

國立臺灣師範大學管理學院管理研究所

碩士論文

Graduate Institute of Management

College of Management

National Taiwan Normal University

Master's Thesis

企業數位轉型困難之初探以零售服務業為例

An investigation of the difficulties for the organizational digital
transformation: a case of retailing service



克羅伊

Reullier, Chloe

指導教授：鄒蘊欣 博士

Advisor: Cindy Yunhsin Chou, Ph.D.

中華民國 112 年 6 月

June 2023

Acknowledgement

I would like to express my deepest gratitude to my thesis advisor, Cindy Yunhsin Chou, for their invaluable guidance, expertise, and unwavering support throughout this research journey. Their insightful feedback and encouragement have been instrumental in shaping this thesis.

I am also immensely grateful to the members of my academic committee, for their thorough evaluation and valuable suggestions that have greatly contributed to the quality of this work.

I extend my gratitude to the participants of this study for their time, cooperation, and willingness to share their experiences. Their contributions have enriched this research. I am grateful to the administrative staff, librarians, and lab technicians at National Taiwan Normal university, for their assistance and support in accessing resources, facilities, and technical guidance.

I would like to acknowledge the love, patience, and encouragement provided by my family and friends. Your unwavering support and understanding have been a constant source of inspiration. To all those mentioned above and to anyone else who has contributed to this thesis in any way, your support has been invaluable, and I am truly grateful.

摘要

這篇論文探討了頂層管理的概念性質以及在進行數位轉型的組織中，頂層管理與較低層級之間的差距存在。實施數位轉型策略需要共同理解現象及扎實的理論基礎。儘管有許多關於企業頂層管理者角色的研究，但較少關注受這些決策影響最大的較低層級員工。少數研究承認員工的角色時，主要著重於他們對數位轉型的準備和能力，忽略了他們的情緒狀態和與客戶的互動。本研究確定了溝通困難和理解不足作為重要問題，強調了阻礙全面決策和員工滿意度的五個關鍵問題。研究結果凸顯了在推動成功的數位轉型中，考慮頂層管理者和較低層級員工的能力和觀點的重要性。研究結論指出，組織應該致力於全面合作，涵蓋組織的各個層級，以確保順利過渡和不同層級之間更好的協調。解決確定的挑戰將有助於增強溝通、促進共同理解，並在數位轉型項目中彌合頂層管理和較低層級員工之間的差距。

關鍵詞：頂層管理、差距、下層、數位轉型、溝通困難、決策、員工滿意度

Abstract

This thesis explores the conceptual nature of top-level management and the existence of a gap between the lower levels within organizations undergoing digital transformation. The implementation of digital transformation strategies requires a shared understanding of the phenomenon and a solid theoretical foundation. While studies on the role of top managers in firms have been abundant, little attention has been given to the lower-level employees who are most impacted by these decisions. The few studies that acknowledge the role of employees focus on their readiness and capabilities to support digital transformation, neglecting their emotional state and their interactions with customers.

This research identifies communication difficulties and a lack of understanding as significant concerns, highlighting five key problems that hinder comprehensive decision-making and employee satisfaction. The findings underscore the importance of considering the competencies and perspectives of both top-level managers and lower-level employees in driving successful digital transformation. The study concludes that organizations should aim for collaborative efforts involving all levels of the organization to ensure a smoother transition and better alignment between different levels. Addressing the identified challenges will contribute to enhancing communication, promoting shared understanding, and bridging the gap between top-level management and lower-level employees during digital transformation initiatives.

Key words: Top-level management, Gap, Lower levels, Digital transformation, Communication difficulties, Decision-making, Employee satisfaction

Table of Contents

Acknowledgment	i
摘要.....	ii
Abstract.....	iii
Chapter 1.....	1
1.1 Introduction to the topic	1
1.2 Motivations	3
1.3 Research Question	6
1.4 Research Method.....	7
Chapter 2.....	9
2.1 Digital transformation and customer experience	9
2.2 Service ecosystem	10
2.3 Organizational culture.....	11
2.4 Internal communication within a retailing organization	11
Chapter 3.....	14
3.1 Company presentation	14
3.2 Interview process	14
Chapter 4.....	18
4.1 Analyzing results	18
4.2 Mind map	23
Chapter 5.....	28
5.1 Conclusion.....	28
5.2 Contributions to the theory.....	29
5.3 Managerial implications.....	30

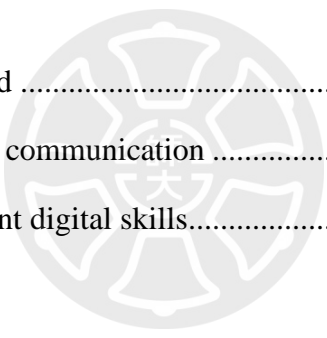
5.4 Research limitations and future research suggestions	32
References and annex	34

List of Tables

Table 1: The structure of the research related to digital transformation within a retailing company and content review	13
Table 2: Interviewee’s background information.....	17

List of Figures

Figure 1: Illustrated research method	8
Figure 2: The main difficulties with communication	23
Figure 3: The mapping of insufficient digital skills.....	23



Chapter 1 Introduction

1.1 Introduction to the topic

Customer experience is at the center of the retail industry. This concept was developed in the 1960's and to the 1990's, with the increasing commodification of services (Meyer, and Schwager, 2007). The long-lasting customer organization relationship became a priority for businesses which led to the customer taking center stage over the product. This next step is taken from the previous goods and product-based industry to a service industry that has become an industry of "experience". This created experience is what now sets one business apart from one another.

As reported by Forbes, in as many as 70% of digital transformations, the targets of the transformation are not reached. This is due to the complexity of the implementation, with more than three quarters (76%) rating it as somewhat challenging or highly challenging. With the lack of availability for talented staff, upfront costs, the necessary time that is needed to achieve these benefits, as well as privacy and security concerns. The brick-and-mortar retail sector is undergoing a required transition as a result of the enormous and ongoing expansion of the E-commerce sector and digital transformation itself (Dennis, Jayawardhena, & Papmatthaiou, 2010; Doherty & Ellis-chadwick, 2010; Hagberg, Sundstrom, & Egels-zenden, 2016; Sands, Ferraro, & Luxton, 2010). Mobile gadgets like smartphones and, lately, smart watches have paved the way for digital transformation and the shift to affect consumer behavior. (Blazquez, 2014) Situation-specific information is now available to customers via mobile devices (Rohm & sultan, 2006).

Customers may now obtain product-specific information, such as price range, images, and customer reviews, faster and simpler than ever before thanks to widespread internet connection. As a result, this has modified their expectations when customers purchase in stores as well as online. The COVID-19 pandemic has caused fundamental and disruptive changes. Its impact continues to change the post-pandemic world. The pandemic continues to demonstrate the need for businesses to evolve to operate in a progressively uncertain and volatile climate, driving the need to digitize to meet rapidly growing demand. (Vuta, Nichfor, Chitu, Bartacu, 2022). Customer experience has been enhanced to its peak with the digital evolution that created new ways of marketing and communication with customers. With the use of internet of things apps, direct selling, engagement, experience programs, and targeted communication, they are

able to develop robust brand ecosystems that engage customers and turn brands into experiences. (Reinartz, Wiegand and Imscholss, 2019). This has led to a change in the way the customers interact with the company through the different platforms, but also in person with frontline employees having to adapt to the constant demands. This study aims to show that digitalization has created a large impact on the retailing industry and has influenced the customer experience as well as the frontline employees.

Digitalize transformation has been the leader in today's social and economic environment, modifying the way we communicate to the way we consume. It's a part of our daily lives, with smartphones allowing us to have everything in our hands, from shopping to socializing. Companies have taken advantage of this new way of living through our phones, allowing companies to be able to reach clients directly and with a more personal way of connecting. It's leading our lives and is ever evolving, but few companies are able to keep up with the evolution. The intersection of digital experience and customer experience is an important area of focus for businesses in today's digital age. With the increasing adoption of digital technologies, customers now expect businesses to provide seamless and consistent experiences across all touchpoints, both online and offline. To meet these expectations, businesses must develop a customer-centric digital strategy that is focused on understanding customer needs and preferences and incorporating them into the design of digital experiences. Businesses that are able to effectively connect digital experience and customer experience will be better positioned to meet the evolving expectations of customers and differentiate themselves in a competitive marketplace.

Changing their infrastructure and their business models to satisfy customers' new needs are difficult to execute at the speed that digitization is done. Creating a seamless digital experience is difficult to implement because each customer's expectations are different and creating harmony between the client, the employee and the business structure is a near impossible task. (Verhoefa, Broekhuizen, Bartb, Bhattacharyaa, Donga, Fabiana, and Haenleinc, 2021). Digital transformation in retailing companies is a slow process due to often the large size of the companies but as well as the ingrained business model, and the fear to scare away customer engagement. The new implementations can be positively or negatively received depending on the customer.

The main problem is integrating to the already present business model. Internally adoption can be difficult. Between the frontline employees having to manage the customers' experiences, and the change of consuming. Implementing more digital steps such as online shopping is difficult because synchronization between internal and external can be hard to regulate. Hosseini, Röglinger, and Schmied showed that retailers struggle to carry on with the complexity of multi-cloud environments that support customer service experience using the omnichannel as well as critical business operations. These environments are essential to construct the flexibility needed to expedite the delivery of high-quality digital services that facilitate retailers to create shopping experiences that are new and innovative.

