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TO WHAT EXTENT ARE VIRTUAL STORES A RELEVANT, ENGAGING EXPERIENCE
FOR BEAUTY CUSTOMERS?

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Abstract

The beauty industry has been making efforts to consecutively embrace emerging technologies, and as the new desire for premium experiences becomes clear, it has begun to explore the use of Virtual Reality in practice. In consequence, beauty brands started developing 360-degree 3D virtual storefronts. The following paper aims to investigate to what extent those virtual stores are a relevant and engaging experience for beauty customers. Furthermore, to assess which factors are relevant for the engagement. To do so, qualitative research in the form of semi-structured interviews is conducted, and thematic analysis is carried out to provide meaningful results.

Keywords: beauty industry, customer engagement, virtual reality, virtual stores, customer experience

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1. Introduction

J. Pine II (2020) states that the customers' demand for experiences is increasing as customers desire "memorable events that engage each individual in an inherently personal way". Ongoing technological changes and new technologies have been redefining marketing standards, enhancing experimental approaches, and creating new opportunities for immersive, personalized experiences. As industries began to implement emerging technologies, worth \$427 billion beauty industry did not fall behind (Business of Fashion and McKinsey & Company 2023). Witnessing the rise of the Metaverse, brands have commenced experimenting with new applications of existing technologies, tapping into the phygital landscape. While technology such as AR has proved successful in beauty, the industry began to explore using VR technology in practice as a step towards the Metaverse. One of the experiences that leverage VR and are becoming increasingly available to beauty customers is 3D virtual storefronts. While their use rises in popularity, little is disclosed about their role, customer perception, and effectiveness.

Existing research on consumers' interaction with 3D virtual stores in the form applied by the beauty industry is scarce. Sources vary in terms of the virtual store concept comprehension, investigating cases of diversified types of VR technology and concepts that, given the time perspective, might be seen as "outdated". While few studies have explored the impact of VR on the customer experience in various retail contexts, they do not include the beauty industry in their scope and focus primarily on purchase intent as an investigated factor. Thus, observing the rising interest of brands in this virtual experience, the author finds it necessary to explore the extent to which those constitute a relevant, engaging experience and to investigate which store's aspects affect customer engagement. The author believes the following research might deliver valuable insights for effective virtual experience creation within the beauty industry context.

2. Contextual Background

2.1. Literature Review

2.1.1. Beauty Industry & New Type of Experiences

The global beauty industry is often perceived as one of the most lucrative and dynamic business areas. The \$427 billion beauty industry, which in the past has proved its resiliency and ability to prosper and grow when confronted with economic volatility, attracts numbers of big and small new players every year (Business of Fashion and McKinsey & Company 2023). The beauty market is frequently discussed in the broad Beauty and Personal Care context. Main market activities of the BPC industry revolve around few big players: L'Oréal Group being the biggest one, holding 10.9% of market shares in 2022 with top brands such as Lancôme, L'Oréal Paris or Maybelline; Procter & Gamble owning 7.7% of shares focusing mainly on personal care segment, Unilever (7.3% of shares) focused on personal care, yet still present in skin care and hair care; and Estée Lauder (3.6%) focused solely on beauty segment with brands such as Clinique, Estée Lauder or Smashbox. Other companies disrupting the industry in mass, premium, or luxury segments, yet not leading in the general top 5 ranks, are Coty Inc (2.1%), LVMH Moët Hennessy (2,1%), Natura&Co (2.1%) and Sheishido (2.1%) (Euromonitor International 2023a). Given the diverse coverage of the BPC industry, McKinsey's experts simplify the division into five main segments: personal care, skin care, colour cosmetics, fragrances, and hair care (Marchessou and Spagnuolo 2021). While personal care is indeed crucial and an inseparable part of the market, the following paper focuses on its "beauty" part, hence the four remaining segments.

Like many other industries, the changing technological environment has affected the beauty industry. In the last decades, the customer shopping experience has visibly evolved due to the "digital revolution" (Hoyer et al. 2020) effectively influencing shopping environments as

customers have been embracing the online universe and adapting to e-commerce. Moreover, emerging cutting-edge technologies already have and are believed further to transform consumer behavior regarding all purchase stages. Most prominent players have been investing in nascent technologies embracing the approaching Web3 revolution. L'Oréal Group, with its “seize what’s starting” philosophy and bold “explore, test and learn” approach (Hieronimus 2023, XI) has become one of the first early adopters of the emerging Web3 ecosystem. It made significant long-term investments into tech startups (Katsikopoulou 2023), partnered with Meta, and experimented with initiatives such as virtual looks for avatars (L’Oréal Group 2022) or NFTs (YSL Beauty n.d.). Still developing, Metaverse carries a lucrative promise of unlimited possibilities and benefits for the beauty industry. It is predicted to become the next generation of social media and thus carry the ability to build virtual communities therefore drive engagement and loyalty; secondly – a virtual life is experienced through avatars for which beauty, with its power of self-expression, will become a tool for diversity and limitless creativity (Hieronimus 2023, XI). Yet, the new wave of revolution has a long-term horizon as it is still too early for the technology to be implemented at a scale, and the time scope for full development and adoption of Web3 remains unclear. From the business perspective – companies are facing financial and tech know-how bottlenecks; hence collaborations with gaming platforms are expected to play an important part in the near future (Cottrell 2022).

