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LEVERAGING EMERGING TECHNOLOGIES IN THE FASHION INDUSTRY TO ENHANCE THE PERCEPTION OF GEN Z – A CASE STUDY OF LOUIS VUITTON

KARIANNE HELENE ROSE (55689)

Work Project carried out under the supervision of:

João Castro

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Abstract

This work project investigates the influence of emerging technologies on the perceptions of luxury fashion brands among Generation Z. This individual part focuses on the well-established brand Louis Vuitton and how emerging technology can enhance its appeal to Generation Z. A mixed methodology, combining quantitative analysis with qualitative interviews, is used to reveal Generation Z's current perceptions. It includes industry expert opinions and Geneneration Z interview feedback for strategy validation. The findings suggest that luxury fashion brands can enhance their positioning and perception among Gen Z by strategically utilizing technology as part of their current objectives.

Keywords

Gen Z, Fashion Industry, Luxury Industry, Premium Brands, Emerging Technologies, AR and VR, Generative AI, 3D Printing, Marketing

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Table of Content

1. INTRODUCTION 5

2. LITERATURE REVIEW 7

2.1. Luxury Industry 7
2.2. Gen Z in the Luxury and Premium Fashion Industry 9
2.3. Emerging Technologies in the Luxury & Premium Fashion Industry 12
2.3.1. Augmented Reality and Virtual Reality 14
2.3.2. Generative AI 15
2.3.3. 3D Printing Technology 17

3. METHODOLOGY 19

3.1. Research Approach 19
3.2. Survey 21
3.2.1. Survey Design 21
3.2.2. Survey Results 22
3.3. Interviews 22
3.3.1. Interview Design 22
3.3.2. Interview Results 23

4. CONSULTANCY PROJECT – LOUIS VUITTON 25

4.1. Project Initiation and Scope Definition 25
4.2. Data Collection and Analysis 28
4.3. Strategy Development 30
4.4. Implementation 33
4.5. Assessment 36
4.6. Project Closure 38

5. COMPARATIVE ANALYSIS 41

6. CONCLUSION 47

6.1. Summary of Findings 47
6.2. Limitations and Recommendations for Future Research 49

7. BIBLIOGRAPHY 52

8. APPENDIX 68

Appendix A – "Most" Relevant Emerging Technologies 68
Appendix B – Expert Interviews 71
Appendix B.1 – Expert Interview Guide 71
Appendix B.2 – Expert Interview Transcript – Expert 1 73
Appendix B.3 – Expert Interview Transcript – Expert 2 85
Appendix C – Louis Vuitton: Consumer Interviews 101
Appendix C.1 – Louis Vuitton: Consumer Interview Guide 101
Appendix C.2 – Louis Vuitton: Consumer Interview Transcript – Consumer 1 105
Appendix C.3 – Louis Vuitton: Consumer Interview Transcript – Consumer 2 113
Appendix C.4 – Louis Vuitton: Consumer Interview Transcript – Consumer 3 122
Appendix D – Louis Vuitton: Identified Key Challenges 130
Appendix E – Louis Vuitton: Use Case Decision Matrix 131
Appendix F – Louis Vuitton: Success Measurement Metrics 132

9. GLOSSARY 133

List of Tables and Figures

Table 1: Challenges of Luxury Fashion Brands 27

Table 2: Louis Vuitton Perception Survey Analysis 29

Table 3: Comparative Overview 45

Table 4: Identified Technologies and Their Use Cases 70

Table 5: Louis Vuitton: Identified Key Challenges 130

Table 6: Louis Vuitton: Use Case Decision Matrix 131

Table 7: Louis Vuitton Success Measurement Metrics 132

Figure 1: Methodology Approach 21

Figure 2: Interactive Smart Mirror Experience at Louis Vuitton 102

Figure 3: In-Store 3D Printing Experience at Louis Vuitton 103

1. Introduction

As the importance of Generation Z (Gen Z) for brands rises, so do the assumptions trying to pin down the unique characteristics of this generation. They are claimed to be the “most sustainable” and the “most digitally savvy” (Maguire 2023). As fashion brands have always chased the youth (Sherman and Lee 2022), Gen Z’s consumption behavior is highly complex, making it increasingly difficult for brands to unlock their valuable spending power (Schneider and Lee 2022). Despite the challenge, Gen Z accounts for 25% of the world’s population, and their overall spending power is estimated to expand three times faster than previous generations (Kuzminov 2023). Ultimately, in an ever-changing landscape, every player in the industry faces the critical question: How can brands embrace innovation to keep up with Gen Z’s demands and desires and positively influence their perception of the brand?

In recent years, the success and dominance of e-commerce and social media have shown that technology has drastically changed the fashion industry and will continue to do so, as current trends in the industry saw a significant rise in investment in fashion technologies in 2021, with the top 50 investments increasing in value by 66% from 2019 (McKinsey 2022). The digital transformation has altered the role of the consumer from being a passive observer to gaining a voice to express their needs and preferences (Deloitte 2018). The shift sets standards for brands to meet by providing a seamless and consistent shopping experience across various channels and platforms. Experimenting with new emerging technologies is crucial for brands to create unique and memorable experiences that allow more profound interaction with consumers on multiple dimensions and simultaneously provide a competitive edge in a highly competitive industry (McKinsey & Company 2019). In an era of conglomerates and a highly concentrated market, the fashion industry is continuously dominated by the established luxury groups LVMH, Kering, and Richemont. The ongoing trend of mergers and acquisitions to further diversify portfolios and increase market power ultimately poses a threat to less established and independent labels (Sherman 2022). The high level of competition is further intensified by the emergence of premium brands, blurring the boundaries between accessible fashion and luxury fashion, and thus paving the way for further entrants and competitors.

For fashion brands to better understand how they spend precious resources and apply new technologies, a better understanding of the perception of Gen-Z is required. Therefore, the following research question was developed:

RQ: How can premium and luxury fashion brands leverage emerging technologies to overcome their unique challenges, based on Gen Z's brand perception?

The social relevance of this study lies in its potential to contribute to the ongoing debate on the application and acceptance of new technologies and the efforts of brands to attract the highly sought-after Gen Z as customers. The established brands Louis Vuitton and Diesel can significantly impact the fashion industry and set an example for other companies, but also The Attico for new independent brands. In addition, the study explores the perceptions and values of Gen Z and helps to understand consumer behavior in the twenty-first century and the decision-making process of a new consumer group. Understanding these young consumers will help brands develop more effective strategies to meet those needs.

The scientific relevance of this work is that it contributes to the existing knowledge about new technologies in the fashion industry and their acceptance by Gen Z by specifically analyzing brands in different phases, positioning, and problems. Furthermore, previous studies have focused on the general fashion industry and neglected the diversity of individual players. Diesel, Louis Vuitton, and The Attico are used as examples, as the diverse positions of the brands offer the possibility to generalize the results to different sectors of the industry. By analyzing the critical characteristics of Gen Z consumers, this study provides a new perspective on the impact of social and cultural factors on consumer behavior and opens new avenues for future research in this area. The approach of this Work Project is illustrated in the methodology.

2. Literature Review

2.1. Luxury Industry

The Luxury Fashion Industry is a rapidly growing sector with a market value of €345 billion in 2022. Despite uncertain economic conditions, it is expected to grow between 5-12% to reach €360 to €380 billion in 2023 (Bain & Company 2023). Luxury fashion sales are predicted to increase by 3-8% in Europe, 5-10% in the US, and 9-14% in China in 2023 (The Business of Fashion; McKinsey & Company 2023). As a result, the market of personal luxury goods is expected to double in the decade from 2020 to 2030 (€265 billion to €530-570 billion), as projected by Bain & Company (2023). The luxury goods market has a significant market concentration, with five companies responsible for more than 40% of total sales in 2021 (Sherman 2022). Roughly 23% of the total sales in 2021 (€64bn of €283bn) can be attributed to the leading French luxury group *LVMH, while* its French competitor *Kering* retains a 6% share (€18bn of €283bn), followed by the Swiss-based group *Richemont*, which is responsible for 5% of total sales (€13bn of €283bn). Furthermore, a study by Deloitte in 2022 found that the top 10 luxury companies, including the aforementioned companies, account for 81% of the year-on-year growth in sales and 85% of the combined net profits of the top 100 companies in 2021 (Faccioli and Martin 2022). With growing merger and acquisition activity in 2021 and 2022, luxury goods companies are looking for opportunities to expand their brands, increase control over supply chains and distribution channels, and improve their digital capabilities. This trend will continue to solidify these current market dynamics, making it increasingly difficult for smaller and independent companies to remain profitable (Sherman 2022).

Definition of "Luxury"

Defining "luxury" is a multifaceted task influenced by various factors, including the situation, geographic location, temporal context, and the individual's perspective (Cabigiosu 2020). Furthermore, *luxury* is a dynamic concept that constantly evolves over time. The origination of the term could be the Latin word "luxus" suggesting an abundance or excess in lifestyle beyond actual needs (Sombart 1967) and "luxuria" indicating opulence and a lascivious lifestyle (Lipovetsky and Roux 2003). Additionally, it can also tie to the French "loxos", meaning deviation from the norm (Mattia 2013). This notion is echoed by Kapferer and Bastien (2012), who associate luxury with "luxation", implying a significant deviation from usual practices, often involving high-value experiences, objects, and services with symbolic importance, commanding prices far exceeding the average, not based on production costs.

Premium vs. Luxury

The terms *luxury* and *premium* are often used interchangeably, leading to confusion. Premium brands may imitate luxury codes, creating a blurred distinction between the two concepts. This ambiguity is further reinforced when premium brands are perceived as more innovative. Additionally, the overlapping price range between premium and luxury products complicates this differentiation (Kapferer and Bastien 2012). The most recent development of "*Democratization of Luxury*" further contributes to the blurring of the boundaries. Fostered by the rapid growth of the luxury industry, this phenomenon refers to the trend of luxury goods becoming more accessible to a broader range of consumers, challenging traditional definitions based on the scarcity and physical rarity of a luxury good and creating the tension of maintaining exclusivity whilst attempting to reach a more comprehensive market (Shukla, et al. 2022).

The differentiation between premium and luxury brands is grounded in distinct attributes. Premium brands aim to create the best product in their category, focusing on customer needs, quality, and innovation, while luxury brands emphasize heritage, prestige, and exclusivity, often being defined by the creator's vision. The correlation between price and function is evident in premium brands as they charge a price premium for higher quality products. They are more accessible and aim to set industry standards through exceptional quality (Sung 2018, Miller 2023). In contrast, price alone is not enough to identify luxury products, as it is often a reflection of the brand's image and prestige (Kapferer and Bastien 2012). Luxury brands embody multi-layered attributes beyond economic value such as innovation, creativity, heritage, selective distribution, storytelling and rarity, both in terms of the product's material and craftsmanship, as well as the exclusivity of the customer base (Kapferer 1997, Fabris 2003, Corbellini and Stefania 2015).

In summary, the differentiation between luxury and premium brands lies in their core attributes and market approach. Premium brands focus on superior quality, customer needs, and innovation, with a price that reflects product functionality. Luxury brands, on the other hand, are characterized by their heritage, prestige, and exclusivity, with pricing often based on brand image and prestige rather than functionality.

2.2. Gen Z in the Luxury and Premium Fashion Industry

Generation Z, commonly referred to as "Gen Z" is currently the second youngest generation – preceded by millennials and followed by Generation Alpha. Akin to previous generations, Gen Z has been shaping and transforming many aspects of life, the broader population, and consumption in general (Francis and Hoefel 2018). In the luxury and premium fashion industry, Gen Z has supported the growth and further expansion of the market (D'Arpizio, Levato and Prete, et al. 2020). Already, Gen Z accounts for 25% of the world's population (Sherman and Lee 2022) and Bain & Company suggest that the overall spending pattern of Gen Z and the following Generation Alpha is estimated to expand three times faster than those of the previous generations by 2030 (D'Arpizio, Levato und Prete, et al. 2023). By 2035 Gen Z’s spending is expected to make up 40% of the global market for personal luxury (The Business of Fashion 2021).

Gen Z Definition and Characteristics

More generally, a generation is defined in the literature as “the entire body of individuals born and living at about the same time” (Seemiller and Grace 2019). Gen Z can be roughly specified as people who were born between 1997 and 2012, placing them between 11 and 26 years old, at the time of writing (Wilson 2021). Important cultural and societal issues, as well as political, socioeconomic, and technological events, shape the overall characteristics of each generation and the impact it has on its surroundings (Seemiller and Grace 2019). The unique characteristics of Gen Z include being the first generation where technology is integrated and present in almost all aspects of life, which is typically why this generation is thus often referred to as “iGen” or “Digital Natives” (Francis and Hoefel 2018). Additionally, Gen Z is known for its “*idealism*” in its pursuit of social justice and equality by promoting diversity and inclusivity (McKinsey & Company 2023). Self-expression and individuality are also widely celebrated among this generation, seeking out unique and personalized experiences and customization (Francis and Hoefel 2018). Gen Z has also witnessed several economic challenges, most recently the COVID-19 pandemic, and therefore tends to be financially cautious and less stable than previous generations (Schneider and Lee 2022).

Gen Z Characteristics in the Fashion Industry

The typical characteristics of Gen Z mentioned above are mirrored in its consumption behavior in the fashion industry, including the luxury and premium segment. Gen Z's impact is predicted to be disruptive and focused on revolution, which poses a unique challenge for brands to capture the very promising spending power and demands for change in many aspects. The tech-savviness of this generation also demands new business models and innovative consumer engagement (The Business of Fahion; McKinsey & Company 2023). Therefore, those fashion brands that embrace emerging technologies can differentiate themselves and create unique experiences that resonate with Gen Z (The Business of Fashion 2022). According to The Business of Fashion Insight Report, Gucci is the only luxury brand to feature in the top 10 favourite fashion brands among Gen Z, securing the second spot (Schneider and Lee 2022). Gucci has been at the forefront of utilising emerging technologies to appeal to younger demographics. Through initiatives like their early entry into the virtual gaming world and their general omnichannel approach, the brand was able to attribute 50% of its sales to Millennials and Gen Z (G & Co 2023). As 98% of luxury consumers are present online, luxury brands must integrate a strong digital approach (G & Co 2023). Growing up in a digital age with easily accessible information, Gen Z demands diversity, inclusivity and values that need to be reflected in the products, marketing, and advertising of a brand (Bakhtiari 2022). Closely tied to this is the need for representation and self-expression. Gen Z views fashion as a means of self-enhancement, social recognition, and identity construction (Francis and Hoefel 2018). Being more environmentally conscious than previous generations, Gen Z is placing greater emphasis on the impact that brands have on the climate crisis and is advocating for a more sustainable fashion industry (Schneider and Lee 2022). Although being more critical of sustainability matters, the paradox of Gen Z increasingly supporting fast-fashion players like Shein, due to their trend-chasing habits, proves the complexity for brands attempting to please this generation (McKinsey & Company 2023). Fast fashion can be defined as a business model that is built on the quick production and consumption of fashion at an affordable price point, which is highly criticized for its negative environmental and social impact (Niinimäki, et al. 2020). At the same time, however, there is an emerging trend of Gen Z wanting to support smaller more underrepresented designers. Even though they are less financially stable than previous generations, a large percentage of Gen Z's disposable income is spent on fashion. Although the spending on luxury fashion is limited, a majority of this generation aspires to purchase more luxury clothing as they gain purchasing power (Schneider and Lee 2022).

To conclude, with a growing purchasing power Gen Z is expected to continue to transform the luxury fashion industry over the next years. The tech-savviness and demands for diversity, inclusion, and representation, as well as sustainability, are all characteristics that brands need to adapt to in order to secure their future. Luxury brands like Gucci have already successfully embraced and captured Gen Z, by leveraging more digital approaches and providing more engaging consumer experiences. As a result, it is strongly suggested that emerging technologies provide a valuable opportunity for premium and luxury fashion brands to gain access to younger demographics, and to attract as well as align their values and preferences to them.

2.3. Emerging Technologies in the Luxury & Premium Fashion Industry

Emerging technologies are defined as a broad range of technologies that have the potential to trigger significant technological, cultural, or economic change. Typically, these technologies are referred to as "emerging" because, whilst they have been developed, they are either i) not yet widely used or ii) are sufficiently expensive that they are too infrequently to bring about meaningful socioeconomic transformation. Some emerging technologies are previously invented technologies which are now more affordable or widely available. For instance, television, computers, and cell phones were invented decades before they became widespread enough to have a significant cultural impact (Kte'pi 2023).

The spectrum of emerging technologies is broad and diverse, encompassing a range of ground-breaking innovations that promise to fundamentally change a wide variety of industries. This thesis focuses on Augmented Reality (AR) and Virtual Reality (VR), Generative AI and 3D Printing, as these exhibit significant innovation and growth potential, especially in the premium and luxury fashion industry. In particular, AR and VR have the potential to reshape the industry. It is predicted that the AR and VR market in retail will increase by 67% and reach around 2.4 billion dollars by 2027 (Alsop 2023). In addition, generative AI will be examined in more detail as part of this thesis due to its considerable, still largely untapped potential in the fashion sector. A McKinsey report shows that 75% of fashion executives see generative AI as key to the future, but only a minority have already integrated this technology into creative design and product development processes (The Business of Fahion; McKinsey & Company 2023). The discrepancy between interest and application indicates significant opportunities for innovation. Lastly, 3D Printing has the potential to revolutionize the fashion industry. For instance, the market value of 3D Printing is estimated to reach USD 34.5 billion by 2028 and is expected to grow at a compound annual growth rate of 18.1% from 2023 to 2028 (Markets and Markets 2023). The conclusion to focus on these technologies in this paper is based on the recognition that the potential of these technologies is still largely untapped and represents fertile ground for groundbreaking applications and transformative advances in the luxury fashion industry.

2.3.1. Augmented Reality and Virtual Reality

Augmented Reality and Virtual Reality are immersive technologies that redefine our interaction with both digital and physical realms (Shirmohammadi and Shen 2008). AR involves overlaying digital information onto the real world, enhancing our perception, and providing an enriched experience. It is often made accessible using devices like smartphones, smart glasses, or AR headsets, enabling users to interact with both the physical and digital aspects of their environment simultaneously (Johnson 2023). On the other hand, VR immerses users in a completely virtual environment, isolating them from the physical world and allowing for immersive, simulated experiences. It creates a fully immersive digital environment that users can explore and interact with through specialized VR headsets. These headsets transport users to a simulated reality, completely separating them from their physical surroundings and providing an immersive experience that can range from educational simulations to entertainment content (Johnson 2023).