Digital transformation is propelling omnichannel experiences tailored to the customers' needs and expectations. But creating this omnichannel where every part of the retailing company is connected is hard to implement all at once, which leads to a rough transition. Implementing step by step can be perceived as slow regarding the customers' expectations who want a more seamless approach. The complexity of creating a channel that directly connects the online and the offline world regarding product stock or sales is hard to implement as a whole (Alkhadra, and Melander, 2022). It's easier for a primarily online sector to have a fully digital experience that is easily accepted throughout the company, but with the retailing sector that uses both online selling as well as in store selling it is harder to comply both harmoniously, it takes more time, and this leads to many errors before finding a smooth harmony. This leads to a slower transition that we are seeing today. Even with the covid accelerating the digital transformation, retailing is still having a hard time keeping up compared to different sectors (Meyer, Helmholz & Robra-Bissantz, 2018).

1.2 Motivations

A broad definition of digitization is “the integration of digital technology into everyday life by digitizing everything that can be digitized” (Brave & Nass, 2002). It has been first associated with a new value creation (Amit & Zott, 2001) and then to improved customer-dealer relationships (Hagberg et al., 2016). This relationship between digitalization to create value and then to enhance the relationship between the retailer and the consumer, has been fundamentally modified with external factors, such as most importantly covid that has led different industries, especially retailing into a huge digital leap.

As Forbes reported, every way we interacted with consumers had to be reimaged, resulting in a six-year acceleration of sweeping digital transformation efforts, a significant time leap. 97% of executives said that the pandemic has accelerated their digital transformation, and 79% said that Covid has increased their digital transformation budget.

Investment in digital transformation is not the only thing that has increased, the number of people in technology roles, and the number of customers expecting digitalization. Given the time frames regarding digital transformation, it is not surprising to see that certain sectors were able to adapt quicker than others. Manufacturing changes and sectors with products such as retailing are having a relatively low level of change in their digital product portfolio due to the fact that it takes longer to implement change, installing the software and teaching the employees how to accommodate. Compared to sectors without physical products, such as financial services, are not struggling to implement a quicker digital transformation, there is no need to create a link between the online and offline.

Online shopping is the act of buying a product or a service through any e-commerce store with the help of a website or an app. Online shopping has seen an increase in activity and progress due to the opportunity to save time and effort. There are different types of online shopping that vary from direct e-stores and indirect e-stores. Due to the Covid-19, there have been drastic changes that have been seen globally in many sectors, retailing being one of them. To survive and continue selling even with lockdowns happening all around the world, a switch had to be made from traditional shopping or trade towards a digital one that was able to capture in the new consumers. This resulted in an upsurge of swift online adoption of online channels. (Rao, Saleem, Saeed, & Haq 2021). Research in previous studies have shown that 30% of the products bought through online channels get returned and are not according to their perception (Saleh, 2016). The same author also showed that the return and complaint rates are getting higher when consumers shop through online channels.

Product quality and service quality are still the basic source of consumer complaints during Covid 19. This shows that a product is what a consumer is in constant pursuit. Clients have a bigger tendency to complain while shopping online due to the lack of human interaction. The better the interaction with human customer service the less likely a complaint is to follow. (Wang, Zhang, Wu and Zhao, 2022).

In today's age, customers expect a higher degree of service with a higher level of emotional connection, seeking long term partnerships rather than a series of one-off transactions. Once the consumer has established an emotional attachment to the brand, they become prone to creating lifetime value, and are inclined to suggest it to others. In today's digital environment, businesses can keep intimate contact with their clientele and consistently improve their services immediately which later translates to a large economical gain. With digitalization becoming an integral part of the customer experience, com This leads to a long-term change in the client purchasing and interaction patterns.

Digital era has led to information and digitalization being everywhere, communication with customers does not only pass through a single channel anymore. It has become a multichannel or omni channel digital marketing. Omnichannel refers to a multichannel approach to sales and customer service that provides a seamless and integrated experience across all available channels. This means that customers can interact with a brand or business through various channels, such as online, mobile, social media, phone, or in-person, and have a consistent and personalized experience regardless of the channel they choose. The goal of omnichannel is to make it easy for customers to engage with a business at any time and from any location, and to provide them with a unified and cohesive experience across all touchpoints. By integrating various channels and providing a seamless customer experience, businesses can improve customer loyalty, satisfaction, and retention (Lazaris and Vrechopoulos, 2014). Taking this into consideration it is easier for a business to be able to access their customers and modify the message throughout the different channels depending on how the customers react. Allowing also for the consumer to have easier access to the business to let them know of their needs and desires (Meyer and Schwager, 2007).

Online shopping has created a stronger empowerment towards the customer by providing information, overcoming time and place difficulties, and most importantly offering convenience. This has allowed companies to create a cost-effective channel between the consumers and the businesses. As of 2021, 56% of companies worldwide are prioritizing digital transformation. Digital transformation has reported to improve operations efficiency (40%, allows for a faster time to market (36%), and helps to keep up with customers' expectations (35%).

For example, Walmart who is a traditional brick and mortar retailer, has developed over the recent years, and especially during COVID a more significant online presence. They decided

to implement an OMNI channel based digital transformation, this meant that the company decided to refocus their operations around digital technology internally as well as a customer facing way. Walmart started with creating a mobile app and a website to allow customers to pursue their shopping experience online. After collecting data from their website and their app, they were able to analyze customer behavior information. This led to the company creating more services to meet the customer's needs, such as same day pickup, mobile ordering, and 'buy now, pay later'. What led Walmart to have a successful digital transformation, was that Walmart decided to prioritize data access for everyone within their teams. Leaving the internal hierarchy of deciding who is to take care of this customer allowed the employees to take ownership of the client without going through different steps. This resulted in faster decision making and more concrete changes which helped improve the customer experience.

Walmart's head of mobile marketing, Sherry Thomas-Zon, explained how critical data and the access to this data is to influence a better digital operation. "Our marketing and product teams are always looking at numbers. You can't work quickly without self-service data and analytics tool for marketing, especially in an organization as large as Walmart. It keeps our team agile, despite our size and the increasing amount of data we collect and analyze".

Their FY2021 summary cites that the company has made over 559 billion dollars in revenue, and their E-commerce marketplace grew in triple digits. This growth is shown with their FY2022 with a revenue increase, 2022 revenue was 572 billion dollars compared to 2021 559 billion dollars, their e-commerce only grew in double digits compared to the previous year. This is due to Covid lockdown and other restrictive measures being removed.

1.3 Research question

This research question posed in this study is:

“What are the difficulties that retailing service organizations are facing regarding digital transformation?”

To answer this research question, the study aims to examine the challenges and difficulties faced by retailing service organizations in their digital transformation efforts. Specifically, the focus is on understanding the obstacles that hinder the creation of an effective environment that integrates in-store and online digitalization seamlessly. The study also aims to investigate how this integration can enable a harmonious omni-channel experience that caters to customer expectations.

By conducting the research with the participation of a retailing company, the study intends to gain practical insights and firsthand knowledge of the challenges faced in implementing digital transformation initiatives within the retail industry. The findings of this research can provide valuable insights and recommendations for retailing service organizations aiming to enhance their digital capabilities and meet the ever-evolving demands of customers in an omni-channel retailing landscape.

1.4 Research method

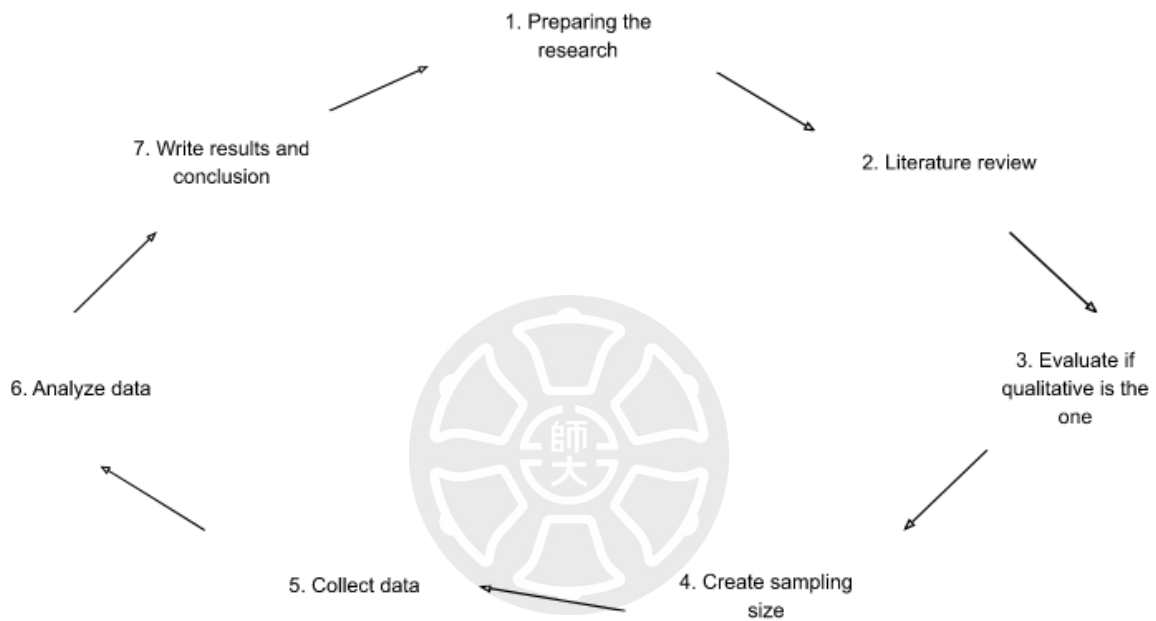
The methodology employed in this study consisted of seven distinct phases. The initial step involved undertaking a thorough preparation phase, during which a subject matter of relevance and significance within the contemporary environment was identified. This selection process sought to ensure that the chosen subject could provide valuable insights and contribute meaningfully to the existing body of knowledge. Following the identification of the subject, a comprehensive literature review was conducted. This critical analysis of existing scholar works aimed to identify gaps and deficiencies within the chosen subject matter. By examining the prior research conducted in the field, this review sought to ascertain the extent of existing knowledge and shed light on areas that have not been adequately explored.