Looking at the recent and present time perspective, the role of digital in beauty has grown in significance. That is due to several factors, such as excessive use of social media, increased interest in gaming, and demand for interactive and immersive experiences (Hieronimus 2023, IX). Beauty industry professionals predict that digital engagement will be one of the few upcoming most impactful industry trends (Euromonitor International 2022). Digital, with its potential to deliver “dreamlike and spectacular” experiences, innovative products, and personalization (Hieronimus

2023, IX) is also said to positively impact premiumization – a predicted driver of beauty industry growth. The power of digital rises as e-commerce evolves from a transactional platform to an immersive and personalized experience, which occurs due to the ongoing strive to implement phygital strategies, develop seamless omnichannel experiences, and the development of new tools such as Virtual Reality (VR), Augmented Reality (AR), Artificial Intelligence (AI), and Metaverse reality which further elevate digital to virtual (Pantano and Vannucci 2019; Euromonitor International 2023b). While e-commerce has become one of the fastest-growing channels in the beauty sector, modern beauty customer navigates fluently between online and physical stores. Phygital strategy, being a part of the Metaverse adaptation journey, bridges the gap between physical stores and e-commerce, enhancing those seamless, immersive, and personalized experiences (“Phygital: The Digital-Physical Bridge To The Metaverse” n.d.; Drenik 2023). Its omnichannel approach and complementary nature prolong and expand the experience across the worlds, ensuring the brand’s presence across all the shopping stages (Hieronimus 2023, X). It aims to combine the best elements of both realities into one solution to deliver a unique interactive and elevated customer experience (Moore 2022; Drenik 2023). Moreover, it serves as a valuable source of data regarding customers' behavior across the purchasing journey. Truchi (2023) identifies seven conditions necessary for a successful digital experience – customer’s perceived time efficiency, creativity, ease of use and navigation, conveying brand DNA, immersive and sensory dimensions of an experience enabling personalization and stressing customer value, clear product information. While technology such as AR has proved its usefulness in the industry, brands have decided to take another step towards the Metaverse and further elevate the phygital experience by putting VR technology into practice. That resulted in numerous recent launches of 360-degree 3D virtual stores (VS). Those create new memorable digital experiences - they are meant to blend “the fun of in-

store shopping” into online shopping, as they combine the possibility of exploring as in physical stores with e-commerce convenience (Monteros 2023). Virtual environments are a step forward from conventional websites; brands can increase the entertainment rate for customers, enhance their in-store enjoyment, and ultimately lead to increased shopping satisfaction (Hassouneh and Brengman 2015). The industry must embrace the trend of digital engagement as it will only rise in importance due to the increase of spending power among Generation Z beauty customers, who are known to be the first “digital natives”. Fluent in the digital environment and highly influenced by social media, Gen-Z are expected to drive the demand for immersive experiences and tech-enabled solutions (Owen 2022). Therefore, given the rise of a new tech-savvy customer and the need for phygital landscape development on the way to the immersive web, beauty brands face increasing external and internal needs to deliver elevated experiences.

2.1.2. VR technology and Customer Engagement

Virtual Reality (VR), a tool at the center of a virtual store experience, is “a computer-generated 3D environment that users can navigate through and possibly interact with, resulting in real-time stimulation of one or more of the user’s five senses” (Burdea and Coiffet 2003 as cited in Pizzi et al. 2019). One of the most important aspects of the VR experience is *immersion*, which according to L. Hollebeek et al. (2020b) refers to “a user’s sense of actually being present in the mediated environment, or the mental process of perceiving a mediated world as non-mediated”. Physical immersion is a crucial feature of VR as a medium. Yet, in that aspect, virtual stores have been developed in a non-immersive form, as customers can only navigate them using their computer screen, mouse, and keyboard. Nevertheless, the displayed environment and products exist in 3D despite being shown in 2D medium - that makes it a more immersive experience compared to e-

commerce shopping (Kim and Choo 2023; Peukert et al. 2019; Furht 2008; Bressoud 2013). The second type of immersion, mental, refers to the user's involvement. It is crucial for the VR experience as it embodies the user's engagement level and hence, as W. Sherman and A. Craig (2018a) state - defines the success of virtual world communication. The two authors have developed a framework to support the assessment of virtual experience quality. It consists of four elements: a virtual world that refers to the computer-generated environment and its content (e.g., objects, space) that the user encounters, previously discussed feeling of being present and immersion in experience, sensory feedback provided to users in response to their actions (e.g., movement), and interactivity – level of interaction with and responsiveness of VR to user's actions (Sherman and Craig 2018b).

As J. Pine II and J. Gilmore (1998; 2011) underline - the purpose of staging an experience is not to entertain customers but to engage them. Hence, J. Pine II (2020) argues that “engagement understood as emotional involvement is the center of any and all experiences”. Customer engagement (CE), in its multidimensional approach, refers to “the intensity of an individual's participation in, and connection with, an organization's offerings and/or activities”(Żyminkowska 2018). Thus - in the case of customer experience such as a virtual store, CE is a psychological condition occurring while customers interact and explore the brand's virtual landscape and offering within the virtual store. L. Hollebeek (2011) refers to CE as the “level of a customer's cognitive, emotional and behavioral investment in specific brand interactions” pointing out the three dimensions of CE that result from participation in an interactive experience. To assess the extent to which virtual stores might drive CE, one should comprehend the dimensions set in the context of VR technology. The cognitive dimension is “a consumer's level of brand-related thought processing and elaboration in a particular consumer/brand interaction” (Hollebeek, Glynn, and

