



The Future of Luxury: How Small Brands Combine Traditional Craftsmanship with Innovative Technologies to Create Sustainable and Unique Products

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Abstract

Title: The future of luxury: how small brands combine traditional craftsmanship with innovative technologies to create sustainable and unique products

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This study examines how small luxury brands combine traditional craftsmanship with innovative technologies to create sustainable and unique products. To answer the research question, I have adopted a qualitative approach and conducted a multiple case study of four Portuguese small luxury brands to gain insights into their strategies, practices, and challenges. The findings reveal that brands combine these elements by integrating digital software in the design process, implementing laser engraving for product branding, elevating handcrafting with laser cutting technology, and prioritizing sustainable material selection and vegan leather. Fostering the synergy of made-to-order production and digital platforms, employing artificial intelligence in marketing efforts, and protecting traditional craftsmanship with blockchain technology are additional strategies employed by these brands. The study also reveals challenges faced by small luxury brands, such as financial barriers hindering seamless integration of traditional craftsmanship with technological advancements, and complexities associated with preserving savoir-faire while embracing innovation in craftsmanship.

Keywords: Luxury industry, Small luxury brands, Traditional craftsmanship, Innovative technologies, Sustainable products, Unique products, Multiple case study, Portuguese luxury sector

Resumo

Título: O futuro do luxo: como as pequenas marcas combinam o artesanato tradicional com tecnologias inovadoras para criar produtos sustentáveis e únicos

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Este estudo analisa a forma como as pequenas marcas de luxo combinam o artesanato tradicional com tecnologias inovadoras para criar produtos sustentáveis e únicos. Para responder à questão de investigação, adotei uma abordagem qualitativa e realizei um estudo de casos múltiplos de quatro pequenas marcas de luxo portuguesas para obter informações sobre as suas estratégias, práticas e desafios. Os resultados revelam que as marcas combinam estes elementos através da integração de software digital no processo de design, da implementação da gravação a laser para a estampagem do *branding*, da elevação do artesanato com a tecnologia de corte a laser, e dando prioridade à seleção de materiais sustentáveis e ao couro vegan. Promover a sinergia entre a produção por encomenda e as plataformas digitais, empregar inteligência artificial no marketing e proteger o artesanato tradicional com a tecnologia *blockchain* são estratégias adicionais utilizadas por estas marcas. O estudo também revela os desafios enfrentados pelas pequenas marcas de luxo, como as barreiras financeiras que impedem a integração perfeita do artesanato tradicional com os avanços tecnológicos e as complexidades associadas à preservação do *savoir-faire*, enquanto abraçam a inovação no artesanato.

Palavras-chave: Indústria do luxo, Pequenas marcas de luxo, Artesanato tradicional, Tecnologias inovadoras, Produtos sustentáveis, Produtos únicos, Estudo de casos múltiplos, Sector do luxo português

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List of abbreviations

AI - Artificial Intelligence

AR - Augmented Reality

CEO - Chief executive officer

LVMH - Louis Vuitton Moët Hennessy

NYC – New York City

SCM - Supply Chain Management

SME - Small and medium-sized enterprise

2D - Two-dimensional

3D - Three dimensional

1. Introduction

The luxury industry has always been synonymous with exclusivity, higher quality, and unparalleled craftsmanship. However, in recent years, the sector has faced numerous challenges, such as the marginalisation of traditional craftsmanship (Tarquini et al, 2022), coupled with global economic uncertainty, changing consumer behaviour, and environmental concerns (Seibel et al., 2021). In this context, small luxury brands have emerged as key players, leveraging their focus on craftsmanship to differentiate themselves from larger luxury brands. Niche brands, such as a shoemaker, embody traditional manufacturing techniques and the incorporation of natural components, thereby implying superior quality and distinct product attributes (Tungate, 2009).

The value of culture, history, and heritage is immeasurable, and products crafted with traditional heritage skills serve as a catalyst for revitalizing the oversaturated market of branded luxury fashion (Brown, 2015). Yet, in the contemporary landscape, technology plays a crucial role and advancements in technology are pervasive across all industries, including luxury. Consequently, small luxury brands must navigate the balance between preserving traditional craftsmanship and incorporating innovative technologies to create sustainable and distinct products.

Despite the growing significance of innovation within the luxury industry, there still exists a notable gap when it comes to exploring the intersection and synergy between technological innovation and traditional craftsmanship. This gap becomes particularly evident when considering small luxury brands, as the specific strategies and challenges they encounter when combining traditional craftsmanship with innovative technologies is missing. Existing research predominantly focuses on larger luxury brands (Chung et al., 2020; Pantano et al, 2022; Ahmed, 2023) and lacks a comprehensive analysis of the distinctive circumstances faced by smaller players. Therefore, a deeper exploration of the approaches of small luxury brands in effectively navigating this delicate intersection is necessary. As such, this research aims to address this gap by answering the following research question:

How can small luxury brands combine traditional craftsmanship with innovative technologies to create sustainable and unique products?

By conducting a qualitative exploratory approach, and more specifically a multiple case study of four small luxury brands in the Portuguese luxury sector - Josefinas, Lachoix, Majatu Studio, and Ownever, I seek to gain insights into the strategies, practices, and challenges faced by these brands as they navigate the combination of traditional craftsmanship with innovative technologies.

The dissertation is structured into six chapters, each serving a specific purpose in addressing the research question comprehensively. The literature review forms the foundation of the study, providing a comprehensive analysis of craftsmanship in the luxury sector. It includes the definition of craftsmanship and examines its role in the sector. Additionally, the review explores sustainability and recent innovations in luxury, particularly highlighting the influence of technology. Finally, it examines the challenges faced by small luxury brands.

Identifying the research gap, the methodology section describes the approach I adopted to collect and analyse primary and secondary data. This section highlights the rigor and depth of the research process, ensuring the findings are robust and insightful. The empirical setting chapter introduces the four investigated companies, providing a contextual understanding of their backgrounds. The findings chapter presents the research outcomes, directly addressing the research question. It delves into the strategies and practices adopted by small luxury brands to combine traditional craftsmanship with innovative technologies. These findings are then compared and contextualized with the relevant literature in the discussion section, offering insights into the alignment or divergence between theoretical perspectives and empirical evidence.

Finally, the conclusion synthesizes the key findings, emphasizing their implications for small luxury brands seeking to create sustainable and unique products. The conclusion also acknowledges the limitations of the study and suggests potential avenues for future research in this domain.

2. Literature Review

This literature review explores the concept of craftsmanship in the luxury sector, with an emphasis on its evolving meaning and branding significance. It delves into the definition of craftsmanship in luxury, its role in establishing authenticity, and how it contributes to a brand's

heritage and cultural value. The review then explores sustainability and technological innovation in the luxury industry. It begins by looking at the challenges and opportunities faced by luxury brands when integrating sustainable practices into their operations. Additionally, it analyses the potential for technological innovation in the luxury realm, while also showcasing the complex relationship between technological innovation and luxury. Lastly, it highlights the specific challenges encountered by small luxury brands and identifies the research gap regarding the combination of traditional craftsmanship with innovative technologies to create sustainable and distinctive products.

2.1 Craftsmanship in the luxury sector

A luxury brand is a branded product or service that consumers perceive to be high quality, offer authentic value via desired benefits, and have a prestigious image within the market built on qualities such as artisanship, craftsmanship, or service quality (Ko et al., 2019). Craftsmanship has always been a fundamental aspect of the luxury industry, but its meaning has evolved over time, and in some cases, it may not carry the same connotations as it once did. This section aims to define craftsmanship in the context of luxury, as well as its current position and relevance in the current environment.

2.1.1 Definition of craftsmanship in luxury

The term “craftsmanship” is defined as skilled work and usually applies to a small-scale production (Dominiczak, 2015). Cimatti and Campana (2015) argue that various factors contribute to the definition of craftsmanship, including territory, history, cultural heritage, tradition, know-how, art professions, handiwork, shaping ability, material knowledge, as well as innovation and technology. It's the artisans who bring these elements to life through their work, making them a vital part of the luxury industry (Amatulli & Guido, 2011). These skilled craftsmen have perfected the art of creating handmade objects using specific techniques and know-how. While they often reproduce a specific design, they ensure the final product meets strict quality and aesthetic standards (Fionda & Moore, 2009). But artisans must also be creative when working on custom orders, which often require them to create unique and functional products tailored to individual customers. This fusion of technical expertise and creativity results in beautiful, functional objects (Kapferer, 2014).

Craftsmanship is a critical success factor that allows brands to be defined as luxury brands and differentiate themselves from other brands (Brun et Castelli, 2013). In order to establish an authentic brand, companies typically leverage their extensive history of producing high-quality craftsmanship, which is firmly rooted in a specific geographic location and time period. This historical foundation infuses a brand with a distinct non-commercial aspect and creates a romanticized origin story that sets it apart from similar, mass-produced products (Goldstein et al., 2022).

Transmitted from generation to generation, craftsmanship represents more than just a method of producing goods as it embodies a cultural value. In this sense, craftsmanship becomes an integral part of the brand heritage, and customers are willing to pay a premium for the products that embody this heritage (Kapferer, 2012).

According to Roberts and Armitage (2015), craftsmanship products typically require a high level of skill, time, and expensive materials. However, nowadays, craftsmanship has lost some of its traditional meaning, as big luxury brands like Louis Vuitton use allusions to craftsmanship to balance their image as a mass-produced luxury brand (Kapferer, 2014). In the past, luxury companies were often family-run and served mainly local customers, but now brands face challenges in expanding their storefronts globally, leading many to sell to larger conglomerates. While references to mythical luxury "houses" persist, the reality is that most brands are now owned by vast conglomerates like LVMH, Kering, Richemont, EPI, and Prada Group (Kapferer and Bastien, 2012).

2.1.2 Craftsmanship in the evolving luxury landscape

The luxury sector has experienced tremendous growth in recent years, leading to the decline of artisanal production methods in favour of mass-produced products, except for made-to-measure models and small batches (Kapferer and Bastien, 2012). However, this growth has also led to increased pressure on luxury brands to promote their commitment to craftsmanship in order to counter negative perceptions that may arise from the rise of mass production (Kapferer, 2014).

