



How to create value with the integration of technologies in omnichannel strategies in the luxury market

Luís Carlos Ferreira Tavares

Dissertation

Master's in Innovation and Technological Entrepreneurship

Supervised by

Teresa Sarmento

2023

Acknowledgments

Embarking on this journey has been a remarkable experience, filled with moments of growth, discovery, and immense gratitude. As I reflect upon the conclusion of this life project, I am reminded of the incredible support and unwavering encouragement I have received from several people. I am also incredibly grateful to conduct research at such a great university while working as a Product Manager at Farfetch. Undoubtedly, such challenge contributed to both my personal and professional development.

First and foremost, I would like to express my gratitude to my supervisor, Professor Teresa Sarmento, for her assistance, guidance, and support during the entire research process.

I am also thankful to the study's participants, who made themselves available to contribute to this research. Their insights, opinions, and observations were crucial for this accomplishment. And I am glad I had the opportunity to meet and interview some of the most experienced professionals in these fields.

I sincerely thank my friends, who directly and indirectly contributed to this research, for their constant support and encouragement. Their empathy, patience, and confidence in me have continuously inspired and motivated me.

Finally, a huge and special thanks to my mom, dad, and sister. Always together and available to help me. Thank you very much!

Abstract

The rapid evolution of technology and the rise of emerging technologies have impacted how consumers shop and interact with brands. Challenges are intensified in the luxury market, not only due to this segment's exclusive and aspirational nature but also because of the high expectations of luxury consumers. In this highly competitive market, customers have a wide range of brands, companies, and businesses from which they can choose to buy whatever they want. Therefore, luxury experiences must be increasingly captivating, different, and unique. In this context, this dissertation aims to examine how integrating technology in omnichannel strategies can contribute to value creation in such experiences.

This dissertation explores the growing importance of omnichannel strategies and the power of technology in creating seamless experiences for luxury consumers. It investigates the integration of technology into luxury omnichannel strategies to understand how technology can be harnessed to create value in the luxury industry. Additionally, this study examines the challenges and opportunities associated with integrating technology into the luxury customer journey, such as the need to balance accessibility and exclusivity, meet customer expectations, and leverage consumer data effectively.

Data collection was conducted through semi-structured interviews, following a qualitative research approach. Thirteen experts from the luxury and technology industries were interviewed, providing valuable insights for this dissertation. The interview guide and analysis were developed based on this study's research question and specific objectives. These elements were carefully crafted and structured around the following pillars:

- understanding how experts perceive the power of technology when integrated into luxury omnichannel strategies
- exploring the opportunities and challenges related to technology integration
- showcasing successful cases of technology integration in luxury shopping experiences

The study findings reveal that technology significantly impacts value creation within a luxury omnichannel experience. It can transform how customers interact with brands, create memorable experiences, and exceed high-end consumers' expectations. Further, it indicates that technology can enhance the shopping journey via data and the brand's essence, leveraged by emerging

technologies. Finally, this research demonstrates how vital the brands' resources and the technological evolution concepts are to deliver more value to the customers.

Keywords: omnichannel strategy, luxury, technology integration, value creation

Resumo

A rápida evolução de tecnologia e o recente surgimento de tecnologias emergentes tem impactado a forma como os consumidores fazem compras e interagem com as marcas. E os desafios são intensificados no mercado de luxo devido não só pela natureza exclusiva e aspiracional deste segmento, mas também devido às elevadas expectativas dos consumidores de luxo. Para além disso, neste mercado altamente competitivo, os clientes têm uma extensa variedade de marcas, empresas e negócios dos quais podem escolher o que desejam comprar. Por isso, as experiências de luxo devem ser cada vez mais cativantes, diferentes e únicas. Neste contexto, o objetivo desta dissertação é analisar como é que a integração de tecnologia em estratégias omnicanal pode contribuir para a criação de valor em tais experiências.

Esta dissertação examina a crescente importância das estratégias omnicanal e o poder das tecnologias na criação de experiências perfeitas para os consumidores de luxo. Explora, assim, a integração de tecnologia nas estratégias omnicanal de luxo, com o objetivo de compreender como o poder da tecnologia pode ser aproveitado para criar valor nesta indústria de luxo. Além disso, este estudo analisa os desafios e as oportunidades associados à integração da tecnologia na jornada do consumidor de luxo, como a necessidade de equilibrar o acesso e a exclusividade, satisfazer as expectativas dos clientes e utilizar os dados dos consumidores de forma eficiente.

A recolha de dados foi realizada por meio de entrevistas semiestruturadas, seguindo uma metodologia qualitativa. Foram entrevistados 13 especialistas das indústrias de luxo e da tecnologia que trouxeram relevantes e valiosos contributos para esta dissertação. O guião das entrevistas e a análise das mesmas foram desenvolvidas com base na questão de investigação e nos objetivos específicos deste estudo. Esses elementos foram cuidadosamente elaborados e estruturados nos seguintes pilares:

- entender como os especialistas vêm o poder da tecnologia quando integrada em estratégias omnicanal de luxo
- as oportunidades e os desafios relacionados com a integração de tecnologia nestas estratégias e como os ultrapassar
- casos bem-sucedidos de integração de tecnologia em experiências de compra de luxo

Os resultados do estudo revelam que a tecnologia tem um impacto significativo na criação de valor dentro de uma experiência omnicanal de luxo. Ela possui o potencial de transformar a

forma como os clientes interagem com as marcas, criando experiências memoráveis e superando as expectativas dos consumidores de luxo. Além disso, indica que a tecnologia pode aprimorar as etapas de compra por meio de dados e da essência da marca, elementos que são alavancados por tecnologias emergentes. Por fim, esta pesquisa demonstra a importância dos recursos das marcas e do conceito de evolução tecnológica para fornecer mais valor aos clientes.

Palavras-chave: estratégia omnicanal, luxo, integração de tecnologia, criação de valor

Index

Acknowledgments	
Abstract	
Resumo	V
Index of Tables	
Index of Figures	X
Chapter 1. Introduction	1
Chapter 2. State of the Art	
2.1. Omnichannel as an evolution of multichannel	3
2.2. Challenges in designing omnichannel strategies	6
2.3. Omnichannel Retail Technologies	8
2.4. Perceived value and quality in the luxury customer journey	10
2.5. Technology-based luxury services	
Chapter 3. Methodology	17
3.1. Introduction	17
3.2. Research Design	17
3.3. Data Collection	
3.4. Data Analysis	
Chapter 4. Results & Discussion	
4.1. Introduction	23
4.2. Characterization of the sample	23
4.3. Results	24
4.3.1. Experiences	25
4.3.2. Expectations	27
4.3.3. Data	

4.3.4. Emerging Technologies		31
4.3.5. Brands' essence		34
4.3.6. Technology evolution		36
4.3.7. Resources		38
Chapter 5. Conclusion 5.1. Limitations and Future Research		43
References	45	
Appendix	51	
Appendix A – Research participants		51
Appendix B – Informed Consent Form		53

Index of Tables

Table 1 - Interview guide		
Table 2 - Categories and concepts retrieved from the data analysis	25	

Index of Figures

Figure 1 - Tiffany & Co. Diamonds of Tiffany	9
Figure 2 - Burberry Virtual Studio AR Makeup Tutorials	16
Figure 3 - World cloud from the interviews	24

Chapter 1. Introduction

"Digital will continue changing consumer behavior, fostering an appetite for experience rather than simply shopping and buying. Consumers are no longer simply buying a product. They are purchasing the experiences and emotions that the brand can offer them." (Achille, Remy, & Marchessou, 2018, p. 15)

In today's highly competitive market, customers have a wide range of brands, companies, and businesses from which they can buy whatever they want (Shi, Wang, Chen, & Zhang, 2020). Besides, the customer's behavior and interactions in the physical world are changing rapidly in this industry (Holmqvist, Wirtz, & Fritze, 2022). For these reasons, and due to the tremendous technological advantages and the necessity to attend to the evolving desires of customers, luxury brands are increasingly interested in quickly adopting new technologies to their service to design and provide a unique shopping experience for each customer. So companies use several customer-facing channels to interact with their clients while meeting these new market needs.

Omnichannel strategies have the potential to address these challenges and drive growth in the luxury market. By exploring the latest research and best practices in omnichannel strategies for luxury brands, this dissertation aims to provide valuable insights for industry professionals and contribute to the academic literature in the field. By studying the luxury market, this dissertation could help luxury brands to identify the most suitable technologies used in omnichannel strategies and how to implement them effectively. This study could also help to understand the consumer behavior of the luxury market through a technological journey.

This way, we question - How can a luxury brand create value for its customers using technology in its omnichannel strategy?

The literature review process, which revealed a gap in the existing literature in the context of value creation through technology integration in omnichannel strategies, served as the basis for identifying this research question. To address this gap, research is organized around several sub-themes, each of which focuses on a different aspect of the interaction between technologies and luxury shopping services. These themes include understanding the power of technology, evaluating its impact on luxury customer experiences and perceptions, examining the challenges and opportunities they present to luxury brands, and exploring the role technology will play in shaping the luxury retail sector of the future. The research question aims to be answered by examining these themes and exploring and filling the identified gap.

The following chapters of the dissertation are organized to accomplish the planned approach. Chapter 1 focuses on introducing the research. The literature review is introduced in Chapter 2 with an emphasis on comprehending the luxury omnichannel concepts and the tactics used. The detailed methodology for the research is described in Chapter 3, after which the results are presented and discussed in Chapter 4, and Chapter 5 concludes the study.

Chapter 2. State of the Art

A selection of scientific articles on technology, omnichannel, customer experience, retailing strategies, and luxury were grouped to assess their similarities and analyze the writers' theories. These themes reflect several recent research areas and offer insightful information about technology, retail, and the luxury market and critical reasoning on the arrangement of all.

According to Lazaris and Vrechopoulos (2014) and Verhoef, Kannan, and Inman (2015), omnichannel (1) includes the evolution of multichannel strategies to omnichannel and the challenges associated with designing omnichannel experiences (2). Moreover, this study also examines Omnichannel Retail Technologies (3) and how they influence the customer journey and improve the overall retail experience.

Then it analyses the perceived value and quality within luxury customer journeys (4). Also, this study looks at the increasing popularity of technology-based luxury services (5), examining how technology is transforming the way luxury experiences are delivered.

By organizing the literature into these themes, this study offers a thorough and coherent overview of the state of the art at the interaction of technology, retail, omnichannel strategies, and the luxury market. The following paragraphs will go into further depth on each of these subjects.

2.1. Omnichannel as an evolution of multichannel

Rigby (2011) states that omnichannel reflects how retailers can easily interact with customers through countless channels, such as "websites, physical stores, kiosks, direct mail and catalogs, call centers, social media, mobile devices, gaming consoles, televisions, networked appliances, home services, and more" (Rigby, 2011, p. 4). Along with being implemented to integrate technologies and processes across supply and sales channels (Saghiri, Wilding, Mena, & Bourlakis, 2017).