Augmented and Virtual Reality in Luxury and Premium Fashion Industry

AR and VR is also finding application in the fashion industry. The transformative technology offers numerous opportunities to improve various aspects of the fashion industry, from design and production to retail and personalized customer experience.

Enhancing the design process is one of the key use cases. AR and VR enable to create and test designs in a virtual environment. This reduces the need for physical prototypes, accelerates the design process, and significantly cuts sampling costs, allowing for more experimentation and creativity (Shivangi 2022). Additionally, AR and VR enable a personalized customer experience. This involves digital enhancements that enrich the real-world shopping experience, such as virtual try-ons, allowing customers to try products virtually before purchasing (Toppan n.d.). Likewise, the technology facilitates collaboration with customers to create unique and customized items, by providing a virtual demo version of a product, enabling customers to see how the final product will look in real life. This reduces wasteful expenditures in the production of sample items and improves customer experience and brand perception (Mathur 2022). AR and VR also find application in marketing and can be used to create virtual fashion shows and showrooms, enhancing engagement and brand visibility. It also enables a unique marketing experience and creates a connection with tech-savvy consumers (Empevia 2021).

2.3.2. Generative AI

In addition to Augmented and Virtual Reality, Generative AI also plays an important role in the fashion industry. In the broader context of artificial intelligence, Generative AI refers to a class of technologies and algorithms that exhibit an extraordinary capability: the autonomous generation of novel content, data, or information. This capability spans a wide range of domains, including text, images, audio, code, and simulations without requiring direct human input or explicit programming instructions (McKinsey & Company 2023). Generative AI systems essentially rely on machine learning techniques as their foundation. These techniques enable these systems to recognize and internalize patterns from existing data, which then serve as the basis for producing diverse and creative results. This innovation has profound implications for multiple industries by improving content creation, problem-solving, and driving innovation. Generative AI represents a significant advancement in the field of Artificial

Intelligence and differs from traditional AI models that are primarily concerned with identifying and categorizing data that already exists. Instead, generative AI drives us forward by generating entirely new and original content. This transformative technology is embodied in models such as GPT-3.5 and DALL-E, which are advanced deep-learning models that can handle complex tasks simultaneously (McKinsey & Company 2023). The potential applications of generative AI are vast and promise to revolutionize industries by streamlining content creation, optimizing operational efficiency, and improving the overall customer experience. The ability to work with unstructured data such as raw text, images, and video enables the creation of a range of innovative media formats, including scripted narratives, intricate 3D designs, and lifelike virtual models. This offers the fashion industry an unprecedented wealth of possibilities in the world of artificial intelligence (McKinsey & Company 2023).

Generative AI in the Luxury and Premium Fashion Industry

As a powerful force, generative AI is capable of fundamentally transforming the entire value chain of the luxury and premium fashion industry, from the design process to the prediction of trends (Bain 2023, Harreis, et al. 2023). The enhancement of design concepts and design generation are important use cases for Generative AI in the fashion industry. The technology is also used in the creation of visual content and marketing images. This enriches idea generation as well as design possibilities, whilst shortening the timeline for content creation (Harreis, et al. 2023). Similarly, the use of Generative AI in the creation of sales descriptions and marketing content can also increase efficiency in this regard. In terms of product customization, generative AI can be used to tailor products to the individual topography and preferences of consumers, enhancing product fit and fostering a stronger connection between a brand and its customers (Shoplazza Contributor 2023). Generative AI can also be used for personalized styling recommendations and virtual customer care, which also increases loyalty and the overall customer experience (Harreis, et al. 2023). Even in terms of trendspotting and marketing precisions the technology finds application. By analyzing unstructured data to predict trends, targeted and flexible marketing strategies can be developed for the luxury and premium fashion industry. This allows more personalized marketing activities (Harreis, et al. 2023). Furthermore, Generative AI can be used to optimize the store layout with the help of AI-driven data analysis and also to improve the overall in-store experience (Shoplazza Contributor 2023).

2.3.3. 3D Printing Technology

3D Printing technology refers to a manufacturing process that utilizes adhesive materials, such as powder metal or plastic, to create objects through layer-by-layer printing based on digital models. It is often termed rapid prototyping technology due to its ability to produce objects quickly (Cheng 2022). Originally applied in mold manufacturing and industrial design, 3D Printing has evolved to encompass the production of various items, and now finds applications in diverse industries, from aerospace engineering to jewelry and footwear. The technology's significant feature is the production of customized goods in response to market demand, facilitating a new economic growth point in the modern service industry. It enables quick adaptation to market needs and the establishment of a production mode characterized by remote customization, local production, and innovative changes in the production and operation process (Zhang 2022, Cheng 2022).

3D Printing in Luxury and Premium Fashion Industry

The merging of 3D Printing technology with the luxury and premium fashion industry is changing the way high-end clothing and accessories are designed, produced, and experienced (Morand 2016). This combination offers new opportunities for creativity, sustainability and personalized luxury that are changing the face of fashion (McCormick, et al. 2019). Enhancing the design process is one of the key use cases of 3D Printing within the fashion industry. As the technology can be utilized for the creation of intricate shapes and textures, which are not possible with traditional methods, creative boundaries in design can be expanded and innovation in design and craftsmanship can be fostered (Vanderploeg, Lee und Mamp 2017). Furthermore, 3D Printing enables and streamlines the creation of unique and personalized fashion items, contributing to an overall enhanced customer engagement. By implementing in-store 3D Printing studios, the production process transparency can be improved (Chakraborty and Biswas 2020). 3D Printing technology also contributes to increasing efficiency, facilitating faster prototyping (Morand 2016) and demand-driven production. This contributes to the acceleration of the overall creative process and the improved sustainable use of resource, attracting environmentally conscious customers while underlining the brand's commitment to innovation (Morand 2016).

In conclusion, the integration of Augmented and Virtual Reality, Generative AI, and 3D Printing in the luxury and premium fashion industry represents a paradigm shift that holds transformative potential across various dimensions. AR and VR serve as a dynamic bridge between the physical and digital worlds, offering real-time insights and simulations for enhanced design processes, supply chains, and personalized customer experiences. Generative AI, with its autonomous content generation capabilities, revolutionizes design concepts, marketing strategies, and customer interactions, helping drive innovation throughout the industry. Lastly, 3D Printing has emerged as a game-changer, enhancing design possibilities, streamlining production processes, and fostering sustainability. Together, these technologies usher in a new era of creativity, efficiency, and customer-centricity, redefining the luxury and premium fashion landscape and positioning it at the forefront of technological advancement and sustainable practices.

3. Methodology

3.1. Research Approach

Given the relevance of the study and after a careful review of the literature, a few questions remain to guide the rest of the Work Project. The overarching research question is:

RQ*:* *How can premium and luxury fashion brands leverage emerging technologies to overcome their unique challenges, based on Gen Z's brand perception?*

Due to its complexity, , the overarching research question was divided into three sub-questions, each to be answered with one specific brand within a fictional consulting project. This particular Work Project's aims to answer the following research question:

RQ2: *How can emerging technologies help heritage luxury brands sustain their current success while enhancing Gen Z's perception? – A Case Study of Louis Vuitton.*

In the scope of this overarching research question, the luxury fashion brand Louis Vuitton was selected, challenges identified, and a fictitious consulting project was carried. The use of consultancy projects in research offers several advantages. It provides a practical application for theoretical concepts and demonstrates how strategies might work in real-life scenarios. They are inherently solution-orientated and fit well with research that aims to address specific problems through innovative technologies. This approach enables data collection and analysis that provides immediate insights into the strategies' effectiveness. In addition, consultancy projects provide adaptability to meet the three brands' unique challenges and market positions. Finally, this method is a practical test of theory and contributes valuable insights for academic knowledge and industry practice. The consultancy project follows a six steps approach:

1. Project Initiation and Scope Definition: Understanding the brand's business, market, and challenges, setting objectives aligned with the research question, and defining the project's scope.

2. Data Collection and Analysis: Analyzing Gen Z's initial brand perceptions through a quantitative survey and identifying key challenges. The survey was conducted with Generation Z individuals born between 1997 and 2012. Due to limited accessibility, the random sampling method was chosen, and data collection was limited to readily available respondents. The detailed design of the survey can be found in Chapter 3.2.

3. Strategy Development: Development of proposed solutions within the framework of the technologies identified in the literature review and evaluation of the options with expert insights through semi-structured interviews and secondary research. The goal is to assess each technology application's feasibility, risks, and benefits for each brand. The detailed design of the expert interviews can be found in Chapter 3.3.

4. Implementation: Develop a detailed plan for the identified solutions.

5. Assessment: Validate the solutions with consumers who have a personal interest in the luxury and fashion industry and might possess academic or professional backgrounds in this field through semi-structured interviews to enhance the quality of feedback. The detailed design of the consumer interviews can be found in Chapter 3.3.

6. Project Closure: Summarizing key findings and recommendations, reflecting on the research process, learnings, and their contributions to the research questions.

Following this, a comparative analysis is carried out to summarize the findings and to draw more a comprehensive conclusion about the overreaching research questions.

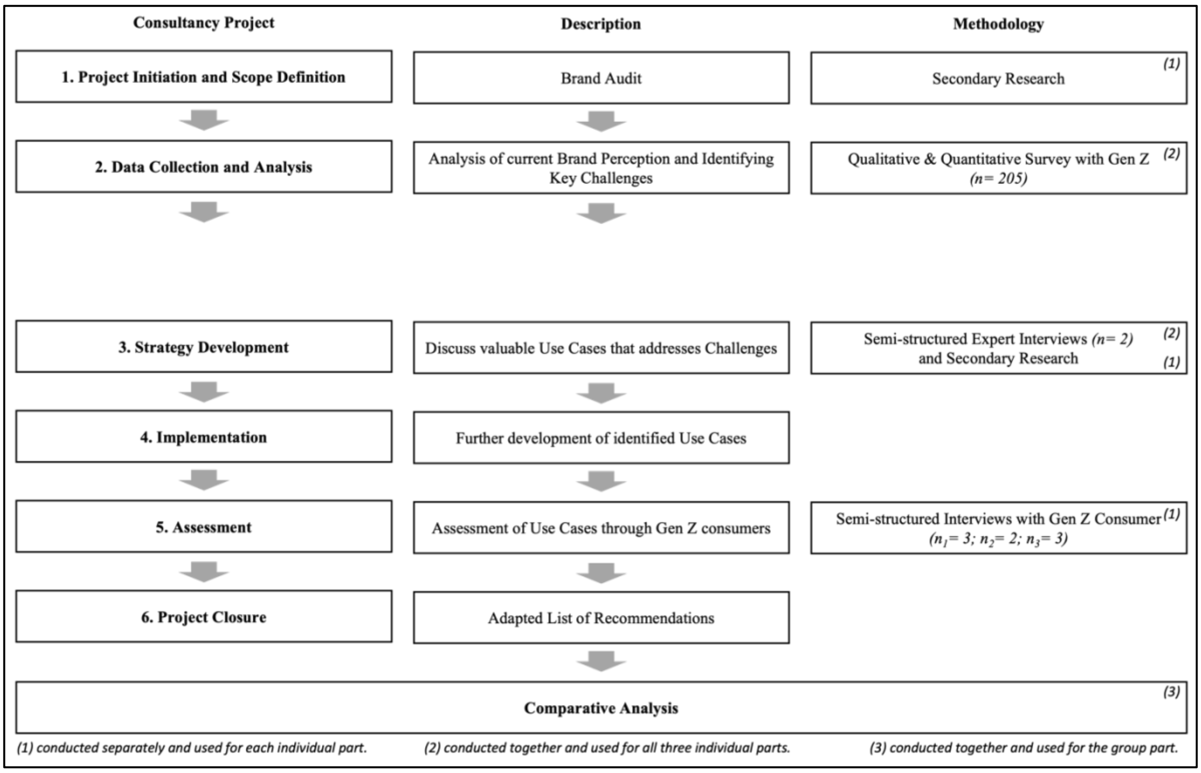

Figure 1: Methodology Approach

3.2. Survey

3.2.1. Survey Design

The survey was created with the online tool Qualtrics and was available for 14 days. The link was distributed to multiple WhatsApp groups, shared on social media platforms, as well as forwarded to LinkedIn profiles. In the survey, the participants were asked to provide their email addresses to be able to generate leads to contact for the consumer interviews at a later stage. The structure of the survey was created to assess Gen Z's initial perception and brand equity of the three chosen brands. The survey was divided into three parts, one for each brand, consisting of questions surrounding brand awareness, associations, attributes, feelings, quality, and loyalty. The survey's initial questions asked for the participants' age, only allowing those who fit into the category of Gen Z (18–26-year-olds) to continue, ultimately ensuring the relevance of the findings on the research topics.

3.2.2. Survey Results

A total of **206** answers were gathered (N=**206**), of which 135 (65.53%) were represented by the target group of 18-26-year-olds. Out of the participants, 81(60.71%) were female, 53 (39.29%) were male and 1 (0.74%) answered with others. In correlation to the frequency of luxury goods consumption, 21(15.56%) consume products regularly, 99 (73.33%) sometimes and 14 (10.37%) never. A detailed analysis of the participant's perception of each of the brands will be examined in the individual parts.

3.3. Interviews

3.3.1. Interview Design

In the course of this Work Project, two types of qualitative interviews were conducted, Expert Interviews and Consumer Interviews. The detailed interview guides and transcripts can be found in Appendix B and Appendix C.

Expert Interviews

The two Expert Interviews were structured to gain in-depth insights into the interplay between technology and brand challenges from industry experts and were employed utilizing virtual Microsoft Team meetings. Each of the meetings lasted between 45 minutes to 1 hour. The two interviewees were individuals with a professional background in luxury and technological industries. One of them is an adjunct university professor, teaching classes in the realm of fashion entrepreneurship and luxury to Master students, and the other expert is currently employed by LVMH. The following steps outline the scripted interview process: Firstly, the three brands along with their key challenges were introduced to ensure familiarity. Secondly, with the support of a decision matrix, the three technologies and their use cases were discussed and with the help of the Experts decided whether they addressed any of the brand's challenges. Thirdly, Experts are asked to share potential limitations and risks, as well as identify other brands that serve as benchmarks or success stories in employing similar technologies.

Consumer Interviews

The Consumer interviews were conducted using a mixed-method approach, utilizing face-to-face interviews, as well as virtual Microsoft Team meetings with a total of 9 participants, 3 for each of the brands. Each of the interviews lasted 30 minutes to 1 hour. The participants were individuals within the Gen Z age category, from different genders, nationalities, and professional backgrounds. To ensure a good quality of responses the Gen Z representatives were chosen based on their personal or professional knowledge of the fashion industry. The three strategies of each of the brands were presented and tested with the consumer to understand their perspective and ultimately validate the strategy. Firstly, each brand and its key challenges were introduced to ensure familiarity. Secondly, the proposed strategy to overcome their unique challenges, informed by Expert interviews and secondary research, was presented. Lastly, Consumer feedback was gathered to assess the perceived effectiveness and appeal of the proposed strategy.

3.3.2. Interview Results

Decision Matrix Findings

The results from the decision matrix completed during expert interviews offer insights into which technology and use case combinations are most effective for each brand, considering their unique challenges. These insights were used together with benchmark companies and further secondary research to transform the identified use cases into practical strategies. The detailed findings can be found in the Chapter “Strategy Development” (Chapter 4.3).

Validated Strategy with Consumer Feedback

Feedback from consumer interviews plays a crucial role in validating and refining the proposed strategy. It ensures that the strategy is not only theoretically sound but also aligns with consumer expectations and preferences. The detailed findings can be found in the Chapter “Assessment” (Chapter 4.5).

4. Consultancy Project – Louis Vuitton

This segment is dedicated to evaluating the practicality and impact of cutting-edge technologies when applied to a distinguished and well-established brand. For this purpose, the French luxury fashion house Louis Vuitton has been chosen. This brand confronts challenges including adjusting to evolving consumer demographics and enhancing brand perception in a fiercely competitive market environment.

4.1. Project Initiation and Scope Definition

Brand Introduction and History

Louis Vuitton is a prestigious French luxury fashion and lifestyle brand with a long history dating back to the 19th century (Kasztalska 2018, 226). Founded by Louis Vuitton himself, the company has since become an iconic symbol of opulence, sophistication, and enduring elegance (Masè and Cedrola 2017). Today, as part of LVMH, a French multinational luxury goods company (The Fahion Law 2021), Louis Vuitton continues to epitomize the pinnacle of luxury fashion.

Initially, Louis Vuitton specialized in the production of travel suitcases (Yotka 2019) and quickly gained recognition for its revolutionary suitcase concept with a flat top, which replaced the traditional round suitcases (Louis Vuitton 2023). This innovation laid the foundation for Louis Vuitton's reputation for quality and craftsmanship (Yotka 2019). The company expanded its product offering over the years to include a wide range of leather goods, fashion accessories, ready-to-wear collections, and an ever-growing range of luxury products (Kasztalska 2018). In 1987 Moët et Chandon and Hennessy, leading producers of champagne and cognac, merged with Louis Vuitton to form a luxury goods conglomerate LVMH (The Fahion Law 2021). Today, Louis Vuitton is the world’s biggest and most profitable luxury label

(Williams 2023). The company sells its products through independent boutiques, licensed stores in luxury department stores, and the internet (Kasztalska 2018). In 2022, the company's revenue exceeded 20 billion euros for the first time, while LVMH generated 79.2 billion euros of revenue and profit from recurring activities in the amount of 21.1 billion euros (LVMH 2022, 2-4). In addition, the global brand value reached USD 3.4 billion in 2022, representing a year-on-year increase of 57.05% (Sabanoglu 2022).

This rich history provides the backdrop for Louis Vuitton's brand identity, which has become synonymous with luxury, sophistication and timeless elegance (Yotka 2019). Aimed at discerning individuals seeking style, quality and exclusivity, the Louis Vuitton brand is built on a foundation of excellence and tradition that cements its international reputation as a high-quality, creative manufacturer. Renowned for its style, quality and exclusivity, Louis Vuitton combines a tradition of excellence with continuous innovation to develop its brand identity. (Masè and Cedrola 2017, Zhu 2023) Louis Vuitton's brand strategy is deeply rooted in sophistication, with a primary focus on prioritizing clients above all else (Masè and Cedrola 2017). The brand image is built on traditional craftsmanship, emphasizing high-quality products that stand the test of time (Zhu 2023). Louis Vuitton's strategy focuses on luxury pricing and limited product availability, emphasizing the exclusivity and opulence of the brand. This approach, coupled with a commitment to craftsmanship and excellence, cements the brand's status as a symbol of enduring luxury and elegance (Masè and Cedrola 2017).