The artisan is a key figure in the narrative approach used by luxury brands to emphasize the value of skilled craftsmanship, rarity, exclusivity, and personalized attention (Bettiol &

Micelli, 2013; Hawley & Frater, 2017). Yet, the shift towards mass production and globalization has had a significant impact on the luxury industry, particularly on the traditional craftsmanship that luxury brands often rely on to differentiate themselves. With the rise of globalization, the market has become more competitive, and larger luxury brands are turning towards mass production to cater to the growing demand for luxury goods (Brun and Castelli, 2013). However, this shift away from craftsmanship has raised concerns about the potential consequences for the authenticity and heritage of luxury brands (Silverstein and Fiske, 2003).

Moreover, the convergence of recent competitive pressures and the global pandemic has compelled luxury organizations to embrace and integrate significant technological innovations, seeking to elevate and enrich their customer experience (Pantano et al., 2022), while simultaneously responding to the growing demand for ethics and sustainability from young luxury consumers (Santos et al., 2021). However, in the realm of luxury, where craftsmanship has traditionally been held in high esteem, technology has often taken a backseat. Certain renowned luxury brands have been slower in adopting these new strategies and technologies, potentially due to the challenges faced by large-scale companies in rapidly adapting to the transformative effects of the pandemic and, consequently, this situation presents smaller brands with a unique opportunity to outperform larger competitors and secure a greater market share by catering to evolving consumer needs (Loranger & Roeraas, 2023).

2.2 Sustainability and technological innovation in the luxury industry

In recent years, the luxury industry, renowned for its qualities such as craftsmanship (Ko et al, 2019), has experienced a transformative shift. At its core, two critical themes have gained significant attention - innovation and sustainability. However, the coexistence of innovation and sustainability in luxury to create a more sustainable and environmentally friendly sector, without compromising the core values of craftsmanship and heritage remains a subject of ongoing exploration and debate (Chandon et al., 2016; Amatulli et al., 2017; Nash et al., 2016; Pantano et al., 2022).

In light of this context, the following section explores the literature on sustainable practices in luxury and examines the perceived tension between sustainability and luxury. As innovation plays a crucial role in developing new products, and services that are more efficient and environmentally friendly, this section also delves into the evolving landscape of technology

within luxury, examining how luxury organizations are incorporating innovative technologies to enhance customer experiences and brand positioning. While also addressing the delicate balance that luxury brands must strike between embracing innovation and preserving their heritage and artisanal essence.

2.2.1 Navigating sustainability in the luxury industry

Sustainability has become an increasingly important topic in the luxury industry in recent years. Luxury brands are beginning to recognize the need to incorporate sustainable practices into their business models to appeal to environmentally conscious consumers and to reduce their environmental impact (Pencarelli et al., 2019). The literature on sustainability in luxury has grown significantly in recent years, with a focus on exploring the challenges and opportunities of incorporating sustainable practices in the luxury sector.

One of the main challenges facing the luxury industry in relation to sustainability is the perceived conflict between sustainability and luxury. Several studies have addressed this issue, with some scholars arguing that sustainability and luxury are incompatible (Amatulli et al., 2017; Nash et al., 2016). Athwal et al. (2019) reviewed the literature on sustainable luxury and concluded that research on this issue is still underdeveloped, and the relationship between sustainability and luxury remains vague and inconsistent.

However, other studies have explored the potential for sustainable luxury, highlighting the opportunities for luxury brands to differentiate themselves by incorporating sustainable practices into their business models. Wang et al. (2020) and Dean and Athwal (2019) addressed the growing tensions between sustainability and luxury, while Zhang et al. (2020) and Bhardwaj and Bedford (2017) explored factors that influence the consumption of sustainable luxury, including gained information and psychological determinants such as symbolic value perception, tendency to conform, and moral judgment.

Several studies have also explored specific aspects of sustainability in luxury, such as the use of best practices along the supply chain, like waste reuse, wastewater treatment, certified raw materials, emission reductions, and renewable energy production (Karaosman et al., 2018). Other studies have focused on the implementation of sustainable materials in luxury goods production. For instance, Lerma et al. (2017) investigated the use of new eco-friendly

materials to substitute gold in the manufacturing of jewellery. Moreover, authors study the influence of sustainability on the brand's strategic approach. Cimatti et al. (2017) presented a case study of an Italian luxury brand that produces leather and fabric accessories using recycled materials. Yet, the brand strategically places emphasis on craftsmanship rather than solely focusing on eco-friendliness and prioritizes creating exquisite products.

Craftsmanship and quality, together with durability, authenticity, and unique design aesthetic, are essential elements of luxury fashion that promote sustainability (Ozdamar-Ertekin, 2019). Sun et al. (2021) propose that focusing on the durability aspect of sustainability can be an effective marketing strategy for high-end brands to promote their products while nudging consumers toward buying fewer, better goods.

Sustainability and luxury are inherently interconnected, and it is reasonable to assert that luxury entails a focus on durability, aligning with the idea of valuing fewer items of superior quality (Hawley & Frater, 2017). Unlike premium or mass brands, luxury brands offer products that are scarce and therefore reliant on resources, necessitating a greater emphasis on sustainability.

Overall, the literature suggests that incorporating sustainable practices into the luxury industry is a complex issue with both challenges and opportunities. While there is still much to be learned about the relationship between sustainability and luxury, luxury brands must begin to innovate in order to remain relevant in today's increasingly environmentally conscious world.

2.2.2 Unraveling the potential of technological innovation in luxury

Luxury organizations have been slow in adopting technology (Arrigo, 2018; Holmqvist et al., 2020). Rather than embracing new technology, they tend to hold on to traditional values that are associated with the concept of luxury. On the other hand, recent financial data suggest that technological innovation separates the "winners" from the "losers" in luxury markets (Gonzalo et al., 2020).

In recent years, studies have explored the potential of technological innovations to enhance luxury brands. Javornik et al. (2021) examined how a single technological innovation, augmented reality (AR), can be strategically leveraged to convey luxury attributes to enhance

brand experience and improve the customer journey. Their findings suggest that augmented reality has the potential to create a more immersive and engaging brand experience as virtual representations can convincingly simulate the quality and craftsmanship of luxury products in a manner not previously possible via a regular website, while also providing new opportunities for artisans to showcase their skills and creativity.

Pantano, et al (2022) revealed what technological innovations large luxury retailers have been adopting in the last five years while presenting a framework to guide luxury retailers in the strategic adoption of technological innovation to enrich the customer experience. Across four case studies, they identified technological advancements such as chatbot, image recognition technologies (2D and 3D), mobile app, smart mirrors, in-store interactive displays, virtual try-on, mobile app, immersive technology, virtual reality, and augmented reality.

In the realms of artificial intelligence, findings show that luxury fashion brands can use chatbot to develop digital customer assistance tools that increase customer engagement, provide unrestricted availability, offer highly customizable flexibility, and give simple and natural customer experiences (Chung et al., 2020). Chatbots can work to cultivate forthcoming relationships between luxury brands and consumers. A notable example is Louis Vuitton, which has implemented a chatbot service offering a multitude of benefits. This service includes providing details about global physical stores, granting access to personal service agents who can assist with product care inquiries, and engaging users through conversational interfaces that highlight the artistry and craftsmanship behind their products (Forbes, 2017a, 2017b, 2017c).

Other studies have explored the potential of other technologies, such as 3D printing, to have a great role in the luxury market and bring in sustainability benefits. Ahmed (2023) suggests that 3D printing can revolutionize clothing, cosmetics, and luxury markets through design flexibility, customization, and increased productivity. The technology has been successfully utilized in creating shoes, sneakers, lace-like textures, haute couture dresses, handbags, knitwear, patronage, skeletal masks, ties, and organic skirts made from a variety of materials such as polymers, vegan organic materials, metals like silver or gold, nacre "mother-of-pearl," leather, nylon, carbon fibres, and bio-based materials. Yet, while the adoption of technological innovations such as 3D printing can bring significant benefits to the luxury goods industry, it is crucial to strike a delicate balance to prevent any detrimental effects on luxury

brands that have deep roots in tradition and heritage (Chandon et al., 2016; Pantano et al., 2022).

2.3 Challenges for small luxury brands

Small luxury brands compete intensely in a market that is both dynamic and heavily dominated by luxury groups. Despite their potential to seize a distinct advantage in outperforming larger competitors and securing a greater market share by effectively catering to evolving consumer needs (Loranger & Roeraas, 2023), small brands face particular difficulties because of their scale. While there is limited literature on small luxury brands, it is possible to identify some challenges they may face with regards to their brand dimension.

One of the most significant challenges faced by small luxury brands is achieving the same level of visibility and brand recognition as larger luxury brands (Kapferer, 2012). Due to limited marketing budgets and resources, smaller luxury brands may struggle to gain the same level of exposure and brand awareness as their larger competitors. This lack of visibility can be detrimental to small luxury brands as consumers tend to gravitate towards well-established and recognizable brands.

As a result, securing funding from investors and financial institutions becomes a major challenge, constraining their ability to expand and innovate (Kapferer, 2017). Moreover, the lack of financial resources can impede their marketing and advertising efforts, exacerbating the challenge of building brand visibility and recognition. Furthermore, small luxury brands often face challenges related to limited distribution. They may struggle to secure space in high-end retail locations, which can limit their visibility and exposure to potential customers (Kapferer, 2017). Small brands may lack the resources to invest in their own retail spaces or to develop an effective e-commerce platform, which can further limit their ability to reach customers.

Studies have shown that small and medium-sized enterprises (SMEs) in the luxury industry face challenges in responding to sustainability, such as the high-cost implications in terms of time and knowledge required to meet social responsibility requirements (Zhang, Pawar, & Bhardwaj, 2017). Caniato et al. (2012) found that small companies in the footwear and outerwear industries had greener processes, but often did not measure environmental performance in a structured quantitative way due to their small size, making it difficult to establish a planned performance measurement system. Despite the importance of firm size as

a determinant of social and economic performance, most studies addressing supplier development strategies and their role in managing social sustainability in supply chain management (SCM) do not consider this factor (Yawar and Seuring, 2017). Furthermore, there is limited understanding of responsible business practices in SMEs, and a failure to consider differences in SMEs and the contextual impact in traditional sectors further exacerbates this issue (Carrigan et al., 2017). Although the environmental and social consequences of actions taken by individual SMEs may be small, their collective impact can be significant. Thus, it is necessary to consider organizational and contextual variables that could influence sustainability implementation (Karaosman et al, 2020).