Upon identifying the research gaps, an evaluation was undertaken to determine the most suitable research approach for the study. This evaluation critically assessed whether a qualitative methodology would be appropriate to effectively capture and analyze the intricacies and nuances of the subject matter. Considerations such as the research question, objectives, and available resources guided this decision-making process. Once the research approach was established, the determination of an appropriate sampling size became paramount. This involved carefully considering the population from which the participants would be selected. A judicious determination of the sampling size was crucial to ensure the representativeness and generalizability of the findings. Subsequently, the data collection phase commenced, wherein interviews were conducted with individuals associated with the subject matter within the chosen company. These interviews provided a rich source of firsthand insights and perspectives, allowing for a comprehensive exploration of the research topic.

With the data collection completed, analysis was undertaken to derive meaningful interpretations and draw conclusions from the obtained information. This analytical process encompassed both an in-depth examination of individual interview responses and a

comprehensive synthesis of overarching themes and patterns that emerged from the data. Finally, the research findings were synthesized into a comprehensive report, consisting of a detailed presentation of the results and a conclusion.

Figure 1: Illustrated research method.



Chapter 2 Theoretical Background

2.1 Digital transformation and customer experience

Digital transformation goes beyond the mere creation of an online presence for businesses; it involves a comprehensive restructuring that impacts all aspects of an organization. This includes changes in strategy, organization, information technology, supply chains, and marketing (Gong & Ribiere, 2020). The concept of digital transformation can be traced back to the early 2000s when the Internet became widely accessible. Over time, it has gained global adoption, with advancements in accompanying technologies such as smartphones, connected watches, and online payment systems. The convenience of accessing information and services online has fueled the growth of e-commerce and mobile commerce (m-commerce), allowing users to make purchases using handheld devices like smartphones and tablets. These digital commerce platforms have experienced exponential growth, especially during and after the pandemic, leading to intensified competition within the retail industry (Gong & Ribiere, 2020).

Digital transformation entails a customer-centric, digital-first approach that permeates every aspect of an organization, encompassing business models, customer experiences, processes, and operations. Various technologies and tools, such as artificial intelligence (AI), automation, hybrid cloud, and other digital innovations that leverage data, play a crucial role in building this new digital environment. They enable intelligent workflows, faster decision-making, real-time responses, and the potential for market disruptions, driving the evolution of the customer experience and opening up new business opportunities (Gong & Ribiere, 2020). It is essential to understand that digital transformation is an ongoing process rather than a one-time solution. Businesses need to continuously adapt to the ever-changing environment, aligning with customer requirements and effectively responding to uncertain expectations, market dynamics, and local or global events. The goal is to establish a robust technical and operational foundation that supports organizational evolution and agility (Gong & Ribiere, 2020).

Customer experience is an essential part of digital transformation, and it encompasses all aspects of what a company offers its customers, including the quality of customer care, advertising, packaging, product and service features, usability, and reliability. The way customers perceive and react to various aspects of a company is what defines their overall experience with the company. Positive customer experience is crucial for the success of a

business because if a customer is satisfied, they are more likely to become a loyal customer, leading to a boost in revenue as well as positive word of mouth marketing. Direct and indirect contact with customers determines the customer experience. Direct contact occurs during purchase, use, and service, while indirect contact includes a customer's unplanned encounter with a company's products, services, or brand representations. The service ecosystem perspective examines digital servitization through a holistic multi-actor lens, emphasizing the systemic, dynamic, and contextual aspects of the phenomenon as influenced by the interactions between actors (Edvardsson, Tronvoll, & Gruber 2011; Tronvoll, 2017; Vargo & Lusch; 2011). As businesses pursue digital transformation, service ecosystems have become prominent in understanding and analyzing the inter- and intra-firm change processes that are occurring. The structural flexibility and integrity of digital systems are better understood from the perspective of the service ecosystem (Lusch & Nambisan, 2015).

2.2 Service ecosystem

In the context of markets, an ecosystem is a term used to describe the interdependence between actors, their adaptation, and their evolution. An ecosystem describes entities that can adapt to changes in the environment or collapse if the changes are too traumatic. The ecosystem may collapse if the changes are too drastic, and the actors are unable to adjust to the new circumstances. The service ecosystem perspective examines digital servitization through a holistic multi-actor lens and emphasizes the systemic, dynamic, and contextual aspects of the phenomenon as influenced by the interactions between actors (Edvardsson, Tronvoll, & Gruber 2011; Tronvoll, 2017; Vargo & Lusch; 2011). Companies using digitalization have been able to reshape their service activities through processes, which can be described as changing the roles of back-and-forth units. This means that the ecosystem needs to tie the units together with a more coordinated and purposeful effort. Three levels of aggregation make up service ecosystems, and each level can adjust to changes in the ecosystem. The terms "micro, meso, and macro levels" refer to these three categories, and the meso level denotes the level that is above the micro level and beneath the macro level (Heuvelen, 2018).

For the ecosystem to thrive it must incorporate a system. A service system is a human-usable system that operates with the voluntary participation of external individuals or organizations to generate value. This system consists of interconnected components and is customer driven. It requires a human in the loop as an essential component, and the work system

that produces services is known as a service system (Wang et al., 2014). Within the ecosystem that thrives with a functional system, a work system must be understood because a system that generates services is called a service system. The system of work is one in which individuals, machines, and/or other resources are used to carry out tasks. (J.W. Wang, H.F. Wang, W.J. Zhang, Furuta, 2014).

2.3 Organizational Culture

Within this ecosystem there is a distinct organizational culture that helps iterate the way the company functions and how they interact with customers. In this context we must define key elements to define organizational culture and how these fits into the ecosystem.

First, let's define culture, which refers to a shared way of feeling, thinking, and acting within a collective that is produced, interpreted, and passed down over time. It ascribes to certain regularities and predictability and can be seen as a state or an ongoing process. Secondly, Organizational culture is a set of fundamental beliefs that are created, discovered, or developed by a group to deal with external adaptation and internal integration. It is passed down to new members and influences their perception, thinking, and behavior. It represents the organizational style or behavioral norms that new hires are proactively encouraged to adopt. (Schein, 1991; Serpa, 2016; Kotter and Heskett, 1992). The values, standards, and practices that define the organization's culture serve as a set of principles for all team members to follow. It has an impact on all facets of a company, including punctuality, tone, contract terms, and employee benefits. A better workforce that can adapt to any changes in the business environment results from a positive work culture.

Understanding these different variables that are a part of an organization is a key element into implementing digitization within the different elements such as organizational culture or the ecosystem, but this cannot be successfully integrated without internal communication, especially within a retailing organization. Retailing refers to the sale of products and services to customers, typically in small lots or individual units. The rise of e-commerce and m-commerce has revolutionized the retail industry, with online retailing conducted through internet-connected devices now having a significant influence.

2.4 Internal communication within a retailing organization

Effective internal communication is vital for any organization. Internal communication involves the two-way exchange of information between upper management, management, and

employees, utilizing tools that enable efficient communication of thoughts and emotions. Open and transparent communication is crucial to ensuring employees understand the company's mission and values, breaking down organizational silos, and inspiring employees.

According to Mishra, Boynton, and Mishra (2014), the role of internal communication is to provide employees with the information they need to do their jobs and enhance connections between different pieces of information. Effective internal communication can result in improved productivity, decreased absenteeism, higher levels of innovation, fewer strikes, and lower costs. Every level of an organization's internal communication is a distinct and ongoing task, with every member of the organization playing a part in the communication network.

Chitrao (2014) emphasizes that effective internal communication initiatives can increase employee trust, benefiting both the company and employees. Regular, honest communication and an open and transparent operation are key to building employee confidence and a sense of belonging and shared mission with the company. As a result, employee engagement increases, giving them more power to interact with customers on the company's behalf.



Table 1: The structure of the research related to digital transformation within a retailing company and content review.

Scholars and Years	Research Structure									
	Organizational readiness	Digital transformation	Organizational culture/structures	Behavioral visibility	Digital business models	Service ecosystem	Resource attainment	Internet of things (IOT)	Innovation	Customer behavior/experience
Paul M. Leonardi, Et Al. 2020		x	x	x						
Peter C. Verhoef, Et Al. 2019		x			x					
Peter C. Verhoef Et Al. 2018		x	x							x
Anjar Priyono Et Al 2020		x	x			x				
André Hanelta, Et Al. 2019		x	x			x				
Ntandoyethu S.M. Mhlungu Et Al. 2019		x					x		x	x
Nigel Halpern Et Al. 2020	x	x	x					x	x	
Rion van Dyk, Et Al. 2019		x	x			x		x		
A. Kutnjak, I. Et All. 2019		x								
Carla Gonzales Machado, Et Al. 2021	x	x								
Marcela M. Bonanomi Et Al. 2020		x	x							
Martina Tomičić Furjan, Et Al. 2020		x	x							x

Chapter 3 Research Methodology

3.1 Company Presentation

To be able to conduct this study we did in depth interviews with a worldwide retailing and wholesaling brand specialized in selling goods in hypermarkets. The company is located everywhere in Taiwan and in the world, they range from hypermarkets to smaller stores. In this Asian market this western hypermarket retailer has approximately 64 hypermarkets, 64 supermarkets, and one online shopping store.