Throughout its history, Louis Vuitton has consistently achieved remarkable success. The company's commitment to quality and innovation has made it one of the world's most prestigious and profitable luxury brands (Kasztalska 2018). Over the past few decades, Louis Vuitton has seen substantial growth, particularly under the leadership of Bernard Arnault and the LVMH group (The Fahion Law 2021). The brand has significantly expanded its global footprint, with a network of boutiques in key cities around the world, and its financial performance has been consistently strong (Louis Vuitton 2023). Today, Louis Vuitton's revenue and profit margins remain robust (Louis Vuitton 2023). The company has diversified its product lines, including ventures into fragrance, fine jewelry, and watchmaking (Louis Vuitton 2023).

Challenges of Luxury Fashion Brands

Despite its remarkable success, Louis Vuitton faces several contemporary challenges. Primarily, these challenges are cross-industry related, such as economic uncertainties, digital transformation, and currency fluctuation. Four major challenges can be identified:

Challenge Category	Description	Implication
Economic and Geopolitical Risks	Global economic uncertainties and geopolitical tensions lead to fragile consumer confidence, unpredictable spending patterns and impact global trade. ((D'Arpizio and Levato 2023, Amed and Berg 2023, The Business of Fahion; McKinsey & Company 2023)	Necessitates agile strategies to adapt to market fluctuations, maintain market position and mitigate risks.
Digital Transformation	Need to adapt to the digital age with enhanced e-commerce and digital experiences. (Faccioli, Martin and Sheehan 2023)	Brands must evolve to stay competitive and offer seamless digital experiences.
Environmental Sustainability	Pressure to adopt sustainable, ethical production practices and tackle emissions (The Business of Fashion; McKinsey & Company 2023).	Necessity to align with new sustainability regulations and consumer expectations.
Shifting Consumer Demographics	Gen Z's increasing influence on luxury purchases, seeking authenticity and meaningful experiences. (D'Arpizio and Levato 2023)	Brands must cater to diverse generational values and preferences.

Table 1: Challenges of Luxury Fashion Brands

Overall, the brand’s ability to navigate these challenges will be pivotal in maintaining its position in the luxury fashion sector (Klasa 2023). As the brand confronts several challenges, its success will depend on its agility in embracing innovation and adapting to the evolving demands of a diverse and digitally-savvy customer base (Faccioli, Martin and Sheehan 2023).

4.2. Data Collection and Analysis

The conducted survey determined the perception of the Louis Vuitton brand among 106 participants belonging to the Gen Z age group. Notably, there were no significant differences in responses between male and female participants, leading to an equal treatment of all responses in the subsequent analysis. To prevent biases in the initial survey segment, no introductory information about the brand was provided. The following table illustrates the survey results.

Analysis Area	**Respondents Insights**	**Implication**
High Brand Familiarity and Emotions	• Brand Awareness: 101/106 (95%) are familiar with the brand. • Emotions towards the brand: Balanced emotional landscape (34/106 (32%) lean towards negative emotions, 36/106 (34%) have neither positive nor negative emotions, 31/106 (29%) lean towards a positive emotion).	High awareness among Gen Z but diverse emotional connection, suggesting a potential for enhancing the brand's emotional appeal brand image.
Sustainability Perception	• Perception of Sustainability Efforts: 44/106 (42%) somewhat disagree and 14/106 (13%) strongly disagree with the brand's sustainability efforts.	Majority skepticism about the brand's commitment to environmental consciousness, indicating a gap in brand communication or practices.
Lack Self-Expression & Perceived Brand Associations	• Self-Expression: 57/106 (54%) perceive few opportunities for self-expression • Brand Associations: mainly associated with prestige, quality, exclusivity and less with innovation.	Potential discrepancy between the brand's offerings and Gen Z's desire for self-expression and innovation. This indicates a potential mismatch between the brand's current positioning and Gen Z's desire for self-expression and innovative attributes.
Perception of History, Quality, and Design	• History Perception: 61/106 (58%) view the brand as rich in history. • Quality Perception: 72/105 (69%) agree on high product quality. • Design Perception: Creativity and uniqueness seen as average good.	Strong heritage and quality perception, but mixed views on creativity and modernity, indicating a need to harmonize its traditional values with more innovative and modern design elements.
Targeting Gen Z & Value Perceptions	• Targeting Perception: 58/106 (55%) express a positive outlook on addressing Gen Z. • Reflected Values: Innovation and sustainability are the values least seen at Louis Vuitton.	Effective targeting of Gen Z, but a need to align more closely with their values, especially sustainability. This suggests an opportunity to realign its brand strategy to more closely resonate with the values and expectations of Gen Z.

Brand Loyalty	• Brand Loyalty: Negative trend in brand loyalty and 81% (79/97) would not recommend the brand. • Purchase Trend: 48/96 (45%) would not purchase products more often.	Significant challenge in cultivating brand loyalty and positive recommendations among Gen Z, highlighting a need for targeted engagement strategies.

Table 2: Louis Vuitton Perception Survey Analysis

Identification of Key Challenges

In summary, the analysis of the survey indicated mixed perceptions among the participants, which highlights three core challenges (Appendix J) that Louis Vuitton is currently facing. These challenges are pivotal for ensuring Louis Vuitton's sustained success in the fiercely competitive luxury market.

The first challenge (brand loyalty and negative word of mouth) prevailed to be a trend towards negative brand loyalty, with a substantial percentage (45%) indicating that they would not increase their purchases with rising income. Moreover, a large majority (81%) expressed that they would not recommend Louis Vuitton. Building brand loyalty and positive word-of-mouth is crucial for sustained success. The negative sentiment towards recommending the brand suggests a challenge in creating a positive brand image and fostering loyalty among Gen Z consumers.

The second challenge highlighted limited self-expression opportunities and innovation perception. A substantial portion of Gen Z respondents (42%) expressed disagreement with Louis Vuitton's sustainability efforts, and an additional 13% strongly disagreed. This indicates a significant level of skepticism regarding the brand's commitment to environmental consciousness. In an era where environmental concerns are increasingly important to consumers, the perception of lacking sustainability efforts can affect the brand's appeal and resonate negatively with environmentally conscious Gen Z consumers.

The third challenge addressed the skepticism of Gen Z consumers towards the company's sustainability efforts. A notable number of respondents felt that Louis Vuitton does not provide adequate opportunities for self-expression. Only 2% felt that Louis Vuitton does provide adequate opportunities for self-expression. Additionally, there is a gap in the perception of innovation associated with the brand, with the term "Innovative" receiving the least mentions. For a demographic that values self-expression and innovation, this perception can hinder the brand's ability to resonate with Gen Z consumers who seek uniqueness and creativity in their fashion choices.

4.3. Strategy Development

The objective of this consulting project is to formulate strategies that effectively address the challenges described in Section 1.1, with the aim of improving the brand perception of Louis Vuitton among Gen Z and answering research question RQ2. This approach involves synthesizing insights from expert interviews, benchmarking with industry leaders and conducting additional secondary research to support the development of effective strategies. These strategies are then tested with Gen Z representatives in Chapter 4.2.5.

This section focuses on identifying practical and feasible use cases to address the challenges faced by Louis Vuitton. In addition to the findings from the literature review, expert interviews were conducted which provided new and valuable insights.

Three use cases can be distinguished for AR and VR. Regarding the first use case, *1.1 Personalized customer experience*, both experts, expressed optimism about leveraging AR and VR to enhance personalized customer experiences. Expert 1 emphasized that this should take place within the company's existing stores, citing Smart Mirrors as an example that enables virtual try-ons in physical stores. According to Forbes, the probability of recommending a brand that creates experiences like Smart Mirrors is 82% higher (Hirschmiller 2023). Furthermore, Expert 1 suggested that implementing personalized customer experiences in stores could attract a younger clientele. According to both experts, Louis Vuitton could utilize this approach to improve its innovation perception and communicate its sustainability efforts effectively to overcome *Challenges 1* and *2*. The second use case, *1.2 Production of bespoke luxury items*, was deemed practical by both experts. Furthermore, they stated that the brand could benefit from the "Artificial Scarcity Model" by increasing the perceived value of products through personalization, especially among Gen Z customers. According to Expert 1, the primary focus should be on the personalization of products, as co-creating carries the risk of diluting the brand identity. Similarly, in the third use case, *1.3 Immersive marketing campaigns*, both experts see applicability for Louis Vuitton. Expert 1 cited virtual fashion shows that could help engage younger customers, while Expert 2 sees the applicability, particularly concerning interaction with products in the virtual world and creating initial touchpoints. Overall, according to the experts, the implementation and enhancement of AR and VR with the all the use cases can increase Louis Vuitton's challenge of low innovation perception, promote environmental practices, and can contribute to an improvement of brand loyalty. However, considering the existing literature and examples of benchmark companies, *Use Case 1.1* emerges as particularly promising for Louis Vuitton. Therefore, *Use Case 1.1* will be considered for implementation and recommendation.

Four main use cases for Generative AI can be identified. Regarding *Use Case 2.1: Creating Visual Content and Marketing Imagery*, Expert 1 stated that content creation by AI does not align with a brand like Louis Vuitton. It was particularly emphasized that a big part of luxury brands is their originality, and this cannot be achieved through AI. In contrast, Expert 2 sees potential applications of this use case for Louis Vuitton. This could lead to cost savings in content creation and faster production. Furthermore, Expert 2 cites the implementation of AI campaigns as an example that could contribute to improving the innovation perception (*Challenge 2*). However, as *Use Case 2.1* is less suited to the original approach of luxury fashion and craftsmanship, it will not be considered further. *Use Case 2.2: Tailored Product Recommendation and Support* was once again deemed unsuitable for Louis Vuitton by Expert 1. This assessment was attributed to the personal connection between customers and the brand, which, according to Expert 1, cannot be replaced by AI. However, Expert 2 sees potential applicability for Louis Vuitton, particularly concerning tailored product recommendations. This could contribute to enhancing brand loyalty. Regarding *Use Case 2.3: Trendspotting and Marketing Precision*, has been approved from Expert 2, but due to its lack of a customer facing component will not be considered further. To summarize the usefulness of Generative AI in context of the challenges Louis Vuitton is facing, according to the industry experts, *Use Case 2.2* can enhance innovation perception and improve brand loyalty as a personal connection between customers and the brand can be built. Therefore, *Use Case 2.2* will be considered for implementation and recommendation.

Two central use cases can be identified for 3D printing technology. Regarding *Use Case 3.1: Personalization and Collaboration*, both experts expressed optimism that Louis Vuitton could leverage 3D printing technology for personalization to enhance the customer experience. Expert 2 emphasized that personalization can serve as a tool to increase customer engagement. As a potential application, they mentioned (temporarily) implementing 3D printing in stores, allowing customers to experience the technology in the context of the brand. However, Expert 1 also cautioned that it is essential to maintain the high standard of luxury products. Overall, Louis Vuitton could use this to improve its innovation perception and increase brand awareness. Concerning *Use Case 3.2: Promoting Sustainability*, Expert 1 stated that 3D printing, through demand planning, can generally contribute to improved sustainability. On the other hand, Expert 2 mentioned that they couldn't assess how this technology could be used to enhance sustainability perception. Given the lack of a customer-oriented component in demand planning with 3D printing, this use case will not be considered further. Overall, both experts approved *Use Case 3.1* and emphasized the benefits of the experimental aspect that can increase the innovation perception and brand awareness. Therefore, *Use Case 3.1* will be considered for further implementation.

4.4. Implementation

Based on previous analyses and insights from both industry experts and secondary research, three use cases from the three technologies have been selected for further implementation. To evaluate these use cases (*Use Cases 1.1*, *2.2,* and *3.1*), three strategies were designed and tested through semi-structured interviews with three representatives of Gen Z. The interview guide in Appendix E.1 contains visual representations of the strategies discussed during the consumer interviews A range of metrics should be used to measure the effectiveness and success of these strategies, and to adjust where necessary, as detailed in Appendix L.

Strategy 1 – Interactive Smart Mirror Experience

Strategy 1 focuses on enhancing the in-store shopping experience at Louis Vuitton through the implementation of smart mirrors. These mirrors, equipped with AR, enable customers to virtually try on digital versions of Louis Vuitton products. This immersive experience exceeds traditional fitting rooms, offering an interactive and innovative way of shopping. The smart mirrors utilize 3D body tracking technology to accurately capture the dimensions and movements of customers. Cloth simulation technology then overlays digital versions of clothing and accessories onto the customer's reflection in real-time, providing a realistic view of how the items would look. Customers can explore multiple variations of products, including different colors, styles, and sizes, without needing to physically try them on. This not only saves time but also expands the range of options available for experimentation. By placing smart mirrors in shop windows, Louis Vuitton can engage passers-by, inviting them to interact with the technology and explore products virtually. This serves not only as an innovative marketing tool but also attracts potential customers into the store. To implement this technology, a partnership could be entered into with ZERO10, for example. The company has already worked with luxury brands and has extensive experience with AR and virtual fittings. Overall, this strategy offers a unique blend of physical and digital shopping experiences, potentially increasing customer engagement and enriching the Louis Vuitton brand experience.

Strategy 2 – AI-Enhanced E-Commerce

Strategy 2 focuses on transforming the e-commerce experience by implementing generative AI on Louis Vuitton's website for personalized product recommendations and enhanced customer service. This technology can process and analyze extensive datasets of customer interactions, purchases, browsing patterns, and feedback. Based on this data analysis, the AI can provide personalized product recommendations for each customer, considering factors like previous purchases, viewed items, and preferences in color, style, and design. This could be introduced as a dynamic feature on the website, where users see a curated selection of products tailored to their tastes. In addition to personalized product recommendations, this strategy also includes the implementation of sophisticated AI-supported chatbots. These chatbots are designed to provide immediate, 24/7 support to customers, answering questions, offering style advice, and assisting with purchases. Unlike standard chatbots, these AI-driven assistants can understand complex queries and providing contextually relevant responses, ensuring a higher level of customer interaction and satisfaction. Additionally, the chatbots could provide detailed product information, care instructions, and even assist in resolving post-purchase queries such as order tracking or return processes.

Strategy 3 – In-Store 3D Printing Experience

The *third strategy* introduces a unique and innovative approach to enhance in-store customer engagement through the installation of 3D printers in select flagship stores. This technology will initially only be available in stores for a certain period to create an aura of exclusivity and urgency that compels customers to visit the stores to take advantage of this special service. This strategy focuses on providing 3D printers that can be used to produce small, customizable items such as name badges, pendants, key rings, or patches. To enable a seamless and user-friendly experience, stores will be equipped with intuitive design software and tablets. This allows customers to get directly involved in the design process by either creating their own design or choosing from a variety of pre-set, customizable patterns, and styles. A key aspect of this strategy is the commitment to sustainability. The 3D printers will use eco-friendly materials, such as biodegradable plastics or recycled inputs. This not only meets the growing consumer demand for environmentally responsible products but also underlines Louis Vuitton's commitment to environmental protection. The exclusivity of this campaign is expected to generate significant customer interest and in-store traffic as it offers a unique experience that combines personalization with technology and sustainability. Depending on the success of this campaign, Louis Vuitton may consider making 3D printing permanent in some stores or expanding the range of customizable products available with this technology.

4.5. Assessment

In this chapter, the developed strategies are critically evaluated. For this purpose, semi-structured interviews were conducted with three representatives of Gen Z. As part of this, each strategy was presented, and specific questions were asked to understand consumer responses to these strategies in detail and to determine each strategy's ability to effectively address Louis Vuitton's identified challenges.

Strategy 1 – Interactive Smart Mirror Experience

All three interviewees perceived Strategy 1 as particularly interesting and innovative. They also emphasized that Smart Mirrors could enhance the shopping experience, although the extent of this improvement varied among them. Some saw it as a significant extension, others as a moderate enhancement of the in-store shopping experience. Additionally, all expressed an interest in trying out this technology. Each interviewee mentioned that the implementation of Smart Mirrors could position Louis Vuitton as a more innovative (*Challenge 2*). They also stressed the importance of maintaining physical interaction with products. The interviewees pointed out that while Smart Mirrors are a valuable addition in stores, they should not replace the traditional experience of physically engaging with products. Opinions were divided regarding the impact of the technology on purchasing behavior. While the interviewees saw potential for increased customer traffic and interest, they were uncertain about its direct influence on actual sales. The products themselves continue to be seen as the decisive factor in purchase decisions. There was consensus that Strategy 1 aids in rejuvenating Louis Vuitton's brand image, presenting the brand as more innovative. (*Challenge 2*). However, opinions were divided regarding improvements in sustainability perception (*Challenge 1*) and brand loyalty

(*Challenge 3*). In summary, Strategy 1 is seen positively in terms of innovation and improving the shopping experience, especially for a younger audience, but there are reservations about the long-term impact on purchasing behavior. The technology is viewed as a valuable tool for renewing the brand image and enhancing customer loyalty, but not as the sole solution to all challenges.

Strategy 2 – AI-Enhanced E-Commerce

All three interviewees showed mixed reactions to Strategy 2. They recognized the value in personalized product recommendations and improved support. However, only a tempered interest was expressed in utilizing these services themselves. Additionally, concerns regarding data privacy in the implementation process were raised. The interviewees indicated that Strategy 2 could contribute to enhancing the online shopping experience and making the brand appear more modern, thereby addressing *Challenge 2*. Moreover, they pointed out that Strategy 2 could lead to increased brand loyalty (*Challenge 3*), but ultimately, it is the products themselves that are decisive, rather than the purchasing process. At the same time, they emphasized the necessity for the implementation to align with the brand identity and reflect the brand's quality orientation. In summary, while Strategy 2 is seen as innovative and potentially enriching for the online shopping experience, there are reservations concerning data privacy aspects and the overall fit for a luxury brand. The technology is viewed as an interesting tool for renewing the brand image and potentially increasing customer loyalty, but not as a comprehensive solution to all challenges. It was noted that Strategy 2 alone might not be sufficient to meet all the brand's challenges.