In summary, small luxury brands face significant challenges that can make it difficult for them to succeed in the highly competitive luxury market. These challenges may include limited access to capital, the need to maintain authenticity and brand heritage, limited distribution, and difficulties in addressing sustainability concerns.

2.4 The gap

The existing literature has explored the relationship between craftsmanship and luxury, the challenges faced by luxury brands in incorporating sustainable practices, and the potential for technological innovation in the luxury sector. However, there is a noticeable lack of research specifically focused on small luxury brands. The gap lies in the scarcity of evidence and studies on how small luxury brands effectively navigate the combination of traditional craftsmanship with technological innovations to create products that are not only sustainable but also unique to consumers.

By addressing this knowledge gap, we can gain valuable insights into the strategies and approaches employed by smaller luxury brands to effectively utilize innovative technologies while preserving and enhancing the essence of traditional craftsmanship. The aim is to create unique, sustainable products that stand out in the market.

In light of this research gap, my research question arises:

How can small luxury brands combine traditional craftsmanship with innovative technologies to create sustainable and unique products?

3. Methodology

This chapter discusses the methodology used to answer my research question. I will present the research design, data collection process, along with the chosen data analysis procedures.

3.1 Research Design

For this study, I chose a qualitative research approach to explore the question of how small luxury brands can combine traditional craftsmanship with innovative technologies to create sustainable and unique products. As previously mentioned, this question has received scarce research. The current research on innovation in the luxury industry has made strides, but it notably lacks evidence regarding small luxury brands and the combination of traditional craftsmanship with technological innovation.

In crafting this dissertation, a qualitative research approach was deemed the most suitable, as it allows for the exploration and development of theories in cases where the phenomenon under investigation is novel or lacks prior research, or when existing theories may have limitations or require empirical validation (Graebner et al., 2012). This approach offered several advantages in addressing my research question. Through open-ended interviews, observations, and analysis of textual data, it allowed for a deeper understanding of the complexities and interrelationships involved. Secondly, qualitative research provided flexibility and adaptability in data collection and analysis (McCall & Simmons, 1969). Moreover, the primary focus of case studies was to gather empirical evidence from individuals working within organizations, specifically in response to "why" or "how" questions. This type of research method, as highlighted by Myers (2019), aligned perfectly with the objective of this study, which aimed to gain insights into how brands combined traditional craftsmanship with innovative technologies.

After selecting a qualitative research approach, I chose the multiple case study method to delve into how small luxury brands integrate innovative technologies to create sustainable and unique products, while preserving their traditional values. This approach allowed for a comprehensive exploration of the diverse luxury industry landscape, providing valuable insights into how these brands strike a balance between tradition and innovation.

To begin the brand selection process, I first conducted extensive research on traditional craftsmanship in luxury to choose the correct market for my research. Based on the results, I decided to focus on the Portuguese market for some reasons. First, Portugal boasts a rich heritage in craftsmanship with a long-standing tradition of producing exquisite and finely crafted products (Ratten et al., 2022). This emphasis on artisanal skills and attention to detail aligns perfectly with the core values of luxury brands that prioritize craftsmanship. Furthermore, Portugal's luxury industry has been gradually gaining international recognition, with a growing number of small luxury brands gaining prominence on the global stage (Portuguese Soul Magazine, 2022). This reputation offers a valuable opportunity to shed light on the strategies employed by these brands to create sustainable and distinctive products while navigating the complexities of a competitive and evolving luxury market.

Subsequently, I conducted a thorough search for Portuguese brands that aligned with the majority of the criteria defining a luxury brand, as analysed in the literature (2.1). This process allowed me to narrow down the scope of the industry, focusing primarily on the fashion sector. During this selection, I identified luxury brands that not only upheld traditional craftsmanship but also exhibited a willingness to integrate innovative technologies. Moreover, I prioritized brands demonstrating genuine commitments to sustainability and the creation of distinctive and exceptional products. Out of the initial pool of eight potential case studies meeting these criteria, I reached out to each brand via email, resulting in positive responses from four brands: Josefinas, Lachoix, Majatu Studio, and Ownever – all willing to participate in my research.

3.2 Data Collection

The data collection process involved gathering information from both primary and secondary sources. For the primary data collection, I conducted six semi-structured interviews with the founders, partners, and managers of the selected companies. I carefully selected the interviewees based on their relevance to the subject studied, utilizing contact information available on the companies' websites and LinkedIn profiles. The interviews were designed to elicit rich and detailed insights into the practices and decision-making processes of the brands, thereby enhancing the depth of the study's findings.

Specifically, I conducted an interview with the international sales manager of Josefinas, providing valuable insights into the brand's approach to combining traditional craftsmanship with innovative technologies. For Lachoix, I interviewed the founder of the brand to gain an in-depth understanding of their creation, production methods, and future goals. Similarly, I conducted interviews with both founders of Majatu Studio, who shared their story, along with challenges and successes encountered in their recently created luxury brand. Additionally, I conducted two interviews with the two founders of Ownever, to capture different perspectives on the research topic.

The interviews were semi-structured and open-ended to encourage participants to provide comprehensive responses (Saunders et al., 2009). I conducted them through recorded video and voice meetings, and when necessary, via email. The interview duration ranged from 20 to 60 minutes. I transcribed all interviews for analysis purposes.

The interview process started by constructing key themes and questions, allowing participants to freely describe their experiences and perspectives. I used probing questions to explore significant responses related to the research topic. This approach enabled a better understanding of the meanings behind the participants' responses, as well as the reasons behind their decisions and processes.

While I made efforts to address limitations, it is important to acknowledge their presence in the primary data. First, some brands were hesitant to schedule interviews, for example, while Josefinas demonstrated openness to collaboration, a preference was observed for information exchange through email. However, video or phone interviews proved to be more engaging and detailed, as they facilitated personal interaction between the participants. Additionally, the reliance on interviews as the primary data collection method may introduce some degree of subjectivity and bias. Despite my efforts to ensure open-ended questioning and probing, participants' responses may be influenced by their own perspectives and experiences. Moreover, the research focused on the perspectives of founders, partners, and managers, potentially overlooking valuable insights from other stakeholders within the organizations. Lastly, one aspect that should be acknowledged as a limitation in this study is the unavailability of financial data from the participating brands. While this limitation does not have a direct impact on the central focus and objectives of the research, it is worth noting that the inclusion

of financial information would have offered valuable insights into the size, performance and market positioning of the brands being investigated.

In addition to primary data, I collected secondary sources to complement and triangulate the primary data. I obtained archival data from companies' websites, reports, and media articles. These sources provided additional insights and context to support the analysis of the primary data. I carefully evaluated and compared the secondary sources with the primary data, ensuring the inclusion of relevant information while excluding data not directly relevant to the study. The data collected can be found in Appendix 1.

By utilizing a combination of primary and secondary data sources, this study aimed to achieve a comprehensive and nuanced understanding of how small luxury brands combine traditional craftsmanship with innovative technologies to create sustainable and unique products.

3.3 Data Analysis

After completing the process of data collection, I organized and interpreted the gathered data to effectively address the research question. This section outlines the data analysis process, including the coding procedure and the interpretation of findings.

To begin the coding process, I pre-defined a set of codes based on the research question and insights obtained from the literature review. These codes provided a framework for organizing the data. However, as the primary data from interviews with the identified companies unfolded, new codes emerged to capture unique insights and perspectives, as demonstrated below:

Quotations	Codes
<p><i>“We utilize Rhino 3D for our design process, enabling us to create realistic 3D designs. This software ensures accuracy, reduces the need for incorrect prototypes, and aligns with our sustainability goals by minimizing waste”</i></p>	<p>3D/digital design</p>

Quotations	Codes
<i>“At Josefinas, we also design vegan leather creations such as ballerinas and bags. These products have been developed in response to the growing requests from customers who prioritize ethical considerations”</i>	Vegan leather
<i>“Instead of traditional stamping, we've turned to laser engraving because it not only saves time but also proves to be more cost-efficient, all while maintaining the same exceptional quality”</i>	Laser engraving

Table 1: Codes originated from interview quotes

During the systematic examination of the collected data, I focused on identifying patterns and extracting key themes. In the second stage, I aggregated codes into categories and associated them with two main themes of this dissertation: traditional craftsmanship and innovative technology. I detailed the associations generated from the collected data in Figure 1, that can be found in Appendix 2.

4. Empirical Setting

To address the research question, I selected four case studies, which I will present in the following chapter. The purpose of these case studies was to provide a contextual understanding of the elements that I analysed in the subsequent findings section. All the companies examined in this study operate in the Portuguese luxury market. Specifically, the companies under examination were Josefinas, Lachoix, Majatu Studio, and Ownever.

4.1 Josefinas

Josefinas is a luxury lifestyle footwear brand, founded in 2013, that specializes in ballet flats, a type of shoe that is affordable and made with the highest quality materials. Each pair is handmade by master shoemakers in Portugal, making them unique and exclusive. The brand is known for its commitment to providing an integrated experience of exclusivity, savoir-faire, comfort, and luxury.

The idea for Josefinas was born out of a visit to a construction site when Filipa Júlio realized that every woman should have the perfect shoes to wear in any situation. She wanted

to create a brand that would provide women with both comfort and style and entered her idea in a business idea contest and was among the ten finalists, where she met Maria Cunha, who proposed a partnership to launch the business. Together, they searched for the best materials and suppliers to create the perfect ballet flat. They eventually found a shoemaking atelier in São João da Madeira, where two shoemaking brothers work, who could ensure niche production on a family scale. With the first prototypes, Filipa and Maria tested the ballet flats in various environments, from rain and mud to sand and even the sea, until they were satisfied with the quality (Araújo Barbosa, 2013).