Brodie 2014). It refers to the degree of absorption/immersion - the level of focus on the interaction and the potential brand knowledge gained from the experience (de Regt, Plangger, and Barnes 2021; Hollebeek 2011). The emotional dimension is “the level of brand-related affect exhibited in VR interactions” (Hollebeek et al. 2020a). It refers to passion, joy, and entertainment and might be impacted as the brand creates a positive connection with customers through delivering enjoyable and memorable experiences as well as highlighting the main features and benefits of the offering (de Regt, Plangger, and Barnes 2021). Lastly, the authors define the behavioral dimension as “a consumer’s level of energy, effort, and time spent on a brand in a particular consumer/brand interaction” (Hollebeek, Glynn, and Brodie 2014) - in this case – in a virtual store. Researchers have also identified the business importance and implications of VR-based engagement. As L. Hollebeek et al. (2020a) point out – consumers’ emotional and behavioral engagement in VR experience directly impacts their brand commitment, sense of connection to the company’s identity, experienced intimacy with the brand, and depth of passion towards the brand. On the other hand, cognitive VR engagement impacts calculative commitment, motivated by perceived benefits or high switching costs, and normative commitment - the customer - perceived obligation to maintain brand loyalty. Hence, the application of VR technology in creating premium experiences such as virtual stores has the potential to drive engagement and might have beneficial results for the brands.

2.1.3. Virtual Stores

Virtual Stores (VS) are the 360-degree 3D brands’ storefronts embedded in brand websites (hence available on both computers, mobiles, and tablets) that leverage VR technology with elements of AR. They allow customers to interactively visit branded stores anytime without leaving their

homes. While they are often referred to as a “v-commerce” and seen as a future ascendant of e-commerce, so far their primary use has been limited to marketing purposes. Yet, researchers believe in their potential to deliver entertainment and elevated customer experiences (Xue, Parker, and Hart 2020). There are numerous ways in which brands approach VS creation. VS might replicate an actual store, closely resemble one (reality-based store type of VS), or represent an imaginary creation (fantasy-based type of VS) (Kim and Choo 2023). Brands might opt to dedicate the store to one product in the form of a virtual pop-up or allow users to explore different product lines. They also have the freedom to decide on a theme, layout, elements of interior and exterior, product display, and include music and visual content to enrich the store exploration experience. Store elements can be functional, aesthetic, or have entertainment functions (Hassouneh and Brengman 2015). Navigation in the store plays a crucial role in the overall experience. It significantly impacts the user’s immersion and learning, as it is the main source of customer interaction and the primary tool of the control system (Baek et al. 2020; Hassouneh and Brengman 2015). As mentioned, customers can explore the store using a keyboard or integrated on-screen console; some stores allow for teleportation, enabling fast movement by simply clicking on the desired place within the store (Schnack, Wright, and Holdershaw 2021). In selected stores, customers can explore the virtual world by navigating their avatar, which brings the experience one step closer to the concept of Metaverse. While discussed aspects are an inseparable part of each VS experience, there are several features that brands can choose to implement and communicate in their 3D retail tool. Such include virtual shop assistants' avatars or storytelling and audio materials to provide customers with product and brand knowledge. Moreover, a provider of VS stores Obsess (2023a) states brands might attract customers with diverse gamification elements with optional rewards. Further on, typically for the beauty industry, customers might also have an

opportunity to “virtually” try on products by uploading their photo or using a camera in the AR try-on feature. These try-ons enable the customers to see how the product would look on them in real life (Boletsis and Karahasanovic 2020).

2.2. Virtual Beauty Stores – What have been brands doing so far?

The first references to beauty virtual stores date back to 2020, when brands such as Dior Beauty launched virtual store spaces to enrich online shopping during the pandemic and offset the lack of in-store visits caused by the lockdown (Flora 2020). Since then, the development of virtual retail spaces has accelerated as more brands entered the virtual landscape. An overview of selected created based on secondary research is available in Appendix A. So far, beauty VS have emerged with a focus on make-up and skincare categories. Big players, L’Oréal Group and Estee Lauder, have been most active in those fields. Only in 2021-2022 did L’Oréal launch over four VS. These include Lancôme pop-ups promoting Lancôme Advanced Genefique product which contained, i.e., AI-powered skin quiz providing customers with personalized skin routine, customer testimonies, and extensive knowledge on product, its ingredients, formulation, and effects (Writer 2021); Kiehl’s realistic virtual store (Rebeira 2021); Armani Beauty London-based pop-up where users could explore both fragrances and make-up (“Armani Box - Retail TouchPoints” 2022), and Maybelline Virtual Loft sharing the world of make-up (Lafferty 2023). Estee Lauder has recently pleased its customers with Maison Too Faced where customers are encouraged to participate in scavenger hunts, explore rooms displaying the brand’s product lines, or try-on make-up via an AR plug-in (Smith 2022). Moreover, the company also launched a futuristic fantasy-based Clinique Virtual Lab in which users navigate using personalized avatars and, through interactive elements combined with storytelling, discover the brand’s history and products in-depth (King 2023).