Customers move freely between online, mobile devices, and physical stores in a single transaction process (Piotrowicz & Cuthbertson, 2014). And this is happening because the lines between online and offline are becoming more tenuous now that retail businesses

concentrate more on designing a model that can assist their customers instead of just focusing on simple transactions and deliveries (Brynjolfsson, Hu, & Rahman, 2013).

Mobile, social media, and games are supplemented by the 'traditional' online and physical channels. As a result, the journey becomes seamless and offers a unified customer experience regardless of the channel used. However, these channels must be managed together so the perceived interaction is with the brand and not the individual channel (Piotrowicz & Cuthbertson, 2014).

As new companies and brands appear in a more and more competitive market, especially in the luxury market, there has been a great need to differentiate not only the products but also the way clients get involved with the brands and enter their universe, get to know the people behind it and have a unique experience. This is a result of the significant advances and improvements in technologies, which have started a revolution in the retail sector. This revolution can be seen as integrating several different channels that complement each other to improve the customer experience; therefore, encouraging the transition from multichannel to omnichannel business (Shi, Wang, Chen, & Zhang, 2020). According to Shen, Li, Sun, and Wang (2018), it was also due to the evolution of technology along with the current digitalization trends that it became possible for the various existing channels to be accessed by customers in the retailing sector.

Therefore omnichannel is not a new concept. It is an emerging trend that can be considered an evolution from multichannel, which meets the new requirement of integrating several channels to attract customers to the business in an effortless flow (Verhoef, Kannan, & Inman; Lazaris & Vrechopoulos, 2014). And in contrast to multichannel, omnichannel includes not only the usage of several channels at the same time but also the collaborative implementation of the complementary channels to ensure that the transition between them is seamless and consistent (Shen, Li, Sun, & Wang, 2018). In this manner, multichannel focuses on increasing customer value by combining digital tools and technologies, while omnichannel strategies focus on offering a broader view of influencing consumer decision-making (Akter, et al., 2019). This, according to Shen, Li, Sun, and Wang (2018), is defined as the type of service that enables customers to effortlessly select from all available channels and switch between them without losing or repeating any information.

However, designing an omnichannel strategy requires more than just including channels. In fact, integrating other service elements, such as price, promotion, product variety, information, and transactional data, must be planned across all of a company's channels (Akter, et al., 2019). And this concept goal is to align processes and technologies across several different channels to enhance the customers' value proposition (Gallino & Moreno, 2014). Nevertheless, for this to happen, several means must interact in the form of information and material flows (Saghiri, Wilding, Mena, & Bourlakis, 2017).

Nonetheless, nowadays there have been occurring several changes in the retail sector, which have led to finding new ways to interact with customers, innovate the business model and see the latest and proper purpose for physical retail stores (Jocevski, 2020). And this is where technology steps in and gets its relevance. In fact, the use of technology in retail services is completely transforming how they are delivered and how customers engage with that experience. For that, it is necessary to combine both online and offline channels while using omnichannel retail technologies, which are constantly changing and evolving (Mimoun, Miltgen, & Slama, 2022). And, to better understand how they are growing and in what way they will change and impact the luxury retail market and customer behavior (Mimoun, Miltgen, & Slama, 2022).

Initially, some motivations and advantages would lead retailers to design these strategies. First, it was a way to have better financial performance, which was explained by providing affordable access to new markets, as well as enhancing customer satisfaction and establishing a strategic advantage (Zhang, et al., 2010). In fact, these strategies could provide access to new markets without expanding the physical stores, which require significant investment. While simultaneously offering a more convenient purchase experience, in which customers could buy their items "whenever and wherever" (Zhang, et al., 2010, p. 170) they want to. This results in reduced time and travel expenses, a more comprehensive range of items to choose from, and a physically secure shopping environment in their homes or other preferred places. Also, by purchasing through several channels, users can face more customized content due to technology integration. Finally, the strategies mentioned above can bring the benefit of creating strategic advantages. As addressed by these authors, businesses can arise from owning customer information and offering a seamless customer interface. In other words, companies can retain customer

data, which can then be used to target clients better, make better suggestions, and retain customers throughout a convenient and easy purchase journey (Zhang, et al., 2010).

For Rigby (2011), omnichannel is a bit more complex. Consumer awareness is influenced not only by marketing initiatives created by the brand, but also by online expert evaluations, reviews, and recommendations. Shopping involves more than simply going to the store; it also involves looking up other suppliers, comparing costs, making quick and easy returns, and so on (Rigby, 2011). And nowadays, marketers can send coupon codes and offers directly to their customer's mobile devices, optimize search terms and locationbased promotions, and deliver targeted advertisements to customers who check in to their stores using external platforms. The number of potential strategies and tools available is constantly growing. Plus, by using these tools in each process stage, retailers can identify targeted client groups to design and craft engaging purchase journeys (Rigby, 2011).

2.2. Challenges in designing omnichannel strategies

Designing an omnichannel retailing experience is becoming more and more complex. In fact, "customers want everything" (Rigby, 2011, p. 8). And one of the biggest challenges is integrating "technologies in the most important channel – physical stores" (Rigby, 2011, p. 5).

Customers not only seek the advantages brought by the digital side, such as the infinite selection of products, the transparency on price and reviews, and the ease and speed with which they can make a purchase, but they also want the advantages found on the physical stores, like the face-to-face interactions and personal service, possibility to try on the products, and shopping as an event. Integrating technologies in omnichannel retailing strategies is crucial to generate opportunities and challenges for retailers (Piotrowicz & Cuthbertson, 2014).

Considering the new issues and challenges brought on by the digital disruption to both the traditional physical stores and online businesses on delivering "seamless quality experiences within and across multiple channels" (Akter, et al., 2019, p. 72), an omnichannel store strategy is considered to be crucial to help increase the quality of the service that is being provided, so that it can then be considered an "integrated, seamless and consistent cross-channel shopping experience" (Shen, Li, Sun, & Wang, 2018, p. 61). However, each

channel, like the Internet, smartphones, social media, and physical stores, is considered as a separate mean. And this is where some difficulties arise regarding creating value in omnichannel strategies (Shen, Li, Sun, & Wang, 2018). In fact, according to these authors, transiting information between several channels can turn out in "data mismatch and information inconsistency" (Shen, Li, Sun, & Wang, 2018, p. 61) and a "lack of a unified view of a customer across channels" (Piotrowicz & Cuthbertson, 2014, p. 6). For this reason, companies nowadays focus on creating and delivering omnichannel strategies while integrating the information from the several available channels to offer a seamless, unified, and consistent shopping experience (Shen, Li, Sun, & Wang, 2018). And this data integration issue is divided into two aspects. It is not only essential to set up an infrastructure that can process the shopping and purchase data from all the available channels, but it is also crucial to understand what information needs to be collected and how it can be presented to decision-makers (Zhang, et al., 2010).

The traditional approach to collecting and managing data focuses on individual channels, often leading to retailers needing help tracking transaction information across channels and measuring their cross-channel customers' profitability (Zhang, et al., 2010). Adopting a customer-centric approach to data integration is essential to implement these strategies effectively. However, when the same customer interacts with the retailer in a brick-and-mortar store, linking this behavior to their purchase history through other direct channels becomes challenging. Many retailers need help to link these separate databases, which results in them missing out on the actual value of an omnichannel customer. Therefore, retailers who can accurately connect the data can measure customer value, target appropriate marketing resources, track customer evolution in different stages, and more. An integrated and unified view of customer purchase behavior is critical to using customer transaction data to build a better customer relationship and more efficiently allocate the available resources (Zhang, et al., 2010).

Furthermore, this is where another challenge steps in: the complexity. Integrating online and offline channels require a series of multiple integrations that need to be made, such as the "inventory systems, warehouses, marketing campaigns, pricing strategies" (Gallino & Moreno, 2014, p. 4). Zhang, et al. (2010) identified several other channels in which several challenges arise, including aspects related to organizational structure, consumer analytics, and performance evaluations. Companies must integrate numerous business functions, such as information technology (IT), service operations, logistics, marketing, human resources, and external partners, to create and deliver positive customer experiences. Subsequently, due to the explosion of potential customer touchpoints and the loss of experience control, it has become more difficult for businesses to design, manage, and control each customer's experience and journey (Lemon & Verhoef, 2016).

According to Rigby (2011), each target segment can be impressed in a unique way by omnichannel strategies. It is possible to serve some segments much like they were in the past. However, others require more imagination, creativity, and innovation. And businesses need to allocate resources to innovate. Instead of the one-size-fits-all strategy that has been most common around retailers in the past, the goal is now to identify each segment's unique attributes and offer customized solutions. Nowadays, shopping in a brick-and-mortar store can be, for many customers, just a job that needs to be done. So, businesses must find new ways to attract customers and make the shopping experience appealing and entertaining (Rigby, 2011).

Finally, luxury brands must also protect their distinctive personality and keep their reputation as exclusive and aspirational, keeping their widespread popularity and exclusivity balanced. The author suggests that this challenge began due to technological advances (Lawry, 2023).

2.3. Omnichannel Retail Technologies

Omnichannel Retail Technologies (ORTs), or In-store technologies (ISTs), refer to the use of technology in the physical retail environment. In other words, these are "the different consumer-facing devices that facilitate the shopping process in the physical store" (Alexander & Kent, 2022, p. 1; Mimoun, Miltgen, & Slama, 2022).

For example, ORTs not only include smartphones and tablets used by the customers (Akter, et al., 2019) but also emerging technologies, such as "virtual screens and aisles, virtual mirrors-fitting rooms, digital signage, intelligent self-service kiosks, vending machines and dynamic menus" (Piotrowicz & Cuthbertson, 2014, p. 6) and "interactive screens, augmented reality, and 'magic mirrors" (Piotrowicz & Cuthbertson, 2014, p. 10).

These technologies are integrated to enhance the shopping experience and create a seamless connection between the available channels (Alexander & Kent, 2022), while blurring the differences between the online and offline channels (Brynjolfsson, Hu, & Rahman, 2013). In fact, these authors state that integrating these technologies facilitates customer interactions and improves the shopping experience. And this happens because these technologies increase the customer's willingness to go to the store, making it more attractive and the purchasing journey more enjoyable and satisfying (Gibson, Hsu, & Zhou, 2022). This is also explained by Brynjolfsson, Hu, & Rahman (2013) and Javornik, et al. (2021), who explain that by merging tangible sensory experiences from the physical world with the digital content in the virtual world results in a more enriching experience. Figure 1 illustrates an example from Tiffany & Co., where technology, specifically Augmented Reality, was integrated to create an interactive space where customers could have an immersive experience within a craftsman's workshop.