This wholesale brand has a direct operation in store and online to give more access to their customers, and employees but the Taiwanese market is extremely dense with many competitors leading to a high competition between companies. This is accentuated with the online competition that has been gaining a strong influence on Taiwanese consumers, leading to a strong competition on every front. The interview process employed in this study adhered to rigorous qualitative research principles, aiming to capture a comprehensive understanding of the impact of digital transformation on employee experiences within the retailing sector. The selection of participants and the formulation of interview questions were conducted with careful consideration to ensure the collection of valuable and diverse insights.

3.2 Interview Process

For this study, the best technique for effectively gathering and analyzing information was determined to be qualitative research. Collecting and analyzing non-numerical data, such as text, audio, or video, to understand ideas, opinions, or experiences through human interaction is what is referred to as qualitative research. It enables a thorough understanding of a problem, which can inspire fresh research concepts. Contextual richness is made possible by being able to comprehend how people function in their everyday environments, which is made possible by human interactions during interviewing.

Qualitative research is used most in social science because the interviews allow the analysis of people's behavior and reactions. The method is about 'what' people think and 'why' they think so. To be able to understand the 'what' and the 'why' in-depth interviews must be conducted. (Yin, 2010). One of the qualitative research techniques known as an "in depth interview" that was adopted by this study. The method involves conducting lengthy one-on-one interviews with a small group of representative respondents to learn more about their

perspectives on a given concept, plan, or circumstance. When you want to learn more about a person's thoughts and behaviors in detail or you want to delve deeply into a brand-new topic, in-depth interviews can be helpful. Interviews are frequently used to contextualize other data, which provides a more thorough understanding of what transpired and why. To make the participants feel included and more comfortable, which in turn helps them speak more freely and provide more detailed information, in-depth one-on-one interviews are used.

All interviews were conducted within the internal organization in an anonymous setting allowing for a more truthful gathering of information, the questions were each curated to the person regarding their position as well as their job activities, all the while maintaining a global theme and a few common questions to perceive the different perspectives (**Annex 1**). To be able to conduct this study we did in depth interviews with a worldwide retailing and wholesaling brand specialized in selling goods in hypermarkets. The company is located everywhere in Taiwan and in the world, they range from hypermarkets to smaller stores. In this Asian market this western hypermarket retailer has approximately 64 hypermarkets, 64 supermarkets, and one online shopping store.

This wholesale brand has a direct operation in store and online to give more access to their customers, and employees but the Taiwanese market is extremely dense with many competitors leading to a high competition between companies. This is accentuated with the online competition that has been gaining a strong influence on Taiwanese consumers, leading to a strong competition on every front. The interview process employed in this study adhered to rigorous qualitative research principles, aiming to capture a comprehensive understanding of the impact of digital transformation on employee experiences within the retailing sector. The selection of participants and the formulation of interview questions were conducted with careful consideration to ensure the collection of valuable and diverse insights.

The sampling strategy that was used was the Snowball sampling, participants for the study were purposefully selected, employing a specific set of criteria. Firstly, individuals needed to be employees within the retailing company under investigation, ensuring their direct exposure to the effects of digital transformation. Furthermore, a minimum age requirement of 18 years was established to ensure participants' maturity and ability to provide meaningful reflections on their experiences. Additionally, participants were required to possess a minimum of 2 years of experience within the company, allowing for a nuanced understanding of the organization's inner

workings and the long-term effects of digital transformation on their roles and responsibilities. To expand the sample size and gather diverse perspectives, snowball sampling was employed. This non-probability sampling technique involved the recruitment of participants through referrals from existing subjects. Through this chain-referral approach, participants were recommended by their colleagues or supervisors who were already part of the study. This method facilitated access to individuals who may have unique characteristics or experiences related to the research topic, thus enhancing the richness and diversity of the qualitative data collected.

The interview questions were carefully formulated to elicit participants' perceptions, experiences, and reflections on the impact of digital transformation on their satisfaction, job performance, and overall well-being. The questions were designed to be open-ended and semi-structured, allowing participants to freely express their thoughts and providing flexibility for further exploration of emerging themes. These questions were derived from the research objectives and the identified gaps in the existing literature, ensuring their relevance and alignment with the study's purpose.

Prior to the interviews, informed consent procedures were conducted to establish a respectful and ethical environment. Participants were provided with detailed information about the study's objectives, potential implications, and their rights as participants. They were given the opportunity to seek clarifications, ask questions, and express any concerns before voluntarily providing their informed consent to participate in the interviews.

During the interviews, face-to-face interactions were employed to create a conducive atmosphere for participants to share their experiences openly. This mode of interaction enabled the exploration of not only participants' verbal responses but also their non-verbal cues and expressions, facilitating a deeper understanding of their emotions and perspectives. The interview process involved audio-recording, with participants' consent, to ensure accurate capturing and preservation of the data. This method facilitated meticulous transcription and subsequent analysis, maintaining the integrity of participants' responses in their own words.

Table 2: Interviewee's background information.

Interviewee	Years of seniority	Position
Employee A	7 years	Frontline supervisor
Employee B	17 years	Store manager
Employee C	30 years	Store manager
Employee D	13 years	Sales information
Employee E	15 years	Mid-level manager
Employee F	25 years	Top management
Employee G	3 years	Frontline employee
Employee H	17 years	Cashier Supervisor
Employee I	1 year	Distributor
Employee J	20 years	Section manager

Chapter 4 Results

4.1 Analyzing results

The existing literature extensively covers the topic of digital transformation and its effects on companies. However, despite the wealth of research, there remain several gaps in our understanding of this phenomenon.

Firstly, there is a need for a more profound understanding of how sociometrical infrastructures influence behavior in the context of digital technology usage. This entails exploring the emerging visibility of behavior and its implications for firms.

Secondly, the research literature lacks in-depth investigation into the value creation potential of new digital players, particularly frontline employees, and how their resources, capabilities, and deployment contribute to overall value within digital firms. It is crucial to assess the capabilities of these digital players and establish their relationship with firm performance in order to identify key capabilities that drive success.

Thirdly, there is a scarcity of studies examining the potential negative externalities associated with digital business models, with a particular focus on their impact on frontline employees. Factors such as the increasing prominence of digital sales, the diminishing importance of physical stores, and the exclusion of specific employees and customer segments due to insufficient digital skills require thorough exploration. The retail sector's digital transformation needs to identify new factors that influence digital adoption.

Fourthly, there is a pressing need for more qualitative research to develop a theoretical understanding of the complex interplays between organization design strategy and digital technologies. Such research would shed light on how various factors interact with each other and how these interactions impact the overall success of digital transformation efforts.

Lastly, limited investigations have been conducted on the impact of digital technology adoption on organizational structures, specifically within large firms. It is essential to assess how different types of digital technologies influence the organizational structures of these firms and identify any distinct findings and trends that may arise. Despite the recent surge of studies focusing on digital transformation, these research gaps persist, particularly in terms of understanding the value creation potential of new digital players, the negative externalities associated with digital business models, and the effects of digital technologies' adoption on

organizational structures. Furthermore, there is a need for qualitative research to develop theories concerning the intricate interplays between organization design strategy and digital technologies. To address these gaps, this research aims to investigate the impact of digital transformation across all levels of an organization, with specific attention given to frontline employees. While existing research primarily concentrates on the broader organizational perspective or managerial viewpoints, there is a lack of thorough examination regarding the implementation of digitization and its potential negative consequences throughout the organization. Therefore, this study seeks to bridge this gap by exploring the effects of digital transformation on lower-level employees within the retail sector, who are often the first to experience the consequences of new technologies and bear the brunt of any negative outcomes resulting from the digital transformation process.

By conducting personal interviews with employees in a retailing company, this study will offer a unique perspective on how digital transformation impacts employee satisfaction, job performance, and overall well-being. The insights derived from this study will not only contribute to the existing literature on digital transformation but also provide practical implications for managers and policymakers seeking to implement digitalization strategies that consider the well-being and experiences of their employees. The findings of this study will fill the identified research gaps in the literature. Specifically, it will provide a deeper understanding of the role of sociometrical infrastructures in shaping behavior during digital technology usage, shedding light on the emerging visibility of behavior and its implications for firms. Additionally, by exploring the value creation potential of new digital players, particularly frontline employees, this study will contribute to identifying the key capabilities necessary for success in digital firms. Furthermore, the study will assess the impact of digital technology adoption on organizational structures within large firms, identifying trends and differences across various types of digital technologies.

This investigation will contribute to a comprehensive understanding of the organizational changes brought about by digital transformation. In conclusion, this research endeavors to bridge the existing research gaps in the understanding of digital transformation. By focusing on the impact of digital transformation on frontline employees within the retail sector, the study aims to provide valuable insights into their experiences, well-being, and performance. The findings will not only enrich the literature on digital transformation but also offer practical implications for

managers and policymakers seeking to navigate the complexities of implementing digitalization strategies while considering the needs and concerns of all stakeholders involved. The table below shows concisely what are the main structures that have been studied throughout recent years. The implementation of digitalization in a leading retail store has been met with various challenges that have hindered the company's goal of improving its customer experience, as well as creating an easier environment for frontline employees. One of the primary obstacles is the issue of security that remains a significant concern for customers who question the safety of the App, online payment methods, and QR codes with hacking becoming a normality with most companies. The employees are also having difficulties embracing these technologies, leading to further implementation difficulties.