In November 2021, make-up brand Charlotte Tilbury addressed the trend of social shopping, which emerged during the pandemic by implementing “Shop with friends” in its store, which enabled customers to shop together. The store itself is very close to the concept of Metaverse, as users not only can explore it with others but also navigate fantasy-based stores with personalized avatars as well as see other avatars and watch live content (Berthiaume 2021). Other brands with VS spaces within the make-up and skincare categories include Laura Mercier and Elizabeth Arden. VS are also present in the hair care category, yet with fewer examples to provide. In 2022 Olaplex launched a reality-based virtual hair salon where consumers can explore in-detail brand’s products and treatments, receive personalized advice, or listen to a podcast (“Olaplex Virtual Salon” 2022). Another brand virtually present in that category is Living Proof by Unilever. The brand offers customers AI hair diagnostics, and a portion of knowledge on sustainability (Marin-Lopez 2023). While fragrances could be explored within Armani Beauty and Dior Beauty virtual experiences, there have not been launched a store designated solely to this beauty category. According to one of the biggest VS providers - Obsess, “modern beauty selling is customer-centric and focused on engagement” (Obsess 2023b); hence brands should elevate experiences with new technologies. Each of the virtual experiences differs in design, focus, and unique combination of available features provided to customers to craft a premium customer experience. Thereby, this paper aims to investigate to what extent these experiences are seen as relevant sources of engagement and which aspects and features of the beauty virtual stores experience are relevant drivers of customer engagement.

3. Addressing the Work Project Topic

3.1. Methodology

To answer the research question, qualitative research was adopted as the research method due to its applicability in understanding experiences, meanings, and attitudes (Hammarberg, Kirkman, and de Lacey 2016). Further on, semi-structured interviews were selected as the primary data collection technique, as the opportunity to probe allows researchers to explore responses and grasp their significance to the research topic (Saunders 2012). To gain a rich and broad understanding of the extent to which beauty virtual stores are seen as a relevant, engaging experience and further comprehend which aspects influence engagement, the research consisted of two parts – retrospective experience recall and live interaction with stimuli.

To ensure the quality and fit of the sample, a purposive sampling method was applied to provide information richness and relevance for in-depth study (Lopez and Whitehead 2013). Thus, the participant profile was defined in terms of pre-selected necessary criteria: recent beauty purchase, interest in beauty brands, and prior experience with beauty VS. Due to the narrowness of the research focus and specificity of selection criteria, a pre-recruitment questionnaire (Appendix B) was distributed through social media and online beauty-related forums to facilitate successful sample selection. A sample of 15 participants (Appendix C) was selected based on answers to the pre-recruitment questionnaire. Interviews were carried out and recorded with the use of the MS Teams platform. Each interview lasted approximately 50 minutes with 20 minutes dedicated to individual live experience of a pre-selected virtual store. At the beginning, participants were clearly instructed on the purpose of the research, its structure, and estimated time and were encouraged to express their thoughts, feelings, and opinions extensively. The first part of the research referred to

participants' prior experience with beauty virtual stores; thus it involved a retrospective recall technique. It aimed to identify memorable aspects of experience and gather information about participants' previous engagement, factors impacting virtual store exploration, and gain an understanding of the nature of experience. Participants were asked to answer the following question: *Could you please describe a virtual store of a beauty brand that you had explored?* The second part of the interview involved a live exploration of the pre-selected beauty VS. Participants were instructed to launch the provided website link to the virtual store and enable their screen sharing to enable the interviewer to make observations of interviewees' reactions to explored live stimuli. This was implemented in line with (Renninger and Bachrach 2015) who pointed out that observations can augment interviewee self-reported data allowing for better undersigning of activity-related engagement. Furthermore, participants were instructed to carefully explore the store and refrain from sharing thoughts until the task was finished. That instruction aimed to ensure full participation in the experience, and that the potential engagement is not disrupted.

The Too Faced VS (overview in Appendix D) was chosen as the stimuli to provide a specific virtual store experience to be explored consistently among participants and ensure comparability of insights. Once participants confirmed completing the task of store exploration, the interview began with a question: *What are your thoughts and feelings on the virtual store experience you have just explored?* A pre-designed interview guide was used to guide the interviews (Appendix E). To analyze the qualitative data, interviews recordings were transcribed, and the data was cleaned to ensure its quality. Furthermore, the thematic analysis method was followed to make sense of collected data and identify patterns and themes relevant to the research question that emerged from the interviews. The analysis followed a six-step thematic guide developed by Braun and Clarke

(2006) and guidelines provided by M. Maguire and B. Delahunt (2017). That is, becoming familiar with data, developing initial codes thus reducing the data to smaller chunks, identifying themes, reviewing them, defining, and reporting. As for the data analysis and coding, the grounded theory of inductive research was followed in line with Skjott Linneberg and Korsgaard (2019), who underline the relevance of this paradigm in an exploratory study with little or no theoretical background. Following the inductive approach, no initial pre-determined set of codes existed, and codes were created and modified during the coding process. Open, axial, and selective coding was performed following the guidelines of Williams and Moser (2019). Thereby, codes have been examined, grouped into categories if applicable, and organized into themes which were further reviewed to ensure coherency and relevance to research questions. Lastly, themes were presented in the form of research insights.

3.2. Research Insights

All 15 participants provided a description of their previous experience with beauty virtual stores. Eight of the interviewees had explored VS launched by a skincare brand – these were: Clinique (3 participants), Elisabeth Arden (1 participant), Lancome (3 participants), and Kiehl's (1 participant). Three participants described their experience within a Laura Mercier virtual store combining skincare and make-up. 2 participants referred to their experience in solely make-up VS (by Nars and Charlotte Tilbury). Only one participant has previous experience with a store that included fragrances (Armani Beauty), and one explored the hair care category store (Olaplex). Broad experience of participants across categories combined with live exploration of Too Faced store, allows to see in-depth the value of stores' aspects and their role. The research analysis identified several themes referring to experience and relevance to participants' engagement.