Figure 1 - Tiffany & Co. | Diamonds of Tiffany

Additionally, the development of ORTs has made it possible to increase the efficiency and speed of internal processes and sales teams. With the help of these technologies, data, systems, and operations can be seamlessly coordinated across the various channels,

enabling a more unified and efficient approach. By leveraging these technologies, brands can streamline their retail processes and build a solid, agile team (Alexander & Kent, 2022).

Besides, some individuals prefer to interact with In-store Technologies to "avoid salesassociate interactions" (Alexander & Kent, 2022, p. 6), considering that they like to minimize interactions with sales associates. Thus, contradicting the use of technologies to increase the store attractiveness, raising the enjoyment, satisfaction, and purchase intention associated with these experiences, as clarified by Alexander & Kent (2022).

2.4. Perceived value and quality in the luxury customer journey

The original concept of luxury was created based on the visible manifestations of hereditary social inequality and stratification. Nowadays, luxury is everywhere. The idea of luxury is appealing and fashionable and it plays an important role in our life by reintroducing a socioeconomic stratification (Kapferer & Bastien, 2008). And luxury brands have the power to make luxury difficult to access, while conveying an impression of selectiveness and exclusivity (Dubois & Duquesne, 1993; Geerts & Veg-Sala, 2011). And there are two ways customers can access luxury goods: quality or social representation. In fact, customers can opt for luxury goods because of their excellent quality or simply because of what the brand or the product represents, which can be explained as an extreme manifestation of expressing one's values (Dubois & Duquesne, 1993).

This market is entirely distinct from other industries and so requires a certain kind of attention. The luxury market has its own rules and is distinguished by the particular needs of the luxury customer. In fact, the preferences and expectations of the luxury consumers call for specific methods and tailored solutions considering that their standards are higher, unlike other industries (Kapferer & Bastien, 2008), especially when luxury brands are developing their strategies. Geerts and Veg-Sala (2011) mentioned that communication is vital for luxury brands. But so is the personalization of the service and the shopping journey (Alimamy & Gnoth, 2022). Actually, the desire for unique and personalized experiences, along with high-quality products, remains strong among luxury shoppers. And this is seen as an opportunity for luxury brands to improve their in-store service, while maximizing their customer engagement via technology integration (Steinfield, Bouwman, & Adelaar, 2002; Fubini, 2016). However, in the context of luxury retail, it is crucial to

understand that in-store experiences should show more than simply mirroring the brand's online presence. Instead, luxury brands should effortlessly combine and integrate both digital and physical elements to produce a superior overall experience (Steinfield, Bouwman, & Adelaar, 2002). Therefore contributing to strengthening the brand identity and reputation, as well as differentiating the brand in a highly competitive market.

Additionally, time plays an important role in the customer journey as a differentiating factor. In a luxurious purchase journey, customers intentionally spend time seeking the perfect item, waiting for it to become available, and nurturing their desire for it. Thus it becomes crucial for a luxury brand to know how to create the proper barriers to encourage and intensify this desire and manage it in the best possible way. This is interesting to recognize that customers appreciate these experiences, which require them to go through cultural, logistical, and time obstacles, as well as certain feelings and emotions. A distinctive feature of the luxury experience is that customers value the opportunity to make decisions involving significant amounts of money, learning how to appreciate, wear and use the product, find where to buy it, and have to wait patiently for the achievement of their longing for an exclusive item (Kapferer & Bastien, 2008; Geerts & Veg-Sala, 2011).

It is also essential to analyze the literature on the value and quality customers perceive while shopping within an omnichannel strategy. Such exploration contributes to identifying the key factors that influence customer perception and can assist in developing and implementing successful omnichannel strategies that exceed the customers' expectations.

Wu and Chang (2016) define customers' perceived value as their assessment and evaluation of a product or service's attributes and features that support accomplishing their objectives within particular usage circumstances. It includes how the customer perceives the advantages and benefits of the product or service and evaluates its worth and usefulness according to their requirements and expectations. Besides, it refers to the level of quality experienced across all their interactions throughout the entire journey, representing the complete assessment of the customer experience, considering each interaction that existed across several channels (Sousa & Voss, 2006).

To offer value and good quality for customers, providing a seamless experience in which customers can smoothly interact with the available channels is mandatory. And businesses work towards ensuring customer convenience by making it simple and straightforward for customers to obtain their products or services through the channel they find most convenient, whether those channels are physical or digital (Banerjee, 2014). However, for this to become possible, it is crucial to implement a strategy based on already well-known channels to customers of which they are aware of their features and attributes (Shen, Li, Sun, & Wang, 2018). This means customers will go through similar and consistent process attributes based on their desires, conditions, time of the day, or even product category. Actually, it is critical for customers to be already familiarized with the available channels; so that companies and brands do not create an obstacle during the shopping experience, enabling an adequate channel flow and ensuring consistent quality levels within and across channels (Piotrowicz & Cuthbertson, 2014; Banerjee, 2014).

Moreover, maintaining consistency in the process is equally important as ensuring content across the various channels (Piotrowicz & Cuthbertson, 2014; Banerjee, 2014; Shen, Li, Sun, & Wang, 2018). Content consistency applies to the coherence of information that is managed and transitioned across the channels, contributing to a natural and effortless transition between them. It means ensuring that customers interact with similar information and responses across different touchpoints, resulting in a cohesive, unified, and seamless customer journey (Piotrowicz & Cuthbertson, 2014; Shen, Li, Sun, & Wang, 2018). Hence, integrating information from the different available channels can be challenging, but it is crucial to building a competitive advantage while having customers delighted and satisfied. Which, according to Banerjee (2014), involves combining several different channels to achieve a consistent customer experience and focuses on integrating information in the best possible way into the design of the channels, as well as the flow that needs to be followed by the customers.

According to Sousa and Voss (2006), it is crucial to analyze the perfect combination of virtual and physical quality. The combination of both concepts cannot be guaranteed by combining good virtual and physical quality since inconsistencies between the two can result in a poor perception of quality and value by the customer in the combined experience, leading to dissatisfaction. To this extent, Banerjee (2014) explains that brands must inform their customers about the several available channels and their respective attributes. The strategy's overall effectiveness may be compromised if the specific purposes and roles of each channel are not considered. In other words, failing to maintain a

consistent and seamless integration across channels can negatively affect the experience and the customer's quality perception (Banerjee, 2014). For this reason, it is crucial to pursue coherence and alignment across the physical and virtual channels in order to achieve a seamless and engaging experience. And so, these authors introduced a new concept: integration quality. It involves the seamless transaction of information, data, and operations across several channels, allowing customers to switch between them effortlessly, regardless of the chosen channel. Also, the integration needs to eliminate obstacles and create a unified experience, ensuring that customers get the same quality in the several touchpoints since the focus on channel integration quality is particularly important in the omnichannel context (Shen, Li, Sun, & Wang, 2018).

2.5. Technology-based luxury services

"In luxury services, the experience is the core of the luxury offering" (Holmqvist, Wirtz, & Fritze, 2020, p. 676), and technology can actually contribute to significant increases in both productivity and service quality (Holmqvist, Wirtz, & Fritze, 2020; Junsawang, Chaiyasoonthorn, Urbański, & Chaveesuk, 2022). However, while some luxury brands have decided to reduce the effects of transforming information to digital versions and focus even more on the traditional customer experiences in their boutiques, other brands follow an alternative approach as they invest and promote cutting-edge technology-based services (Holmqvist, Wirtz, & Fritze, 2022). On the one hand, a few luxury brands believe that personal touch, exclusivity, and the environment of the physical stores are crucial to providing the traditional luxury service experience, thus avoiding integrating digital channels (Holmqvist, Wirtz, & Fritze, 2020). For these brands, that is the only way it becomes possible to meet the customers' expectations through personalized interactions. On the other hand, several luxury brands perceive technology and digital innovation as potential elements able to boost the overall perception and results of the brand. By leveraging technology, these luxury brands can develop innovative ways for luxury customers to interact with them through the use of technology. As a result, these brands can benefit from implementing technology-based luxury services that involve interactions between multiple elements, such as "the customer, employees, technology, and other customers" (Holmqvist, Wirtz, & Fritze, 2020, p. 747), observing significant increases in their sales, as well as reach new and larger audiences who value the accessibility and convenience of the technology-based service (Holmqvist, Wirtz, & Fritze, 2022).

Considering the brands that invest in technology and perceive its value when integrated into their omnichannel strategies, there is great potential for the businesses. Its role is seen as a complementary tool that helps to solve problems, and not as a visible and unappealing barrier (Piotrowicz & Cuthbertson, 2014), particularly when talking about luxury (Holmqvist, Wirtz, & Fritze, 2020). In fact, many luxury customers enjoy the status and the prestige associated with the consumption of luxury goods or services, being motivated by the possibility of 'showing off' (Liu, Burns, & Hou, 2013). So the implementation of technology-based services makes the purchase journey apparently easier, allowing the customers to have a seamless flow across the channels as well as exhibit their consumption, as explained by Holmqvist, Wirtz, & Fritze (2020).

By combining physical and virtual channels, it is possible to create synergies, from which it becomes possible for luxury brands to differentiate not only their products but also their whole offerings, therefore providing added value to the customers without incurring high costs (Steinfield, Bouwman, & Adelaar, 2002). In fact, technologies can produce entertaining activities that draw clients, entice them to remain longer, and compensate them for contributing creative ideas. For example, with the help of digital technologies, boring storefront windows can be replaced with dynamic and interactive screens that can make suggestions or take orders when the business is closed (Rigby, 2011). Moreover, digital technologies may also provide sales assistants with endless information about their clients, describing how they prefer to be approached and building accurate models of their homes or body types to allow not only for the best decisions but also to provide personalized recommendations. By linking clients with reliable information, these technology-based services can help companies deliver more value to their customers, showing that when used properly, digital technologies can enhance the experience (Rigby, 2011; Holmqvist, Wirtz, & Fritze, 2020). Another study indicates that when luxury customers are capable of engaging with technology during an omnichannel flow and sales assistants recognize their efforts; they become more willing to engage and participate in these technology-based luxury services (Lawry, 2023). Also, the author stated that "luxury brands should adopt technologies that increase social engagement (...) within stores" (Lawry, 2023, p. 409), suggesting that introducing technology and involving luxury customers in the experience is advantageous.

Rigby (2011) suggests that retailers in a variety of industries can connect these channels and technologies to develop omnichannel experiences that can be superior to those offered by a purely digital retail strategy. Which, in fact, helps to build trust among luxury customers more effectively, allowing them to have a more active function within these cross-channel interactions (Holmqvist, Wirtz, & Fritze, 2020). Since trust can be a barrier to online shopping, companies started integrating technologies and offering a combined-channel approach. For the reason that providing a luxury service with the help of technology assist luxury consumers to perceive less risk in their shopping journeys, mainly because they can see both the physical and digital sides of the brand (Steinfield, Bouwman, & Adelaar, 2002).