Once the product was ready, they began showing it to the world. Sending the shoes to various bloggers, they received personal and private opinions overnight, which were overwhelmingly positive. Inspired by the ballerinas and Filipa's grandmother, the brand was named Josefinas and is now sold online and in small markets (Araújo Barbosa, 2013).

As a small to medium-sized enterprise, the brand's headquarters are located in Braga, while its production takes place in São João da Madeira. In the hands of master shoemakers and craftsmen, every shoe is made to order, one request at a time (Interview, International Sales Manager Josefinas).

The demand for exclusive, handmade products from a sustainable market is on the rise, and Josefinas is well-positioned to meet this demand. The brand exports their comfortable and exclusive women's footwear to more than 160 countries worldwide. The United States is a particularly important market for them, while Europe, Canada, and Australia are also significant destinations for their products. Their products are sold online, and the brand has expanded into the luxury handbag market. The value of "Made in Portugal" is recognized by international customers who admire the meticulous Portuguese craftsmanship and expertise (Oliveira, 2022).

Josefinas strives to be the door to all this talent and to showcase to the world the magic that can be found in each of their products. They believe that the value of something comes from the time, love, and knowledge that goes into creating it (Interview, International Sales Manager Josefinas).

4.2 Lachoix

Lachoix is a Portuguese footwear brand that was founded in 2018 by Fátima Carvalho. Their unique approach combines elegance and comfort, going beyond merely offering high-quality products to create a lifestyle brand that redefines women's footwear essentials. Specializing in elegant flat shoes, including loafers and slippers, Lachoix draws inspiration from androgynous aesthetics, using noble materials such as velvet and fur.

As a direct-to-consumer brand based in Lisbon, Lachoix represents a new era of luxury. All of their products are designed and manufactured in Portugal, a country renowned for its expertise and unwavering commitment to quality. Fátima Carvalho, the founder, recognized the need for shoes that could adapt to the contemporary woman's everyday routine, and this vision became the driving force behind Lachoix's creations.

Transparency is a core value at Lachoix. They believe in providing customers with the necessary information to make conscious choices. Their products embody timeless design, quality materials, and comfortable shapes, reflecting their commitment to sustainability. Lachoix envisions their footwear lasting for generations, embodying their vision of a truly sustainable product (Interview, Founder and Creative Director, Lachoix).

One of Lachoix's primary goals is to create fair products that benefit consumers, workers, and the planet alike. They source their leathers from animals used in the food industry, abstaining from supporting the use of leather or fur derived from wild animals or animals exploited solely for their skins (Lachoix – Responsibility, n.d.).

Lachoix's commitment to sustainability and exceptional craftsmanship has resonated with their consumers, particularly modern and active women seeking comfort and style. The brand has experienced significant success in the online market, with approximately 60% of their sales done through their online shop. The remaining portion of the sales is attributed to their physical store in Lisbon, that opened in late 2021. During the COVID-19 pandemic, their sales tripled, especially in international markets such as Italy, Spain, Germany, and Russia (Interview, Founder and Creative Director, Lachoix). This surge in sales highlights the brand's ability to cater to the evolving needs and preferences of their perceptive customer base.

4.3 Majatu Studio

Majatu Studio is a Portuguese luxury brand that specialises in creating unique and timeless pieces inspired by architectural principles and human shapes. Founded by childhood friends Sara Peixoto and Jorge Ribeiro in 2020, in Viana do Castelo, Portugal. The company is led by its two founders, who collaborate with a small atelier named Atelier Cristina Macedo, as well as two independent artisans responsible for bringing their designs and garments to life. The brand aims to return to its roots and reinterpret the meaning of simplicity as true luxury while producing minimum waste designs in small batches that are crafted locally from high-quality materials by experienced seamstresses (Majatu Studio – About us, n.d.).

Today, the brand is sold at three different locations: The Feeting Room in Lisbon and Porto, as well as House of Curated in Lisbon (Interview, Founder 1, Majatu Studio).

The brand exemplifies its commitment to sustainability through both its design philosophy and production methods. The brand's deep understanding and connection to the Portuguese textile industry allow them to produce the majority of their pieces on-demand with meticulous attention to detail. This approach ensures that no compromises are made in terms of quality, and no items are left unsold or neglected on shelves. By adopting limited editions for their seasonal collections, the brand infuses each piece with significance, recognizing the ever-changing nature of fashion and the desire for freshness, surprise, and durability, while maintaining timeless design as a core value (Majatu Studio – The Majatu Model, n.d.-b).

Majatu Studio believes in slow production processes for longer product lifecycles. Each item is made upon request, minimizing waste and maximizing its durability. Seasonal collections are launched in small drops and available to pre-order within a limited timeframe of three weeks. *“During this period, since we can produce in quantity without running the risk of excessive inventory, we are able to reduce the final price by 30%, compared to original PVP,”* they explain. Afterwards, they start producing the first batch of orders, and the price goes back up, while garments remain available to be produced on-demand until the end of the season (Majatu Studio – The Majatu Model, n.d.-b).

With this approach, Majatu Studio can create dream objects that stand the test of time and have a lower impact on the environment.

4.4 Ownever

Ownever is a Portuguese luxury accessories brand, founded in 2020 and inspired by timeless French classic style. The brand was created with the mission of making a difference in rampant consumerism and not contributing to the fast fashion industry. The founder's realization that less is truly more led to a challenge of creating accessories that are still desired after a few months of use (Ownever – Story, n.d.). Currently, the company has a team of three people in-house, while the remaining workforce is outsourced (Interview, Founder 1 and CEO, Ownever).

Eliana Barros, the founder of Ownever, was inspired to create a brand of accessories that would stand the test of time and combat the fast fashion industry after realizing that she was happier with less. She wanted to create something that was sustainable, made with Portuguese savoir-faire, and would enhance timeless design. Her vision was for Ownever to be a reference not only in quality and longevity but also in sustainability and emotionality (Bento, 2022).

The brand's mission is not only to use sustainable materials but also to ensure that workers, the planet, and the people that inhabit it are considered when creating a product. Every piece is the materialization of the sustainability of the materials used, the respect for the workmanship that creates it, and the unique lifestyle that it embraces. The brand encourages its customers to take care of their pieces because everything they care for lasts a lifetime (Ownever – Our Commitment, n.d.). As such, the brand's clients are primarily people who live in urban areas, are financially stable, are usually over 30 years old, care about the luxury and longevity of the products, and want to celebrate leather and other craftsmanship techniques (Interview, Founder 1 and CEO, Ownever).

Ownever embraces the circular economy and takes a position opposite to fast fashion. All creations are handmade in Portugal with the mission of being passed from generation to generation. The brand also offers a repair and restoration service for leather goods, including polishing, painting, antibacterial treatment, restoration of handles and corners, and other repairs that may be necessary. These values are at the core of what defines the Ownever brand (Bento, 2022).

Every Ownever piece is the materialization of the sustainability of the materials used, the respect for the workmanship that creates it, and the unique lifestyle that it embraces. The brand encourages its customers to take care of their pieces because everything they care for lasts a lifetime (Interview, Founder 1 and CEO Ownever).

5. Findings

This chapter presents the findings I obtained through the analysis of the collected data, with the primary objective of addressing the research question: *"How can small luxury brands combine traditional craftsmanship with innovative technologies to create sustainable and unique products?"*. The chapter has been organized into two distinct sections, each shedding light on the integration of traditional craftsmanship with innovative technologies within small luxury brands. The first section explores the pathways embraced by these brands, showcasing how they strategically combine traditional craftsmanship with innovative technologies in order to create sustainable and unique products. In the second section, I delve into the challenges encountered by these brands as they attempt to harmoniously merge tradition and innovation, unveiling insights into the delicate balance they must achieve.

5.1 Unveiling strategies that combine traditional craftsmanship with innovative technologies to create unique and sustainable products

In this section, I present how small luxury brands strategically combine traditional craftsmanship with innovative technologies to create sustainable and unique products. By integrating digital software in the design process, streamlining product branding with laser technologies, prioritizing eco-friendly and innovative materials such as vegan leather, fostering the synergy of made-to-order production and digital platforms, implementing AI in marketing efforts, and leveraging blockchain to protect intellectual property, among other strategies, these brands successfully blend tradition and innovation to craft sustainable and unique luxury products.

5.1.1 Integrating digital software in the craftsmanship design process

The insights shared by the examined small luxury brands highlight the crucial role that design software plays in integrating traditional craftsmanship with innovative technologies to

produce sustainable and unique products. During an interview with Owenever, one of the brand's partners emphasized the significance of design software, expressing:

“We utilize Rhino 3D for our design process, enabling us to create realistic 3D designs. This software ensures accuracy, reduces the need for incorrect prototypes, and aligns with our sustainability goals by minimizing waste” (Interview, Founder 2, Owenever).

Likewise, Josefinas, revealed their approach that combines both manual and digital phases in the design process. The International Sales Manager explained:

“We have a two-fold process involving manual sketches and graphic work done in software like Illustrator and Photoshop. These complementary approaches allow us to articulate and refine our designs effectively” (Interview, International Sales Manager, Josefinas).

This integrated method showcases the seamless collaboration between traditional craftsmanship and design software. Josefinas International Sales Manager further emphasized the significance of this approach, stating:

“Our work has always been done on a digital basis, modern and innovative allied to the traditional form (idealization of the model that then materializes in the creation of a drawing/sketch, and this later evolves and takes shape in digital format in the programs mentioned).”

Lachoix, too, highlighted their reliance on digital design. The founder and creative director shared:

“I collaborate closely with our brand designers, who skilfully translate my ideas into meticulously crafted digital models of our shoes. These digital models include comprehensive technical sheets that ensure smooth production at the factory”.

By leveraging design software, Lachoix achieves a seamless transition from concept to detailed digital models, upholding their commitment to sustainability and uniqueness.

The fusion of manual and digital techniques facilitates a comprehensive design and production process. Traditional craftsmanship forms the foundation, while design software serves as an invaluable tool for refinement and visualization. This harmonious blend empowers small luxury brands to effectively translate their initial ideas into digital formats, resulting in the creation of sustainable and unique luxury products.