Relevance of phygital experience

While all the participants agreed that VS are indeed “an interesting novelty” and confirmed it is an unusual and intriguing form of retail, some of them struggled to envision its role in their shopping journey. 15/15 participants stated they perceive virtual stores as an experience complementary to existing channels, not a substitute. 8/15 interviewees perceived it as complementary specifically to e-commerce due to its digital nature, while the remaining 7 could not decide and pointed out complementary possibilities for both physical and online “I will learn here more details than in a physical store, but also if I have more time it seems as a more fun way of shopping than just adding products to my cart as in online shops”. Despite the common appreciation of VS’ entertaining side, only 2/15 participants expressed willingness to purchase from virtual stores. Compared to e-commerce, 12 out of 15 participants pointed out time constraints and greater effort as a main disadvantage of VS – “Regular e-commerce is much easier, faster and structured – you go to a website, search and purchase...the virtual store is way more time and effort consuming”. In the case of physical stores - absenteeism of physical touch and smell and lack of human interactions were the commonly mentioned downsides. Yet, in terms of the perceived value of experience, participants referred to VS as a more valuable source of entertainment and knowledge compared to traditional channels – “It’s much cooler and fun to walk around, try and check out the things than on a website...but you need to have time”; “I don’t think that store assistants know that much about the products as like this website can show you, especially when you think about all the videos and photos in the virtual store.”. Further on, 6 participants referred to VS as a “one-time experience”. They explicitly expressed that VS was indeed an interesting, immersive, and entertaining experience, yet time-consuming and requiring effort to explore; hence with no periodical content change, they would not be willing to repeat it.

Store design and organization

All 15 participants commented on the store design while recalling their previous experience and referring to the Too Faced VS. Store design strongly reflecting the brand's identity both in case of memorized experience and Too Faced VS was an important aspect of experience brought up in a positive context by most interviewees (12/15). According to participants, it affected their feeling of immersion, connection with the brand, and perceived credibility of the experience; "It matches so well that it really feels like walking through this brand's own universe". The participant describing Lancome's VS pop-up noted that the professional and innovative look of the interior reflected the advanced technology within the product, created a positive attitude towards the brand and its know-how and added credibility to the virtual store. Participants referring to Laura Mercier's experience underlined its luxurious look and sense of elevated experience created by audiovisual storytelling and Paris set-up - "Before you enter the store, you see that it is set in Paris. It is a nice introduction as you are told the story in the background using a narrator. It looks so luxurious and excited me because I don't live in Paris, and yet I shop there with one click". Participants often described the store design of Too Faced as pretty, cute, interesting, and matching the products. Yet, 3/15 interviewees found the set-up overwhelming due to information overload, excess of colors, and too many interactive features, all of which decreased the quality of their experience. All of them directly expressed their preference for real-based store designs. Another aspect 8 out of 15 participants revealed was curiosity about store design and layout. That was present in two forms: initial curiosity affected by first impression on store design or curiosity about products hidden within the store. In each of them, participants admitted it was a source of motivation to explore further virtual space ("The store was very pretty and interesting, so I wanted to click on everything and see all the rooms"). Moreover, a clear layout and brand-embed spaces

pleased participants and provided ease of use and product exploration. According to the findings, effective store design, being a first interaction with a virtual store, is relevant for engagement in terms of immersion, attitude towards experience, and motivation to explore; thus it might affect all dimensions of engagement.

Navigation, control, and technology

Difficulties in navigation and low perceived quality of graphics were the common sources of frustration, confusion, and feeling of annoyance experienced and expressed by 5 participants during Too Faced VS experience. 2 participants explicitly expressed their inability to comprehend navigation during their interaction and needed the interviewer's guidance. The remaining 3 participants only admitted their struggles afterward, yet as the interview observed – they seemed very annoyed at the beginning of the experience, chaotically clicking on the desktop. When they learned navigation, they were cautious and slow in-store exploration. They all stated that while they still enjoyed the experience, it negatively impacted their motivation and feelings (“The graphics were hopeless, and I just kept climbing the wall, and I couldn’t climb those stairs at all, once I figured it out, it was all good, but I was way less excited”). However, other interviewees who claimed the navigation was intuitive/easy/smooth displayed high focus and concentration. The importance of straightforward navigation for the behavioral dimension of engagement was revealed, among others, by the participant recalling Clinique's experience - “It was hard for me to move, and walking was very slow, which was very frustrating so I didn’t spend a long time there”. The importance of clear guidance in moving around the store was mentioned by 5 participants. Another aspect affecting the experience was the quality of technology. Poor graphics, slow interface, lagging, and glitches negatively affected the virtual store experiences of 5 participants.

Ease of use and technology were highly appreciated by 8 participants exploring Too Faced VS as they enjoyed a seamless experience - “You click on the product, and with the pop-up you can purchase it while not leaving the store or being redirected to another website”. Interview insights imply that negative encounters with navigation and technology might significantly impact all dimensions of engagement - behavioral engagement, namely decreased willingness, efforts, and time spent on interaction. Emotional - decreases excitement and positive attitude towards experience, and cognitive – disrupts focus due to confusion and frustration.

Gamified experience and interactive tools

For 9 participants, entertainment was the primary function and benefit of the experience. In general, the primary sources of entertainment among interviewees were interactive features, gamified form, and gamification (relating to games within the store). 10/15 participants drew a parallel between the virtual stores' experience and video games, as one of the interviewees said, “Because I am on my computer, I feel like I am playing a game rather than shopping; I didn’t feel like in real life”. For 9 interviewees it positively referred to entertainment function, yet one person disliked the impression, stating, “It is not very professional”. The gaming-like form of shopping was described by participants as “fun”, “pleasing”, and “entertaining”, as one of them stated, “It is a nice concept because it combines shopping with fun, yet it requires some effort and time”. Moreover, 8/15 interviewees referred to their experience of VS in terms of childhood nostalgia (“It somehow made me feel like a child again, but it is like an adult child so it made me want to stay longer”) which positively impacted their experience and thereby increased willingness to explore and interact with stimuli VS. Positive opinion on the scavenger hunt was mentioned by 12/15 participants in the context of Too Faced experience and memorized by 5 in reference to previous experience.