Piotrowicz & Cuthbertson (2014), already in 2014, were describing several innovative technologies that helped to drive change, "such as smart mobile devices (smartphones and tablets) and related software apps, mobile payments, e-valets, e-coupons, digital flyers, location-based services" (Piotrowicz & Cuthbertson, 2014, p. 6). Or also the new technologies that businesses can integrate into their stores, such as "virtual screens and aisles, virtual mirrors-fitting rooms, digital signage, intelligent self-service kiosks, vending machines and dynamic menus" (Piotrowicz & Cuthbertson, 2014, p. 6). Each of these technologies helps customers to have access to information and purchase an item at anytime, anywhere, in a seamless transaction. In fact, Lawry (2023) believes that luxury brands need to incorporate "behavioral targeting and multiplatform storytelling across interactive storefronts, AR/VR experiences, and mobile games to personalize shopping experiences" (Lawry, 2023, p. 409). For this reason, retailers must lower the barriers inside the channels and offer several different integrations of online and traditional retail activities, resulting in real-time connectivity, through which clients share comments, opinions, and pictures of the product or the journey within their network (Piotrowicz & Cuthbertson, 2014). As in the example of Burberry (Figure 2), the brand implemented an innovative feature of Virtual Try-on, using Augmented Reality and Artificial Intelligence to help customers in product discovery, recommendations, and application education, delivering a hyper-personalized experience.

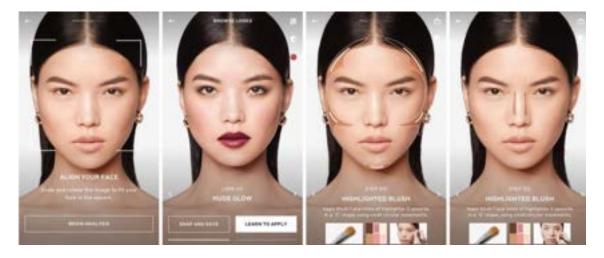


Figure 2 - Burberry Virtual Studio | AR Makeup Tutorials

Lastly, brick-and-mortar stores are still a lot focused on the products and their visibility, and not especially on the customer's flow and their purchase experience. This role of attracting customers and offering a certain level of expertise depends not only on the product itself but also the type of shopping (Piotrowicz & Cuthbertson, 2014). For this reason, through the analysis of literature and the state of the art in this field, the best method to answer the research question is by means of a qualitative methodology. Especially involving specialists from different disciplinary fields. The next chapter describes the methodology.

Chapter 3. Methodology

3.1. Introduction

An exploratory and qualitative study was developed to understand better how these themes are related and to feel the growth potential of these subjects. This work describes how the research was conducted in this part, including the approaches taken and the rationale behind each. Besides this initial section, this chapter is structured into four relevant sections.

Sub-chapter 3.2. details the research design approach for this dissertation, followed by the data collection in chapter 3.3. Finally, the methodology chapter finishes with an explanation of the data analysis in chapter 3.4.

3.2. Research Design

The base of this research is to understand how emergent technologies can contribute to value creation when integrated into luxury omnichannel strategies. For this reason, the research will focus on conducting interviews with experts in the luxury retail industry to gather insights on the use of technology in omnichannel strategies, creating a supportive environment where participants feel comfortable sharing their insights and ideas (Bryman, 2016).

Because of this, the research design will include a qualitative research approach, using semistructured interviews to analyse the perspectives of experts in the luxury retail and technology industries. This type of interview is used to allow the researcher to "keep an open mind about the shape of what he or she needs to know about" (Bryman, 2016, p. 10), enabling concepts and theories to arise spontaneously from the data, fostering a deeper understanding of the research topic (Bryman, 2016).

The three-stage method recommended by Bardin (1977) will be used to support the research's methodology. In the initial phase, the goals will be defined, and the interviews conducted. Then, in the second phase, the collected data will be explored after the interviews. Finally, in the last stage, data will be interpreted and analyzed.

3.3. Data Collection

In the first phase, the participants were selected through purposive sampling since this not only involves selecting participants that are most relevant to the research question but also based on their availability and expertise (Creswell, 2009), especially their experience in implementing technology-based solutions in luxury environments (see Appendix A). Therefore, following Bryman's (2016) theory which describes that the participants should be chosen according to their "appropriateness to the purposes of the investigation" (Bryman, 2016, p. 10). According to Creswell's (2009) approach, the selection of participants in this method is based on the judgment of the researcher, who mainly chooses participants with experience with the research's central phenomenon and will be more helpful to the research itself.

Curiously, for this study, the snowball sampling method, suggested by Biernacki and Waldorf (1981), was used to identify and recruit participants. This approach involves selecting an initial group of eligible participants to contribute to the research and then asking these participants to recommend other potential people who also meet these criteria. This method is useful, especially in the luxury industry, where the target population is hard to reach and difficult to recruit. Therefore, the snowball sampling method helped reach relevant participants, thereby enhancing the overall quality and richness of the collected data (Biernacki & Waldorf, 1981). Initially, some participants with a more entrepreneurial profile were interviewed. However, through this sampling methodology, interviewees with a more creative profile participated in the research, contributing to a broader range of participants, which could bring more value to this research.

This process was repeated until data saturation occurred, meaning there was no new information, or the further information had little effect on the research (Guest, Bunce, & Johnson, 2006).

Semi-structured interviews are commonly used in qualitative research (DiCicco-Bloom & Crabtree, 2006). Therefore, semi-structured interviews were conducted with participants whose professional backgrounds are connected to the luxury industry to collect data for this study. The reason for conducting semi-structured interviews follows its iterative process due to the possibility to pre-align the key topics that need to be addressed while

maintaining flexibility to introduce the discussion of other relevant points. Since the research question relies on personal opinions and assumptions, this type of interview allows the interviewee to express their thoughts without feeling restricted by a more rigorous script, resulting in better data collection (DiCicco-Bloom & Crabtree, 2006).

These interviews were scheduled in advance and followed pre-determined open-ended questions. In addition, as the interviews were only done once with each participant, to avoid taking up too much of the interviewees' valuable time, the interviews were programmed to last between 30 to 40 minutes and conducted via online platforms, such as Zoom. In cases where the interview exceeds the expected duration, it is attributed to the availability and interest of the participant in the subject (DiCicco-Bloom & Crabtree, 2006). Also, they were audio-recorded with the participant's consent (see Appendix B) and transcribed verbatim for analysis.

To ensure consistency across the interviews, an interview guide with open-ended questions was developed based on the research questions and the literature review (Table 1). Moreover, other different questions could arise from the dialogue between the participant and the researcher (DiCicco-Bloom & Crabtree, 2006).

The interview guide followed the questions below:

	Question	
1.	What is the role of technology in shaping the customer experience?	
2.	What are the challenges and opportunities in integrating technology into luxury retail? How can companies overcome these challenges?	
3.	What elements play a role in creating value when technology is integrated?	
4.	Examples of successful technology integration in luxury omnichannel strategies.	
5.	Future trends in technology omnichannel retail services. What advice would you give to a luxury brand that is just starting to explore different omnichannel strategies? How will luxury customer preferences and behaviors evolve in the next few years?	

Table 1 - Interview gui

The interview questions were carefully designed to focus on particular aspects related to the research question:

- The first question aimed to understand how industry experts perceive technology in the context of luxury retail.
- The second and third questions were crucial to explore how to overcome the challenges when integrating technologies and the key elements that play a role in creating value in these strategies. These two questions are fundamental to understanding how to create more value for luxury customers through technology.
- The fourth and fifth questions were important to provide real-life examples of successful technology integration, as well as valuable insights into the steps that companies should take to prepare for different omnichannel strategies that lie ahead.

Prior to data collection, getting the informed consent from all participants was an essential aspect of ethical research methodology. An Informed Consent Form (see Appendix B) was designed to provide participants with the necessary information about the research, its purpose and objectives, the participant's rights, how data will be stored and kept confidential, and the contact information for the researchers and university.

3.4. Data Analysis

Reading the transcripts of the interviews to comprehend the content thoroughly revealed a greater familiarity with the data. This process allowed to immerse in the data and start to identify patterns or insights (Bryman, 2016). The next step was to break down data into segments that reflect essential concepts or topics and start coding. Codes are used as labels to point out key ideas and patterns in the interviewees' responses to develop a comprehensive understanding of each segment (Creswell, 2009; Bryman, 2016). In the following step, the initial themes were reviewed and revised in order to ensure they accurately represent data. Moreover, in order to create a logical and relevant structure, this procedure could involve merging or discarding themes. This can also be called the Data Reduction stage (Alhojailan, 2012).

In order to begin the analysis of the content shared in the interviews, it was necessary to use the software Transkriptor® to transcribe the audio into text format, considering the adjustments required to correct any possible omissions or errors typically associated with such applications.

The interviews' analysis was conducted using thematic analysis with the assistance of Nvivo® R1 Software. This process is the most recommended one to follow when the research is based on interpretations, according to Alhojailan (2012). In fact, the author explains that it involves several steps to ensure a comprehensive understanding of the collected data by providing a detailed explanation.

Finally, the analysis was written, in which the identified themes were integrated relevantly and addressed the research objectives. This phase involves joining the themes together and providing an interpretation of the data as a way to contribute to a deeper understanding of how technologies can create value by being integrated into luxury omnichannel strategies.

Chapter 4. Results & Discussion

4.1. Introduction

The sample design is presented with demanded details revealing its pertinence and ensuring participants' confidentiality.

Later, the section will report and discuss the findings obtained from the interviews.

The discussion will involve interpreting the results, comparing the existing literature and the study's objective.

4.2. Characterization of the sample

The study employed a purposive sampling strategy to recruit a sample of industry experts with relevant experience and expertise either in the luxury market or in implementing technologies in omnichannel strategies.

The sample consisted of eight male and five female participants, with ages ranging from 25 to 60 years old. The participants' professional backgrounds varied, including strategy, innovation, technology, management & research, creativity, and luxury. Moreover, it includes a wide range of experts occupying important positions in the luxury industry, including CEOs, innovation and digital transformation directors and an analyst, heads of luxury market research, and advisors within this industry (see Appendix A).

Regarding the geographical location, the participants were mainly based in Europe and the USA. Their majority were based in Europe, with 5 in the United Kingdom, 2 in Italy, and 2 in Portugal. Three participants were based in the USA, of which one had Colombian American nationality. Also, 1 participant was based in Singapore.