Additionally, the efforts to connect the old and new systems have created dissatisfaction among employees and customers alike. For instance, the Merchandise Location Code has caused difficulties for employees when using the software. The lack of training has caused difficulties for certain employees who may have a harder time adapting to new technologies. Another challenge is the lack of consideration given to frontline employees as well as other employees who will be the main users of the program during the development of software. This oversight has resulted in difficulty using the software, leading to frustration for both employees and customers. Furthermore, the lack of clear guidance from the headquarters on how to create harmony with consumers and employees has left store managers to develop their own strategies, leading to inconsistencies in the application of the company's values throughout the different locations. Similarly, the use of external logistics companies such as Uber and Foodpanda has presented difficulties, as the lack of contact availability between drivers and customers frequently results in the retailer's employees having to handle problems that are not their responsibility, as well as the customers dissatisfaction who blames falsely the retailer for the delivery services issues. Leading to the employees having to navigate the digital interface of their own retailing store all the while handling the external logistics companies' issues that are not supposed to be part of the employees' job.

The employees also face logistic issues within the company as well, with different infrastructures that are proven to be challenging for the employees to handle. Such as, the customers being able to purchase online out of stock items due to the delays in the software with updating stock. The employees are the first to feel any problem from the system that leads to

delays regarding the preparation of the order, resulting in customer dissatisfaction. A feedback channel has been created to help improve communication between the headquarters and the employees facing the difficulties, but this has been proven to be ineffective, with changes made to the app that do not align with employees of the customers' expectations. For example, the implementation of a weight limit to prevent customers from ordering heavy items, did not prevent customers from ordering the same items from different brands which still leads to the weight limit being exceeded, making the employees having to pack the orders as well as the drivers to struggle to be able to carry everything.

The lack of communication between the headquarters and the stores has also created difficulties, as decisions made at the higher level do not always align with what is happening in the store, leading to inconsistencies with the application of certain projects as well as customer service with the headquarter teams not always being aware of what really happens in store. To further the retail company's ambition of becoming a more digital innovative store, the hybrid digital transformation stage was implemented to accelerate digitalization directly within the stores. This led to further complication in store due to the companies lack of sufficient labor to manage both the digital and the non-digital. For instance, self-checkout being promoted to customers and employees as an entirely autonomous digital checkout without cashiers, but there's still a need for frontline employees to manage the self-checkout process and help the customers all the while still having to manage the regular checkout.

The challenges faced by this retailer in implementing digitization highlight the importance of considering the impact on employees and customers when introducing new technologies. Failure to do so can result in inconsistencies in service delivery, customer dissatisfaction, and ultimately, loss of revenue. The implementation of digital transformation strategies refers to the actions taken by senior management to shift an organization into a new digital business. While the integration of transformation strategies into corporate strategy can bring about great opportunities, it requires a shared understanding of digital transformation as a phenomenon and a theoretical foundation. Effective transformation strategies must take multiple perspectives into account, such as new social systems and organization structures that promote open communications between business functions (Gerhard & Mugge, 2017). Studies on the role of top managers in firms have been plentiful, regarding them even as key decision-makers in firms. Top managers have a crucial role to play in the digitization of the firm's activities.

However, before making decisions that affect the organization, they need to develop a deep understanding of digitalization topics and their implications on the firm's formal and informal structure (Wrede & Valamuri, 2020).

To further support the top management's decisions, the concept of top management support (TMS) has been long-established to explain the role of top managers in digitalization activities. (Esciba-Esteve, 2022). But these concepts lack one fundamental element which is the lower-level employees who are the ones who will be the most impacted by these decisions in a positive or a negative way. The few that mention the role of employees are seen as human capital in the assessment of digital transformation. They are seen as playing a critical role in forming a business model based on data. The transformation process though is typically led by a business leader who has their own concept of conversions within the frameworks of a digital environment (Artemenko, 2020).

While studies on employees within digitalization often discuss their readiness or openness to accepting the transformation and how their capabilities support digital transformation, little is said about their emotional state regarding their roles in the organization, their interactions with customers, and whether top-level management takes lower-level employees into account (Blanka, Frumay, & Rueckel, 2022). Top managers have a crucial role to play in this process, but it is essential to consider the state of employees and their competencies in driving digital transformation.

4.2 Mind Map

Figure 2: The main difficulties with communication

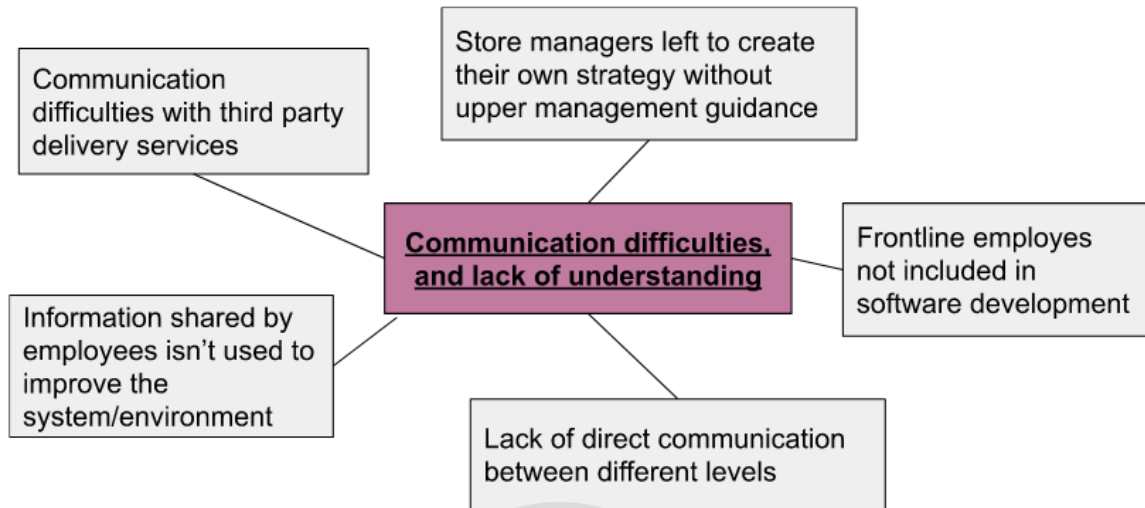
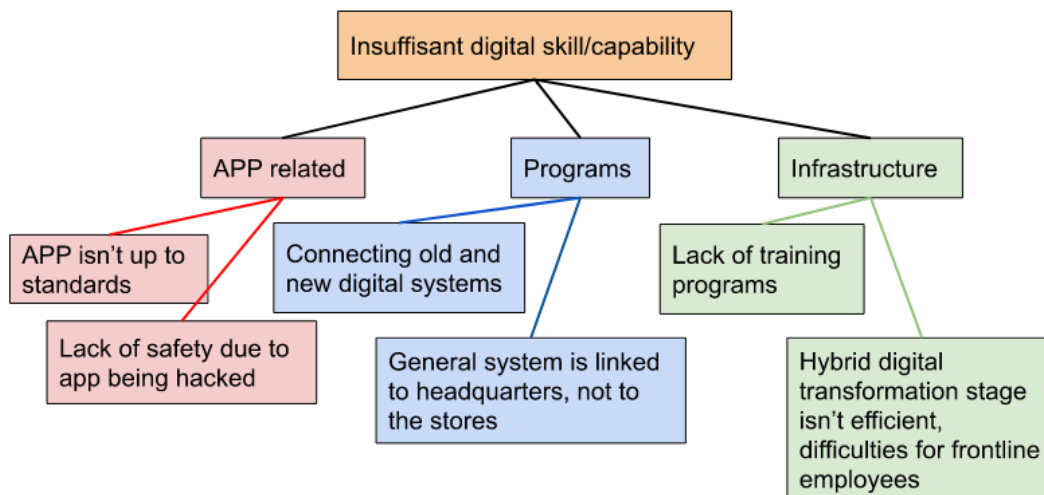


Figure 3: The mapping of insufficient digital skills.



Communication difficulties, often referred to as communication impairments or disorders, are multifaceted challenges that manifest in the realm of human interaction and information exchange. Rooted in diverse cognitive, linguistic, and socio-cultural factors, communication difficulties disrupt the seamless transmission of ideas, emotions, and intentions, impeding the effective and accurate conveyance of messages between individuals. The impact of communication difficulties extends beyond the individual, affecting interpersonal relationships, academic performance, occupational opportunities, and overall quality of life.

Communication difficulties have been extensively explored through theoretical frameworks and empirical research, aiming to understand their underlying mechanisms, etiology, and potential interventions. Scholars have examined the interplay of biological, cognitive, and environmental factors in the development and manifestation of communication difficulties, seeking to identify risk factors, diagnostic criteria, and evidence-based therapeutic approaches. (Dockrell, 2015). Insufficient digital skills refer to a lack of proficiency and knowledge in effectively using digital technologies and tools. In today's increasingly digitized world, where technology plays a central role in various aspects of life, individuals with insufficient digital skills face challenges in navigating and leveraging digital platforms and resources.

Insufficient digital skills encompass a range of competencies, including but not limited to basic computer literacy, internet navigation, digital communication, information retrieval, data management, digital security, and critical evaluation of online content. These skills are vital for tasks such as accessing online information, communicating electronically, utilizing digital productivity tools, engaging in online learning, and participating in the digital economy. These challenges can lead to limited access to information, reduced opportunities for employment and education, social exclusion, and a widening digital divide between those who have adequate digital skills and those who do not. Aria-Nejad, S. (2021). Communication difficulties and a lack of understanding emerged as a significant concern, revealing five key problems that significantly impact both the stores and frontline employees daily. The first challenge arises from store managers being left to devise their own strategies without guidance from upper-level management. As mentioned by employee C “There is no real clear path for the managers to follow, store managers have responsibilities towards the frontline employees as well as having to follow the top-level strategy, it’s difficult for the manager to manage the store and the

employees.” This places a substantial responsibility on store managers, as their decisions directly influence the brand's outcomes and service quality.