Strategy 3 – In-Store 3D Printing Experience

All three respondents responded positively to Strategy 3, the introduction of 3D printing technology in selected Louis Vuitton stores and expressed a keen interest in trying it out for themselves. They particularly highlighted the aspect of personalization, which could strengthen the bond with the product and enable customers to stand out from the crowd (*Challenge 2*). It was emphasized that this type of personalization offers added value to customers but does not necessarily lead directly to purchases. Each interviewee saw the implementation of this technology as an opportunity to position Louis Vuitton, especially in the perception of the younger Gen Z, as a more innovative brand (*Challenge 2*). The importance of sustainability in the execution of this strategy was also underscored, especially when addressing a younger target group. Opinions were divided regarding its impact on purchasing behavior. While all three viewed the technology as an exciting enhancement to the shopping experience, there were concerns about whether it alone could significantly increase brand loyalty (*Challenge 3*). The products themselves remain a crucial factor in purchase decisions. The interviewees emphasized that Strategy 3 has the potential to improve innovation perception and the brand image. At the same time, possible limitations such as pricing and the need to include older customer groups were discussed. In summary, Strategy 3 is perceived as an exciting innovation and a valuable addition to the shopping experience. The technology is seen as a tool that can contribute to renewing the brand image and strengthening customer loyalty. However, it was also pointed out that the strategy alone might not be sufficient to tackle all challenges, and a more comprehensive, integrated approach is required.

4.6. Project Closure

To conclude the consulting project for Louis Vuitton, essential insights from secondary research, industry experts, and Gen Z representatives confirm that employing emerging fashion technologies can enhance the brand perception among Gen Z, thereby addressing research question RQ2. The three challenges identified for Louis Vuitton in a quantitative survey (Chapter 4.2.2.) are crucial for answering this research question and their resolution is important for maintaining the brand's success. Strategies to address these challenges were developed based on insights from industry experts, secondary research and competitive analysis, focusing on relevant emerging technologies. (Chapter 4.2.3.). These strategies were then tested among Gen Z representatives to appropriately assess their relevance (Chapter 4.2.5.). The results show that AR and VR (Strategy 1), in the form of smart mirrors, improve brand perception and innovation awareness among Gen Z (*Challenge 2*). In terms of improving the perception of sustainability (*Challenge 1*) and brand loyalty (*Challenge 3*), this strategy hardly contributes to any improvement. The use of Generative AI (Strategy 2) does not significantly improve Gen Z's brand perception, brand loyalty (*Challenge 3*) or sustainability perception (*Challenge 1*) and only leads to a slight increase in innovation awareness. Lastly, 3D Printing technology is viewed positively as it improves Gen Z's experience in Louis Vuitton stores. This strategy fits well with Gen Z's preferences for self-expression and individualism (*Challenge 2*), positively influences brand perception and encourages the use of sustainable materials (*Challenge 1*).

In conclusion, the three strategies explored for Louis Vuitton each hold distinct implications for addressing the challenges identified among Gen Z. The use of Augmented and Virtual Reality (Strategy 1) notably enhances the brand's innovative appeal, although it shows limited impact on sustainability perception and brand loyalty. The application of Generative AI (Strategy 2) marginally boosts the perception of innovation but falls short in significantly improving brand loyalty or sustainability image. Lastly, the adoption of 3D Printing technology (Strategy 3) effectively resonates with Gen Z's desire for self-expression and individualism, positively influencing brand perception and aligning with sustainability goals. Collectively, these strategies underscore the general potential of emerging technologies in reshaping brand perception and meeting the unique demands of a younger, more tech-savvy generation.

5. Comparative Analysis

This chapter contains a comprehensive and joint evaluation and understanding of the three projects in a more general context. The aim is to compare the individual parts' findings, recognize similarities and differences, and ultimately answer the Research Question of which technologies are relevant for what brands at what stages.

Cross-Project Findings and Learnings

The fashion industry is highly diverse and dynamic, including various stakeholders and players. However, they all face the same challenge of effectively addressing their future customer group, Generation Z, to secure sustainable growth and future success. Industry experts say emerging technologies offer opportunities to make brands more attractive to Gen Z, a generation with unique values, demands, and expectations of the brands they consume (see Chapter 2.2.) (McDowell 2023). Due to the high complexity of the fashion industry, three brands were selected for this Work Project, each of which being at a different stage of market establishment and positioning to ensure diversity. *Diesel* is an established and widely recognized premium brand but has not yet been relevant to Gen Z. *Louis Vuitton*, as a flagship luxury brand, is performing extremely well financially, but according to Gen Z, lacks innovation and has therefore been replaced by its Italian competitor Gucci when it comes to appealing to Gen Z. *The Attico* is an up-and-coming independent brand that is on its way to positioning itself in the luxury segment. Without brand heritage and broad brand recognition, this young brand faces completely different challenges than the established brands Diesel and Louis Vuitton.

As a premium brand, **Diesel** operates in a different segment from Louis Vuitton and The Attico. While the brand has enjoyed great success at the beginning of its establishment, it has faced challenges, including defining a clear strategy and maintaining its relevance in the face of rising competition. Having its historical peak before the years of Gen Z, Diesel is now facing the challenge of bridging the generational gap to enhance the revitalized brand recognition and relevance amongst the younger demographic. Despite its repositioning efforts in recent years, Diesel's efforts have not yet significantly impacted the average Gen Z consumer. Its rich heritage and uniquely innovative identity, however, provide an opportunity to embed those values in the minds of consumers. Due to the brand's industrial and controversial premium positioning, Diesel can leverage and experiment with upcoming fashion technologies and new marketing approaches with a lower risk of hurting the brand compared to more prestigious brands like Louis Vuitton and ultimately find new ways to resonate with Gen Z.

Currently excelling in the luxury fashion market, **Louis Vuitton**, a renowned and established brand, faces the industry-wide challenges of adapting to shifting consumer demographics and ongoing digital transformation. Despite its strong financial performance and prominent market position, Louis Vuitton must address a significant hurdle: enhancing its appeal to the increasingly influential Gen Z demographic. This younger generation, poised to command substantial purchasing power in the near future, currently perceives the brand as less relevant compared to competitors like Gucci, which is seen as more innovative. To sustain and enhance its success, Louis Vuitton must develop a unique value proposition that resonates with Gen Z consumers. By leveraging its rich heritage and creative identity, Louis Vuitton has the opportunity to reinvent its brand image strategically. This involves maintaining its tradition of luxury and exclusivity and innovating in product design, marketing, and brand storytelling to cultivate a stronger connection with younger audiences. The key lies in balancing its esteemed legacy with contemporary appeals, ensuring the brand remains exclusive and relevant in a rapidly evolving luxury fashion landscape. Louis Vuitton's challenge is integrating traditional luxury values with modern marketing strategies and technological advancements, thereby securing its leadership position in the face of changing consumer preferences and industry dynamics.

As an emerging luxury brand, **The Attico** faces the challenge of creating its brand identity and gaining recognition in a market dominated by established luxury groups such as LVMH, Kering, and Richemont. This dynamic of the luxury industry is particularly challenging for smaller independent brands. It is further complicated by the current trend of ongoing mergers and acquisitions, entrenching existing market structures and the power of the conglomerates above. The Attico needs to create a unique value proposition to carve out a niche in the luxury market. Furthermore, the brand must position itself strategically to gain visibility and acceptance in the luxury fashion industry. This involves a unique and appealing product design and effective marketing and brand storytelling to attract the interest of potential customers and reach a wider audience. The challenge of market establishment in the highly competitive luxury segment is to master the balance between achieving luxury status, traditionally characterized by rarity and exclusivity, while leveraging marketing efforts that ensure growth beyond the luxury industry experts. As the brand is still in the process of establishing itself, The Attico also has the opportunity to experiment more with new technologies despite this challenge. With leaner and shorter processes, decision-making paths, and flatter hierarchies, it may be easier to react agilely to changing customer expectations and test new strategies and technologies.

Comparison at Company Level

Diesel, Louis Vuitton, and Attico, while operating in different segments of the luxury and premium fashion market, have certain challenges and opportunities to navigate the modern fashion landscape, yet they differ in their approach and brand positioning.

All three brands display **similarities.** On the one hand, similarities can be identified regarding the need to adapt to demographic change. All brands recognize the need to appeal to Generation Z, which is crucial to their future growth. To accomplish this, they need to understand and adapt to the preferences and values of this younger generation. On the other hand, each brand is facing the challenge of digital transformation, which involves integrating new technologies into their marketing, design and sales strategies. Finally, the brand identity is a crucial component of a new strategy for all three brands. Diesel wants to revitalize its brand identity, Louis Vuitton wants to reinvent it and The Attico wants to build and spread it, all three with the aim of remaining relevant and attractive in a highly competitive market. In addition to the similarities, significant **differences** can be identified. Firstly, in terms of brand positioning and heritage. Louis Vuitton, with its traditional brand image, differs from Diesel's industrial and somewhat controversial positioning. As an emerging brand, the company is still in the process of finding its identity in a market dominated by giants such as LVMH. Secondly, significant differences exist in terms of market challenges. Diesel continues to bridge a generational gap and revitalize its brand, while Louis Vuitton faces the challenge of reconciling its prestigious heritage with modern appeal. In contrast, The Attico is focused on establishing a unique market presence amidst industry giants and ongoing market consolidation. Ultimately, the brands also differ in terms of innovation approach and risk. Diesel's positioning means it can afford to take more risks in experimenting with fashion technologies and marketing approaches than Louis Vuitton, which must strike a careful balance between innovation and maintaining its luxury status. The Attico is a newer and smaller company that is more flexible and can experiment with new technologies and strategies. In conclusion, while Diesel, Louis Vuitton, and The Attico share challenges such as adapting to demographic changes and digital transformation, they differ significantly in brand positioning, market challenges, and approaches to innovation.

Comparison regarding Applicability of Technologies

The implementation of AR/VR, Generative AI and 3D Printing in the luxury fashion industry reveals clear differences in their applicability and effectiveness for the brands Diesel, Louis Vuitton, and The Attico, particularly in addressing their unique challenges and market positions. *Table 3* provides a comprehensive overview of how the emerging technologies were evaluated by industry experts and consumers at the use case level.

Technology	Use Case	Diesel		Louis Vuitton		The Attico	
		Experts	Consumer	Experts	Consumer	Experts	Consumer
1. AR and VR	1.1 Personalized Customer Experiences	X		X	X	X	X
	1.2 Creation of Customized Luxury Items	X		X		X	
	1.3 Immersive Marketing Campaigns	O		X		X	X
2. Generative AI	2.1 Creating Content & Marketing Imagery	X		O		O	X
	2.2 Tailored Product Recommendations, Support	X	X	O			
	2.3 Trendspotting & Marketing Precision	X		O		O	
3. 3D Printing	3.1 Personalization & Collaboration	X	X	X	X		
	3.2 Promoting Sustainability	X	X	O			

Table 3: Comparative Overview ("X" indicating that Use Case was either recommended by all Experts or approved by all Consumers, "O" indicating that Use Case was recommended by one Expert)

The effectiveness of **AR/VR** in the luxury fashion sector varies notably among brands like Louis Vuitton, Diesel, and The Attico, influenced significantly by their market status. Louis Vuitton, as a successful and established brand, effectively utilizes AR/VR technologies like smart mirrors to enhance customer experience and align with modern consumer expectations, particularly from Gen Z. The Attico, an emerging brand, can find value in AR/VR through virtual try-ons and immersive marketing campaigns, helping to build brand recognition and customer connection in the absence of physical stores. However, Diesel, currently a struggling brand, does not see similar benefits from AR/VR, indicating a mismatch between the technology and the brand's current market position and customer engagement needs. This suggests that the suitability and impact of AR/VR is contingent not just on the technology itself, but on the brand's status and its specific market positioning.

Generative AI's impact varies across Diesel, The Attico, and Louis Vuitton, reflecting their unique market positions. For Diesel, struggling to reconnect with consumers, AI-driven personalization addresses key challenges, enhancing relevance and sustainability, especially with Gen Z. The Attico, as an emerging brand, could benefit from AI in marketing for broader reach and personalized content, balancing the need to maintain a luxury appeal. However, for Louis Vuitton, an established brand, AI's role in customer experience enhancement has not markedly increased relevance or loyalty among Gen Z, indicating that its success depends on aligning with the brand's existing strengths and heritage. This indicates that the effectiveness of Generative AI is closely tied to each brand's specific stage of development and market presence.

The adoption of **3D Printing** can enhance customer engagement and addresses sustainability, proving beneficial in its turnaround efforts. Louis Vuitton, as a successful and established brand, can effectively use 3D printing to attract Gen Z consumers, offering personalized experiences that underscore its innovative edge. However, for The Attico, an emerging brand focused on building its identity, this technology seems less relevant at its current stage. This disparity highlights that the effectiveness of 3D Printing is closely tied to a brand's market status and strategic needs. While it can serve as a rejuvenation tool for Diesel and a means of enhancing luxury experience for Louis Vuitton, its suitability for The Attico could be limited due to different level of brand awareness. This suggests that the impact of 3D Printing in the luxury market varies significantly based on whether a brand is struggling, thriving, or emerging.

To summarize, it can be assumed that the effectiveness of emerging technologies such as AR/VR, generative AI and 3D printing in the luxury fashion industry varies greatly among brands such as Louis Vuitton, Diesel and The Attico and depends largely on the market status and strategic goals of the individual brands. While established brands like Louis Vuitton could leverage these technologies to enhance luxury experiences and appeal to Gen Z, emerging brands like The Attico could use them for brand building and market entry. Conversely, for struggling brands like Diesel, the impact of these technologies is primarily focused on re-engagement and sustainability. This shows that the introduction and impact of these technologies are not one size fits all, but need to be tailored to each brand's unique position and objectives in the fashion market.

6. Conclusion

6.1. Summary of Findings

This research focused on how premium and luxury fashion labels can leverage emerging technologies to tackle their distinctive challenges, particularly how Gen Z perceives these brands. The study involved an analysis of three different brands each at a unique point in their market development to understand the impact of cutting-edge technologies like AR and VR, Generative AI, and 3D Printing within the luxury fashion sector.

As a struggling premium brand, Diesel is grappling with a lack of appeal amongst Generation Z consumers. This research found that Diesel could boost its appeal with Gen Z by adopting emerging technologies, primarily through groundbreaking marketing strategies and implementing Generative AI and 3D Printing (*RQ1*). Conversely, despite being a successful brand, Louis Vuitton encounters challenges in attracting Gen Z consumers. According to the research results, utilizing AR and VR and offering personalized experiences through 3D Printing enhances the brand's relevance for this demographic (*RQ2*). For The Attico, an ascending luxury brand, establishing a foothold in a market ruled by large conglomerates is crucial. The research findings suggest that using AR and VR to build a personal bond and familiarize the brand with the intended target group and using Generative AI to reach this target group authentically can increase the brand's visibility among Gen Z (*RQ3*).

The findings indicate that premium and luxury fashion brands can significantly refine their positioning and perception of Gen Z by strategically deploying emerging technologies, and thus, these findings demonstrate critical managerial implications for brands in the fashion industry. However, it is also evident from the study that the application of these new technologies needs to be customized to address each brand's specific challenges. The effectiveness of these technologies varies depending on the brand's market position, brand identity and strategic objectives. Established brands like Louis Vuitton should intertwine their storied heritage with modern technologies to maintain and bolster their standing. For brands like Diesel, aiming to rejuvenate their brand image, these technologies offer opportunities for repositioning and increasing relevance among Generation Z. Emerging brands such as The Attico can harness these technologies to establish their brand identity and penetrate a competitive market rapidly. This research underscores the importance of differentiated application of technologies in the dynamic realm of the fashion industry, particularly for engaging and attracting Gen Z.

6.2. Limitations and Recommendations for Future Research

It should be noted that certain limitations have emerged in the context of this Work Project, which inform recommendations for future research directions. Acknowledging these limitations is central to contextualizing the research findings.

Sample Profile Limitations

The study's approach to defining Gen Z, focusing on individuals born between 1997 and 2012, represents a fundamental limitation due to varying definitions in the literature. This lack of consensus in defining Gen Z may impact the results, since if a different resource had been selected and thus a different age range considered, the results of our survey and our research might have been different. Therefore, future research should aim to establish a more universally accepted definition of Generation Z. Additionally, the survey, focusing only on age and gender, limits a diversity of perspectives. Important variables such as nationality, place of residence, education and income level were neglected. Including these additional demographic characteristics in future studies could provide deeper insights. Furthermore, the inherent subjectivity of survey responses, in terms of personal style and personal preferences or biases regarding the brands, is a limitation despite efforts to design a biased survey. Future studies could benefit from the use of mixed methods to compensate for the subjective nature of survey responses.

Time Constraints Limitations

The constrained timeframe of this research project limited its depth and comprehensiveness. Selecting only three emerging technologies - AR/VR, Generative AI, and 3D Printing - restricted the study's scope. Future research should include further emerging technologies that offer relevant use cases to the fashion industry. The limited time also meant that only some of the use cases for these technologies were investigated. In addition, use cases that are particularly difficult to test with consumers, such as trend prediction with generative AI, could not be evaluated due to limited time and resources. The timeframe also constrained the study's sample size, the number of industry experts, and consumer interviews. Extending the time for future studies could provide more substantial data and varied expert and consumer insights. In conclusion, although Louis Vuitton and Diesel are financially better placed than The Attico, no financial plan has been implemented to realize these strategies. Future research should consider this in light of the resources available to each brand.

General Limitations

Resource constraints significantly impacted the depth of this work. This included limited access to company sources and industry experts, which may have led to a narrower exploration than initially planned. Future studies should endeavor to develop more exclusive insights and a broader range of resources, for instance through collaboration with the investigated brands. Furthermore, language barriers could present a challenge as most survey and interview participants were non-native English speakers. This might have led to misunderstandings or misinterpretations, impacting data accuracy. Employing multilingual surveys and translators in future research could mitigate this issue. As there is little academic literature on the intersection of technology, the fashion industry and Gen Z, frequent reference was made throughout the Work Project to articles and reports from respected and leading fashion industry magazines such as Vogue Business or The Business of Fashion. This indicates a clear need for academia to shed more light on this industry sector and facilitate further academic publications.

In summary, while this study provides valuable insights, these limitations must be considered when interpreting and generalizing the research findings. Future research in this area should address these limitations to gain a more comprehensive understanding of Gen Z perceptions and usability of emerging technologies in the fashion industry.