Overall, the sample of the industry experts invited to participate in this research represents a diverse group of professionals with intense experience in the luxury and technological industries. And the participants' diverse backgrounds and geographical locations provide a rich and varied perspective on integrating technology in luxury omnichannel strategies. In order to keep the participants anonymous, the analysis of the interviews will be conducted without any reference to the names of the interviewees.

4.3. Results



Figure 3 - World cloud from the interviews

The word cloud (figure 3) was generated from Nvivo® R1 Software, revealing the most frequent terms in the experts' responses, representing the interview quotations. The size of the words is proportional to their frequency in the interviewees' answers, meaning the larger words indicate more frequent occurrences.

After collecting data, the concepts were grouped into the following seven main categories.

In this chapter, it was examined the research question from the perspectives identified during the interviews, comparing them with existing literature. Seven categories were identified through the analysis of the data collected from 13 semi-structured interviews through open-ended questions. Through this research, it became possible to identify consistencies with the literature, along with previously unexplored aspects and new insights that have emerged from the interviews.

Categories	Concepts
Experiences	Interactions
-	Personalization
	Omni-personal
Expectations	High-expectations
	Identify and solve problems
	Personalization
Data	High-quality data
	Privacy and security
	Personalization
Emerging technologies	AI, AR, VR and Metaverse
	'E-commerce'
	Personalization
	Authenticity
Brand's essence	Legacy and values
	Authenticity
	Sustainability
Technology evolution	Provide solutions
	Test
	Partnerships
Resources	Investment
	Efficiency
	Teams

Table 2 - Categories and concepts retrieved from the data analysis

4.3.1. Experiences

As supported by literature, one of technology's main contributions is enabling luxury brands to manipulate customer behavior in the shopping experience (Shi, Wang, Chen, & Zhang, 2020). In fact, technology gives luxury brands the power and opportunity to mold and influence customer behavior throughout the whole shopping experience. Moreover, this was proven by the interviewees.

As described by CEO3, an expert in Augmented Reality technologies

"The luxury retail experience is everything. It's the number one differentiator that gets the user to be willing to pay the premium price and not get more on that side. So the moment that a luxury brand falls into the trap of being just another basic website, let's say online or in-store, it loses its magic, and it loses the chance to be positioned and perceived by the user as luxury."

Here it is emphasized how technology can completely change how luxury brands interact with their customers and how they are perceived. By embracing cutting-edge technologies, luxury brands can transcend traditional boundaries and provide clients with immersive experiences that encourage exploration, discovery, and emotional connections. These personalized interactions draw clients' attention and drive towards a closer relationship between them and the brand, attracting more and better customers, ultimately increasing the customer experience and fostering deeper interactions.

Plus, CEO1 introduced a new topic

"Omni-personal means whatever channel the customer wants, you need to be there."

They mean that technologies provide luxury brands with the opportunity to fulfill the customers' desires through the channels they want to interact with, aiming to provide them with a journey that leaves no room for dissatisfaction. In cases like this, technology helps protect clients from the disappointment of receiving something that does not meet their preferences by offering a more realistic representation of the items and allowing customers to interact with them before buying, making more informed decisions.

As genuinely said by MR1, an expert in luxury consumer behavior

"It's very useful. But it doesn't necessarily mean that it's going to be perfect. But at least it's that extra level in this day. And I mean how many people buy something (...) and then realize it doesn't fit in their home or so?! It just avoids that level of friction that could create problems (...) it's quite disappointing when you buy something online, you receive the physical product, you try it on and it's not right. Then you have the hassle of having to return it and then wait for a refund".

4.3.2. Expectations

According to the literature, the expectations of luxury consumers need distinct approaches and specialized solutions, given that their requirements are greater than those of other industries (Kapferer & Bastien, 2008). So, in order to satisfy these customers, Alexander & Kent (2022) reveal that the integration of technologies makes the store more appealing and increases customer satisfaction, enjoyment, and purchase intention.

In this study, participants emphasized how luxury customers have extraordinarily high expectations for their experiences, which makes incorporating technology more complex.

As evidenced by two experts in innovation and technology, HOI1 and CEO5, respectively

"Customers have very high expectations to experience and so the whole part of the technology has to solve specific problems to have value and have to take into account their expectations."

"It's crucial that brands modernize their online offerings and build experiences that are not just about driving immediate sales, but also designed to engage customers and hold their attention in a crowded market."

Technology integration needs to handle particular needs, creating value for the customers while addressing their needs, solving their problems, exceeding their expectations, and creating unique and memorable experiences.

Moreover, luxury brands must prioritize delivering personalized service and reduce the risk of unpleasant interactions to preserve the integrity of the luxury customer journey.

In this particular case, MR1 pointed out

"If the delivery company that you're using fails to deliver the product on time or it arrives late or something basically along the shopper's journey goes wrong, you know that whole kind of shopping experience for the customer has then kind of been destroyed."

The personalized service must match the quality of the luxury goods or services being purchased. By exploring technologies, it is possible to understand better how customers use the products and their preferences. This allows high-end companies to match clients' expectations more successfully by customizing their items to fit better and combine desired colors, like CEO1 detailed:

"If you want custom, you want custom made and that's one price. If you want made-to-order, because we know your size, but it's part of our portfolio product offerings, that's fine. Or you want it off the rack, that's fine. So you can do all three, but more and more we are going to make it fit better, make it in a color that is your favorite."

Moreover, two other ideas were raised in this study: being online and reaching new audiences. Even though being online was seen as an essential aspect of technology, other participants considered that it could lead to reaching new audiences and markets. It becomes feasible to expand the brands' storytelling into virtual spaces, engage with customers across multiple platforms, and grow their customer base. This offers a chance to strengthen brand recognition, get a competitive edge, and reach a bigger audience of luxury customers.

As explained by CEO5, an expert in 3D interactive experiences

"Immersive experiences allow brands to extend their storytelling into new virtual spaces and attract new audiences, all while maintaining control of their customer data and branding."

Nevertheless, a different perspective was introduced, stating that luxury consumers influence their peer's consumption mainly through word-of-mouth within their communities. Suggesting that the higher the net worth of a group, the less affected they will be by technologies.

As explained by CEO1, with expertise in these markets

"The rich people spread it within the network, within the tribe, and that's what drives the consumption of the top luxury goods, whether you're young or old. And now social media helps and all that, but it's still a word of mouth."

4.3.3. Data

In this study, some opinions revealed how relevant technologies can be to collecting, managing, and storing data. According to Shen, Li, Sun, & Wang (2018), the processes

need to establish robust data integration to guarantee the accuracy and consistency of information across all the available channels. This can then be applied in strategic decisions, contributing to target customers more effectively and retaining them across the shopping journey (Zhang, et al., 2010).

The significance of gathering accurate and trustworthy data directly from customers rather than relying on third-party vendors was underlined by CEO1:

"If you don't have good enough data to take advantage of what the software can do or what the technology can do, what you have is called garbage data. It's expired data."

Even though it is easy for a luxury brand to collect data, ensuring consumer data privacy and security should remain a top priority. In fact, strong security measures must be put in place to protect the privacy of luxury customers while building and maintaining trust with them. If so, these brands can improve customer experience and acquire valuable insights about their customer base.

As covered by IA1, who works with fashion and technology

"I believe it is super important for a luxury customer to feel secure. Brands need to provide this comfort to the consumer, ensuring that their data is well-managed and safe."

Moreover, data can be used to offer a more customized experience to luxury customers. IA1 shared an example of how a specific emerging technology can collaborate to value creation through data:

"Smart mirrors can be used to capture customer data, such as their preferences and purchase history. And I think that if we use this correctly, we can offer personalized recommendations, for example, and also improve customer loyalty."

Accordingly, through the use of technology, luxury brands can collect and analyze a significant amount of customer data, which can then be used to identify patterns or trends that can drive strategic decision-making, such as customizing their services, tailoring their marketing campaigns, and providing customers with more relevant and engaging experiences.

As agreed by CEO3

"By harnessing the power of data analytics (...), luxury brands can gain deep insights into customer preferences and behaviors, tailoring their offerings to individual needs."

Even though data is already a crucial part of integrating technology in luxury omnichannel strategies, it is still treated as a trend for this specific market.

As described by IA1:

'Integration of artificial intelligence, machine learning, and predictive analytics will play a major role in achieving this goal by enabling retailers to better understand their customers' preferences and behaviors."

This study expressed how powerful data can be to support strategic decisions and offer personalized products and services. Moreover, such findings will influence the brand's results by personalizing customer interactions. In this manner, luxury brands need to augment their investments in technologies that capture good quality data, which can then be used to drive marketing and sales strategies.

Finally, customers will actively have control over their data, realizing its value and treating it as one of their assets.

As explained by CEO1, a professional in this market

"Consumers will take control of their data and that will become one of their assets. One of your assets will be your data and you will be getting paid for that in the future."

This means that people are likely to claim ownership of their data and want more control over how it is collected, used, and shared through businesses as data privacy concerns increase. People become more conscious of the information they produce and share. Customers can make better decisions about sharing their data and even get rewards from its strategic management if they recognize it as an asset.

4.3.4. Emerging Technologies

The importance of integrating technologies in luxury omnichannel strategies follows the theory of creating a cohesive purchase journey while seamlessly connecting the available channels (Alexander & Kent, 2022). Regardless of the chosen channel, this connection enables clients to have consistent experiences and easy access to products or services due to the inexistent lines separating online and the offline channels (Brynjolfsson, Hu, & Rahman, 2013).

In order to draw customers' attention and differentiate themselves from competitors, luxury brands need to develop highly visual, interactive, and distinctive immersive digital touchpoints towards building exciting and vivid experiences that delight customers both off and online.

As supported by CEO1

"People love to go to the Hermès store because of the experience, but they still buy online because it is such an efficient, friction-free kind of process."

CEO5 gave examples of some emerging technologies that can contribute to customer satisfaction through the shopping experience:

"Increase interactivity, time spent and customer lifetime value from features like gamification, social shopping, avatars and interactive media."

Through these technologies, brands can encourage customer engagement and improve the shopping experience by using elements of competition, rewards and prizes, and challenges that motivate customers. Therefore, customers stay connected with the company for longer, promoting brand loyalty and customer satisfaction. Also, it allows customers to share their shopping experiences, look for suggestions, and engage in community discussions, enhancing the interactive elements of the shopping process.

As described by CEO5

"[offer] a more immersive and engaging way to explore and interact with the luxury products (...) influence, be influenced and be validated within the community."

Finally, some other examples of technologies that contribute to creating immersive and consistent experiences, such as wearable devices, smart mirrors, mobile apps, augmented reality (AR) and virtual reality (VR) technologies and the metaverse. HOI1 and MR1, respectively, exemplified how these technologies can be used to create more value for the customer:

"Realize who are the people, who are experts, and what is the storytelling about the store, about the products, and have a specific curation."