5.1.2 Elevating craftsmanship with laser engraving technology in product branding

The findings collected from this study show that small luxury brands have embraced laser engraving as a modern alternative to conventional engraving methods when it comes to product branding. This strategic shift stems from their desire to save time, reduce costs, and uphold the highest level of quality throughout the branding process. During my interview with Ownever, they shared their approach, explaining:

“Instead of conventional engraving, we've turned to laser engraving because it not only saves time but also proves to be more cost-efficient, all while maintaining the same exceptional quality” (Interview, Founder 2, Ownever).

By integrating laser engraving technology, these brands have effectively streamlined their branding process, eliminating the need for labour-intensive stamping, or engraving. Laser engraving offers numerous advantages, including improved speed, heightened efficiency, and cost-effectiveness, while ensuring consistent and impeccable outcomes.

This transition to laser engraving signifies a remarkable technological breakthrough within the product branding practices of small luxury brands. The precision and versatility of laser engraving allow for intricate designs and precise detailing, resulting in visually captivating and consistently branded products (Interview, Founder 2, Ownever). Additionally, this innovative approach aligns perfectly with these brands' commitment to optimizing resources and reducing waste in their production processes.

Furthermore, during the interview with Lachoix, it was confirmed their utilization of laser engraving technology for imprinting their logo onto the outer soles of their shoes. While they still rely on traditional techniques for other components, such as the insole, Lachoix has embraced the efficiency and effectiveness of laser engraving for branding the outsole (Interview, Founder and Creative Director, Lachoix). This strategic incorporation of laser engraving enables the brand to enhance their branding efficiency while upholding their unwavering dedication to craftsmanship.

The adoption of laser engraving for branding not only enhances operational efficiency but also ensures that small luxury brands meet consumer expectations in terms of quality and aesthetics. By embracing this cutting-edge technology, these brands are able to achieve a more

efficient and cost-effective approach to branding, all without compromising the inherent visual appeal and fine craftsmanship associated with their exceptional products.

5.1.3 Efficiently enhancing handcrafting with laser cutting technology

Laser cutting is another innovative technique I found to be embraced by small luxury brands to shape their materials and enhance their production processes. During the interview with Lachoix, it was revealed that the brand collaborates with a factory that values the perfect blend of craftsmanship techniques and technological advancements, making laser cutting a standout innovation in their manufacturing operations.

According to the representative from Lachoix, the factory employs laser cutting technology to achieve precise cuts on their shoe moulds. This cutting-edge technique offers significant benefits, including improved speed and meticulous quality control:

“Through this technique, the shoe moulds are placed in a machine, and everything is laser cut, maintaining quality and speed. This technology allows for speed and higher quality since it is a more controlled process with less margin for error” (Interview, Founder and Creative Director, Lachoix).

It's important to note that while laser cutting technology plays a pivotal role in streamlining and expediting the material cutting process, the brand's commitment to traditional craftsmanship techniques remains unwavering: *“However, the finalization of the product always has a manual part where everything is sewn by hand”* (Interview, Founder and Creative Director, Lachoix).

The integration of laser cutting techniques allows small luxury brands like Lachoix to achieve a seamless fusion of traditional craftsmanship with innovative technology. This integration not only enhances production efficiency and speed but also upholds the brand's unwavering commitment to maintaining exceptional quality standards. By harnessing the power of laser cutting, these brands can achieve precise material shaping, reduce production time, and create truly unique products that resonate with their discerning clientele.

5.1.4 Blending craftsmanship and ethical luxury through sustainable material selection

One significant finding in this study highlights the dedication of small luxury brands to sustainable and eco-friendly material selection. These brands actively integrate natural fibres, organic textiles, and recycled materials into their product lines, catering to the increasing demand for sustainable fashion. For instance, Josefinas collaborates with the Leather Working Group (LWG), an organization that implements a robust due diligence testing program (Leather Working Group – Chemical Management, n.d.). Through this partnership, the brand ensures that the leather used in their products has been manufactured with safer chemistry practices, as verified by LWG-certified facilities (Interview, International Sales Manager, Josefinas).

Ownever shares a similar commitment to sustainability in material selection. They exclusively use chromium-free leather, which is naturally biodegradable, ensuring a reduced environmental impact. In addition, Ownever actively reuses leather dead stock obtained from other luxury brands. By incorporating these materials, they not only minimize waste but also extend the lifespan of valuable resources:

“We use in our products deadstock luxury leather, chromium-free leather. And in order to ensure that they are sustainably sourced we usually have certifications, and we know how to identify if the leather has chromium or not, in case there is doubt” (Interview, Founder 2, Ownever).

To ensure the sustainability and quality of these materials, small luxury brands rely on innovative technologies such as material scanning and testing, as used by organizations such as the Leather Working Group. These technologies play a crucial role in their decision-making process regarding material selection. By leveraging the availability of advanced scanning and testing methods, brands can assess the eco-friendliness and durability of the materials they utilize. This approach enables them to make well-informed choices that align with stringent sustainability criteria. Combining craftsmanship with sustainable and eco-friendly materials enables these brands to meet the growing demand for sustainable fashion while maintaining the exceptional quality and luxury that sets them apart.

5.1.5 Crafting cruelty-free luxury with vegan leather innovation

In response to the increasing demand for sustainable and cruelty-free options, small luxury brands are also embracing innovative materials like vegan leather to complement their

craftsmanship skills. These brands have recently integrated vegan leather as a solution to meet ethical considerations while staying true to their commitment to craftsmanship. Josefinas recognises this trend and stated:

“At Josefinas, we also design vegan leather creations such as ballerinas and bags. These products have been developed in response to the growing requests from customers who prioritize ethical considerations” (Interview, International Sales Manager, Josefinas).

It's important to note that while vegan leather is often perceived as a sustainable alternative to traditional leather due to its avoidance of animal materials, there are considerations to be made regarding its overall sustainability. The representative from Josefinas acknowledged this by stating, *“Not necessarily more sustainable - that's the superficial truth about vegan leather.”*

This insight underscores the need for a critical evaluation of the environmental impact and sustainability factors associated with vegan leather production and disposal. While it presents an ethical choice for consumers who prioritize animal welfare, there are complexities involved.

However, the integration of vegan leather still represents a remarkable technological advancement within the luxury industry. Lachoux, another brand, shared their experience in creating products using vegan leather, acknowledging the demand for such alternatives. The founder expressed the challenge in finding the perfect aesthetic in materials like vegan leather and eagerly awaits technological advancements that offer better options, such as leather made from *“pineapple skin”*.

This pursuit of innovative solutions in vegan leather reflects the dedication of small luxury brands to continually explore and improve their offerings. Combining their craftsmanship skills with cruelty-free materials like vegan leather showcases their commitment to both tradition and innovation.

By embracing materials like vegan leather, these luxury brands demonstrate that they are not only attentive to customer demands but are also actively contributing to a more ethical, and, perhaps, environmentally conscious industry.

5.1.6 Fostering the synergy of made-to-order production and digital platforms

One of the key findings in this study, supported by evidence from the studied small luxury brands, including Majatu Studio, is the prevalent presence of a made-to-order approach. Majatu Studio articulates this approach, stating:

“Most of our pieces, with the exception of t-shirts and hoodies, are made-to-order, following our approach to sustainability and exclusivity. The person who wants to purchase a product from our brand may need to wait a little longer but receives something more customized and exclusive” (Interview, Founder 1, Majatu Studio).

This emphasis on made-to-order production offers several benefits for combining traditional craftsmanship with innovative technologies while concurrently promoting sustainability and uniqueness. By enabling customers to personalize their products by selecting materials, colours, finishes, and incorporating unique design elements, small luxury brands facilitate a high degree of customer involvement in the creation process. Consequently, these brands can offer personalized and distinctive products that stand out in the market.

To streamline the customization process, small luxury brands excel in selling their products online and leverage the power of digital platforms. Moreover, they establish and maintain open and effective communication channels, or online messaging systems, which facilitate a clear and continuous flow of communication between the brand and the customer.

Josefinas, a digital brand since day one, also utilizes this approach to ensure the accurate capture of customer preferences and customization details, resulting in products that align precisely with their expectations (International Sales Manager of Josefinas).

“Each order is created specifically for that client (made-to-order) and is always unique and differentiated. This is one of the characteristics that distinguishes Josefinas. Each pair of shoes and each Josefinas bag is created order by order, detail by detail, exclusively for each client, with time (each order takes about two weeks to be ready, sensibly), because we believe that only time makes it possible to create wonderful and unique pieces” (Interview, International Sales Manager, Josefinas).

In addition to offering personalized products, the adoption of the made-to-order production model helps mitigate the issue of overproduction, which is a prevalent challenge in the fashion industry. By producing items only in response to specific orders, small luxury brands avoid excess inventory, minimize waste, and bypass the need for clearance sales or

disposal of unsold products. This approach aligns with sustainable practices by promoting responsible production and consumption. As expressed in the interview with Josefinas:

“In terms of stock, our inventory intentionally remains at minimal levels, primarily due to accumulation over the years. This includes stock created for events such as pop-ups and our NYC store. Even with our existing stock, we exercise great care and rigor to ensure its controlled nature and prevent exceeding optimal levels. This strategic decision has always been a fundamental aspect of our company's operations” (Interview, International Sales Manager, Josefinas).

Furthermore, the adoption of a made-to-order model enhances craftsmanship, which holds significant importance for small luxury brands. By focusing on the production of fewer, meticulously crafted items rather than mass-produced goods, craftsmen can dedicate more time and attention to each product (Interview, International Sales Manager, Josefinas). This meticulous approach ensures the highest quality and meticulous attention to detail, both of which are highly sought after by customers seeking unique and luxurious products.

Finally, the brand Ownever also shared that to reduce waste and minimise the environmental impact of their production processes they produce “small batches or mostly by order” (Interview, Founder 2, Ownever).

5.1.7 Empowering craftsmanship in marketing through artificial intelligence

The integration of artificial intelligence (AI) into marketing and communication strategies has emerged as a powerful tool for small luxury brands to enhance their craftsmanship, share their brand heritage, and connect with a wider audience of sustainability-conscious consumers. By combining traditional craftsmanship with such technology, brands can convey their dedication to preserving the essence of craftsmanship while reaching out to customers who value sustainability and traditional practices. One brand, Ownever, emphasized the use of ChatGPT for marketing purposes, stating:

“We utilize ChatGPT for marketing purposes. Because of the intrinsic qualities of craftsmanship and the importance of its preservation, we often resort to innovative techniques in our marketing strategies, focusing on enhancing those rather than altering the production process itself” (Interview, Founder 2, Ownever).