Participants have explicitly recalled that feature as a driver of curiosity and motivation for further exploration. It was also a feature to which interviewees (8/15) directly referred in terms of engagement “In the beginning, I bumped into collecting hearts task. I was curious about what they offered so I started collecting them. And as I did it, I walked through all the spaces looked at all the products. It was very engaging”. Moreover, gamification elements that led to rewards or discounts were viewed positively by 6 interviewees, as one of them stated, “If I can play an easy game and get a freebie or a discount then it really feels like a win-win – you get fun and a benefit at once”. Another interactive feature described by 8 interviewees as an engaging tool, namely “fun” and “cool to experiment with” was a try-on feature. It was positively commented on both in the context of recalled experience, as well as the Too Faced one. One of the participants tried out all the products available in the Too Faced store and said, “I tried all the products there because it was fun to experiment, and I was curious what they would like on me”. Moreover, it was also seen as a necessity for make-up virtual stores. Nonetheless, some participants explicitly pointed out the lack of the tool’s credibility to reflect reality “Technology hasn’t got to the point yet where it’s going to be spot on” and absenteeism of touch and smell senses. Both interactive elements and game-related features provide hedonic values and thus have the possibility to impact cognitive and behavioral dimensions through tools such as scavenger hunt and strongly influence the emotional dimension, providing a source of fun and entertainment.

Virtual stores as a source of knowledge

Analysis of interviews revealed that virtual stores are perceived by most of the participants as an interesting, entertaining, and engaging way of learning. The need for and appreciation of educational content was expressed by all participants who referred to their previous experiences

with virtual skin care stores; they all stated to be conscious customers, thus valuing pre-purchase research. As they pointed out – the ability to learn in an approachable way about ingredients, formulas, and effects of products supported by visuals and interactive materials kept them engaged in a store. The participant who had explored Lancome’s pop-up stated, “The information itself was handy – it is nice to have all of this gathered in one place and explained well with visuals; scientific terms are difficult, and they did a great job explaining how the serum works”. Moreover, participants (13/15) agreed that virtual store is a more efficient, credible or exciting form of learning compared to standard digital or offline search “It’s nice that you can have everything in one place rather than search through tens of websites and forums”; “I am sure lady at Sephora wouldn’t be able to provide me such exhaustive info”. Few interviewees (6/15) positively commented on brand-related information transferred in an interactive form in the Too Faced store and previous experience. Only one participant was indifferent to the topic of knowledge, stating, “Things about history or where it comes from I don’t care about that stuff”. Most of the interviewees (11/15) found value in virtual stores’ immersive and interactive nature for discovering and learning about different products. They had positive thoughts about seeing products in 3D, reading detailed information about them, and exploring brand novelties. Two interviewees seemed extraordinarily intrigued and excited with Too Faced VS as they commented during experience “I knew they offered the famous mascara, but some of the other products I didn’t even know they offered them! Such a great way to find out about portfolio” and “Everything is so detailed! As if you were taking the box and looking at it in the store”. According to the results, finding knowledge and educational content within virtual stores might positively impact engagement in terms of both brand knowledge gained from experience and brand-related affect.

Different category expectations

Throughout the interview, participants were encouraged to discuss expectations and the relevance of brought up virtual stores' features concerning different beauty categories. Surprisingly, opinions were mostly consistent across participants. Firstly, 14/15 interviewees rejected the concept of a virtual store for fragrances claiming the sense of smell is crucial for category exploration and engagement ("Perfume...that is a real no-go. I need to smell them and how can you do that virtually?"). Both in terms of skincare and hair care, participants indicated a strong interest in knowledge-based content (13/15), some of them expressed the need for tools suggesting personalized routine- "In skincare and similarly hair care, I would really love to get some guidance without needing to research a lot, to see what ingredients are and what they do. I would be down to stay in the store longer if they could advise me on my type of skin or hair". Lastly, make-up aroused mixed feelings among participants. While some of them (7/15) directly referred to the Too Faced store listing playfulness, entertainment, or try-on feature and main drivers of engagement with this category, a few of the interviewees pointed out the inability to substitute missing senses with virtual solution - "Make-up often has a certain scent, a certain texture it's just so pleasant"; "Eyeshadow or primer... fine! But with foundation or other products I like to see how they act on my skin, if they match it, what is their texture...". Thus, while in the case of skincare and hair care, knowledge might become the primary role and driver for engagement, lack of ability to feel senses might negatively impact engagement in terms of make-up and primarily – in terms of fragrances category.