"Allowing your customer (...) to see all these different stores around the world and experience them."

In this context, interviewees explained that luxury customers could virtually explore different stores worldwide, experiencing the brand's storytelling and how it can be used to mitigate potential issues that may arise during a typical purchase journey.

Even though the core values of luxury, such as personalized service, exclusivity, and attention to detail, remain essential, the participants' impressions revealed their enthusiasm to innovate and be more creative.

According to the interviewees, luxury is fast transforming into an IT industry. Therefore, luxury brands must follow this evolution and embrace innovation.

As mentioned by CEO2, an expert in AR technologies

"They need to be stopped and managed by dinosaurs (...). They need an innovation manager. They need more and more developers, more and more engineers, more and more machine learning people, more and more 3D artists and designers because the entire design but also commercial channels are becoming digitalized."

The metaphor of "dinosaurs" implies that antiquated methods must be replaced with contemporary ones, highlighting the importance of hiring professionals that can drive digital transformation and navigate the digital environment. By investing in these resources, luxury brands can effectively manage and take advantage of the potential given by digitalizing these channels.

Also, the concept of 'e-commerce' is evolving. Initially, it meant 'electronic commerce', but now it is starting to be used differently, such as 'everywhere commerce'.

As explained by IP1, an expert in technology

"We are moving to a world where any surface should be transactable. I expect that when I'm on the train or when I'm flying, anything I touch, I should be able to maybe have an AR experience. And then when I purchase it, they deliver it to my hotel or to my house or wherever I'm going. (...) We are moving to this world where if we touch it, we have the option to shop it."

This technology investor believes that customers will constantly be engaging with one or more omnichannel strategies and in consistent interaction with products or services, providing ongoing and seamless interaction between the brand and its customers.

Participants believe that brands need to modernize their online offerings and build experiences that are not just about driving immediate sales but also designed to engage customers, hold their attention in a crowded market, and be perceived as convenient. Moreover, such interactions will be more and more personalized. In fact, personalization will remain a top priority for luxury brands. For example, by allowing customers to try on the products before they buy.

As mentioned by CEO5, a specialist in VR solutions

"Brands need to offer immersive virtual commerce experiences that incorporate a personal touch and differentiate their brand."

And that customization will be increasingly deepened, reaching such thorough details that will impact the customer without their conscious awareness. This sensation of effortless engagement that results from this seamless and subtle personalization will make the customer feel fully understood and valued throughout the entire experience.

As expected by IP1, as an investor in technology

"It's personalized to me or to my avatar. The voice that talks to me is personalized because they know who I am. And I don't know if it's 5 or 10 years away, but I think it's not going back in the bottle. Omni channel is everywhere."

Furthermore, it is crucial to continue leveraging the potential of Artificial Intelligence, Virtual Reality, and Augmented Reality, to deliver these hyper-personalized and immersive experiences to create a 3D immersive version of a store for every brand that currently runs an e-commerce store.

As supported by CEO5, an expert in VR technologies

"Luxury brands should know that immersive virtual shopping experiences have moved from a 'nice to have' to a 'need to have'."

These experiences will allow customers to visualize products in real-life settings, using wearable devices that will still go through several further developments or even embedded gadgets that will be part of our constitution.

As IP1 described their conviction

"We will move seamlessly from whether it's glasses, or mobile or maybe it's a thing embedded (...) But we will be able to move seamlessly in that way and it will become natural to us to look at things through different lenses, virtual lenses or AI lenses."

Finally, due to the evolving customer values, luxury brands must focus on implementing sustainable and ethical practices throughout the value chain and explore opportunities in the metaverse. Even though some participants already mentioned how blockchain is a reality in today's luxury world to ensure the products' authenticity and supply chain transparency, it is considered that there is still a lot to improve.

As mentioned by CEO2, a Virtual and Augmented Reality professional

"Everything can then be on chain. Everything can be attached with a certification or an authenticity or even the ability to track specific packages and the movement of goods whilst having them certified on the chain."

4.3.5. Brands' essence

Some authors give considerable importance to integrating information across several channels to offer a seamless and unified experience (Shen, Li, Sun, & Wang, 2018;

Piotrowicz & Cuthbertson, 2014). However, in this study, the participants introduced a different concept, mentioning how challenging it can be to integrate information through technology that genuinely shows and maintains the brand's essence across the available touchpoints.

Their interventions highlighted how crucial it is for luxury brands to preserve historical values, legacy, craftsmanship, and unique brand identity; and keep it coherent and consistent among the several channels, which means that it is crucial to not only honor and enhance the brand's personality but also to preserve their uniqueness and appeal to their target audience.

The following quotes by IP1 and CEO5, respectively, prove the described challenge

"Finding the right balance between leveraging technology while preserving the essence of luxury and craftsmanship."

"Each technology used needs to match the brand's unique identity and must result in a memorable and highly engaging experience for this type of customer."

As addressed by MR1, a research professional

"If you are introducing some digital experience in the store, it has to make sense. It can't just be for the sake of it because luxury and fashion brands, all of them, need to tell a story, and whatever it is that you are doing to enhance that experience has to tell the same story."

Technology has limitations and constraints, which may not always fit the brand's unique business strategy and requirements. Therefore, technology adoption needs to be carefully integrated to enhance the brand's true experience rather than compromising its essence, identity, and core values.

Additionally, to support the brand's essence, the concept of 'authenticity' was introduced to illustrate how emerging technologies can enhance the brand's essence.

As mentioned, respectively, by MR1 and CD2, both experts in the luxury customer experience

"That's where things like blockchain can be used. So customers or you, if you're a potential buyer, you know that Gucci bag is authentic." "It is crucial to explore technologies such as blockchain for supply chain transparency, AI for personalized styling recommendations, and sustainability-focused solutions to align with evolving customer values."

Luxury brands become authentic when they protect strong brand identity, their history, and legacy, and seek excellence in every product and every state of the service, guaranteeing that their offerings are also authentic. In this manner, it creates memorable experiences while building trust and nurturing solid emotional ties.

In line with the interviewees' perspectives, technology can not only be used to conduct towards more sustainable products, whether it is in terms of materials and processes, but also in creating more sustainable experiences for the customers to address the increasing demand for sustainable options and meet the evolving standards of conscious luxury consumers. Moreover, a few participants mentioned that technology integration could contribute to the brand's sustainability. MR1, a market research specialist, illustrates:

"Technology's been used in the most amazing way to create sustainable fabrics like leather or fur or diamonds, where lots of consumers are very concerned about the sustainability aspect (...) when we talk about sustainability (...) technology is massive here because obviously, you need a platform to be able to ideally sell your products or rent them out or resell them."

Given that almost every research participant considered these topics, it indicates their level of significance since it can damage the brand's legitimacy and weaken its narrative. So, to ensure that customers have a consistent and engaging journey that promotes the essence of the brand, digital experiences need to be meaningful, purposeful, and thought of as a way to expand the brand identity across all the available channels.

4.3.6. Technology evolution

Because of the rapid evolution occurring in the luxury market, especially regarding technological evolution, luxury brands need to design new and different strategies (Holmqvist, Wirtz, & Fritze, 2022). And here, technology plays an important role. In fact, according to Piotrowicz & Cuthbertson (2014), the role of technology is seen as a complementary tool that helps to solve problems rather than as a visible and unappealing barrier.

The constantly evolving nature of technology requires continuous investment and adaptation, creating challenges in keeping up with the most recent developments.

As mentioned by HOI1, an innovation expert

"There is no point in implementing technology that may not be relevant to customers if it does not solve a problem (...) Sometimes companies may be working on incremental things, not realizing that in the meantime, there is such a big evolution in technology that what they have been working on has become obsolete (...) It's important to think that it's not just build. It's: build and maintain and evolve."

As the digital landscape is ever-evolving, luxury brands must carefully manage this dynamic landscape to avoid investing great amounts of money in technologies that might fast become outdated. In fact, due to the complex nature of technology, it is required to focus on solutions that successfully handle business concerns and address the customers' needs. Thus, to maintain the technology's efficiency, companies need to focus on monitoring, evaluating, and adjusting to the rapidly changing technologies since luxury brands want evidence of whether the investment they are making is good or not. Also, to ensure reliability and suitability, luxury brands must invest in good technology and adopt a continuous improvement mindset while encouraging creativity and experimentation.

Both CEO1 and CEO2 agree on the importance of testing before delivering it to the end customers:

"You need to select vendors wisely, and you really need to test before you buy. So doing pilots is very important to make sure you validate that this is really good technology and that it works for your company."

"Scout for technologies, to bring in and test technologies and solve different challenges using pilots and Proof of Concepts. And then, once those Proof of Concepts are successfully executed, they then ensure that they skill them organically within the organization." MR1, an expert on market research, added the following:

"Build strong relationship with that partner to ensure that the level of the service that you're offering is the highest you can."

It is crucial to build a solid partnership with the technology providers. These strong relationships allow brands to work closely with their partner, align their goals and values, and work together to deliver the best experience. However, some difficulties may arise as a result of the lack of resources or knowledge to strategically decide, as confirmed by CEO4, who runs a small luxury business:

"Luxury brands are not programmed or have in their DNA to be massively IT advanced. They still rather have everything outsourced (...). I try to collaborate with local technology service providers or ask for some guidance from industry associations. By starting with simple and cost-effective solutions, I can gradually begin to integrate technology into my strategies."

Luxury brands, particularly those that lack internal technical capabilities, should take advantage of the market's mature technical solutions, which means that even when the brand does not have the right tools to implement technology in their strategies, it is an option to work together with other small technology providers who have the necessary expertise to bring value to the business.

4.3.7. Resources

Efficiency is also a decisive contribution related to the integration of technology. According to Alexander & Kent (2022), implementing technologies in omnichannel strategies improves the efficiency and effectiveness of internal processes and the sales team. By allocating the available resources and manipulating technologies, brands can smoothly integrate data, systems, and operations across several channels, leading to a more comprehensive and efficient strategy (Zhang, et al., 2010; Alexander & Kent, 2022).

As mentioned by HOI1

"We can quickly invest a lot of money. Technology is not cheap; it is expensive. So it needs to solve problems and be escalated."

Integrating technology can be time-consuming, resource intensive, and require substantial financial investments. Also, by investing in technologies, luxury brands, which still need to be technologically advanced, can acquire advanced technological solutions that may enhance their capabilities. This means that technology enables brands to simplify business processes, automate repetitive tasks and increase efficiency.

A new topic was introduced by CEO2

"[Brands are] paying huge bills to have external IT companies coming in to support their integrations (...), and this also gives them higher expenses (...), and this cuts from their budget of innovation because they have less money to spend on actually solutions that they can deploy."