Another issue stemming from communication deficiencies is the exclusion of frontline employees from software development processes that directly affect their daily tasks and clients. As a result, employees face difficulties in adapting to software that does not align with their needs, leading to dissatisfaction among both employees and clients. The lack of effective communication channels between different levels of the organization gives rise to decision-making processes that fail to consider all aspects of the services provided by the retail company. This neglect of input from lower-level employees means that valuable perspectives and insights are overlooked, hindering comprehensive decision-making. As said by employee G “The company does have a feedback channel to give the headquarter the feedback about the difficulties while using the app, but once they get the feedback, they change the app but not correctly as wanted.”

Furthermore, the suggestions and feedback shared by employees to improve the work environment are often disregarded due to their lack of decision-making authority. Consequently, the organization misses out on valuable opportunities to enhance employee satisfaction and optimize productivity.

Lastly, communication difficulties extend to third-party delivery services. Retailing employees working in this area often bear the brunt of negative outcomes resulting from customer dissatisfaction with these services. Employee E mentioned facing these difficulties with “Third party delivery services that can get quite difficult, with one occasion where the drivers insulted the associates. There is also a problem of delivery that isn’t always conducted in a proper manner, and we receive the backlash instead of the third-party delivery service.” This predicament occurs despite the retail employees having no control or involvement in the operations of the third-party delivery service.

Insufficient digital skills can be seen through the organization's app, which fails to meet the expected standards for employees who rely on it daily. For instance, weight limits not being accurately registered in the app can lead to customers purchasing multiple products that exceed the weight restrictions. This subsequently creates difficulties for delivery services in meeting customer expectations. Furthermore, concerns about the app's security arise from past incidents of hacking, raising doubts about the overall security and protection of customer data.

The organization's digital transformation program, aimed at integrating old and new digital systems, encounters challenge due to its step-by-step approach. Employee G said that “Afterall, the digital transformation takes time and money, it makes sense that the transformation takes times because it will affect their balance sheet, so they are conservative about their spending and do it little by little to be sure that the spending is effective.” This incremental process leads to disruptions in connecting and synchronizing different components, resulting in inefficiencies and operational difficulties. Additionally, the program's direct link to headquarters rather than individual stores creates bottlenecks in decision-making, as changes must go through the headquarters, causing delays in the change process. This centralized approach restricts the autonomy and agility of individual stores.

The complexity of the existing digital infrastructure poses challenges for some employees who struggle to understand and navigate the programs. Additionally, the lack of access to comprehensive training programs further exacerbates the issue, leaving employees ill-equipped to fully utilize the available digital tools. This knowledge gap impairs their efficiency and adaptability, hindering the organization's overall digital transformation efforts. Lastly, the organization is currently navigating a hybrid digital stage that proves inefficient, creating additional challenges for both the company and its employees. Employee H talked about the hybrid stage, “the company has implemented a hybrid stage, but this has proven difficult for cashiers who have to now manage both the normal check out as well as the automatic checkout.” This stage complicates daily operations, making it more arduous for employees to handle, process, and adapt to the evolving digital landscape. We can see that lower-level employees are often left out of the decision-making process because they are not seen as key stakeholders in the digitization process. Decisions regarding digital transformation are typically made by higher level managers and executives who are responsible for setting organizational strategies and objectives. This leads to decisions being made without the input and the feedback of the lower-level employees.

Often digital incentives are seen as top-down directives rather than collaborative efforts that involve input and feedback from all levels of the organization. Even if research shows that involving employees at all levels in the digitization process leads to a smoother transition and a better harmony between the different levels.

During the course of interviews with employees at various levels within a retail store, a conspicuous disconnect was observed between the top-tier management and the lower level staff. Employee F mentioned that in his regard “the digitalization has been going well and more and more are getting used to it.” To begin with, it was noted that the frontline employees and lower-level employees were the ones who directly interacted with the new technology that had been implemented. As such, they possessed a more intimate understanding of the problems associated with it, as well as how its daily usage impacted their work and their interactions with customers.

On the other hand, the top-level management appeared to be cognizant solely of the advantages from the employment of digital transformation, without a clear comprehension of the actual obstacles that were encountered. This was largely because the communication channels between the frontline employees and the top-level managers, who were in charge of the digitalization, were not seamless, but rather obstructed at every juncture. While communication from the top down was straightforward and uninterrupted, the reverse direction was fraught with numerous impediments that frequently caused information to be either forgotten or lost in the chain of command.

Frontline employees were compelled to navigate various routes, such as raising their issues with a supervisor which wouldn't be an easy task due to fear of retaliation, who would then communicate with another supervisor, leading to the fragmentation of the information. An online method was also used to solicit direct feedback, but frontline employees had not witnessed it effecting any tangible change. When information was transmitted through online channels, responses were rare, and the working environment scarcely changed.

Admittedly, change is a prolonged and arduous process that isn't implemented within a day or even a year, but for most employees interviewed, it appeared that they did not see the desired changes materializing, leading them to feel as though the top-level managers were only implementing what they perceived as necessary or ideal. All these difficulties summarize the difficulties that the retailing service organization face several difficulties in their digital transformation journey. These challenges stir mainly around communication deficiencies, a lack of understanding, and a disconnect between different levels of the organization.

Chapter 5 Discussion and Conclusion

5.1 Conclusion

The aim of this study is to shed light on the impact of digital transformation within a company by taking a perspective that focuses on lower-level employees instead of just frontline managers. Through multiple interviews and an analysis of different articles and studies, we have discovered a new perspective on a very important subject. The retail industry heavily relies on lower-level employees, who are the backbone of the business. Without them, there would be no stores or customer service. While digitalization has created a new way of working and managing, it has not fully replaced employees, even if we are slowly getting closer to that point.

For now, frontline employees remain essential for the retail industry, especially since they are the face of the company that customers interact with every day. They play an extremely important role in how operations are affected during the day, and their input can greatly influence the success or failure of digital transformation. However, top-level managers often overlook the importance of lower-level employees and take the lead with digitalization without considering their role in the functioning of the entire system. Previous research has shown time and again the importance of good management and how it affects the implementation of digitalization, but most papers fail to mention the input of lower-level employees when choosing new digital infrastructure.

Through case studies, this paper highlights a lack of understanding and communication between the two levels of management. Frontline employees are not given the attention they deserve in the digital transformation process, and after installation, their opinions and suggestions are often disregarded. This is partly due to the fact that communication channels between employees and top-level managers are hindered, making it difficult for information to be transmitted smoothly. The management's lack of facilitation for information to be shared freely is also evident in the app used to receive feedback from employees. Despite multiple attempts to share their problems, little was done to address them, which resulted in frontline employees feeling neglected and undervalued. Speaking to a superior can be extremely difficult for employees, as they may fear losing their jobs or being considered disrespectful.

In conclusion, this paper has shown that taking employees into consideration is critical when implementing new digital infrastructure. Neglecting their input and not allowing them to be heard leads to more difficulties within the company and creates unpleasant sentiments among employees, which can negatively impact productivity and their desire to work for the company. By considering lower-level employees in the digital transformation process, companies can ensure a more fluid and effective transition.

5.2 Contribution to the theory

In recent years, digital transformation has become a key focus for businesses around the world, especially in light of the COVID-19 pandemic that forced many people to work and shop from home. As a result, a vast amount of literature has been produced on the topic, focusing mainly on the perspectives of top-level managers who make the decision to implement digital transformation and the management styles required to do so effectively. However, there has been a significant gap in research when it comes to the perspectives of lower-level employees who are the backbone of the retail industry.

While there has been some research on employees and their readiness for digital transformation, it has been largely quantitative and has not included detailed case studies. Furthermore, there has been little consideration given to the actual experiences of frontline employees when it comes to the implementation of digital transformation. This is a significant oversight, as frontline employees are often the ones who interact most directly with customers and are thus in a unique position to offer valuable insights into the impact of digital transformation on the customer experience. This paper seeks to fill this gap in research by providing a qualitative perspective on the experiences of employees in a retail setting. In particular, the paper focuses on the perspectives of lower-level employees in relation to digital transformation, an area that has not been explored in depth in previous research. The study is unique in that it is based on a detailed case study of a retailing company, which provides an in-depth look at the experiences of frontline employees and the impact of digital transformation on their work.

Overall, the goal of this paper is to shed light on the experiences of lower-level employees in the context of digital transformation and to provide insights that can be used to improve the implementation of digital transformation in the future. By considering the perspectives of employees, this paper aims to provide a more complete picture of the impact of digital

transformation on the retail industry and to inform more effective management strategies going forward.

5.3 Managerial implications

Understanding the managerial implications of decisions and actions is critical for effective management, as it allows managers to anticipate potential outcomes and make informed choices that align with organizational goals and values. One of the critical implications of digitalization is the need for better communication between top-level employees and the front-line staff. For businesses to succeed, it is essential to create an environment where employees feel safe and encouraged to share their ideas. This involves a fundamental shift in the way top-level managers interact with lower-level employees. Managers must take the time to listen to employees and implement changes based on their feedback.