4. Discussion

The qualitative research findings deliver valuable insights into the perception of VS experience. The main themes of analysis include relevance, store design and layout, struggles with navigation and technology, gamification and interactive experiences, the value of knowledge within VS, and the different expectations towards VS for beauty categories; thereby the emerged themes are consistent with the indicators of VR experience's quality by Sherman and Craig (2018b) and overlap with Truchi's (2023) conditions for successful digital experience. Store design and layout were identified as significant factors impacting customers' engagement in beauty virtual stores. The findings suggest that a well-designed, visually appealing store layout that embodies the brand's identity (thus reflects the brand's DNA as per Truchi's guidelines) can spark curiosity, enhance the feeling of immersion, and improve the credibility of the virtual store experience. This aligns with Sherman and Craig (2018b), as well as with the study of Krasnikolakis et al. (2018) who indicated that "mystery" related to store layout is a driver of curiosity. Problems related to virtual store navigation, control, and technology were found to have a negative impact on user feeling of immersion, emotional engagement, and amount of time and effort devoted to experience which matches Truchi's opinion as he calls them the "deadly sins of failed digital experience". The gamified form of experience, along with interactive aspects and gamification in beauty virtual stores, was found to have a positive impact on customer engagement. It was noted that while the AR try-on was indeed exciting and engaging, it lacked credibility and trust. Research conclusions on the role of gamification in virtual store engagement parallelly align with the findings of Abbasi et al. (2019) who stated playfulness has a favorable influence on cognitive, emotional, and behavioral engagement since it is characterized by enjoyment, curiosity, and novelty. Lastly, virtual stores were perceived as a rich source of knowledge that provided ease

of learning and allowed participants to get closer to brands, explore portfolios, and learn about products. Participants underlined their preference for learning through VS over e-commerce or online research. This finding is coherent with Bonetti, Warnaby, and Quinn's (2018) indications on the potential of virtual environments to create immersive and informative experiences. In practical terms, VS are experiences that reveal the presence of customer engagement during the interaction. Despite having a great potential to become a valuable touchpoint, their current role remains unclear. While phygital aspects of VS are noticed and appreciated, their disadvantages against the channels such as required time and effort, and lack of touch and smell, seem to prevent the solution from becoming a valid sustainable purchasing channel. Thus, brands need to rethink and clearly define the purpose and role of the experience; Moreover, they must address those barriers and ensure the VS align with Thuri's conditions for a successful digital experience. The study shows that beauty brands willing to deliver premium experiences through virtual stores, to ensure quality and attract customers should stress the importance of high-quality brand-inspired design and ensure ease of use. While developing VS, brands should stress gamification elements as entertainment and playful experience actively encourage customers to explore products and interact with brands. Lastly, virtual stores, being a rich medium, have great potential for customer education as the findings show they serve as a valuable knowledge tool compared to ordinary channels. They can serve as a great tool to reinforce brand image and share brand-related knowledge e.g., about heritage (which can be particularly useful in terms of luxury brands), and be a comprehensive tool to facilitate absorption of product and technology-related knowledge.

The findings imply that, while virtual stores in their current form might not be a sustainable long-term source of engagement (as participants perceived them in terms of a one-time experience), the experience might be of value to beauty customers in terms of an entertaining way of connecting

with a brand. Virtual stores with their immersiveness and interactivity are a significant step towards Metaverse preparing customers for virtual adoption, however the quality and role of the experience need to be reinvented. Both financial and technological aspects remain limitations for beauty brands hence to elevate the quality and achieve optimal results, beauty companies might need to seek help at the roots of Metaverse origins - through strategic partnerships with gaming companies.

5. Limitations & Further Research

While the author has made the utmost effort to ensure the quality of the research, certain limitations should be acknowledged. Firstly, the sample size for this study consisted only of 15 participants of the narrow, 21-30 years old age range. Therefore, the relatively small sample size and limited age representation might have limited generalization of findings. Furthermore, the interviews were conducted using the MS Teams platform; the absence of physical interaction with the interviewer might have limited participants' comfort in sharing personal thoughts. The recollection of previous virtual store experiences might not be completely accurate as the experience might not have been wholly remembered, thus quality of data could have been affected. Moreover, recalled experiences referred to virtual stores from different beauty categories; thus diversified experiences might have influenced participants' perception of Too Faced VS experience. Lastly, the participants explored virtual stores on their own devices using their internet connection. Technical factors could have interfered with interviewees' experience and resulted in false negative impressions. As for further research, currently, none of the available research refers to virtual store experience in the beauty industry. The identified gap, along with implications on VS features expectations towards different beauty categories might set useful direction for further research. Moreover, the difference in engagement evoked by reality-based and fantasy-based stores could be explored.

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Appendix

Appendix A – Overview of selected beauty virtual stores

Company	Laura Mercier Cosmetics	Charlotte Tilbury	Estee Lauder	Estee Lauder	LVMH
Brand	Laura Mercier	Charlotte Tilbury	Clinique	Too Faced	Dior Beauty x Harrods
Name	World of Beauty	Virtual Beauty Gifting Wonderland/ Pillow Talk	Virtual Lab	Maison Too Faced	Dream of Beauty
Category	Make-up	Make-up and Skincare	Skincare and Make-up	Make-up	Make-up, Fragrances
Date of launch	December 2022	2020/ 2021/2022	March 2023	January 2022	November 2022
Characteristics and features	- Reality-based VS set in Paris - Gamification: scavenger hunt with reward; quiz to find recommended products for eyes, lips, and cheeks - AR try-on	- Fantasy-based VS with strong gaming impression - Customized Avatar - Gamification: scavenger hunt with reward - Brand-inspired playlist - AR try-on - Shop with friends feature - Personalized advice and product recommendation - Tutorials and live streams	- Fantasy-based VS with futuristic theme - Gamification: scavenger hunt with reward - Focus on hero product - Strong focus on knowledge aspect conveyed through interactive elements and explorative storytelling - Knowledge on brand history, ingredients, formulation, benefits and use - Skin Care tutorials from brand consultants - Chat box	- Fantasy-based VS set in - Gamification: scavenger hunt with reward; product-inspired games with reward; - Knowledge on brand and product lines - Make up tutorials - Ability to rotate products - AR try-on - Shop with friends feature - Chat box	- Mix of reality-based (one floor) and fantasy-based (one floor) pop-up VS - Gamification: Personalized list of gift products - AR try-on
Source	(“Welcome to Laura Mercier’s Virtual Store Experience” 2023; Walk-Morris 2022)	(“Virtual Store Charlotte Tilbury” 2022; Berthiaume 2021)	(“The Clinique Lab Virtual Experience Clinique” 2023; King 2023)	(Smith 2022; “Too Faced Virtual Store” 2022)	(Flora 2020; “Dior Beauty and Harrods in Metaverse • Dior Beauty VR Store” n.d.; Cryptoflies 2022)