This implies that efficiently reallocating these resources allows brands to focus on their core business, improve workflows and free up valuable resources, such as time and money, to shift towards more creative and strategic tasks. As a result, businesses can manage resources more efficiently, react quickly to market needs, and grab new opportunities while enhancing productivity and efficiency, and improving profitability.

As supported by CEO5

"This has empowered all of our retail customers to maximize the ROI (...) and ultimately treat their virtual stores as permanent fixtures of their marketing tech stack."

For this, HOI6 provided the following example:

'Instead of wasting money on a customer service agent that is trying to solve a return label, you can have a customer service agent guiding the customer to think about a complete look, persuading them to buy two or three items, instead of just one, and considering different price points."

Finally, the last resource addressed in this study is 'Teams'. Alexander & Kent (2022) suggest that technologies can help brands to increase the teams' efficiency by driving speed and convenience at the touch point.

CEO1 believes that it is crucial to have everyone working towards the same goals so that the disruption brought by technology integration does not evidence because of the uncoordinated teams: "You have silos or, maybe teams in different countries, for the same function. Everybody decides to buy different software and they don't talk to each other. So there's a lot of disconnects and silos inside the company itself. That are really based on politics and incompetence and could be solved, but the politics get in the way, the hierarchies too: everybody wanting to control as opposed to being a team. That is the one of the challenges."

Also, the teams are responsible for making decisions and using good judgment in integrating technology effectively in luxury omnichannel strategies. Some participants mentioned that to achieve the desired results, technology must be used and exploited efficiently because even with access to cutting-edge technology, success is not guaranteed: people still need to decide carefully based on their knowledge and experience.

Both HOI1 and CEO1 reinforced, respectively

"Technology alone doesn't solve anything because technology has to be manipulated."

"[technology] doesn't make all the judgments for you (...) You still need to have good judgment."

To this degree, people need training to have the right skills to exploit technology to its fullest potential. This emphasizes how crucial ongoing education and development can be to keep up with the technological advancements and maximize the benefits it can bring to the brand.

Chapter 5. Conclusion

This research has one clear goal: to understand better how technologies contribute to value creation when integrated into luxury omnichannel strategies.

Based on an in-depth review of the literature and analysis of the insights provided by industry experts, it is possible to answer the research question, demonstrating that technologies are essential to value creation when integrated into luxury omnichannel strategies. In this manner, it is intended to publish an article based on the study's findings in order to contribute to academic discussion. This publication aims to disseminate this study's findings and provide researchers and professionals with valuable information to benefit from.

First, luxury brands must differentiate themselves from other industries and continuously seek innovative approaches. And here, technology plays a crucial role in determining how customers interact with the luxury market. Through technology integration, luxury brands can offer unique purchase journeys appreciated by customers. These innovations can improve shopping experiences by enabling more interaction and customization and offering the luxury customer several channels through which it is possible to engage with the brand and seamlessly purchase its products or services. Luxury brands need to consider that luxury consumers enjoy connecting with the brand and value how different these interactions can be from other industries. Therefore, considering that omnichannel will be everywhere, these businesses need to be constantly available for the client, meaning that the channels need to increase and become more accessible, avoiding any effort from the customer side.

Additionally, these high-end consumers have incredibly high expectations. In fact, in such a thriving market, luxury brands have a greater responsibility to attend to these needs when compared to other industries. Therefore, luxury brands must take advantage of these integrations and provide the best solutions. That the more personalized, the better. And, for this, data also plays a fundamental role. Brands must collect data directly from customers to have high-quality, relevant, and updated data. This way, it becomes possible to identify the overall market trends and the particular necessities of each customer, allowing brands to make better and more informed decisions, aligning, and exceeding the

customers' expectations, and offering unique and personalized products and services. Plus, luxury customers have high exigencies for their data. They have to trust how the brand collects and manages customers' data. Additionally, in the future, it is expected that customers will treat their data as an asset, through which it will be possible to get some benefits from their management.

Moreover, this study clarifies how crucial it is to maintain the brand's essence in the digital age. A thin line must be drawn between adopting technology and upholding the fundamental principles of exclusivity, craftsmanship, and customization for luxury goods. Luxury brands may improve their storytelling and establish genuine connections with their target audience by efficiently fusing technology with their brand identity while building a strong brand narrative, fostering emotional connections, and delivering exceptional customer service. The brand's core must be preserved when integrating new technologies, and compatible with luxury brands' critical exclusivity, craftsmanship, and customization principles. Luxury companies may keep their distinctive positioning and set themselves apart from the competition by utilizing technology to strengthen and expand the brand's identity; simultaneously, they create more value for luxury customers who appreciate these characteristics. Also, such essence can be protected through the use of new technologies, such as the Metaverse, which gives customers more guarantees on whether the product they are buying or service they are experiencing is reliable, authentic, and aligned with their values.

The study also underlines how important it is to keep up with technological advancements. Luxury brands must adapt and adopt cutting-edge solutions to stay competitive as technology continues to progress at a rapid rate. To fully utilize the potential of technology and create more value for the customers, luxury brands need to test the technology before delivering it to the final customer. These experiments are crucial to assess if the technology is aligned with the company's storytelling, values, and strategy instead of being just a barrier to the seamless and proper functioning of the luxury customer journey.

Continuous resource investment is necessary for technological advancement. Spending money on partnerships, infrastructure, and talent development is critical for luxury firms to integrate and exploit technologies successfully. However, sometimes companies need to prepare and be available to invest such high amounts. In these cases, when the brand does not have the internal capabilities to implement such considerable changes, it should find technology partners and work together to gradually find and implement relevant solutions to survive in such a competitive market. This involves working with tech companies, startups, and industry professionals and promoting a culture of digital innovation within the company.

5.1. Limitations and Future Research

The limitation of this study includes the potential for selection bias. Because the participants were selected based on their prior experience in the luxury industry, the sample may not represent the entire population of professionals working in the luxury retail and technology sectors.

Also, as the participants were selected according to some common criteria, they will have a certain degree of homogeneity. As a result, it makes it quicker to reach saturation. Because even though when selecting the participants the importance of the sample heterogeneity was considered, the size and diversity of the sample does not ensure the generalizability of the findings to a broader population. As a result, this could potentially limit the findings' accuracy, which may not apply to other settings or industries.

Finally, during the interviews it was demonstrated how the luxury market can have several different consumer segments. Meaning that some customers value the in-store experience, where technology can enhance their interactions and provide added value. Others who value convenience and would rather have someone else make the purchase on their behalf and concentrate just on getting the high-quality products. For luxury businesses to effectively adjust their strategies and offers to match these diverse needs and requirements, studying these different preferences and behaviors is essential.

References

- Achille, A., Remy, N., & Marchessou, S. (2018). The age of digital Darwinism. McKinsey & Company. Retrieved from https://www.mckinsey.com/~/media/mckinsey/industries/retail/our%20insights /luxury%20in%20the%20age%20of%20digital%20darwinism/the-age-of-digitaldarwinism.pdf
- Akter, S., Hossain, M. I., Lu, S., Aditya, S., Hossain, T. M., & Kattiyapornpong, U. (2019). Does service quality perception in omnichannel retailing matter? A systematic review and agenda for future research. *Exploring Omnichannel Retailing: Common Expectations and Diverse Realities*, pp. 71-97. doi:10.1007/978-3-319-98273-1_4
- Alexander, B., & Kent, A. (2022). Change in technology-enabled omnichannel customer experiences in-store. *Journal of Retailing and Consumer Services*, 65. doi:10.1016/j.jretconser.2020.102338
- Alhojailan, M. I. (2012). Thematic Analysis: A Critical Review of its Process and Evaluation. West east Journal of Social Sciences, 1(1), pp. 39-47.
- Alimamy, S., & Gnoth, J. (2022). I want it my way! The effect of perceptions of personalization through augmented reality and online shopping on customer intentions to co-create value. *Computers in Human Behavior*. doi:10.1016/j.chb.2021.107105
- Banerjee, M. (2014). Misalignment and Its Influence on Integration Quality in Multichannel Services. *Journal of Service Research*, 17(4). doi:10.1177/1094670514539395
- Bardin, L. (1977). L'Analyse de Contenu. Presses Universitaires de France.
- Biernacki, P., & Waldorf, D. (1981). Snowball Sampling: Problems and Techniques of Chain Referral Sampling. Sociological Methods & Research, 10, pp. 141-163. doi:10.1177/004912418101000205
- Bryman, A. (2016). Social Research Methods. Oxford University Press.
- Brynjolfsson, E., Hu, Y. J., & Rahman, M. S. (2013). Competing in the age of omnichannel retailing. *MIT Sloan Management Review*, 1(4), pp. 1-7. Retrieved from https://www.scopus.com/inward/record.uri?eid=2-s2.0-84880055271&partnerID=40&md5=f339d1b30b96db45edf4e78164f6493b
- Cao, L., & Li, L. (2015). The Impact of Cross-Channel Integration on Retailers' Sales Growth. *Journal of Retailing*, 91(2), pp. 198-216. doi:10.1016/j.jretai.2014.12.005

- Creswell, J. W. (2009). Research Design: Qualitative, Quantitative, and Mixed Methods Approaches. *Sage Publications*.
- DiCicco-Bloom, B., & Crabtree, B. F. (2006). The qualitative research interview. *Medical Education, 40*, pp. 314-321. doi:10.1111/j.1365-2929.2006.02418.x
- Dubois, B., & Duquesne, P. (1993). The Market for Luxury Goods: Income versus Culture. European Journal of Marketing, 27(1), pp. 35-44. doi:10.1108/03090569310024530
- Fubini, M. (2016). Luxury retail tips: It's 2016 omni-channel engagement is no longer optional. Retrieved from Netimperative: https://www.netimperative.com/2016/03/31/luxury-retail-tips-2016-omnichannel-engagement-no-longer-optional/
- Gallino, S., & Moreno, A. (2014). Integration of Online and Offline Channels in Retail: The Impact of Sharing Reliable Inventory Availability Information. *Management Science*, 60(6), pp. 1434-1451. doi:10.1287/mnsc.2014.1951
- Geerts, A., & Veg-Sala, N. (2011). Evidence on Internet communication management strategies for Luxury Brands. *Global Journal of, 5*, pp. 81-94.
- Gibson, S., Hsu, M. K., & Zhou, X. (2022). Convenience stores in the digital age: A focus on the customer experience and revisit intentions. *Journal of Retailing and Consumer Services*. doi:10.1016/j.jretconser.2022.103014
- Guest, G., Bunce, A., & Johnson, L. (2006). How Many Interviews Are Enough? An Experiment with Data Saturation and Variability. *Field Methods*, pp. 59-82. doi:10.1177/1525822X05279903
- Holmqvist, J., Wirtz, J., & Fritze, M. P. (2020). Luxury in the digital age: A multi-actor service encounter perspective. *Journal of Business Research*, 121, pp. 747-756. doi:10.1016/j.jbusres.2020.05.038
- Holmqvist, J., Wirtz, J., & Fritze, M. P. (2020). Luxury Services. *Journal of Service Management,* 31(4), pp. 665-691. doi:10.1108/JOSM-11-2019-0342
- Holmqvist, J., Wirtz, J., & Fritze, M. P. (2022, January). Case Study: Digital Luxury Services: Traditions Versus Innovation in Luxury Fashion. *Services Marketing: People, Technology, Strategy*, pp. 550-552. doi:10.1142/9781944659806_0018
- Javornik, A., Duffy, K., Rokka, J., Scholz, J., Nobbs, K., Motala, A., & Goldenberg, A. (2021). Strategic approaches to augmented reality deployment by luxury brands. *Journal of Business Research*, 136, pp. 284-292. doi:10.1016/j.jbusres.2021.07.040