This statement reveals the role of AI, specifically ChatGPT, in supporting marketing activities and content creation. Through the utilization of AI technologies, small luxury brands

can extend their reach and cultivate meaningful connections with their audience through compelling storytelling. AI-powered marketing also enables personalized interactions, allowing brands to tailor their messages to individual preferences and interests. Notably, the adoption of AI in marketing aligns with the sustainable essence of craftsmanship, as it enables brands to employ innovative techniques to promote their products without compromising the integrity of their traditional production process.

Lastly, incorporating AI into marketing enables small luxury brands to navigate the challenges of an increasingly digital landscape. By utilizing cutting-edge technologies, these brands can adapt to changing consumer behaviours and preferences, staying relevant and competitive in the fast-paced luxury market.

5.1.8 Protecting traditional craftsmanship with blockchain technology

One of the most interesting findings during this study was discovering that small brands are using blockchain to protect their intellectual property. Josefinas is the first Portuguese fashion brand to do so by leveraging Clarke Modet's registration technology that generates proof-of-existence certificates, which enable the verification of the antiquity and ownership of their designs, documents, products, and future plans (Somos a Primeira Marca Portuguesa De Moda a Proteger a Sua Propriedade Intelectual Em Blockchain! | Josefinas Portugal, n.d.).

Josefinas' adoption of blockchain technology demonstrates its commitment to ensuring that customers receive original, unique, and exclusive products. This proactive measure, implemented in 2021, serves as a crucial step in combatting the production and sale of replicas within the fashion industry. Moreover, by embracing technological advancements and consistently seeking innovative solutions, Josefinas exemplifies its dedication to the ongoing evolution of their brand. Notably, since its launch, Josefinas has been a digital brand, continuously striving to enhance the customer experience (Interview, International Sales Manager, Josefinas).

“In Portugal, in the fashion sector, Josefinas was a pioneer in the adoption of blockchain. For us it is crucial that the customers receive a Josefinas’ product with the guarantee that it is original, exclusive and unique and this measure was one of the adopted a few years ago so that we could act against the production and sale of replicas” (Interview, International Sales Manager, Josefinas).

These finding highlights how small luxury brands, such as Josefinas, recognise the potential of blockchain technology in protecting their intellectual property rights. By utilizing proof-of-existence certificates and leveraging the inherent security measures of decentralization, these brands strengthen their ability to maintain the authenticity and exclusivity of their products, thereby safeguarding their brand reputation and customer trust. This adoption of blockchain technology represents a significant step towards combining traditional craftsmanship with innovative approaches, contributing to the creation of sustainable and unique products in the luxury industry.

5.2 Navigating challenges while balancing tradition and innovation in craftsmanship

In this last section, I present the challenges faced by these brands as they navigated the combination of traditional craftsmanship with innovative technologies. The findings shed light on the financial barriers that impeded seamless integration, as well as the complexities surrounding heritage preservation and the role of innovation in craftsmanship.

5.2.1 *Unlocking financial potential to integrate innovative technologies*

Capital investment plays a significant role in the ability of small luxury brands to combine traditional craftsmanship with innovative technologies. It was observed that, in general, it is the factories that invest in technological advancements. However, for smaller brands to collaborate with these factories, they need to have the financial means to support such partnerships. Without sufficient capital, small luxury brands often find themselves compelled to seek alternative production arrangements, such as partnering with smaller studios or independent artisans.

Moreover, the integration of software tools into the design process also requires financial resources. Brands need to purchase the necessary programs and possess the expertise to effectively utilize them. However, financial limitations can hinder small brands from accessing these software tools or hiring skilled personnel, further inhibiting their ability to combine innovative technologies with traditional craftsmanship (Interview, Founder 1, Majatu).

Majatu Studio serves as an illustrative example of the barriers faced by small luxury brands. As they explained:

“At first when we created the brand we came to work with a factory, but the issue of minimum quantities was complicated for a small brand, and so we tried to find partners (mini ateliers specialized in tailoring and individual artisans) who work with smaller quantities and also offer a great level of quality” (Interview, Founder 2, Majatu Studio).

“Factories offer a lot of quality and state-of-the-art technology, however, right now it is impossible for a small brand like ours to work with these factories as the minimum quantities they ask for are surreal” (Interview, Founder 1, Majatu Studio).

To address these challenges, Majatu Studio collaborates with small workshops and artisans who follow traditional practices. They noted that these smaller businesses have limited investment capacity for innovation compared to larger factories. Majatu Studio contrasted the approach, stating:

“We work with small workshops and artisans who are very traditional. They are very small businesses, so the investment in innovation is very small and there is not much openness to it. In contrast, when you go into a factory, everything is more industrialized, and they are always investing in the best machines that come out in the market” (Interview, Founder 1, Majatu Studio).

During the interview with Lachoix, similar challenges were highlighted. The brand shared their struggle in finding a factory to produce their products. Despite Portugal, especially the northern region, being home to numerous factories and skilled artisans, the barriers for small luxury brands remain high. Lachoix explained, *“We are one of the few Portuguese brands, if not the only one, that have managed to secure production in the factory we operate in”* (Interview, Founder and Creative Director, Lachoix). This serves as a testament to the limited accessibility of these manufacturing facilities for small luxury brands in Portugal.

These insights from the brands further emphasize the critical importance of financial resources in the successful integration of innovative technologies for small luxury brands.

5.2.2 Preserving craftsmanship while striking a balance between tradition and innovation

Small luxury brands place great importance on craftsmanship as a fundamental element of their identity and strategy for standing out. Craftsmanship is highly valued for its inherent

sustainability and uniqueness, reflecting the brand's commitment to preserving heritage and savoir-faire:

“Craftsmanship is one of the best ways to enhance sustainability because it has an intrinsic value: exclusivity and the time taken to create it, which raises the cost of a product. When you add storytelling to the mix, the client who acquires the product will cherish it more, use it more, and not view it as a disposable item” (Interview, Founder 2, Owner).

Due to this deep regard for craftsmanship, the integration of technology in the luxury sector is approached cautiously. Brands are dedicated to maintaining the essence and authenticity of their traditional craftsmanship traditions (Interview, Founder 2, Owner). They understand that their products carry a rich heritage and *“know-how that has been passed from generation to generation”* (Interview, International Sales Manager, Josefinas). Preserving this heritage is integral to their brand value and the appeal they hold for customers.

While innovation has the potential to enhance craftsmanship processes and outcomes, luxury brands are careful about integrating technology in a way that doesn't compromise their savoir-faire. Innovation in the luxury sector is often focused on specific steps in the value chain where technology can improve efficiency, precision, or expand creative possibilities.

“When we attempt to innovate in areas where there is no necessity, we compromise the essence of craftsmanship and venture into unfamiliar territory. Craftsmanship, in its pure form, holds inherent value and should be carefully preserved and executed with excellence. Therefore, innovative techniques are typically employed in marketing to avoid disrupting the traditional methods” (Interview, Founder 2, Owner).

Luxury brands strategically deploy technology at appropriate stages to complement craftsmanship, rather than overshadow it. This selective approach to innovation allows them to harness the benefits of technology while preserving their core values and unique differentiation.

By integrating technology to enhance craftsmanship, they strike a delicate balance between tradition and innovation. However, these brands face the challenge of navigating this integration process while ensuring that their heritage and craftsmanship traditions remain at the forefront. It was observed that they carefully consider the appropriate technologies, materials, and processes that align with their brand identity and maintain the integrity of craftsmanship.

6. Discussion

The aim of this study was to examine how small luxury brands combine traditional craftsmanship with innovative technologies in order to create unique and sustainable products. Based on the presented findings of interviews with four companies the result is in accordance with existing literature, but also deviates in some expressions.

The findings presented in this study contribute to filling research gaps by shedding light on how small luxury brands can combine traditional craftsmanship with innovative technologies to create sustainable and unique products. They accomplish this by integrating digital software in the design process, implementing laser engraving for product branding, elevating handcrafting with laser cutting technology, and prioritizing sustainable material selection and vegan leather. Fostering the synergy of made-to-order production and digital platforms, empowering craftsmanship through AI in marketing, and protecting traditional craftsmanship with blockchain technology are additional strategies employed by these brands. This successful fusion of tradition and innovation allows them to craft sustainable luxury products that stand out in the market.

These findings align with the broader literature on innovation and sustainability in the luxury industry, highlighting the importance of embracing technology, sustainable practices, and customization (Cimatti et al, 2017; Karaosman et al., 2018; Chung et al, 2020; Pantano, 2022). However, the unique contribution of this study lies in its focus on small luxury brands, which have been relatively understudied in the context of innovation and craftsmanship. By examining the strategies employed by these smaller players, we gain a more comprehensive understanding of the challenges they face, the opportunities they seize, and the tactics they employ to navigate the complex landscape of combining tradition and innovation. Yet, through this we were able to see that although smaller brands have indeed less capital to invest, constraining their ability to innovate (Kapferer, 2017), they are following the steps of larger luxury houses when it comes to technological innovation. The findings show that smaller brands, are too investing in artificial intelligence and digital platforms to empower their marketing and communication and leverage their made-to-order strategies. Approaches that are all aimed at enhancing and preserving the authenticity of their craftsmanship.

However, their journey is not without struggles, particularly during the initial stages and when seeking entry into the production market. The interviews with small luxury brands, such as Majatu Studio and Lachoix, highlight the barriers they face in collaborating with larger

factories due to high minimum quantity requirements. This limitation restricts their access to cutting-edge technology and innovative manufacturing processes. The interviews further emphasize the reliance of small luxury brands on partnerships with smaller ateliers and individual artisans who may have limited investment capacity for innovation.