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8. Appendix

Appendix A – "Most" Relevant Emerging Technologies

Technology	Use Cases	Description	Benefits
1. Virtual and Augmented Reality	**1.1 Design Process Enhancement***	Create virtual replicas of luxury clothing and accessories, enabling designers to experiment with styles, materials, and colors in a digital environment (Shivangi 2022).	Reduces the need for physical prototypes, accelerates the design process, and significantly cuts sampling costs, allowing for more experimentation and creativity (Empevia 2021).
	1.2 Personalized Customer Experiences	Facilitating personalized shopping experiences and virtual try-ons to enhance customer engagement and accuracy in product recommendations (Toppan n.d.).	Optimizes the production process, ensures smoother operations, and enables proactive decision-making to address potential bottlenecks in the luxury fashion supply chain. Improves customer satisfaction, fosters brand loyalty, reduces uncertainty about fit, and elevates the overall luxury shopping experience through tailored interactions (Empevia 2021).
	1.3 Creation of Customized Luxury Items	Working with customers to create unique, bespoke luxury items. For example, virtual design workshops where designers collaborate with customers, fostering a sense of inclusivity and community in the creation process (Mathur 2022).	Enhances customer engagement, fosters a sense of exclusivity and loyalty, and elevates the perceived value of personalized luxury products (Empevia 2021).
	1.4 Immersive Marketing Campaigns	Craft augmented reality and virtual reality experiences for virtual fashion shows and showrooms to deepen engagement, amplify visibility, and foster authenticity (Empevia 2021).	Enhances the brand's storytelling, provides a unique and immersive marketing experience, and connects with tech-savvy Gen Z consumers (Empevia 2021).
2. Generative AI	**2.1 Enhancing Design Concepts and Generation***	Utilize Generative AI to generate design ideas, convert sketches into 3D models, create limited-edition luxury items based on customer preferences, ensuring exclusivity and aligning with the desire for unique fashion pieces and enhance the overall creative output in luxury	Enriches ideation, broadens design possibilities, and improves overall design creativity, allowing for more innovative and unique collections, drives anticipation and excitement and encourages repeat purchases.

		fashion design (Harreis, et al. 2023) (Bain 2023).	
	2.2 Creating Visual Content and Marketing Imagery	Employ Generative AI to automatically generate high-quality visual content for marketing, social media, and e-commerce purposes, such as sales description (Harreis, et al. 2023).	Offers creative freedom, shortens content creation timelines, and reduces logistical challenges, ensuring a consistent and visually appealing brand image (Taylor 2023).
	2.3 Customizing Products for Consumers*	Leverage Generative AI to tailor products to the individual topography and preferences of consumers (Shoplazza Contributor 2023)	Personalizes the shopping experience, enhances product fit and satisfaction, and fosters a stronger connection between the brand and its customers (Ajao 2023).
	2.4 Tailored Product Recommendations, Support	Utilize Generative AI for conversational shopping and customer service, e.g. virtual stylists who provide personalized fashion recommendations based on individual style preferences and current trends (Harreis, et al. 2023).	Tailored product suggestions, enhances the overall customer support experience, improves customer engagement and establishes the brand as a trusted style advisor (Ajao 2023).
	2.5 Trendspotting and Marketing Precision	Employ Generative AI to analyze unstructured data for trendspotting, enabling targeted and flexible marketing strategies in the luxury fashion industry (Shoplazza Contributor 2023)	Expedites content creation, personalizes marketing efforts, enhances digital shopping experiences, and improves overall customer service (Shoplazza Contributor 2023).
	2.6 Store Operations Optimization*	Optimize store layouts using generative AI-driven data analysis, incorporating real-time video monitoring for operational efficiency and personalized customer service (Shoplazza Contributor 2023).	Improves the in-store shopping experience, equips sales associates with consumer insights, and enhances overall operational efficiency (Shoplazza Contributor 2023).
3. 3D Printing	**3.1 Creative Design Exploration***	Utilize 3D Printing for the creation of intricate shapes and textures not possible with traditional methods, expanding creative boundaries in luxury fashion design (Vanderploeg, Lee und Mamp 2017).	Expands creative possibilities, enhances collection uniqueness, and fosters innovation in design and craftsmanship (Pasricha and Greeninger 2018).
	3.2 Personalization and Collaboration	Streamline the creation of unique fashion pieces using 3D Printing, encouraging collaboration with customers. Consider implementing in-store 3D Printing studios for	Boosts brand loyalty, drives exclusive revenue, and enhances consumer engagement by providing unique, personalized products. Adds transparency to production processes, reinforcing

		personalized elements, allowing customers to witness the production of customized luxury items. (Chakraborty and Biswas 2020)	the brand's commitment to craftsmanship. (Sun und Zhao 2017)
	3.3 Prototyping and Refining Designs*	Employ 3D Printing for rapid prototyping and refining of designs, reducing the risk associated with traditional prototyping methods and speeding up the overall creative process (Morand 2016).	Speeds up the design process, reduces waste, and improves design accuracy, ensuring a more efficient and sustainable luxury fashion production (Sun und Zhao 2017).
	3.4 Promoting Sustainability	Utilize 3D Printing for on-demand production and efficient material usage, contributing to sustainable practices in luxury fashion. Showcasing the brand's commitment to innovation and eco-friendly practices. (Morand 2016)	Enables efficient use of materials, minimizes waste, enhances the overall sustainability positioning of the luxury fashion brand and attracts environmentally conscious consumers (Pasricha and Greeninger 2018).

Table 4: Identified Technologies and Their Use Cases

**Note: As these use cases are not directly related to the overall research question and do not have a direct impact on the Gen Z customer segment or contribute to addressing the identified challenges, they will not be further considered in this paper.*

Appendix B – Expert Interviews

Appendix B.1 – Expert Interview Guide

Formalities: *"Thank you for agreeing to participate in this interview. Before we begin, may I ask if it's okay to record this conversation for analysis and reference purposes? Do we have your permission to record this interview? During our discussion, we may discuss details such as your name, job description, the company or university you're affiliated with, and other professional information. Are you comfortable with us using this information for this project, while ensuring confidentiality and compliance with data protection laws?"*

I. Introduction and Background Information:

1. Please introduce yourself briefly, highlighting your professional background in luxury and technological industries.

II. Research Introduction

- Introduce Research Objective
- Introduce three Technologies: AR and VR, Generative AI, 3D Printing
- Briefly introduce the three brands, focusing on their history, current market position, and unique selling points.
- Discuss the key challenges identified through secondary and primary research

III. Detailed Evaluation of Technology:

"In the next step, we would like to fill out the following decision matrix with the help of your expertise. The aim is to decide which technology and which of its use cases could be interesting and feasible for which brand"

- Ask those questions for each <u>Use Case</u> and <u>each Brand</u>

2. How, if at all, do you see the application of this Use Case enhancing any of the challenges of Brand X?

- Ask those questions for each Technology:

3. Are there any concerns or drawbacks you can identify in implementing Technology X? *(legal, ethical, financial, or technological issues)*
4. How can a smooth integration of this technology be ensured without disrupting the customer experience?
5. In your view, are there any other luxury fashion brands successfully implementing this technology? If so, what can we learn from their experiences?

IV. Thank You and Next Steps

„*Thank you for your valuable insights and feedback. Your expertise is greatly appreciated. If you are willing, we may reach out for further discussions or guidance as we proceed with our strategy. Would that be acceptable to you?*

Appendix B.2 – Expert Interview Transcript - Inês Risques, Adjunct Professor at NOVA, Coordinator of the Luxury Stream

Interviewer

Could you please introduce yourself briefly, highlighting your professional background in luxury and also in the technological industries?

Interviewee

Sure. So, my name is Ines Risques. I am an invited professor at NOVA School of Business and Economics. I am also in charge together with another professor of the Luxury Stream Management, which is a specialization in luxury within the Master's in Management program. And I also teach or I'm in charge of a luxury seminar where I teach a class on fashion entrepreneurship. In that class, I focus a lot on new business models and a part of it is also the technologies that enable. I'm also doing a PhD on the topic of artificial intelligence applied to business and strategy. And I also have kind of a niche fashion brand that I manage as well. So that's kind of my link to luxury, to fashion and technology. Thank you very much.

Interviewer

OK, perfect. So, I will talk you through the first technology, which is AR and VR. And the way I'm going to do it is just I'm going to quickly highlight the use case again. And then we can discuss each of the brands and if it's helpful for each of the challenges in any way. The first one is the personalized customer experiences, which means using AR and VR for customers facilitating personalized shopping experiences and virtual clients to enhance customer engagement and accuracy in product recommendations. If you see the three challenges that Diesel is facing, do you think any of those three are being addressed with this technology?

Interviewee

OK. Well, Diesel's problem is much bigger than that. It's not easy to just answer your question. I think for a brand like Diesel, leveraging online and on improving the customer experience online, it's something that it's okay. It's possible. So yes, I think the digital twin and this personalization of the digital experience would solve some of the problems, yes.

Interviewer

Okay, and talking about the same technology, do you see any fit with the issues Louis Vuitton is facing?

Interviewee

For Louis Vuitton, I think the application should be much more, how can I say, segmented or catered? I think for Louis Vuitton, this type of technology of personalized experience or virtual try-ons should be done, but I don't know if that's something that you are considering in your approach to the technology. They should do it in-store, not online. I think for a brand like Louis Vuitton, this should be done, yes, a virtual trial on probably the smart mirrors and this personal experience can be improved at the store so that it becomes much more interesting for a young client to go to a store and experience technology. This is something that you can search for at Chanel. Farfetch was developing this type of technology for the stores in China. I think it can be something interesting that for Louis Vuitton to use at the store. It would be a little bit of a different approach as the one I think you're kind of taking originally. In terms of the immersive marketing campaigns with virtual fashion shows, I think this could be interesting for Louis Vuitton to engage the younger generations who are not high-potential clients but are clients interested to keep or to engage. They could do virtual fashion shows for these consumers who are not going personally to the fashion shows. I think this could be interesting. And because fashion shows in the context of Louis Vuitton are more important than any of the other brands that you're studying. I think this particular part of the digital twin could be interesting for Louis Vuitton in a virtual way. In terms of The Attico, I think it's the same as Diesel. I think they can be innovative online, so they can do experiments with their websites and give recommendations to their clients.

Interviewer

Okay. Thank you very much. What do you think about the second point, the creation of customized luxury items? Do you see fit with any of the three brands?

Interviewee

Possibly. Although, again, I think because the brands are different, it's very difficult to apply them in the same way. For a brand like Louis Vuitton, of course, personalization of products is something that they do. This co-creation could be done in Diesel the same thing, and I think at The Attico as well. So, yes, I think for all of them. Yes.

Interviewer

OK, and what about the immersive marketing campaigns? You've mentioned that it would be a nice way for Louis Vuitton to engage with the customers. Do you see it also fitting to Diesel and The Attico or should they maybe try something else?

Interviewee

Yeah, I don't see such a fit because well at least for virtual fashion shows or showrooms. Showrooms perhaps for The Attico. Showrooms may apply better to The Attico because it is a niche brand that is more unknown. They could do virtual showrooms. But for Diesel, I find it a little bit more difficult because there is no link to the activities, to the marketing activities that they actually do.

Interviewer

OK. Thank you. That's very interesting. And to sum up this part, we want to ask if you have any concerns or drawbacks you can identify with implementing AR and VR. For example, that could be legal, ethical, financial, also technological issues.

Interviewee

Well, I think there's always the issue of privacy. But I'm not an expert there. But of course, every time that you're dealing with gathering data, using that data from customers, from clients, from users, even if it is to personalize, you would need their consent and probably their proactive engagement in that activity. I think that is a big thing to explore.

Interviewer

Yeah. Okay and with your expertise how can the smooth integration of this technology be ensured without disrupting the customer experience? Without disrupting the customer experience?

Interviewee

Well, it needs to be integrated with whatever the brands are doing online. The problem is if the brands are not doing a good job online, it's not going to be this that will solve the problems that you have identified. You see? It's just not applying a new technology to kind of a broken online store or to a broken communication strategy that is going to fix the experience magically. I think there is something probably to be done before you implement this. You see what I mean? But I mean, if they have, probably Louis Vuitton, if they have a great online store or if they have great virtual images that they can use very high-quality content that they can share. I think it's very easy to implement that. Perhaps for Diesel, which is a little bit more mass or it's an industrial premium brand, not a luxury brand, of course, it's going to be much more difficult, but it can be more creative, perhaps. For The Attico, I think the brand probably has space to kind of still define that and implement things they haven't yet. But yes, I think it really depends on how the online experience is right now at each of these brands.

Interviewer

That makes a lot of sense. And when you think about this technology, in your view, are there any other luxury fashion brands that have successfully implemented this technology? If so, what can we learn from the experience? Is there any brand that comes to your mind when you think of these technologies?

Interviewee

You should look into Stitch Fix. Stitch Fix is not a brand, but it's a platform for personalized recommendations. It's exactly this. When you go, their goal is that way or DS. So Stitch Fix and DS, both are fashion platforms that try to completely personalize the online experience and the product recommendations. In terms of co-creation or customization, they do this differently, at least Stitch Fix, which is they find gaps in the market. Products that the customer needs, but there are no brands offering. They started producing those products, people with long arms or weird body shapes. So more than just personalizing or co-creating is really finding markets or product gaps that are not being addressed. You should look at the DS and Stitch Fix. And Chanel at the store, in-store technology.

Interviewer

OK, perfect. Thank you so much. We will now move on to the second technology we've identified. Moving on to the Generative AI and the first use case. It's about the creation of visual content and marketing imagery. Do you see the application of this use case enhancing any of the challenges of these brands?

Interviewee

For this one is tricky. I think that we have it all now because it's just not a fit for the type of personalization that a luxury brand needs to give. And probably for The Attico, the same, because it's a niche brand, but it is still, there is a personal connection that cannot be kind faked with automation of chats or visual content. There's a lot of creativity, original creativity that comes. If you create something, if you generate something with artificial intelligence, basically you are kind of giving away your differentiating points. Diesel, perhaps. I don't think Diesel would be penalized for being probably more efficient, and probably having better customer service. To improve services and to improve communication, chats, sales descriptions, and visual content. So probably Diesel would be in a part of the market where this is not hurtful. So only to Diesel, I would say it applies.

Interviewer

The next use case is streamlining and copywriting content. You already said that this does not fit the two brands Louis Vuitton and The Attico. Could you maybe for the use case before the marketing imagery, would you say that creating marketing content also does not fit Louis Vuitton and The Attico?

Interviewee

I don't think it fits their model. No. Of course, I'm sure in the future there will be ways that it will be done. But the big part of luxury brands is their originality. They're creating things that haven't been thought of. When you use everything that has been done before to create something that is not really done by you, you lose a lot of what makes you a luxury brand. So yeah, I don't think it would fit. There is a lot about human content in luxury brands. And that's why for Diesel, which is an industrial premium brand, most of these technologies can be applied and help them not to solve the underlying problem, but to make them more efficient, to make them more up to date. The Attico, which is an aspiring luxury brand, I think it would lose this human component of luxury.

Interviewer

Thank you. For the third use case, the tailored product recommendations and support, for which of the three brands would you say the application is useful

Interviewee

Yeah, okay, it's the same answer.

Interviewer

Okay. The last one for the Generative AI is the trendspotting and marketing precision. How would you analyze this use case for the three brands?

Interviewee

For trendspotting, again, I think it would be interesting for Diesel. For Louis Vuitton and The Attico, it's not about trendspotting, it's about creating trends. It should be completely the opposite. It should not be used. Of course, it can be used as information, but not strategically to address the problems that they have. It's again for the same reasons. I think Clara, if she did the course, knows that luxury brands follow a very different business model. And when you automate, when you imitate, you lose what makes you a luxury brand. I think, again, for Diesel, it would be appropriate. For Louis Vuitton and The Attico, no.

Interviewer

Okay, thank you very much. Are there any concerns you can identify when implementing generative AI?

Interviewee

Well, here the copyrights that I think you mentioned, of course, this will be an issue. Who owns this content? Who owns the even the creation of trends, the imitation of trends? Is it an imitation? Is it something new? This will be very tricky to give ownership to the original creators that are being used as a base for the generation of new information. This is the very, very tricky part, especially the creation of it, especially of the visual content, marketing, and trendspotting. Now, of course, in sales descriptions and chats, I think it's perfect. But when it's something creative that you're using in your own collections or in your campaigns, the brand, even if Diesel uses it, Diesel can be using something from Levi’s 10 years ago and not even being aware of it. It creates a problem.

Interviewer

And how can a smooth integration of this technology be assured without disrupting the customer experience?

Interviewee

I think in this case it's just who is creating the content, not exactly how it is being communicated or reached to the client. I don't think it has a lot of implications on that.

Interviewer

And lastly, in your view, are there any other luxury fashion brands successfully implementing this technology?

Interviewee

Who is a good case for chats? Because mostly it's not in fashion brands. No, I'm not aware.

Interviewer

Okay, thank you very much. All right, so then we will move on to the last technology, so 3D printing technologies. Do you see any application of this use case being useful and effective among those three brands?

Interviewee

I think it's not done with craftsmanship. It would almost be just an experience or a marketing campaign, something like that. But I think with Diesel, for sure, again, I think Diesel can use all of this to address sustainability, because they also produce in much bigger quantities, to do, but you're talking just on bespoke products, right, and personalization.

Interviewer

I would then move on to sustainability. Can this technology be used to promote sustainability?

Interviewee

Yes, so I think these addresses, and especially demand planning, I think it's very, very good. And I think it's something that fashion, in general, really suffers from. I think if 3D printing and more bespoke products are able to be produced at a low price or at a lower price than something very personal like luxury brands do, I think it addresses one of the biggest sustainability problems of fashion brands, especially for those who produce more. in the scale of sustainability and usage of resources, because they do mostly jeans as well. So, the same as Levi's who implemented a big sustainability practice. So, yes, I think this can be very, very good for Diesel. Again, I think The Attico can experiment because they're starting so they can innovate and understand new ways of producing bespoke products without still losing a luxury status that they still don't have. It's a matter of understanding how to use this to create a new luxury status a new craftsmanship So I think for The Attico especially because they're a smaller on-demand planning brand and pricing using this type of technology can be very interesting for them because they're a small brand and to make a better use of all their stock of the production and to do it as most bespoke at lower costs possibly is very good for them. But this is probably not in terms of solving the problem. So maybe it's not going to solve the awareness problem of the ethical, you see. But it might solve the sustainability concerns with Diesel, for instance.

Interviewer

Okay. And with implementing this 3D printing technology, do you see any concerns and drawbacks, be it legal, ethical, financial, technological?