- Jocevski, M. (2020). Blurring the Lines between Physical and Digital Spaces: Business Model Innovation in Retailing. *California Management Review, 63*, pp. 99-117. doi:10.1177/0008125620953639
- Junsawang, S., Chaiyasoonthorn, W., Urbański, M., & Chaveesuk, S. (2022). How to Shift Consumer Willingness to Use the Emerging Technologies on Omnichannel. *Montenegrin Journal of Economics*, 18(3), pp. 183-196. doi:10.14254/1800-5845/2022.18-3.15
- Kapferer, J.-N., & Bastien, V. (2008). The specificity of luxury management: Turning marketing upside down. *Journal of Brand Management*, 16, pp. 311-322. doi:10.1057/bm.2008.51
- Lawry, C. A. (2023). Futurizing luxury: an activity-centric model of phygital luxury experiences. *Journal of Fashion Marketing and Management, 27*(3), pp. 397-417. doi:10.1108/JFMM-05-2021-0125
- Lazaris, C., & Vrechopoulos, A. (2014). From Multichannel to "Omnichannel" Retailing: Review of the Literature and Calls for Research. Department of Management Science and Technology, ELTRUN – The E-Business Center. doi:10.13140/2.1.1802.4967
- Lemon, K. N., & Verhoef, P. C. (2016). Understanding customer experience throughout the customer journey. *Journal of Marketing*, 80(6), pp. 69-96. doi:10.1509/jm.15.0420
- Liu, X., Burns, A. C., & Hou, Y. (2013). Comparing online and in-store shopping behavior towards luxury goods. *International Journal of Retail & Distribution Management*, 41(11), pp. 885-900. doi:10.1108/IJRDM-01-2013-0018
- Mimoun, M. S., Miltgen, C. L., & Slama, B. (2022). Is the shopper always the king/queen? Study of omnichannel retail technology use and shopping orientations. *Journal of Retailing and Consumer Services*, 65(5). doi:10.1016/j.jretconser.2021.102844
- Neslin, S. A., Grewal, D., Leghorn, R., Shankar, V., Teerling, M. L., Thomas, J. S., & Verhoef, P. C. (2006). Challenges and opportunities in multichannel customer management. *Journal of Service Research*, 9(2), pp. 95-112. doi:10.1177/1094670506293559
- Patton, M. Q. (2015). Qualitative Research & Evaluation Methods: integrating theory and practice.

- Piotrowicz, W., & Cuthbertson, R. (2014). Introduction to the special issue information technology in retail: Toward omnichannel retailing. *International Journal of Electronic Commerce*, 18(4), pp. 5-16. doi:10.2753/JEC1086-4415180400
- Rigby, D. K. (2011). The Future of Shopping. *Harvard Business Review, 89*(12), pp. 65-76. Retrieved january 2, 2023, from https://hbr.org/2011/12/the-future-of-shopping
- Saghiri, S., Wilding, R., Mena, C., & Bourlakis, M. (2017). Toward a three-dimensional framework for omni-channel. *Journal of Business Research*, 77, pp. 53-67. doi:10.1016/j.jbusres.2017.03.025
- Shen, X.-L., Li, Y.-J., Sun, Y., & Wang, N. (2018). Channel integration quality, perceived fluency and omnichannel service usage: The moderating roles of internal and external usage experience. *Decision Support Systems*, 109, pp. 61-73. doi:10.1016/j.dss.2018.01.006
- Shi, S., Wang, Y., Chen, X., & Zhang, Q. (2020). Conceptualization of omnichannel customer experience and its impact on shopping intention: A mixed-method approach. *International Journal of Information Management*, 50, pp. 325-336. doi:10.1016/j.ijinfomgt.2019.09.001
- Sousa, R., & Voss, C. A. (2006, may). Service Quality in Multichannel Services: Employing Virtual Channels. *Journal of Service Research*, 8(4), pp. 356-371. doi:10.1177/1094670506286324
- Steinfield, C., Bouwman, H., & Adelaar, T. (2002). The dynamics of click-and-mortar electronic commerce: Opportunities and management strategies. *International Journal* of *Electronic Commerce*, 7(1), pp. 93-119. doi:10.1080/10864415.2002.11044254
- Verhoef, P. C., Kannan, P., & Inman, J. J. (2015). From Multi-Channel Retailing to Omni-Channel Retailing. Introduction to the Special Issue on Multi-Channel Retailing. *Journal of Retailing*, 91(2), pp. 174-181. doi:10.1016/j.jretai.2015.02.005
- Verhoef, P. C., Neslin, S. A., & Vroomen, B. (2007). Multichannel customer management: Understanding the research-shopper phenomenon. *International Journal of Research in Marketing*, 24(2), pp. 129-148. doi:10.1016/j.ijresmar.2006.11.002
- Wu, J.-F., & Chang, Y. P. (2016). Multichannel integration quality, online perceived value and online purchase intention: A perspective of land-based retailers. 26(5), pp. 1228-1248. doi:10.1108/IntR-04-2014-0111

Zhang, J., Farris, P. W., Irvin, J. W., Kushwaha, T., Steenburgh, T. J., & Weitz, B. A. (2010). Crafting Integrated Multichannel Retailing Strategies. *Journal of Interactive Marketing*, 24(2), pp. 168-180. doi:10.1016/j.intmar.2010.02.002

Appendix

Name	Nationality	Age (approximately)	Reason and contribution
Chief Executive Officer 1 (CEO1)	Colombian American	≈ 60 years old	Chief Executive Officer of an American research, and consulting firm for luxury goods.
Innovation Analyst (IA1)	Italian	≈25 years old	Innovation Analyst at an international company that focuses on innovating through emerging technologies and digital fashion.
Chief Executive Officer 2 (CEO2)	British	≈ 30 years old	Chief Executive Officer of a company that develops interactive 3D and AR technologies to improve the purchase journey.
Chief Executive Officer 3 (CEO3)	British	≈55 years old	Chief Executive Officer a start-up focused on technological innovations and digital experiences for the luxury industry.
Chief Executive Officer 4 (CEO4)	Portuguese	≈55 years old	Chief Executive Officer and Co-owner of a small luxury business.
Head of Innovation 1 (HOI1)	Portuguese	≈33 years old	Head of Open Innovation at a leading online platform for luxury fashion.
Market Researcher 1 (MR1)	British	\approx 50 years old	Head of Luxury Manager at a leading international market research company.
Creative Director 1 (CD1)	Italian	≈43 years old	Creative Director of a luxury fashion brand. Skilled in combining digital and physical experiences.
Chief Executive Officer 5 (CEO5)	American	≈40 years old	Founder and Chief Executive Officer of a company that focuses on creating interactive 3D virtual stores.
Creative Director 2 (CD2)	British	≈40 years old	Creative Director of an innovation agency that builds the future of consumer experiences in the fashion industry.
Head of Innovation 2 (HOI2)	British	≈47 years old	Head of Innovation of an agency that focuses in using immersive technologies to change the way brands distribute their products.

Appendix A – Research participants

Name	Nationality	Age (approximately)	Reason and contribution
Innovation Partner 1 (IP1)	Singaporean	≈ 50 years old	Venture Partner focused on technological businesses that transform the role of fashion and retail. Advisor to fashion-tech startups.
Market Researcher 2 (MR2)	American	≈45 years old	Head of Digital and Retail at an international market research company.

Appendix B – Informed Consent Form





INFORMED CONSENT FORM

Name: Luís Carlos Ferreira Tavares

Student Number: 201709522

University: University of Porto

Education: Master's degree in Innovation and Technological Entrepreneurship

University Supervisor: Teresa Sarmento

Informed Consent Form

Please read this form carefully before agreeing to participate in this research project.

Purpose of the Project

This research project explores the integration of technologies in omnichannel strategies and how it creates value for luxury businesses. The study will examine how luxury brands can successfully combine technologies with traditional channels to create and deliver more value to customers.

This will be done through the analysis of interviews with some industry experts.

Who is responsible for the research project?

The institution responsible for this research is the Faculty of Engineering of the University of Porto.

You can contact the following people for any inquiries:

Project Supervisor:

Teresa Sarmento Email: <u>tsarmento@fe.up.pt</u> Telephone: +351 919 007 767

Project Lead:

Luís Tavares Email: <u>up201709522@fe.up.pt</u> Telephone: +351 915 794 750

Purpose of your participation

You have been invited to participate in this research project because you are an industry expert with valuable knowledge and experience in luxury and technology. Your insights will contribute to a deeper understanding of the topic and help inform best practices in the luxury industry.

What does participation involve for you?

If you decide to participate in this project, it will involve conducting an interview, preferably recorded, with Luís Tavares via Zoom. The interview will follow a semi-

structured format with a few open-ended questions. However, as the project seeks your expertise and opinions, additional questions may emerge during the interview.

Your personal privacy

Your personal data will be treated with the utmost confidentiality. The audio recordings and transcripts of your interview will be stored securely and only accessible to the researcher. Your identity will be kept anonymous in any publications or presentations resulting from this research project. Your data will be coded, and any identifying information will be removed. Quotes and details will not be linked to your organization; instead, you or your company will be referred to using expressions such as "an expert with knowledge of technological omnichannel strategies" or similar expressions.

At the conclusion of the research project, your personal data will be securely destroyed. Audio recordings will be deleted, and any physical transcripts will be shredded. Digital transcripts will be retained until September 2023, after which they will be deleted permanently.

Your rights

You reserve the right to ask questions about the research project at any time. Once the project is complete, you can request a copy of the research results. Additionally, you reserve the right to request the removal of your personal information from the study, whether during or after the research has been conducted.

Consent form

By signing below, you indicate that you have read and understood the information in this Informed Consent Form and agree to participate in the research project.

Participant's Name

Participant's Signature

Date