With digitization having widespread implications for retailing stores, management styles must change. Training and development opportunities should be provided to give employees a better understanding of the digital systems and tools. These opportunities can help employees acquire the necessary digital skills and knowledge to adapt to the changing technology landscape. For instance, training programs on data analytics, customer relationship management, and digital tools can empower employees to use technology more effectively in their jobs. As technology changes, so do the roles and responsibilities of front-line employees. Managers need to define these new roles and provide the necessary training to help employees adapt. Once the employees are well-acquainted with the new technology, a better online platform should be created for employees to provide their reviews and ideas on what needs to be changed or added. This information should be used to better the company, even if it may be costly at the beginning. By incorporating feedback from employees, businesses can improve the way front-line employees work, as well as enhance the work environment for all employees.

Digitalization also provides new opportunities for monitoring and measuring front-line employee performance. Managers should identify appropriate metrics to measure employee performance and provide feedback and coaching to support continuous improvement. These metrics can help managers understand how employees are performing and identify areas where additional training or resources may be required. Top-level managers must modify their management style to fit the digitalization of the organization. However, it is crucial to recognize that not all employees will be affected equally by digitalization. Front-line employees are

typically the first to feel the impact of new technology, and their point of view must be considered in any decision-making process. As such, managers must take the time to understand how employees will be impacted and create a better work environment that incorporates their feedback.

The rise of digitization presents numerous managerial implications for retail businesses. By providing training and development opportunities, creating better communication channels, monitoring employee performance, and considering the impact of digitalization on employees, managers can create a more successful and supportive work environment. Ultimately, by embracing digitalization while also recognizing the importance of employee feedback, businesses can position themselves for long-term success.

This study provides multiple recommendations for the implementation of digital transformation in a retailing company. Firstly, one of the key recommendations made by the study is the creation of a more conducive environment for digital transformation by involving frontline employees in decision-making processes. Frontline employees are the ones who interact directly with customers and are best placed to identify areas where digital transformation can make a difference. By soliciting their opinions and ideas, the company can create a more inclusive approach to digital transformation, which will lead to better buy-in from all employees.

Secondly, In addition to involving frontline employees in decision-making, the study recommends that top-level employees, such as CEOs and company managers, provide better training to employees regarding the new digital infrastructure. This training should cover not just the technical aspects of the new system but also the potential impact on customers and how to handle situations that arise. This will prevent employees from feeling lost or ending up in stressful situations when faced with dissatisfied customers or issues related to the new digital infrastructure.

Thirdly, is for the technology team to create a complementary system that takes into consideration the daily challenges faced by employees. This approach will lead to a more harmonious system and a willingness to listen when change is required, rather than making unnecessary changes. The technology team should be aware of the potential impact of their changes on frontline employees and work to minimize any negative impact. Overall, this study highlights the need for a holistic approach to digital transformation in a retailing company that takes into consideration the perspectives of all employees, especially the frontline workers who

face the brunt of customer reviews and the drawbacks of the digital transformation. By advocating for the inclusion of negative feedback in the decision-making process and stressing the importance of creating an inclusive environment for everyone, the study provides valuable insights for companies looking to implement digital transformation successfully. By implementing these recommendations, the digital transformation process will be more effective for the company as a whole, leading to improved efficiency, productivity, and customer experience.

5.4 Research limitations and future research suggestions

This research has yielded significant insights into the implementation of digital transformation in an organizational context. However, it is important to acknowledge the limitations of this study, particularly with regards to organizational culture. The role of culture in shaping the organizational climate and the resulting impact on the implementation of digital transformation cannot be overstated.

One significant challenge that arises from organizational culture is the potential for misunderstandings and difficulties in communication. This is particularly true when there is a cultural divide between the leader and the employees, such as when top level management is from a foreign country and the employees are local. Additionally, the cultural differences that arise in the context of international firms can pose significant challenges when it comes to implementing digital transformation. This is particularly important in cross-cultural settings where the impact of digital transformation may be felt differently by employees from different backgrounds.

One of the major limitations of this study is that it relies on a case study approach. This means that the findings may not be generalizable to other contexts or populations, and it may be difficult to draw firm conclusions based on a single case. Additionally, there is no empirical or statistical data to support the findings, which may reduce the overall rigor of the research.

However, it's important to note that case studies can still provide valuable insights and in-depth understanding of a particular phenomenon or organization. The findings from this study can be used to generate hypotheses or inform future research in similar contexts. Another important limitation to consider is that while digital process sustainability was a significant aspect of the company's policies, this study did not investigate it in depth. This represents a potential area for future research to explore, particularly given the growing emphasis on

sustainable business practices. Despite these limitations, the findings from this study can still be useful for practitioners and researchers alike. By acknowledging the limitations and potential areas for future research, we can build on this study's strengths and work towards a more comprehensive understanding of the role of digital processes in promoting sustainable business practices. As well as continue to explore the impact of organizational culture and cross-cultural settings within the implementation of digital transformation towards the retailing sector.



References

Journal Articles

- Aria-Nejad, S. (2021). *LinkedIn: What is the digital skills shortage?*.
<https://www.linkedin.com/pulse/what-digital-skills-shortage-saman-aria-nejad>
- Ariella, S. (2023). *37 Incredible Digital Transformation Statistics [2023]: Need-To-Know Facts On The Future Of Business*. <https://www.zippia.com/advice/digital-transformation-statistics/>
- Aspers, P., & Corte, U. (2019). What is Qualitative in Qualitative Research. *Qualitative Sociology*, 42(2), 139–160.
- Barari, M., Ross, M., & Surachartkumtonkun, J. (2020). Negative and positive customer shopping experience in an online context. *Journal of Retailing and Consumer Services*, 53, 101985.
- Bartsch, S., Weber, E., Büttgen, M., & Huber, A. (2020). Leadership matters in crisis-induced digital transformation: how to lead service employees effectively during the COVID-19 pandemic. *Journal of Service Management*, 32(1), 71-85
- Becker, L. C. B., & Jaakkola, E. (2020). Customer experience: fundamental premises and implications for research. *Journal of the Academy of Marketing Science*, 48(4), 630–648.
- Blanka, C., Krumay, B., & Rueckel, D. (2022). The interplay of digital transformation and employee competency: A design science approach. *Technological Forecasting and Social Change*, 178, 121575
- Bonanomi, M. M., Hall, D. M., Staub-French, S., Tucker, A., & Talamo, C. M. L. (2019). The impact of digital transformation on formal and informal organizational structures of large architecture and engineering firms. *Engineering, Construction and Architectural Management*, 27 (4), 872-892
- Bordeaux, J. (2021). *What Is Customer Experience? (And Why It's So Important)*.

<https://blog.hubspot.com/service/what-is-customer-experience>

- Cetindamar Kozanoglu, D., & Abedin, B. (2020). Understanding the role of employees in digital transformation: conceptualization of digital literacy of employees as a multi-dimensional organizational affordance. *Journal of Enterprise Information Management*, 34(6), 1649-1672
- Chain, I. S. (2022). *Retailers struggling to keep up with digital transformation*. *IT Supply Chain*.
<https://itsupplychain.com/retailers-struggling-to-keep-up-with-digital-transformation/>
- Chain, I. S. (2022). *Retailers struggling to keep up with digital transformation*.
<https://itsupplychain.com/retailers-struggling-to-keep-up-with-digital-transformation/>
- Cms, A. (2022). *How Digital Transformation Can Overcome the Customer Experience Revolution*.
<https://agilitycms.com/resources/posts/how-digital-transformation-can-overcome-the-customerexperience-revolution>
- Dockrell, J.E., & Howell, P. (2015). Identifying the challenges and opportunities to meet the needs of children with speech, language, and communication difficulties. *British Journal of Special Education* 42(4),411-428. <https://doi.org/10.1111/1467-8578.12115>
- Encyclopaedia Britannica. (1998). *Retailing / Definition & History*.
<https://www.britannica.com/topic/retailing>
- Frow, P., McColl-Kennedy, J. R., Hilton, T., Davidson, A., Payne, A., & Brozovic, D. (2014). Value propositions. *Marketing Theory*, 14(3), 327–351.
- Frow, P., McColl-Kennedy, J. R., Payne, A., & Govind, R. (2019). Service ecosystem well-being: conceptualization and implications for theory and practice. *European Journal of Marketing*, 53(12), 2657–2691.
- Furjan, M. T., Tomičić-Pupek, K., & Pihir, I. (2020). Understanding Digital Transformation Initiatives: Case Studies Analysis. *Business Systems Research Journal*, 11(1), 125-141

- Forbes (2020). *97% Of Executives Say Covid-19 Sped Up Digital Transformation*.
<https://www.forbes.com/sites/johnkoetsier/2020/09/10/97-of-executives-say-covid-19-sped-up-digital-transformation/>
- Gong, C., & Ribiere (2021). Developing a unified definition of digital transformation.
Technovation, 102, 10741.
- Gupta, N. (2022). *Why digital transformation is important in retail and how to get started*.
<https://www.retailcustomerexperience.com/blogs/why-digital-transformation-is-important-in-retail-and-how-to-get-started/>
- Halpern, N., Mwesiumo, D., Suau-Sanchez, P., Budd, T., & Bråthen, S. (2021). Ready for digital transformation? The effect of organisational readiness, innovation, airport size and ownership on digital change at airports. *Journal of Air Transport Management*, 90, 101949
- Hanelt, A., Bohnsack, R., Marz, D., & Antunes Marante, C. (2020). A Systematic Review of the Literature on Digital Transformation: Insights and Implications for Strategy and Organizational Change. *Journal of Management Studies*, 58(5), 1159-1197
- H. C. (2023). *Internal Communication: Definition, Challenges and Top Reasons Why It's More Important than Ever*. <https://haiilo.com/blog/internal-communication-definition-challenges-and-top-reasons-why-its-more-important-than-ever/>
- Leonardi, P. M., & Treem, J. W. (2020). Behavioral Visibility: A new paradigm for organization studies in the age of digitization, digitalization, and datafication. *Organization Studies*, 41(12), 1601-1625
- Machado, C. G., Winroth, M., Almström, P., Ericson Öberg, A., Kurdve, M., & AlMashalah, S. (2021). Digital organisational readiness: experiences from manufacturing companies. *Journal of Manufacturing Technology Management*, 32(9), 167-182
- Mckinsey (2021). *How COVID-19 has pushed companies over the technology tipping point—and*

transformed business forever. (n.d.). <https://www.mckinsey.com/capabilities/strategy-and-corporatefinance/our-insights/how-covid-19-has-pushed-companies-over-the-technology-tipping-point-and-transformed-business-forever>

Meyer, C., & Schwager, A. (2007). Understanding customer experience. *Harvard Business Review*, 85(2), 116–126, 157.