Interviewee

No, here I don't see any problems, at least within my knowledge. Of course, operationally, I don't know.

Interviewer

And in your view, are there any other luxury brands or fashion brands that already implemented 3D printing successfully?

Interviewee

I know there are, but I cannot tell you examples. I don't know the names. But I'm sure it's being done.

Interviewer

Maybe one question, now moving beyond the use cases we presented to you, seeing those three brands, what would if you have to say one sentence, what would they need to implement to solve that challenge?

Interviewee

I think it's all about their own brand identity and seeing which technologies best fits what they are, bearing in mind that they're not all the same. I guess if there is one sentence that can put them all under the same umbrella, I think it's that. It's understanding the brand identity so that you can connect that brand identity to the problems you identified and see which technologies make sense in the context of the identity of each brand.

Interviewer

And is there any technology we didn't cover so far that comes into your mind that we maybe also need to look at?

Interviewee

No, I think you have a good start. I think you have a good start. I think in 3D printing, I think there's a lot of demand planning that can be looked at. And I know Levi’s was doing a lot with implementing artificial intelligence and being smarter in the way they produce. With pricing, it's not such, I don't know if it's such an applicable example, but with pricing, there is a platform called StockX that sells shoes and they define the price by demand and supply. It's not defined by the retailer, it's defined by the kind of who is looking for what, which makes much more sense than the current pricing being done in the market. I think you're looking at the technologies that are applicable to fashion. So yes, I think it's just the problems of the brands that are different.

Interviewer

All right. Thank you very much. We're really happy about your insights and the feedback you gave us. I think that's very valuable for us and for our further Work Project.

Interviewer

Thank you very much. If you're willing, maybe is it OK if we reach out for further discussion and maybe questions?

Interviewee

Sure, of course! I hope to talk to you soon. Bye!

Interviewer

It was really helpful. Thank you very much for taking the time.

Note: This interview was conducted in English and transcribed with Cockatoo. Despite some review, there may be logical or grammatical errors due to the transcription.

Appendix B.3 – Expert Interview Transcript – LVMH Employee in Marketing and Activations

Interviewer

Could you please introduce yourself briefly, highlighting your professional background in luxury and also in the technological industries?

Interviewee

I currently work in marketing at LVMH. I do event planning, marketing and activations specifically for Hennessy. I did my bachelor's degree in the creative industry back then and also worked with marketing and everything related to fashion brands and music labels.

Interviewer

We have identified three use cases for digital twin technology that might be interesting. The first one is the Personalized Customer Experience. And that is to Build Digital Twin Profiles for Customers, facilitating personalized shopping experience and virtual try-ons to enhance customer engagement and accuracy in product recommendations. Can we talk about Diesel first? Do you see any of the three challenges that could fit?

Interviewee

I would say that these twin technologies are definitely a sustainable way of consuming fashion. If you say I'm going to try on 10,000 products and take them home and maybe buy them in the end because I'm too lazy to take them home again, then that's unnecessary consumerism. With this training technology, if you were to try on a well-designed product on yourself, as far as that goes, I would say that it would definitely be a sustainable initiative in that case. And I think also simply for the value communication, what's behind it. I think that whenever there's a bit of excitement, something new, it touches the consumer a bit more. What is also very important for Gen Z consumers is that there is transparency and authenticity. If you say you can try it on in any way, you can say, for example, I've created an avatar here or created a copy of myself and try it on in a scenario where I'm out in the forest or in a scenario where I'm in Paris. You can also incorporate it more or less through the technology somewhere, which in my opinion would be very innovative and also tell a bit of a storyline around it and also somehow have an authenticity for the consumer and on top of that is of course also exciting and something new and definitely creates awareness and also communicates a certain value, I think. So you could say that the first use case addresses all three challenges. Exactly, so you have a lack of relevance, then you have a communication gap. I would definitely say relevance is important and sustainability. With the communication gap, I don't know exactly whether I would classify it there because I think it's more something that you apply. You can communicate it through marketing and say, here we've just built a new technology, but I think it would be more about relevance and sustainability practices.

Interviewer

Okay, perfect, great, thank you. Then we can also work with the same use case at Louis Vuitton.

Interviewee

Yes, we actually have exactly the same thing with sustainability. Once again, of course, the sustainable aspect. You have less consumerism. Although I would say that a brand like Louis Vuitton is inherently more sustainable anyway, because it's a luxury brand and because it's a product that has a kind of long-term value. So not now, for example, my Diesel may also be categorized in this way, but I think Diesel is consumed more in this way than Louis Vuitton, simply because of the price range. The question is, of course, whether it is sustainable in this way, because the step to buy it is already a totally bigger step due to the price range. That's why I would actually say that, among other things, it clearly falls into sustainability, but perhaps more into brand loyalty, that you just say or in Word of Mouth, that you say, look, Louis Vuitton has, I have Digital Twin Technology, can I now buy a product here in my, can you also use it in Metaverse? I don't even know.

Interviewer

Yes, you can use it in Metaverse,

Interviewee

Like Gucci has done, for example. They have, what's it called, in any case in a Web3 of all these worlds, they've set up the workers and you can try everything on there. And that went down really well in all the PR magazines. Like in the exhibition, people could try it on. Again in different scenarios. So with a big brand like Louis Vuitton, I think that's another factor that definitely has a word of mouth effect, but it also improves loyalty. Ultimately, if you want to get into the metaverse, you have to buy an NFT, for example, you have to buy some shares so that you can be part of this immersive world of Louis Vuitton or Gucci. That's why digital twinning is definitely a good way to build that up. And then yes, Limited Self-Expression Innovation, I think that's self-explanatory, but definitely innovative. Of course, the question is how you can build that up so that it doesn't differ from other big top-tier brands like Gucci. Because a lot has happened there. Gucci, for example, has also created a gallery. Can you also do a gallery now or do you want to build Metaverse? Would you like to say you have Candyland? Well, there are quite a few options for how you can do it. You can put yourself anywhere with the product you have through Digital Twin. It's definitely innovative too. You can also present yourself in a normal way that you can't in the real world. For many consumers, it's also a form of escapism; we're fleeing from the real world. This is definitely possible with a digital twin.

Interviewer

Thank you. And what about the last brand, The Attico?

Interviewee

I need to have another quick look. It's all a bit similar, so it's exactly the same again with Environmental Practices. But I think that with a new brand like this and the fact that it's probably priced higher, I don't know, what's the price category?

Interviewer

It's relatively high, something like a coat for 900 to 1500 euros. So already higher than Diesel, cheaper than Louis Vuitton.

Interviewee

Yes, then it's definitely important to justify it first of all. Why is it so high? Why is that? Maybe with the digital twin you can then say, hey, we can put ourselves back into a metaverse and say, we're now here in the production site of The Attico or whatever and here you can see how sustainable it is. So you've stacked one with the other and can then try on the products. That's all possible. I also simply believe that when you see me trying on the product on my avatar or trying on this new blouse, I realize that it fits me well and is also of high quality. For example, you can write down which boxes are made of which material. You can really open up all worlds and that definitely gives you a bit of a justification as to why this product is more expensive than if you were to simply pick it up in a store without any kind of description, without any kind of self-presentation, perhaps even how it would look on you. I definitely believe that the price is also important, of course the environment, which is what we've just said, and brand awareness is of course, I think it all goes hand in hand, because it's also a trend at the moment. In other words, if you sell well, market well, do PR, write to good magazines, then it's definitely at the top of the agenda.

Interviewer

Yes, great. Perfect. Very good. Thank you very much. Then we've ticked off the first point. Now the second is a bit of co-creation with the customer in the form of Digital Twin, that you create unique customized luxury items with this technology together with the customers. Back to Diesel, do you see any fit with the challenges?

Interviewee

So I would say definitely for sustainability for all three, because then you don't have unnecessary production of products that might not even be relevant for the specific target audience. For example, with Gen Z. Of course, the old money aesthetic is back in at the moment, but you can't put any old products out there without a new twist. You save yourself money by saying that we don't have to do trend research, we have the consumer in front of us. Together with us, they create a luxury product or a customized luxury product. So it's definitely sustainable. I think it would be very, very high brand loyalty for Louis Vuitton. Firstly because Gen Z loves to be part of an exclusive community. And it's all about being a hypebeast, for example. Gen Z is a typical hypebeast consumer. In other words, they want to be in a community where they have products that not everyone necessarily has and that are perhaps of higher quality and cheaper. And if you create a product with a brand like Louis Vuitton that only you have and that no one else has, then you have definitely gained a high level of loyalty from the consumer. And also this artificial scarcity model, where you say that you somehow create a product that is so rare that no one else has it, which in my opinion would definitely resonate 100% with Gen Z. Then with The Attico, definitely brand awareness. I know very few brands that do that. And I think I would also give a newcomer brand that would create this more freedom, because there are probably fewer, what do you call it, hardened structures in such a brand, as there are now at Louis Vuitton. So I think there is more freedom there. You can also work with younger designers, for example. Not everything comes from one head. With us, for example, everything comes from Louis Vuitton, from the bigwig. Everything has to be coordinated until it reaches the bottom at some point. And with such a small brand, I think it could definitely be cool. And then also through cool campaigns where people say, here, you can create an avatar. You can create your own product with the avatar in the metaverse together with us. And with the materials, which are high quality and sustainable. So I think that would definitely be cool with The Attico. And I think this relevance is definitely also, as I said, relevant for Gen Z if it's authentic and if it's something new and exclusive. And I think this exclusivity factor is definitely very important for everyone here.

Interviewer

Perfect, very good. And thank you. And the last one would be immersive marketing campaigns, using augmented reality to create a virtual reality experience, for example virtual fashion shows or showrooms, to increase custom engagement, so to speak.

Interviewee

Exactly, I think we've already discussed that a bit before. I think for me, not necessarily for all brands, I wouldn't necessarily say that it helps with sustainability. I don't think that's perhaps the main point of this activation, I would say, of this kind of innovation. I think it might even be more of a consumerism thing in a way when you see something like that online, when you see a bunch of new products online. I believe that it definitely creates relevance and awareness for Diesel or for everyone. And definitely loyalty again. So I think that's very important for Louis Vuitton. And again with Gen Z, what you're saying, with twinning, that you can perhaps copy the products, for example, from these fashion shows that you've seen online. And then you might be invited exclusively to these fashion shows and can then copy these products exclusively into the digital world. So I could imagine that this could definitely open up loyalty and then relevance and awareness for Diesel and The Attico.

Interviewer

Okay, perfect, thank you. Then we're done with that. In general, do you still have any concerns or risks that you see with the implementation of these technologies, it could somehow be legal, ethical, financial or problems like that?

Interviewee

Unfortunately, I don't know enough about legal issues, but I imagined that if at some point you can duplicate every product that exists online in a way that it might somehow lose its exclusivity and patents or rights, if at some point it becomes a mainstream technology, I could perhaps imagine that. Or that it could just aspire to hyper-consumerism, because at some point you might be addicted to trying everything online again somehow - we are also a very consumer-friendly generation.

Interviewer

Very good. And if you have the whole study, can you think of a brand that you know is already using this technology? You already mentioned Gucci.

Interviewee

Yes, but I'm not sure if they used digital twins exactly. Maybe I don't know enough about it, but I think that maybe it just goes hand in hand with a lot of metaverse methods that are taking place here, which many brands are currently doing or many artists are doing. But exactly, I don't know much about it per se, for example.

Interviewer

I have another question about collaborating with consumers or small designers, for example. You said that The Attico, for example, could actually create a bit more brand awareness. Do you perhaps also see a risk that, for example, a brand identity for a brand that is perhaps not yet so strongly established could quickly become blurred if you go straight into collaborations and give the consumer a bit of power? Because the idea is that luxury brands tend to set the trends and not follow them. Do you perhaps see a risk there?

Interviewee

I think so. So I think if you give too much freedom, then perhaps the identity of the brand will be lost. But perhaps there are also options, such as a brand having different designers. You can work with different designers who go in this and that direction and say that you have to be open about it, but there are already, let's say, frameworks set by the designer as to what is possible or perhaps some prototype products. So, I think you can't just give consumers freedom in the digital world, because at some point it expands to such an extent that you no longer have any control over it. I think there are no limits. Especially if you have a brand, you have a brand identity and a mission. You have to stay true to that. But I think there's definitely room for maneuver on how to implement that in a cool way.

Interviewer

Okay, thank you very much. The next technology would be generative AI and the first use case here would be Creating Visual Content in Marketing Imagery. So, it's simply about using generative AI to produce visual content for marketing, social media, etc. How do you see this working for these three brands? How can or can the challenges be rehearsed with it?

Interviewee

Okay, so I think in general, in my opinion, this generative AI is a bit scary and dangerous. For example, in my master's thesis I created a sneaker with Journey, just with a simple prompt and it looked like a Nike sneaker. That's easy copy and paste, I think you have to be very careful how you approach it and always make sure that you have a patent or something like that. I definitely think for Communication Gap and relevance at Diesel, you can create visual designs or create communication that is simply extraordinary. And I think that applies to all brands in this case, you save money because you don't need as many designers, of course. You also don't need as many copywriters, which of course isn't good for the brands either, but you can move forward quickly, you're faster behind the trends. I don't think I would relate this to sustainability in any way, shape or form, in terms of paper consumption, if you say that more people are switching to digital than to billboards or something like that. And I think what's really cool, I don't know if you're familiar with it, for example in Times Square, there are 3D billboards and they also work with AI and all kinds of things and can create immersive fashion shows, for example. And I believe that for all brands, including Louis Vuitton or The Attico, for example, when it comes to creating brand awareness, where a KPI is, the main thing is brand awareness and not conversion at the beginning. And then you say, okay, we just have to get the attention from somewhere. And then I think an AI campaign is cool if you somehow have an idea that no normal designer could implement quickly, for example, that is also a bit immersive.

Interviewer

Thank you very much. Now you've basically already covered use case 2, i.e. streamlining, copywriting and content production. Do you have any other tasks, especially streamlining?

Interviewee

I think at The Attico, if you have a young brand and you have AI, you automatically build a professional image for this quality perception in the part. You don't have a lot of budgets, you can work well with AI, you can create a good design, create a good visual board. For example, you can also use AI to animate your products as a pre-launch, streamline them, anything along those lines. And what perhaps also goes hand in hand with sustainability here is that when you create prototypes with AI, for example, which is perhaps easier, you can order more with small badges. So, you say, here's the prototype, how do you like it? Then you can go back to digital twinning and say, try it on here in the metaverse. And then you have so and so many orders and you can arrange that. I don't know if you know Sporty & Rich? They do, they don't have AI now, but they also do something quite sustainable, for example. They say, okay, they take up to 100 orders and then they say, then we order. So, then we make our big order of 100 shirts, for example, and then the consumers have to wait again until it's ordered again. So, it's not fast fashion, but I think it's actually quite cool for prototyping through AI, maybe for slow fashion and high quality.

Interviewer

The third use case revolves around tailored product recommendations and support. This is particularly about using Generative AI to improve general customer service, but also to give customers personalized recommendations based on trends or what the company can do in general. How would you rate that?

Interviewee

That could be really cool. I could well imagine that for Diesel. You all know Spotify and there are always these tailored playlists. We know that the problem with jeans is that once you've found the right pair, sometimes you can't find any more because the sizes don't fit. And that if, for example, you have a tailored jeans list or playlist with Diesel, with AI, where you know that this is my size, I have specified it once. These are the perfectly fitted jeans that would fit well. The latest ones then come in and they are also adjusted to your sizes. I could imagine that that would be cool for relevance, because it's simply a market gap for me too, a little bit with jeans, because it's just difficult. Definitely also environmental practices, so that you don't just have consumption and consumption, but you know what suits you. I would also count all brands. And especially with Louis Vuitton with brand loyalty, if you have tailored products, I can also imagine if you know, okay, look, I bought this product once, there are the recommendations. But it's often the case that you have similar products to your last purchase. But exactly, I think with Diesel, I would find it cool to have a tailored list of jeans based on your preferences and shopping behavior.

Interviewer

Okay, great. And the last use case would now be trend spotting.

Interviewee

I think technology is extremely important, but I also notice it in my work. It's actually more and more about discovering the latest trends and knowing what the consumer wants. Especially with such a dynamic consumer segment like Gen Z, you always need to know what colors are in, what styles are in. Six months ago, it was brown and pink, now all of a sudden, it's light blue and yellow. How does that come about and what is the next step? You can't just think, what's next month? You have to think about what trends are coming next year or in the next two years. AI is definitely a good help for all brands, for everyone here in this case. And especially for established brands like Louis Vuitton, I think, simply because they are still so outdated in many respects. And of course, new designers like Pharrell or Virgil Abloh have rejuvenated everything. But if you want to address this target audience, then you also have to use AI, I believe, to make it easier to understand and get to know this audience and understand market behavior and shopping behavior. That's why I definitely believe that all points can actually be ticked off here, because this trend spotting and trend research is also totally important in terms of sustainability. For example, women also really like leather products and if you want to be sustainable, then you need an alternative product. And then there's apple skin, for example, and which alternative products are actually respected, which are well received and authentic. I think that's the be-all and end-all, I would say, to appeal to Gen Z.

Interviewer

If you do now or can you think of any competitors if or when you think of implementing this technology for one of these companies?

Interviewee

I just think hire freeze and budget cut if you say we have to invest in AI now and we have less manpower for copywriting. Copywriting is almost eliminated with chat GPT. I think that's the risk and otherwise I just think that AI and maybe data protection, if you just say, okay, you go totally into the consumers and observe what they like. And I think otherwise, regardless of that, it's very beneficial and especially for this trend studying and trend research, because it's very complex. And I think if you have a machine learning or AI bot that can see through that, then I don't think that's a bad thing.

Interviewer

And finally, can you think of any luxury fashion brands that already use this in some way?

Interviewee

I think almost everyone is using it, slowly, I have a feeling. So, AI content, I know that with AI, for example, you can also get a lot of NFTs. They also sell these NFTs online for 200,000 euros or 300,000 euros for a sneaker. That's all generated with AI. So, I think it's also just cool to get into this metaverse world, which is also relevant in order to be innovative.

Interviewer

Great, thank you. I have another quick question. You said that generative AI for content production can actually be used very well by all brands to simply be a bit more creative, to somehow design campaigns that simply have a wow effect. This comes from the last Expert interview. She had focused a bit more on this more traditional definition of luxury, that human craftsmanship is super, super important. Maybe less so for a brand like Diesel, but for Louis Vuitton or The Attico, for example, which want to position themselves more in this luxury sector, do you see a danger that this human touch will become less important and that consumers might not find it so great, even though it is innovative in itself?