Taking a broader perspective, the literature highlights innovative advancements like augmented reality and 3D printing (Javornik et al., 2021; Ahmed, 2023), which were not observed in this study. However, it is important to acknowledge certain limitations stemming from the sample size and sector category. Given that the studied companies primarily focus on clothing, leather goods, and shoemaking, they may not have a vested interest in investing in 3D printing. Interestingly, one of Ownever’s founders explained that she owns another non-luxury brand that *“does utilize 3D printing for jewellery and other smaller pieces, however, this technique is not suitable for the Ownever brand due to its product nature”* (Interview, Founder 2, Ownever).

The following table summarizes the main conclusions covered from the findings in terms of strategies that combine traditional craftsmanship with innovative technologies to create unique and sustainable products, which subsequently answers my research question.

No.	Approach	Key findings	Brands
1	Craftsmanship + Digital Design	Incorporating innovative technologies like digital design (e.g., Rhino 3D) optimizes prototyping, minimising material waste and unlocking creative design avenues. These designs are then meticulously handcrafted by skilled artisans using traditional techniques.	Ownever, Josefinas, Lachoix
2	Craftsmanship + Laser Engraving	Incorporating laser engraving enables the brand to enhance their product branding efficiency while upholding their unwavering dedication to craftsmanship.	Ownever, Lachoix
3	Craftsmanship + Laser Cutting	Laser cutting technology is employed for precise cuts on materials, improving production	Lachoix

No.	Approach	Key findings	Brands
		speed, quality control, and complementing handcrafting techniques.	
4	Craftsmanship + Sustainable Material Selection	By combining traditional craftsmanship with modern technology to identify sustainable materials, small luxury brands meet the call for sustainable fashion without compromising on exceptional quality.	Josefinas, Owenever
5	Craftsmanship + Innovative Materials	Embracing innovative materials like vegan leather presents a solution to meet ethical considerations while staying true to traditional craftsmanship.	Josefinas, Lachoix
6	Made-to-Order + Digital Platforms	Made-to-order approach combined with digital platforms enables customers to personalize products, facilitates high customer involvement, mitigates overproduction, and enhances craftsmanship.	Majatu. Studio, Josefinas Owenever
7	Craftsmanship + AI Integration	AI integration empowers small luxury brands to elevate craftsmanship, communicate brand heritage, and engage sustainability-minded audiences through marketing strategies.	Owenever
8	Craftsmanship + Blockchain Technology	Blockchain technology is utilized to protect intellectual property rights ensuring that customers receive original and unique products and supports the artisans who create them.	Josefinas

Table 2: Main findings' conclusions

7. Conclusion

This study addresses a research gap concerning the combination of traditional craftsmanship with innovative technologies within the luxury industry, specifically focusing on small luxury brands. By uncovering how these brands combine traditional craftsmanship with innovative technologies, we enhance our understanding of their strategies for achieving sustainability and uniqueness. These findings contribute to the existing literature by providing insights that are particularly relevant for smaller luxury brands and by advancing our understanding of how craftsmanship and technology intersect in the context of the luxury industry.

Through the implementation of qualitative research and the development of four comprehensive case studies, I have gained valuable insights into the strategies employed by the brands within the field. This extensive investigation has unequivocally demonstrated that smaller luxury brands are embracing unique pathways to foster innovation while determinedly preserving their revered traditions of craftsmanship. The analysis of these four brands has unveiled captivating perspectives, each offering a distinctive interpretation of their approach to combine craftsmanship with innovation. However, the primary challenge lies in their ability to leverage technological advancements while maintaining the authenticity that defines their brand identity. It is crucial for these brands to recognize the potential of technological innovation not only as a means to create unique and sustainable products but also as an avenue for inspiring admiration through their exceptional expertise and unwavering commitment to high quality, thereby cultivating a profound sense of desirability.

It is important to acknowledge the limitations of this research. Firstly, the findings are based on a limited sample of small luxury brands and may restrict the generalisability of the findings to a larger population of small luxury brands. Secondly, the research focuses specifically on small luxury brands in the Portuguese luxury sector. Therefore, the findings may not be directly applicable to luxury brands in different geographical regions and as such, the outcomes of the study should be interpreted within the context of the selected companies and their unique circumstances. Furthermore, it is noteworthy that most of the brands under investigation are relatively new, with the oldest one being a mere decade old. This aspect limits, again, industry representation, along with historical perspective and insight into long-term sustainability practices. Lastly, the study was conducted within a specific time frame, which

may have imposed limitations on the depth and scope of data collection and analysis. Certain aspects of the research question or related factors may not have been explored in as much detail due to time constraints.

Future research should aim to address the mentioned limitations by adopting a multifaceted approach. To enhance the generalisability of the findings, it is paramount to expand the sample size by including a larger and more diverse range of small luxury brands. Exploring cross-cultural analyses across diverse geographical regions would offer interesting insights into how cultural contexts influence the combination of traditional craftsmanship with innovative technologies. Moreover, conducting longitudinal studies is crucial for investigating the long-term sustainability practices and outcomes of these brands over time. Additionally, comparative analyses between established luxury brands and emerging ones would provide a comprehensive understanding of the subject. Finally, researching the potential impact of innovative technologies on brand differentiation and customer engagement would produce valuable insights to enrich this research field.

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9. Appendices

Appendix 1: Primary and secondary data collected

Josefinas - Primary data						
Type of data	Name	Organization	Position	Method	Date	Length
Interview	Joana Esteves	Josefinas	International Sales Manager	E-mail	21/03/2023 – 25/05/2023	N/A

Table 3: Primary data collected on Josefinas

Josefinas - Secondary data				
Type of data	Title	Author	Organization	Date of publication
Brand's website	Savoir-faire - Josefinas	N/A	Josefinas	N/A
Brand's website	Story and values - Josefinas	N/A	Josefinas	N/A
Newspaper article	Portuguesa Josefinas entra no marketplace do El Corte Inglés	Eva Gracia Morales	Fashion Network	20/01/2023
Newspaper article	Marca portuguesa Josefinas protege propriedade intelectual em blockchain	N/A	Dinheiro Vivo	05/02/2021
Newspaper article	Josefinas apostam nas alternativas vegan com três novos modelos de bailarinas – NiT	Maria Salgueiro	NEW iN TOWN	22/01/2021
Newspaper article	Josefinas. Dos "sapatos bonitos" a "um mundo melhor para as mulheres"	Beatriz Vasconcelos	Notícias ao Minuto	04/04/2019

Newspaper article	Josefinas: a marca de sabrinas portuguesa obcecada pelo savoir faire	Cátia Silva Pinto	Compete 2020	08/11/2018
Newspaper article	Josefinas: Sabinas de Braga atravessam o Pacífico	António Larguesa	Jornal de Negócios	07/11/2018
Newspaper article	A missão vegan da Josefinas Vogue.pt	Mónica Bozinoski	Vogue Portugal	17/05/2018
Newspaper article	Josefinas. A volta ao mundo em sapatos rasos – Observador	Mauro Gonçalves	Observador	17/12/2017

Table 4: Secondary data collected on Josefinas

Lachoix - Primary data						
Type of data	Name	Organization	Position	Method	Date	Length
Direct observation	N/A	Lachoix	N/A	In-store	15/05/2023	15min
Interview	Fátima Carvalho	Lachoix	Founder and Creative Director	Phone call	21/05/2023	20min

Table 5: Primary data collected on Lachoix

Lachoix - Secondary data				
Type of data	Title	Author	Organization	Date of publication
Brand's website	Our Story - Lachoix	N/A	Lachoix	N/A
Brand's website	Responsibility - Lachoix	N/A	Lachoix	N/A

Article	CONVERSAS DE MODA – Fátima Carvalho, a mulher com muito estilo que cria os sapatos rasos mais elegantes	Activa	Activa	12/11/2022
Article	A Lachoix calçou sapatos rasos e chegou ao Príncipe Real	Mauro Gonçalves	TimeOut Portugal	30/11/2021
Article	Lachoix: a marca portuguesa de loafers que triplicou as vendas durante a pandemia	Inês Duarte de Freitas	Público	22/02/2021
Article	Lachoix: A versatilidade num par de sapatos	Susana Lopes Faustino	Visão	15/02/2019

Table 6: Secondary data collected on Lachoix

Majatu Studio - Primary data						
Type of data	Name	Organization	Position	Method	Date	Length
Interview	Sara Peixoto	Majatu Studio	Founder 1	Video call	28/03/2023	60min
Interview	José Ribeiro	Majatu Studio	Founder 2	Video call	28/03/2023	30min

Table 7: Primary data collected on Majatu Studio

Majatu Studio - Secondary data				
Type of data	Title	Author	Organization	Date of publication
Brand's website	ABOUT US - MAJATU. STUDIO	N/A	Majatu Studio	N/A
Brand's website	MAJATU. MODEL - MAJATU. STUDIO	N/A	Majatu Studio	N/A

Newspaper article	Moda minimalista e sustentável traduz-se por Majatu. Studio	Sandra Dias	Terramoto	23/04/2021
Newspaper article	MAJATU. STUDIO/ a nova marca de luxo 100% portuguesa	Margarida Ribeiro	TimeOut Portugal	12/01/2021
Newspaper article	Majatu. Studio: aqui há peças confortáveis, intemporais e 100% fabricadas em Portugal	Ana Bernardino	Magg Sapo	09/01/2021
Newspaper article	MAJATU: a primeira marca de luxo portuguesa focada na criação de peças confortáveis	Maria Salgueiro	NEW iN TOWN	05/01/2021

Table 8: Secondary data collected on Majatu Studio

Ownever - Primary data						
Type of data	Name	Organization	Position	Method	Date	Length
Interview	Eliana Barros	Ownever	Founder 1 & CEO	E-mail	27/03/2023	N/A
Interview	Maria Cunha	Ownever	Founder 2	Phone call	27/04/2023	30min

Table 9: Primary data collected on Ownever

Ownever - Secondary data				
Type of data	Title	Author	Organization	Date of publication
Brand's website	Story - OWNEVER	N/A	Ownever	N/A
Brand's website	Our commitment - OWNEVER	N/A	Ownever	N/A