Mhlungu, N. S., Chen, J. Y., & Alkema, P. (2019). The underlying factors of a successful organizational transformation? digital transformation. *SA Journal of Information Management*, 21(1).

Mishra, K. E., Boynton, L. A., & Mishra, A. K. (2014). Driving Employee Engagement. *International Journal of Business Communication*, 51(2), 183–202. <https://doi.org/10.1177/232948841452539>

Mixon, E., & Torode, C. (2020). *customer experience (CX)*. *Customer Experience*. <https://www.techtarget.com/searchcustomerexperience/definition/customer-experience-CX>

Nienaber, H., & Martins, N. (2020). Exploratory study. *The TQM Journal*. 32(3), 475–495.

Priyono, A., Moin, A., & Putri, V. N. A. O. (2020). Identifying Digital Transformation Paths in the Business Models of SMEs during the COVID-19 Pandemic. *Journal of Open Innovation : Technology, Market, and Complexity*, 6(4), 104

Sklyar, A., Kowalkowski, C., Tronvoll, B., & Sörhammar, D. (2019). Organizing for digital servitization: A service ecosystem perspective. *Journal of Business Research*, 104, 450–460.

Selimović, J., Pilav-Velić, A., & Krndžija, L. (2021). Digital workplace transformation in the financial service sector: Investigating the relationship between employees' expectations and intentions. *Technology in Society*, 66, 101640.

Stainbank, L. J. (2014). Factors Influencing the Adoption of International Financial Reporting Standards by African Countries. *South African Journal of Accounting Research*, 28(1), 79–95.

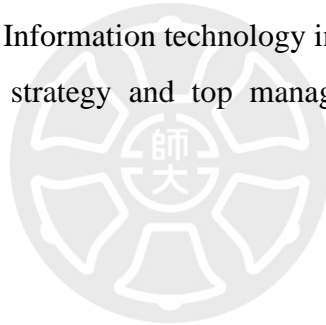
- Wilson, A. A. (2001). Understanding organisational culture and the implications for corporate marketing. *European Journal of Marketing*, 35(3/4), 353–367. <https://doi.org/10.1108/03090560110382066>
- Verhoef, P. C., Broekhuizen, T., Bart, Y., Haenlein, M., Dong, J. Q., Fabian, N. E., & Haenlein, M. (2021). Digital transformation: A multidisciplinary reflection and research agenda. *Journal of Business Research*, 122, 889–901.
- Vuță, D. R., Nichifor, E., Chițu, I. B., & Brătucu, G. (2022). Digital Transformation—Top Priority in Difficult Times: The Case Study of Romanian Micro-Enterprises and SMEs. *Sustainability*, 14(17), 10741.
- Verhoef, P. C., & Bijmolt, T. H. (2019). Marketing perspectives on digital business models: A framework and overview of the special issue. *International Journal of Research in Marketing*, 36(3), 341–349.
- Verhoef, P. C., Broekhuizen, T., Bart, Y., Bhattacharya, A., Qi Dong, J., Fabian, N., & Haenlein, M. (2021). Digital transformation: A multidisciplinary reflection and research agenda. *Journal of Business Research*, 122, 889–901
- Walmart. (2021). *FY2021 Summary: Environmental, social and governance*. https://corporate.walmart.com/esgreport/media-library/document/walmart-2021-esg-annual-summary/_proxyDocument?id=0000017a-82c5-d7dc-ad7a-bac574130000
- Wang, W., Zhang, Y., Wu, H., & Zhao, J. (2022). Expectation and Complaint: Online Consumer Complaint Behavior in COVID-19 Isolation. *Psychology Research and Behavior Management*, Volume 15, 2879–2896.
- Wong, K., & Wong, K. (2023). *Organizational culture: Definition, importance, and development*. Achievers. <https://www.achievers.com/blog/organizational-culture-definition/>

Wrede, M., Velamuri, V. K., & Dauth, T. (2020, August 3). Top managers in the digital age: Exploring the role and practices of top managers in firms' digital transformation. *Managerial and Decision Economics*, 41(8), 1549–1567.

Wrede, M., Velamuri, V. K., & Dauth, T. (2020). Top managers in the digital age: Exploring the role and practices of top managers in firms' digital transformation. *Managerial and Decision Economics*, 41(8), 1549–1567.

Zhang, X., Xu, Y. Y., & Ma, L. (2023). Information technology investment and digital transformation: the roles of digital transformation strategy and top management. *Business Process Management Journal*, 29(2), 528–549.

Zhang, X., Xu, Y. Y., & Ma, L. (2023). Information technology investment and digital transformation: the roles of digital transformation strategy and top management. *Business Process Management Journal*, 29(2), 528–549.



Annex 1: Interview protocol

Interview protocol for (NAME OF STUDY)

Opening script (Note: consent will have to be collected prior to starting the opening script):

Thank you for meeting with me today! The Purpose of this interview is (state purpose). As a participant in this study, I consider you to be an expert on this topic and want to know about your experiences and thoughts regarding the questions I'm going to ask.

I will be recording this interview with this device (show the recorder). After our interview is over, I will make a transcript of what you said, but I will replace your name, as well as those of anyone you mentioned and any places you mention, so that nothing you say can be traced back to you. I will be the only one that has access to this data, and will keep it locked away safe until it is time to erase the data entirely.

If you want to stop the participation in the interview or not respond to any specific questions for any reasons, you may do so without fearing judgment or disappointment. Before we begin, do you have any questions? (Answer any questions until the participant is satisfied and ready to begin.)

This interview is expected to take (X) minutes. Are you willing to start the interview and be recorded right now? (wait for responses, and begin recording). Okay, I've started the recording. Can you confirm, for the recording, that you understand and assent to having your words recorded in this interview? (wait for responses). Thank you! Let's begin with the first question.

Interview questions:

Question	Probes/Follow-up questions
Tell me about your background, and how long you	1. You mentioned (prior

have been working for carrefour?	statement). Can you talk more about it?
Tell me about how you acquired your current position at Carrefour and what led you to work for them?	2. I was interested in what you said about (prior Statement). Can you tell me a specific story from your experience that illustrates this point?
Digitization is on the forefront of Carrefours OMNI channel, can you tell me more about how this came to be? And has this been successful in your perception?	3. How so/in what way?
How did carrefour decide to start digitalization? What were the first steps taken? Has digitization changed the carrefours ideals (555)? Positive or negative?	4. What do you mean?
How do you feel digitization has influenced/changed the way people consume within the store? Have you seen a modification of the client's and employee behavior due to digitalization?	5. Can you clarify what you meant by that?
What for you has been the most impactful with clients and employees within the OMNI channel?	6. So, if I can paraphrase what you just said, I'm hearing that (summary of points), is that correct?
As the CEO of the company, tell me more about your expectations for the future? <ul style="list-style-type: none"> • Digitalization • Stores expanding 	
As a top manager how does digitalization play an important role in your day to day work life?	

<ul style="list-style-type: none"> • Influence • Monitor • Communication 	
<p>Tell me more about how digitalization has changed the company's way of working from the inside.</p> <ul style="list-style-type: none"> • Employee • Distribution • Relationships 	
<p>What is the next digital step you wish to see be implemented and why?</p>	
<p>Have you seen an evolution regarding different roles throughout the employees? How has this created new expectations towards the employees?</p>	
<p>How do you feel digitalization has changed your interactions with customers?</p> <ul style="list-style-type: none"> • Change in interactions • Change in products they buy 	
<p>Tell me about the biggest change due to digitalization in your work environment and do you perceive it as a good or a bad thing?</p>	
<p>Has digitalization on your end been beneficial for your work load or has it created more work?</p> <ul style="list-style-type: none"> • Deliveries • Store layout • Cashier 	
<p>Do you feel the company has a hard time keeping up with the demands from the customers regarding</p>	

digitalization? Do you feel the company is implementing new infrastructure fast enough?	
In what way do you feel that these new infrastructures have changed the way you work? Has it made it easier or more difficult? Why ?	
Has digitalization on your end been beneficial for your work load or has it created more work?	
Has this led to a better relationship between your business and carrefour?	
Can digitalization be hard to handle/keep up with the ever evolving new products that come up, as well as new demand? Why ?	
Have you seen an evolution regarding different roles throughout the employees? How has this created new expectations towards the employees?	

Closing script:

That concludes our time. Thank you for your participation in this interview! The results will help us to understand more about (the topic). (preview any other tasks that the participant will be asked to do.)

Do you have any questions for me before you go?

Thank you so very much. The research would not be possible without you.