Interviewee

I would say no, because I think one is marketing and the other is production. And I believe that if you somehow retain production in marketing and say that you can also use AI or use generative AI to draw attention to production. You can also give consumers the opportunity to immerse themselves in the world of production without having to fly to Paris, or probably the production is not in Paris, but somewhere where production takes place, to see how it works.

For example, I don't know if you know the Shoe Surgeon, he's a designer who takes a lot of luxury products and studio products and puts them together and then there's a very limited selection of products because they're handcrafted. And he always mentions this in his marketing and shows the process. And I just think that if the luxury brands are afraid that something like this is no longer clear, then it has to be emphasized and it can be with marketing, because in my opinion AI then no longer plays a role, because I think that luxury brands lose a bit of their rarity. It's no longer like owning a diamond like it used to be. It's more like you just have a fast fashion product. So, I think that's more the essence of luxury brand communication and marketing in general, which I think is a bit lacking. And I believe that AI could perhaps also be a means of simply emphasizing how it really is.

Interviewer

Thank you very much. Then we would come to the last technology, 3D printing. The first use case, similar to the others, is personalization and collaboration with consumers, so that you can design one-of-a-kind fashion items, whether in-store or online. Do you see a good application for the three brands?

Interviewee

I would definitely say that it creates loyalty or awareness for everyone. Simply because, as I said, if you can build a personalized 3D product in a store where everyone maybe buys a Bottega bag and then you buy a Bottega bag that is personalized or somehow has a logo of yours on it and whatever. Then it's exclusive again in a way. There's also a reason why people, for example, like to have their things personalized, buy a badge to put it on somewhere, so that it's simply their own product. And I would also say that's definitely a big reason why this would definitely stimulate loyalty and awareness. In terms of quality perception, I don't know exactly whether that would help with The Attico, because I think it shows a bit that you have a design, and it can be produced here quickly in 15 minutes with a 3D printer. I think you'd have to think a bit more about why it's so expensive now, then maybe that aspect would be gone a bit. And I would also lose a bit of the sustainability aspect. I think 3D always comes across a bit like it's a plastic production. And I don't think that would necessarily be sustainable for me in a way, especially because you can produce and consume it so quickly. Sure, it's a cost, but I wouldn't say it's 100% sustainable for me at first glance. Sure, you can produce on the multi-handed approach, but I think 3D production is more likely to be a lot at once because it's so fast.

Interviewer

Then in the last use case of 3D printing that we have identified is, as you have just said, promoting sustainability. I think we're now moving a bit more in the direction of perhaps using this on-demand production or being able to incorporate more sustainable or recycled materials into this 3D printer. Yes, you probably see that in the third challenge for everyone, but how do you see it being used?

Interviewee

So I think if you produce it, the question is also whether you produce it on site on quick demand or whether you say you're generally switching to 3D printers in production, then, as I said, I think transparency is the be-all and end-all, because especially if you want to correspond to Gen Z, I think that's also extremely important for these consumers and also to know which products it's made from. So, if you say you're doing 3D printing, you still have to say what materials are used and whether it's even possible. And you also need to perhaps, which is also often seen, is simply a list of materials, is this 100% cashmere here, 100% in the wool here, for example, just to record that when something like this happens, because I think otherwise it very quickly falls back into the image of fast fashion and fast production. And it's not like you imagine someone, a designer, who then sits at a table and assembles a shoe for you, for example. You just imagine that you've typed it into your computer, there's not much heart and soul behind it and it's just printed out. That's why I believe that if it's to be sustainable and this authenticity and transparency is to be created, it definitely has to be listed or somehow a kind of Meterverse, where we have a shoe lock, where it says next to it which materials are included. I think there is a risk that this will be seen as such very quickly.

Interviewer

Do you know a luxury or fashion brand that has already implemented 3D printing?

Interviewee

Not luxury brands at all, maybe I just don't know. But I don't think I knew, maybe you know some, I didn't know whether it's recognized at all or whether it's seen as such high quality. No, I don't actually know them. I just know that it happens. But not in the luxury sector.

Interviewer

Okay, great. I think that really helped us a lot. Could ask if we could come back to you again?

Interviewee

Yes, with pleasure.

Note: This interview was conducted in German and transcribed and translated with Cockatoo. Despite some review, there may be logical or grammatical errors due to the transcription.

Appendix C – Louis Vuitton: Consumer Interviews

Appendix C.1 – Louis Vuitton: Consumer Interview Guide

Formalities: *"May we record this interview and use it for analysis and reference purposes? We may discuss your professional details, but it will be kept confidential and in compliance with data protection laws. Do you agree?*

I. Introduction and Background Information:

1. What is your name, and how old are you?
2. Please emphasize your background, interests, or experiences in the luxury fashion industry.

Brand Introduction – Louis Vuitton

3. Are you familiar with Louis Vuitton? Have you heard from the brand before? If yes, have you ever purchased any Louis Vuitton product?

II. Strategy Presentation

"We collaborated with industry experts to develop strategies to address certain challenges. Let me outline each challenge and strategy, and I'd appreciate your initial impressions and thoughts."

Strategy 1 – Interactive Smart Mirror Experience

Figure 2: Interactive Smart Mirror Experience at Louis Vuitton

4. What is your initial reaction to the implementation of smart mirrors for virtual fitting in stores?
5. Would you be interested in taking advantage of this?
6. What impact do you think this will have your consumer behavior?
7. Do you believe that the implementation will add value for the customer?
8. Do you think that by using this technology, Louis Vuitton will be perceived differently by Generation Z and therefore become more relevant to this demographic?
9. Do you believe that Louis Vuitton can address the presented challenges through this implementation?
10. Limitations: What risks or disadvantages do you see in the introduction of such technologies?

Strategy 2 – AI-Enhanced E-Commerce

11. What is your initial reaction to the use of generative AI in the Louis Vuitton online store?
12. Would you be interested in taking advantage of this as part of your online shopping?

13. Do you believe that the implementation will add value for the customer?
14. Do you think that by using this technology, Louis Vuitton will be perceived differently by Generation Z and therefore become more relevant to this demographic?
15. Do you believe that Louis Vuitton can address the presented challenges through this implementation?
16. Limitations: What risks or disadvantages do you see in the introduction of such technologies?

Strategy 3 – In-Store 3D Printing Experience

Figure 3: In-Store 3D Printing Experience at Louis Vuitton

17. What is your initial reaction to the implementation of temporary 3D printers for personalization in stores?
18. Would you be interested in creating or personalizing products yourself?
19. Do you believe that the temporary implementation will bring added value for the customer?
20. How important is sustainability in the implementation of this strategy?

21. What impact will this have on consumer behavior?
22. Do you think that by using this technology, Louis Vuitton will be perceived differently by Generation Z and therefore become more relevant to this demographic?
23. Do you believe that Louis Vuitton can address the presented challenges through this implementation?
24. Limitations: What risks or disadvantages do you see in the introduction of such technologies?

III. Conclusion, Thank You, and Next Steps:

"Thank you for your valuable insights and feedback. Your expertise is invaluable, and we deeply appreciate your time and thoughts. Would you be open to further discussions or guidance as we refine our strategies? Your continued involvement would be greatly beneficial."

Appendix C.2 – Louis Vuitton: Consumer Interview Transcript – Consumer 1 (Female, 24)

Interviewer

Could you please introduce yourself, age and your background or interest in the luxury fashion industry?

Interviewee

I am currently doing my master's degree at Nova, and I am in the Luxury Stream. I study management, but with a luxury focus, meaning I have taken many courses related to luxury, like branding and brand management, etc. And I chose this because I have a great interest in it and also find the future of luxury super interesting, especially in relation to new technologies and sustainability.

Interviewer

Thank you. Are you familiar with Louis Vuitton? Have you heard from the brand before? If yes, have you ever purchased any Louis Vuitton product?

Interviewee

Yes. But I never bought anything.

Interviewer

Perfect, that means I would leave the introduction relatively short [INTRO TO LOUIS VUITTON]. Now I would like to introduce you to my first strategy and ask you a few questions about it. [INTRO TO STRATEGY I]. My first question would be, what is your initial reaction to the implementation of smart mirrors?

Interviewee

As a consumer, I find it very interesting that something like this can be offered. I also believe that especially for young people, it's quite important that there are variations in store. So, something new and interesting comes along that then attracts me as a shopper or makes the brand more attractive to me. In principle, it's a good idea. But I also think that you have to make sure that it is really authentic and that it is in line with the brand's values. But in itself, I find it interesting when new technology is developed.

Interviewer

Would you be interested in taking advantage of this?

Interviewee

Sure, I would be interested.

Interviewer

What impact do you think this will have your consumer behavior?

Interviewee

I think it might vary a bit depending on the culture. I can't say exactly because I don't have the knowledge. But I believe it definitely can be more enticing and it would definitely pique the interest of Generation Z.

Interviewer

Do you believe that the implementation will add value for the customer?

Interviewee

Yes, I do. But it's also always important to have the option to go to the shop and look at and touch the items and have a certain relationship with the clothes. It's difficult to establish a relationship with products solely through digital means. But overall, I believe it could have positive effects.

Interviewer

Do you think that by using this technology, Louis Vuitton will be perceived differently by Generation Z and therefore become more relevant to this demographic?

Interviewee

Yes, certainly. I think that at the moment, Louis Vuitton is seen as quite outdated and not so cool and trendy by Generation Z. I believe that something like this can definitely reach a new level. But it has to fit the brand. And if the brand is completely restructured, I find that also difficult because then it no longer corresponds to the old traditions. But I believe it can definitely have positive effects.

Interviewer

You already mentioned some challenges. What further risks or disadvantages do you see in the introduction of such technologies?

Interviewee

Yes, definitely. As I said, it's also important for young people to be able to touch products and to have their own connection to the items. I believe that it is extremely difficult to experience that through technologies, and one must simply find the right way to communicate and make it authentic. Otherwise, I don't think it quite fits with a luxury brand.

Interviewer

Do you believe that Louis Vuitton can address the presented challenges through this implementation?

Interviewee

I believe it's not the only factor that's important for overcoming the challenges. I think there's a lot that plays into it. But I do believe that it can have a positive impact.

Interviewer

[INTRO TO STRATEGY II] What is your initial reaction to the use of generative AI in the Louis Vuitton online store?

Interviewee

On the one hand, it's good, because I think that we as young people don't want to be on this mass advertisement, where a lot is being offered, but that doesn't quite fit with us. That's why I think it's important to do it personalized and that only the products that you are interested in are recommended. I think about it now, it's also difficult for privacy reasons. I think a lot of young people really appreciate that. And it could get a little more complicated, I think. That could be a problem.

Interviewer

Would you be interested in taking advantage of this as part of your online shopping?

Interviewee

Yes, I think so.

Interviewer

Do you believe that the implementation will add value for the customer?

Interviewee

Yes, definitely. I think it's definitely more important to be personalized for simple people than to address the big picture.

Interviewer

Do you think that by using this technology, Louis Vuitton will be perceived differently by Generation Z and therefore become more relevant to this demographic?

Interviewee

Yes, definitely. I think it's just that it also gives the impression that the brand has more interest in you as a customer than in the general public and that you are also important for the company.

Interviewer

Do you believe that Louis Vuitton can address the presented challenges through this implementation?

Interviewee

Yes, I think so in terms of brand loyalty, because I think that personalization is also a reason why consumers become more loyal. I think that's a bit of a cycle. You are offered personalized products, then you buy and become more loyal. So yes, I think so.

Interviewer

What risks or disadvantages do you see in the introduction of such technologies?

Interviewee

Yes, exactly these security risks, which I think are also highlighted in Millennials, that too much is somehow attacked in your own privacy. On the other hand, you have to be careful to do it to a certain extent. I think it's difficult for people, especially for young people, when they are overwhelmed by marketing or advertising. So, you have to find a way to do it.

Interviewer

[INTRO TO STRATEGY III] What is your initial reaction to the implementation of temporary 3D printers for personalization in stores?

Interviewee

I think it's a very good idea. I think it's important nowadays that people can personalize their designer bags or clothes and make it their own. That's why if that's possible, it's of course a good idea. But especially for young people, the financial aspect is important. How much it costs and add-ons and so on.

Interviewer

Would you be interested in taking advantage of this?

Interviewee

Yes, definitely.

Interviewer

How important is sustainability in the implementation of this strategy?

Interviewee

I think that's very important. I would be very interested in it, and I think most young people are also. Simply because it is important nowadays that companies offer something like this and deal with it. And I also believe that as a brand you can appeal to a younger audience.

Interviewer

What impact will this have on consumer behavior?

Interviewee

I think so, yes. I think that if you offer personalization, that more customers come to the shop and are interested in your products. I can't say if more is being bought now, but I think that interest definitely exists and that you can create more awareness with it.

Interviewer

Do you believe that the temporary implementation will bring added value for the customer?

Interviewee

I think so, simply because people are looking for personalized things and that they are getting away from the mass. And that's why I think that, for me personally, yes.

Interviewer

Do you think that by using this technology, Louis Vuitton will be perceived differently by Generation Z and therefore become more relevant to this demographic?

Interviewee

Yes, I think that they are getting more attention and are acting in time-appropriate manner. And they are also just sticking out compared to their competitors.

Interviewer

Do you believe that Louis Vuitton can address the presented challenges through this implementation?

Interviewee

I think that to address the topic of sustainability, more needs to be done than just using sustainable materials for personalization. I think there needs to be a general strategy, not just specific to that. It's a good approach, but I think more has to be done than if the brand really wants to present itself like that. And in terms of brand loyalty, I think it can contribute to young people buying the brand more.

Interviewer

What risks or disadvantages do you see in the introduction of such technologies?

Interviewee

Yes, so that the sustainable products have to be sustainable. You have to be behind somehow. And as I said, it's expensive. You have to look at the implementation to develop a certain price point. But otherwise, it's a good strategy.

Note: This interview was conducted in German and transcribed and translated with Cockatoo. Despite some review, there may be logical or grammatical errors due to the transcription.

Appendix C.3 – Louis Vuitton: Consumer Interview Transcript – Consumer 2 (Male, 24)

Interviewer

Could you please introduce yourself, name, age and your background or interest in the luxury fashion industry?

Interviewee

I am 24 years old. I am currently in the final stages of my master's in management. After my studies I am aiming to have a career in consulting. My experience in the luxury segment relates mainly to my personal interest. I like to purchase from luxury fashion brands because I see a personal value in them that makes it worth spending money on luxury fashion.

Interviewer

Are you familiar with Louis Vuitton? Have you heard from the brand before? If yes, have you ever purchased any Louis Vuitton product?

Interviewee

Yes, I know Louis Vuitton, but I haven't bought anything from the brand yet.

Interviewer

Okay. That means I would leave the introduction relatively short [INTRO TO LOUIS VUITTON]. Now I would like to introduce you to my first strategy and ask you a few questions about it. [INTRO TO STRATEGY I]. My first question would be, what is your initial reaction to the implementation of smart mirrors?

Interviewee

I think it's a very innovative and new idea, which is not really used that much on the market. I think that a brand like Louis Vuitton, which is very focused on high quality, has to ensure that the implementation of such technologies is in line with the overall brand image. In other words, that the technology is sufficiently mature and ready for the market. But overall, I find it interesting.

Interviewer

Would you be interested in taking advantage of this?

Interviewee

Yes, I think I would give it a try. But I don't think it can completely replace trying on for me.

Interviewer

What impact do you think this will have your consumer behavior?

Interviewee

I could imagine that consumer behavior might increase, especially at the beginning. Because it's something new and lots of people want to try it, more people will come into the stores. I also think that the Smart Mirrors can help to ensure that more items of clothing can be tried on in less time. Accordingly, I could imagine that consumption will increase as a result. However, experiencing products in their physical state is important to me when making a purchase decision.

Interviewer

Do you believe that the implementation will add value for the customer?

Interviewee

If it is technologically mature, I think it will bring added value. I think it's a really cool gadget and nice shopping experience. The opportunity to try out several things in a short space of time is also an added value for the purchasing experience. But I don't think it has a big impact on the purchase decision, but rather that it's a cool add-on.

Interviewer

Do you think that by using this technology, Louis Vuitton will be perceived differently by Generation Z and therefore become more relevant to this demographic?

Interviewee

I could imagine that Louis Vuitton would be perceived as more innovative. Whether it has a major impact on the image and brand loyalty, I dare to doubt.

Interviewer

Do you believe that Louis Vuitton can address the presented challenges through this implementation?

Interviewee

As already mentioned, I think that the perception of innovation is improved because it is simply a new, innovative product. In terms of brand loyalty, I think this strategy has less of an impact. For me, brand loyalty comes from the relationship with the products and the experience with the products after I have bought them. Finally, the technology helps to see which design suits you best and influences whether customers can identify with the products. Smart mirrors only lead to a different shopping experience, but this does not change the designs and the perception of them.

Interviewer

What risks or disadvantages do you see in the introduction of such technologies?

Interviewee

I think that such an implementation could be associated with high costs. Furthermore, to create uniformity, it would make sense to me to implement the Smart Mirrors in all stores. It should also be ensured that the technology is 100% mature to ensure a quality level that matches the brand. A product that is not 100% mature could have a negative impact on the quality image. In my opinion, especially in the luxury and premium segment, it is important not to be the "first mover" to implement something new, but to let a technology mature first and then deliver a high-quality product. You can see this with Apple, for example. They prefer to wait before launching a new product with a new feature. But then it's perfect. That's why I think this quality aspect is very important.

Interviewer

[INTRO TO STRATEGY II] What is your initial reaction to the use of generative AI in the Louis Vuitton online store?

Interviewee

I think it's cool. I think it's a technology that's already well advanced, especially chatbots. Tailored marketing has also become much more relevant in recent years. Accordingly, I think it has a very high potential and I also see it becoming increasingly relevant. I believe that this could be very exciting for Louis Vuitton. But now, compared to the first strategy, it is less innovative and is already being used by more companies and is therefore nothing completely new for the customer.

Interviewer

Would you be interested in taking advantage of this as part of your online shopping?

Interviewee

Yes, I think so, just to see what's behind it.

Interviewer

Do you believe that the implementation will add value for the customer?

