265	0.214	0.16	0.582
IC4	0.076	0.079	-0.021	0.136	0.106	0.859	0.307	0.333	0.228	0.135	0.433
LT1	0.129	0.118	0.1	0.237	0.3	0.433	0.811	0.25	0.225	0.344	0.612
LT2	0.118	0.118	0.158	0.215	0.266	0.274	0.786	0.21	0.154	0.324	0.54
LT3	0.276	0.285	0.287	0.336	0.231	0.131	0.723	-0.08	-0.034	0.277	0.293
LT4	0.042	0.008	0.032	0.145	0.178	0.43	0.785	0.219	0.182	0.331	0.538
MF2	0.023	-0.037	-0.091	-0.033	-0.022	0.318	0.138	0.983	0.583	-0.009	0.169
MF3	-0.009	-0.032	-0.024	-0.012	0	0.296	0.163	0.868	0.618	-0.01	0.177
PD1	0.073	0.044	0.017	0.084	0.076	0.196	0.143	0.565	0.971	0.092	0.136
PD2	-0.012	0.02	0.017	0.031	0.021	0.214	0.104	0.577	0.8	0.056	0.157
PD3	0.009	-0.028	-0.057	0.005	-0.042	0.282	0.068	0.588	0.708	-0.054	0.125
SP3	0.542	0.611	0.604	0.702	0.824	0.193	0.407	-0.01	0.083	1	0.258
UA1	0.105	0.122	0.073	0.107	0.106	0.442	0.419	0.213	0.13	0.125	0.768
UA2	0.093	0.107	0.081	0.159	0.193	0.448	0.547	0.145	0.156	0.239	0.894
UA3	0.098	0.133	0.066	0.181	0.243	0.516	0.53	0.112	0.078	0.255	0.914
UA4	0.027	0.065	0.015	0.123	0.183	0.52	0.584	0.18	0.186	0.237	0.826

Appendix 3 – HTMT (Heterotrait-monotrait ratio)

	AN	CL	EU	EV	FP	IC	LT	MF	PD	SP	UA
AN											
CL	0.845										
EU	0.744	0.873									
EV	0.869	0.893	0.844								
FP	0.669	0.728	0.712	0.804							
IC	0.043	0.085	0.033	0.145	0.143						
LT	0.201	0.210	0.217	0.344	0.362	0.491					
MF	0.018	0.074	0.086	0.034	0.024	0.376	0.296				
PD	0.039	0.059	0.060	0.059	0.060	0.315	0.199	0.795			
SP	0.542	0.647	0.641	0.723	0.856	0.210	0.455	0.011	0.084		
UA	0.101	0.142	0.080	0.184	0.236	0.665	0.760	0.227	0.197	0.268	

Appendix 4 – VIF

	VIF
AN1	1.000
CL1	2.718
CL2	3.017
CL3	2.257
EU1	2.786
EU2	2.786
EV1	4.398
EV2	4.123
EV3	3.723
EV4	4.254
FP1	3.915
FP2	3.915
IC1	1.862
IC2	1.929
IC3	2.330

	VIF
IC4	2.032
LT1	2.392
LT2	1.978
LT3	1.141
LT4	2.353
MF2	2.396
MF3	2.396
PD1	1.921
PD2	2.066
PD3	2.001
SP3	1.000
UA1	1.744
UA2	2.701
UA3	2.878
UA4	2.043