Newspaper article	Ownever reaproveita pele de outras marcas para criar novas malas	Estela Ataíde	Fashion Network	10/05/2023
Podcast interview	#132: Dicas para empreendedoras c/ Maria Cunha	Bitalk	Spotify	18/04/2023
Newspaper article	Eliana Barros, fundadora da Ownever: “Somos uma marca criada por mulheres que se preocupa com quem e onde atua”	Vanessa Bento	Activa	10/11/2022
Newspaper article	OWNEVER ALIA-SE À TECELAGEM TRADICIONAL PORTUGUESA	Bebiana Rocha	Jornal T	20/10/2022
Newspaper article	OWNEVER CRIA MALA DE MÃO COM TECELAGEM MANUAL PORTUGUESA	N/A	Revista Rua	09/09/2022
Newspaper article	Ownever: A nova carteira da marca portuguesa que tem garantia de 136 anos	Eduardo Oliveira	NEW iN TOWN	14/11/2021
Newspaper article	Ownever, a nova marca que quer ser a Hermès portuguesa	Margarida Ribeiro	TimeOut Portugal	03/03/2021

Table 10: Secondary data collected on Ownever

Appendix 2: Coding tree

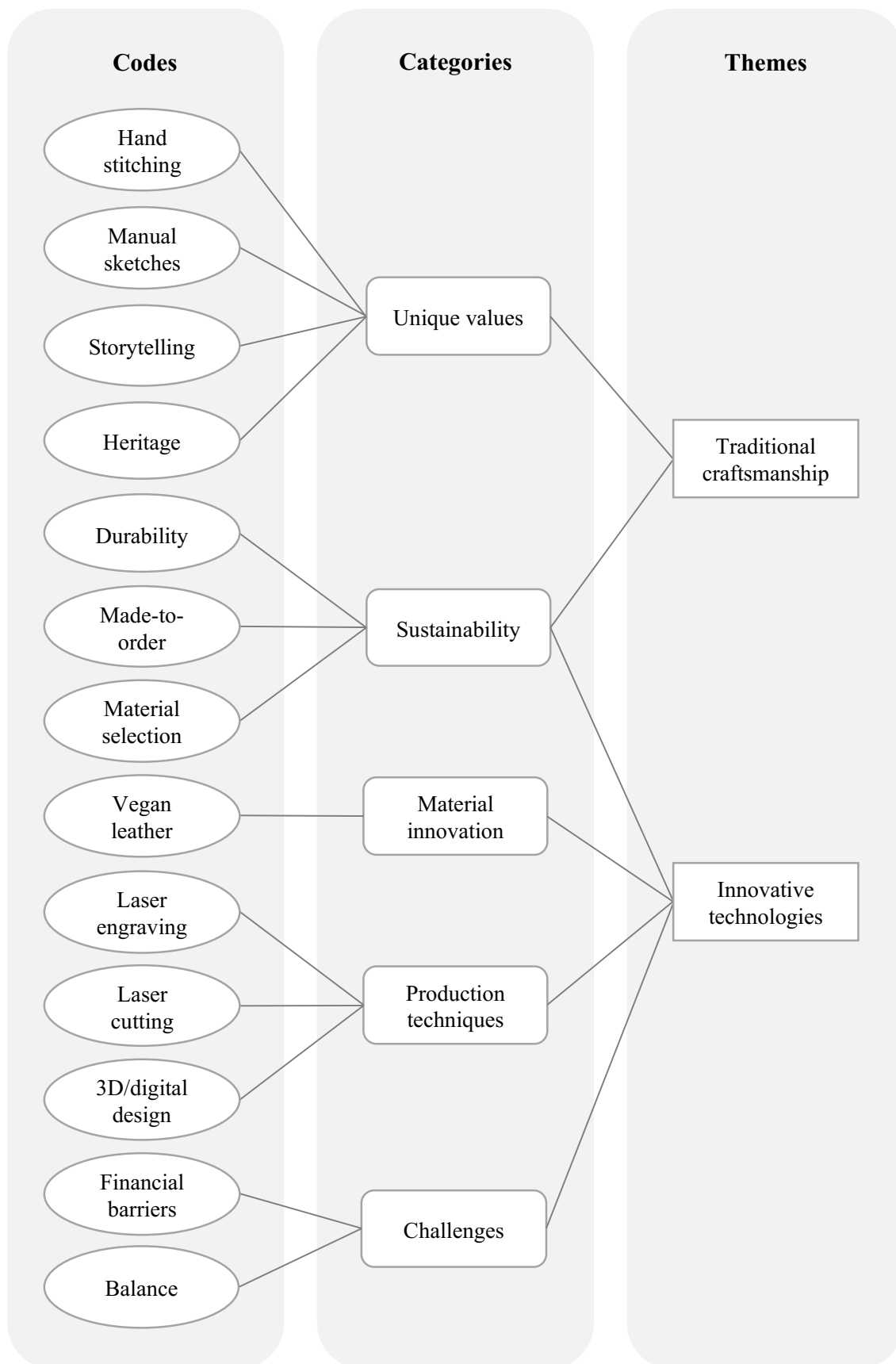


Figure 1: Coding tree

Appendix 3: Coding table originated from interviews

Quotations	Codes
<p><i>“We utilize Rhino 3D for our design process, enabling us to create realistic 3D designs. This software ensures accuracy, reduces the need for incorrect prototypes, and aligns with our sustainability goals by minimizing waste”</i></p>	<p>3D/digital design</p>
<p><i>“We have a two-fold process involving manual sketches and graphic work done in software like Illustrator and Photoshop. These complementary approaches allow us to articulate and refine our designs effectively.”</i></p>	
<p><i>“Our work has always been done on a digital basis, modern and innovative allied to the traditional form (idealization of the model that then materializes in the creation of a drawing/sketch, and this later evolves and takes shape in digital format in the programs mentioned).”</i></p>	
<p><i>“I collaborate closely with our brand designers, who skilfully translate my ideas into meticulously crafted digital models of our shoes. These digital models include comprehensive technical sheets that ensure smooth production at the factory.”</i></p>	
<p><i>“We utilize ChatGPT for marketing purposes. Because of the intrinsic qualities of craftsmanship and the importance of its preservation, we often resort to innovative techniques in our marketing strategies, focusing on enhancing those rather than altering the production process itself.”</i></p>	<p>Artificial intelligence</p>
<p><i>“At Josefinas, we also design vegan leather creations such as ballerinas and bags. These products have been developed in response to the growing requests from customers who prioritize ethical considerations.”</i></p>	<p>Vegan leather</p>
<p><i>“Not necessarily more sustainable - that's the superficial truth about vegan leather.”</i></p>	
<p><i>“We use in our products deadstock luxury leather, chromium-free leather. And in order to ensure that they are sustainably sourced we usually have certifications, and we know how to identify if the leather has chromium or not, in case there is doubt.”</i></p>	<p>Material selection</p>

<p><i>“Instead of traditional engraving, we've turned to laser engraving because it not only saves time but also proves to be more cost-efficient, all while maintaining the same exceptional quality.”</i></p>	Laser engraving
<p><i>“Through this technique, the shoe moulds are placed in a machine, and everything is laser cut, maintaining quality and speed. This technology allows for speed and higher quality since it is a more controlled process with less margin for error.”</i></p>	Laser cutting
<p><i>“However, the finalization of the product always has a manual part where everything is sewn by hand”</i></p>	Hand stitching
<p><i>“Most of our pieces, with the exception of t-shirts and hoodies, are made-to-order, following our approach to sustainability and exclusivity. The person who wants to purchase a product from our brand may need to wait a little longer but receives something more customized and exclusive.”</i></p>	Made-to-order
<p><i>“Each order is created specifically for that client (made-to-order) and is always unique and differentiated. This is one of the characteristics that distinguishes Josefina's. Each pair of shoes and each Josefina's bag is created order by order, detail by detail, exclusively for each client, with time (each order takes about two weeks to be ready, sensibly), because we believe that only time makes it possible to create wonderful and unique pieces.”</i></p>	
<p><i>“In terms of stock, our inventory intentionally remains at minimal levels, primarily due to accumulation over the years. This includes stock created for events such as pop-ups and our NYC store. Even with our existing stock, we exercise great care and rigor to ensure its controlled nature and prevent exceeding optimal levels. This strategic decision has always been a fundamental aspect of our company's operations.”</i></p>	Inventory management
<p><i>“At first when we created the brand we came to work with a factory, but the issue of minimum quantities was complicated for a small brand, and so we tried to find partners (mini ateliers specialized in tailoring and individual artisans) who work with smaller quantities and also offer a great level of quality”</i></p>	Financial barriers

<p><i>“Factories offer a lot of quality and state-of-the-art technology, however, right now it is impossible for a small brand like ours to work with these factories as the minimum quantities they ask for are surreal.”</i></p>	
<p><i>“We work with small workshops and artisans who are very traditional. They are very small businesses, so the investment in innovation is very small and there is not much openness to it. In contrast, when you go into a factory, everything is more industrialized, and they are always investing in the best machines that come out in the market.”</i></p>	
<p><i>“We are one of the few Portuguese brands, if not the only one, that have managed to secure production in the factory we operate in”</i></p>	
<p><i>“Craftsmanship is one of the best ways to enhance sustainability because it has an intrinsic value: exclusivity and the time taken to create it, which raises the cost of a product. When you add storytelling to the mix, the client who acquires the product will cherish it more, use it more, and not view it as a disposable item.”</i></p>	<p>Storytelling</p>
<p><i>“When we attempt to innovate in areas where there is no necessity, we compromise the essence of craftsmanship and venture into unfamiliar territory. Craftsmanship, in its pure form, holds inherent value and should be carefully preserved and executed with excellence. Therefore, innovative techniques are typically employed in marketing to avoid disrupting the traditional methods.”</i></p>	<p>Balance</p>
<p><i>“I have another non-luxury brand that does utilize 3D printing for jewellery and other smaller pieces, however, this technique is not suitable for the Ownever brand due to its product nature”</i></p>	<p>3D printing</p>
<p><i>“In Portugal, in the fashion sector, Josefinas was a pioneer in the adoption of blockchain. For us it is crucial that the customers receive a Josefinas’ product with the guarantee that it is original, exclusive and unique and this measure was one of the adopted a few years ago so that we could act against the production and sale of replicas”</i></p>	<p>Blockchain</p>

Table 11: Coding table from interviews