Interviewee

Yes, I think it has an added value, because in the end I might get products that I didn't I would have liked to see. But for me, it's a double-edged sword. A major criticism of these personalized suggestions is that they lose a bit of diversity. That is, if the AI suggests products that match my previous searches, I might miss out on other products. And it can also have the disadvantage that you get products displayed too much. Moreover, data protection and data usage are very important and crucial. I think many people are still relatively uninterested in what happens to the data, but still you have to be aware that there is a value that you personally often give out that is used for such marketing things and accordingly it can also have disadvantages for customers.

Interviewer

Do you think that by using this technology, Louis Vuitton will be perceived differently by Generation Z and therefore become more relevant to this demographic?

Interviewee

I think, in terms of the usage of chatbot my perception is not changing, to be honest. Because it's just something that is used by so many and not somethings that adds physical value to the customer. So, I don't think it changes much for me.

Interviewer

Do you believe that Louis Vuitton can address the presented challenges through this implementation?

Interviewee

In terms of a low brand loyalty it might be something interesting. Because as the AI notices what I bought in the past and it can then adapt to it. And that's why I think for brand loyalty it can be very interesting.

Interviewer

What risks or disadvantages do you see in the introduction of such technologies?

Interviewee

In general, as I already mentioned, the topic of personal data is a challenge. Moreover, I think that it could be challenging to align this technology with Louis Vuitton in general as the products are more special and outstanding.

Interviewer

[INTRO TO STRATEGY III] What is your initial reaction to the implementation of temporary 3D printers for personalization in stores?

Interviewee

I think it's cool. I think that would lure me into a store. I think that would attract a lot of customers, especially on Gen Z. I think that could create a relatively big hype on social media. But similar to the smart mirrors, I think, you have to make it high quality. I think it's a really cool idea to increase the traffic in the source.

Interviewer

Would you be interested in taking advantage of this and would you be interested in creating or personalizing products yourself?

Interviewee

I can imagine that if I bought a product, like a bag, I would print a personalized tag for it. But of course, it depends on the price. In principle, this interests me very much.

Interviewer

How important is sustainability in the implementation of this strategy?

Interviewee

I think realistically no one will be bothered. It sounds sad, but I believe that the customer group of Louis Vuitton engages less with sustainability. Therefore, I think that sustainability plays a subordinate role in 3D printing.

Interviewer

What impact will this have on consumer behavior?

Interviewee

I think it will probably increase customer traffic in the stores. This can also lead to an increase in sales.

Interviewer

Do you believe that the temporary implementation will bring added value for the customer?

Interviewee

Especially with all these online stores that exist, it's important to keep the physical retail attractive. I think it's a really cool thing to try out. As I said, I can imagine testing it myself. I definitely see an added value there you think that the use of 3D printers will improve the brand's perception of Gen Z?

Interviewer

Do you think that by using this technology, Louis Vuitton will be perceived differently by Generation Z and therefore become more relevant to this demographic?

Interviewee

I can imagine that this would particularly spark interest in Gen Z and could attract them to stores. It's a very innovative technology and I haven't heard anything like this from any other brand so far. 3D printing looks cool, of course, you can also present it in a robotic way. Accordingly, I think that the image would improve and also in the direction of innovation, whether this appeals to the older customer group, which probably belongs to the purchasing power brands. But especially looking at Gen Z, I think that this strategy could have a very big effect.

Interviewer

Do you believe that Louis Vuitton can address the presented challenges through this implementation?

Interviewee

In terms of sustainability, I think that people who are part of the Louis Vuitton customer group will not worry about this sustainability. Of course, Louis Vuitton also has to make sure that their products are more and more sustainable. But looking at the small 3D printing gimmicks, I think that plays a subordinate role. Regarding brand loyalty, I think I have the same opinion as with the smart mirrors. In the end, it depends on me, if I come back to the brand, if I have convinced the product. The product usually convinces me only after I have bought it and then after I need it in everyday life. And accordingly, the 3D printer makes no difference in terms of brand loyalty.

Interviewer

What risks or disadvantages do you see in the introduction of such technologies?

Interviewee

I see the same risks as with the smart mirror. New technology must be mature and costs a lot of money. In theory, when talking about this sustainability issue, you have to make sure that you present yourself positively publicity. It should be ensured that the 3D printers do not have a negative impact on the environment and at least always have a neutral impact. I think the product itself, should also have a certain quality. But overall, I primarily see positive aspects in this.

Note: This interview was conducted in German and transcribed and translated with Cockatoo. Despite some review, there may be logical or grammatical errors due to the transcription.

Appendix C.4 – Louis Vuitton: Consumer Interview Transcript – Consumer 3 (Male, 25)

Interviewer

Could you please introduce yourself, name, age and your background or interest in the luxury fashion industry?

Interviewee

I am 25 years old, and I am currently in my master studies. I am studying finance. My experience in the luxury segment and especially in luxury fashion relates mainly to my personal interest. As a person interested in fashion, I particularly appreciate the high quality of luxury products.

Interviewer

Are you familiar with Louis Vuitton? Have you heard from the brand before? If yes, have you ever purchased any Louis Vuitton product?

Interviewee

Heard yes, bought no.

Interviewer

Perfect. I would leave the introduction relatively short [INTRO TO LOUIS VUITTON]. Now I would like to introduce you to my first strategy and ask you a few questions about it. [INTRO TO STRATEGY I]. My first question would be, what is your initial reaction to the implementation of smart mirrors?

Interviewee

At first glance, I think it's an interesting idea. But I think that's an important point about clothes, that you can touch and feel them, which a smart mirror can't do. That's why I think that for me, interacting with clothes in physical form is more attractive and appealing. I also think that only a smaller amount of customer can use these smart mirrors at the same time, if there are only a few in stores.

Interviewer

Would you be interested in taking advantage of this?

Interviewee

Sure, I would like to give it a try. But more as a bonus to normal shopping and less as a substitute.

Interviewer

What impact do you think this will have your consumer behavior?

Interviewee

I think on the one hand, it can't replace trying products on in the store. Since it basically only directly influences the customer experience in the stores, I think it will have less influence on consumer behavior in my opinion. However, I could imagine that showing a broader product portfolio with the help of Smart Mirrors could have an effect. In other words, also showing products that are not currently available in stores. Especially with the aim of increasing sustainability, I think it would be something exciting. In this way, a broad product portfolio can be shown, and demand can be met. This could possibly avoid excessive stock levels. But I don't know to what extent this will ultimately influence the purchase decision. I do think that more customers will be attracted to the store by the technology and may then buy something they wouldn't otherwise have done.

Interviewer

Do you believe that the implementation will add value for the customer?

Interviewee

Also only on a specific basis.

Interviewer

Do you think that by using this technology, Louis Vuitton will be perceived differently by Generation Z and therefore become more relevant to this demographic?

Interviewee

I think Louis Vuitton will be perceive as more innovative as this is something new and interesting. But I think the brand need to take advantage of being a pioneer. Otherwise, the perception will not change that much. I think it has little effect on the overall brand image.

Interviewer

Do you believe that Louis Vuitton can address the presented challenges through this implementation?

Interviewee

As already mentioned, I believe that it can help to improve the perception of innovation. But only if Louis Vuitton acts as a first mover. I only see a limited improvement in the perception of sustainability. Brand loyalty is also unlikely to be increased for me. But I still think that the general interest in the brand will increase, which may lead to more new customers.

Interviewer

Okey. What risks or disadvantages do you see in the introduction of such technologies?

Interviewee

I think it's a pretty high investment as such things are already expensive. That means if you can't take the lead and are too late, then I think the return you get is rather low. I think this technology will only show itself effectively in this role of a forerunner.

Interviewer

[INTRO TO STRATEGY II] What is your initial reaction to the use of generative AI in the Louis Vuitton online store?

Interviewee

I think it is difficult to implement such a thing in the high-end luxury fashion segment. As the product range is way smaller than in the fast fashion segment like Zara and H&M, I think there the need for such a technology is quite low. In my opinion, luxury fashion items are way more special, and the product customer fit is something more unique as the products are often more statement items. If the collections themselves are not as huge as those of fast fashion brands, I see less of a point in suggesting products. In particular, I see the advantage of technology in being able to save time when shopping online. But I see less of a need for this with Louis Vuitton. I think luxury fashion brands are more about experiencing the full range of products. But of course, a product suggestion based on customer data could be interesting, but more as an optional concept and less as an integral part of the website.

Interviewer

Would you be interested in taking advantage of this as part of your online shopping?

Interviewee

In principle, yes. But I am much less curious compared to the previous strategy.

Interviewer

Do you believe that the implementation will add value for the customer?

Interviewee

Yes, I think it can bring added value. But it probably always depends on whether customers are looking for specific products or not. If customers don't have a specific idea of what exactly they want, I think it can add value. It also adds value if the product portfolio is very large, as customers can save time.

Interviewer

Do you think that by using this technology, Louis Vuitton will be perceived differently by Generation Z and therefore become more relevant to this demographic?

Interviewee

I actually think that it wouldn't be noticeable at all. If not actively put in the forefront, then I don't think the end customer will notice it at all. I therefore see less of a possibility that this technology will improve or change perception.

Interviewer

Do you believe that Louis Vuitton can address the presented challenges through this implementation?

Interviewee

Only a bit as I think it is not noticeable that much.

Interviewer

What risks or disadvantages do you see in the introduction of such technologies?

Interviewee

If it offers the customer little added value and is not noticeable at all, then the implementation is completely wasted money in my view. So, I'm sure you can implement it on other levels. I think it must be ensured that customers feel the added value and perhaps the use of Generative AI must be clearly communicated, and customers must be educated.

Interviewer

[INTRO TO STRATEGY III] What is your initial reaction to the implementation of temporary 3D printers for personalization in stores?

Interviewee

Mega cool. Definitely a cool idea. I find it fascinating on many levels.

Interviewer

Would you be interested in taking advantage of this and would you be interested in creating or personalizing products yourself?

Interviewee

Yes.

Interviewer

How important is sustainability in the implementation of this strategy?

Interviewee

For me personally, it plays more secondary role. But I think that it is a very important point for the general public. And therefore, I think when implementing such a technology, it should be sustainable to avoid any negative backlash.

Interviewer

What impact will this have on consumer behavior?

Interviewee

I think that such things, especially in a store, trigger more impulse purchases. Because such a technology represent one-time opportunities and I think there are many customers who would use the opportunity and print something that they wouldn't have bought otherwise. So, in sum, I think more people will visit Louis Vuitton stores and probably buy something.

Interviewer

Do you believe that the temporary implementation will bring added value for the customer?

Interviewee

Yes, definitely. Especially as it is a one-time opportunity, and it is something relatively new for the customers. I would definitely see myself as a customer described as just now. Just because I think it's cool to experience this.

Interviewer

Do you think that by using this technology, Louis Vuitton will be perceived differently by Generation Z and therefore become more relevant to this demographic?

Interviewee

It is a cool new production process for the end consumer. So definitely something that is not available in every store, in my opinion, also quite suitable for the high-end segment. And yes, Louis Vuitton will be perceived differently when implementing this. Especially if sustainability is taken into account. And I think the brand will be perceived as more innovative and probably as more interested in taking sustainability into account.

Interviewer

Do you believe that Louis Vuitton can address the presented challenges through this implementation?

Interviewee

Sure. I think the innovation perception can be improved and if sustainable materials are being used and is communicated the sustainability perception can also be improved. In terms of brand loyalty, I think it has only a little influence as it's more about convincing new customers.

Interviewer

What risks or disadvantages do you see in the introduction of such technologies?

Interviewee

I don't think of any. I think it's a cool action that can have its added value.

Note: This interview was conducted in German and transcribed and translated with Cockatoo. Despite some review, there may be logical or grammatical errors due to the transcription.

Appendix D – Louis Vuitton: Identified Key Challenges

Challenge Category	Challenge Description	Specific Issues
1. Sustainability Perception and Skepticism	Louis Vuitton faces the challenge of overcoming skepticism among Gen Z consumers regarding its sustainability efforts. The perception that the brand is not environmentally conscious can impact its appeal in a market where sustainability is increasingly crucial.	**1.1 Communication Gab:** Clarifying and effectively communicating Louis Vuitton's sustainability initiatives to bridge the gap between consumer perception and actual efforts. **1.2 Demonstrating Commitment:** Implementing visible and impactful sustainability measures to demonstrate a genuine commitment to environmental responsibility. **1.3 Educating Customers:** Educating Gen Z consumers about the brand's sustainability practices influencing perception positively.
2. Limited Self-Expression Opportunities and Innovation Perception	Louis Vuitton is confronted with the perception that it does not provide adequate opportunities for self-expression, coupled with a gap in the perception of innovation associated with the brand.	**2.1 Enhancing Customization:** Introducing or emphasizing customization options in product lines to allow consumers to express their individuality through Louis Vuitton products. **2.2 Innovative Designs:** Focusing on and promoting innovative designs to shift the perception and highlight the brand's ability to stay at the forefront of fashion trends. **2.3 Customer Engagement:** Creating interactive platforms or campaigns that engage consumers in the design process, fostering a sense of co-creation and innovation
3. Brand Loyalty and Negative Word-of-Mouth	Louis Vuitton encounters challenges in building positive brand loyalty and word-of-mouth recommendations among Gen Z consumers, as reflected in a negative Net Promoter Score.	**3.1 Improving Customer Experience:** Enhancing overall customer experience, from product quality to post-purchase support, to build positive sentiments and loyalty. **3.1 Targeted Marketing Strategies:** Developing targeted marketing strategies that resonate specifically with Gen Z values, ensuring the brand aligns with the preferences of this demographic. **3.3 Addressing Negative Sentiments**: Proactively addressing and rectifying negative sentiments expressed by consumers, whether related to product concerns or perceived brand values.

Table 5: Louis Vuitton: Identified Key Challenges

Appendix E – Louis Vuitton: Use Case Decision Matrix

Technology	Use Case	Targeted Challenge(s)	Expert Approved	Decision
1. AR and VR	1.1 Personalized Customer Experiences	2 + 3	Experts: 1. Yes 2. Yes	Test with Consumers
	1.2 Creation of Customized Luxury Items	2 + 3	Experts: 1. Yes 2. Yes	Don't test with Consumers
	1.3 Immersive Marketing Campaigns	3	Experts: 1. Yes 2. Yes	Don't test with Consumers
2. Generative AI	2.1 Creating Content and Marketing Imagery	2 + 3	Experts: 1. No 2. Yes	Don't test with Consumers
	2.2 Tailored Product Recommendations, Support	3	Experts: 1. No 2. Yes	Test with Consumers
	2.3 Trendspotting and Marketing Precision	1 + 3	Experts: 1. No 2. Yes	Don't test with Consumers
3. 3D Printing	3.1 Personalization and Collaboration	2 + 3	Experts: 1. Yes 2. Yes	Test with Consumers
	3.2 Promoting Sustainability	1	Experts: 1. Yes 2. Unsure	Don't test with Consumers

Table 6: Louis Vuitton: Use Case Decision Matrix

Appendix F – Louis Vuitton: Success Measurement Metrics

Strategy	Metrics	Description
1. Interactive Smart Mirror Experience	Traffic Analytics	Measures engagement levels with smart mirrors including time spent and frequency of use.
	Conversion Rate	Analyzes the impact of smart mirror interactions on actual product purchases.
	Customer Feedback and Satisfaction Surveys	Collect user experience and satisfaction data to identify areas of improvement.
	Social Media Mentions	Gauges store's impact on brand awareness and public engagement with the brand.
2. AI-Enhanced E-Commerce	User Interaction Data	Analyzes the impact of AI features on the website on actual product purchases.
	Conversion Rate	Measures the effectiveness of AI-driven product recommendations in influencing sales.
	Customer Feedback and Satisfaction Surveys	Collect user experience and satisfaction data to identify areas of improvement.
	A/B Testing	Compare impact of AI-driven product recommendations with traditional e-commerce.
3. In-Store 3D Printing Experience	Traffic Analytics	Measures engagement levels with 3D printing including frequency and time spent on designing and printing.
	Customer Feedback and Satisfaction Surveys	Collect user experience and satisfaction data to identify areas of improvement.
	Conversion Rate	Measures the effectiveness of 3D Printing on influencing sales.
	Social Media Mentions	Gauges store's impact on brand awareness and public engagement with the brand.

Table 7: Louis Vuitton Success Measurement Metrics

9. Glossary

Term	Definition
Artificial Intelligence (AI)	Artificial Intelligence (AI) refers to the capability of computers to perform tasks typically associated with human cognition, such as learning and problem-solving. It encompasses a range of technologies and methods, including machine learning, natural language processing, and neural networks (Zawacki-Richter, et al. 2019).
Collection	A fashion collection comprises various garments, often in multiple colors and fabrics, designed for mix-and-match. Brands typically release collections seasonally, traditionally spring/summer and fall/winter, with some creating up to four collections annually, including 'pre-spring', 'pre-fall', and or 'resort/cruise' seasons. The naming conventions for these collections vary widely (Blaazer 2022)
Haute Couture	Haute Couture, a term with strict criteria, refers to high-end, custom-made fashion. Originating from 19th-century dressmaker Charles Frederick Worth, it requires members to create bespoke garments with multiple fittings, employing significant atelier staff. Members must present a biannual collection of at least 50 unique day and evening designs (The Business of Fashion n.d.).
Kimono	Kimonos are traditional Japanese T-shaped robes with wide sleeves and full length, wrapping at the front, integral to Japan's national dress (The Business of Fashion n.d.).
Machine Learning	Machine Learning is defined as a subfield of artificial intelligence that enables computers to learn without being explicitly programmed. It is crucial in most AI advancements and involves using data to train computers to find patterns or make predictions, gradually improving through experience (Brown 2021)
Mass-Fashion	Mass Fashion involves producing ready-to-wear clothes in large quantities and standard sizes for a broad customer base, using inexpensive materials to create affordable fashion. Designers in this market often replicate trends established by high-end brands, using cost-effective materials and production methods for cheaper sales (Fashion Marketing Lesson 2011).
Peigner	A long, sheer garment often worn by women over a negligee in private settings. Its name derives from the French word

	'peigner', referring to women combing their hair while dressed in such delicate fabrics (The Business of Fashion n.d.).
Prêt-à-Porter / Ready-to-Wear	Prêt-à-porter, or "ready-to-wear," refers to clothing made in standard sizes rather than tailored to fit an individual (Cambridge Dictionary n.d.)
Sell-Through-Rate	The sell-through rate indicates the percentage of inventory sold in a month compared to the inventory shipped by the supplier (Klipfolio 2023).
Stockist	A stockist is a retailer that specializes in selling a specific type of goods (Cambridge Dictionary n.d.).