Company	LVMH	Revlon	L’Oréal Group	L’Oréal Group	L’Oréal Group
Brand	Dior Beauty	Elizabeth Arden	Armani Beauty	Lancome	Kiehl’s
Name	Avenue des Champs-Élysées Boutique	Fifth Avenue	Armani Box	Store Genefique/#Strongereveryday	Dream of Beauty
Category	Fragrances and Skincare	Skincare and Make-up	Make-up and Fragrances	Skincare	Skincare
Date of launch	April 2020	May 2023	June 2022	2020 – 2021 – 2022	October 2021/April 2023
Characteristics and features	- Reality-based VS resembling Dior’s flagship boutique in Champs-Élysées in Paris; strongly realistic - Numerous links redirecting to website outside the store	- Reality-based VS set in Paris - Strong focus on brand heritage; founder and brand history knowledge in form of storytelling; knowledge content about products - Gamification: scavenger hunt with reward; quiz to find personalized skin care;	- Reality-based pop-up VS set in London - Knowledge on the founder, brand’s sustainability, make-up tips - AR try-on - Gamification: quiz generating fragrance matching customer’s preferences - Ability to book a appointment with specialist	- Reality-based pop-up VS - Focus on one product - Strong focus on product knowledge: customer testimonies, ingredients, effects, formulation, use - Avatars of virtual assistants - Gamification: AR skin quiz providing personalized routine; personality test; product-related game with reward - Live chat box	- Reality-based VS; strongly realistic - Avatar of a store consultant - Product knowledge conveyed with the use of sound - Education on brand’s heritage - Gamification: games with rewards; skin-type quiz
Source	(Walter 2020; “Welcome to La Collection Privée Christian Dior Champs-Élysées Virtual Store” n.d.; Flora 2020)	(Flora 2023; “Elizabeth Arden” 2023)	(“Armani Box - Retail TouchPoints” 2022)	(Genefique Virtual Pop-Up, n.d.; Writer, 2021)	(Rebeira 2021)

Appendix A – Overview of selected beauty virtual stores- continued

Company	L'Oréal Group	Advent International	Unilever
Brand	Maybelline	Olaplex	Living Proof
Name	Virtual Loft	Virtual Salon	Fifth Avenue
Category	Make up	Hair Care	Hair Care
Date of launch	November 2022	November 2022	March 2023
Characteristics and features	- Fantasy-based VS set in a loft - Gamification: scavenger hunt with reward; quiz about the brand with reward - AR try-on - Educational content such as tips and tricks	- Reality-based VS resembling hair salon - Avatar of a store consultant - Gamification: scavenger hunt game with reward; quiz to match personalized product set - Focus on knowledge about products, their functionalities and results, treatments - Brand podcast	- Fantasy-based VS - Gamification: scavenger hunt game with reward - AI Hair Quiz that performs diagnostics of user's hair - Information on brand's sustainability
Source	(Lafferty 2023; "Welcome to Maybelline Virtual Loft" n.d.)	(Olaplex Virtual Salon, 2022)	("Living Proof Virtual Store" 2023; Pauley 2023; Marin-Lopez 2023)

Appendix B – Pre-recruitment questionnaire

1. Have you purchased for yourself skincare/makeup/perfume/haircare products at least once in the last 3 months? *

☐ Yes

☐ No End the interview

⋮

2. On a scale of 1-5 what is your interest in beauty brands? 1 – I am not interested at all; 5 – I am extremely interested *

☐ 1 End the interview

☐ 2 End the interview

☐ 3

☐ 4

☐ 5

3. Can you please tell me whether you have ever explored 3D Virtual Store(s)?:

☐ 1 - I am not familiar with Virtual Stores

☐ 2 - I have heard about Virtual Stores but never explored it

☐ 3 - I have explored Virtual Store(s)

☐ 4 - I have purchased a product in Virtual Store

Keep if answer is 3 or 4

Appendix C – Profiles of research participants

Participant	Gender	Virtual Store explored (brand)	Age	Nationality	Education	Occupation	Used beauty brands	Ever purchased beauty online?	Ever purchased in a virtual store?
1	Female	Clinique	24	Polish	Bachelor	Restaurant Manager	Anastasia Beverly Hills, Clinique, CeraVe	Yes	No
2	Female	Lancome	26	German	Master	Merchandizing Junior Manager	Lancome, Fenty, Lancome, Olaplex, YSL	Yes	No
3	Female	Laura Mercier	25	Italian	Master	Fashion Store Manager	Kiko Milano, Mac, Clinique	Yes	No
4	Female	Clinique	21	Canadian	High School	Student	Glossier, Clinique, Fenty, Dr Jaart	Yes	No
5	Female	Laura Mercier	22	Dutch	Bachelor	Junior Social Media Manager	Mac, Hermes, Kiko Milano	Yes	No
6	Female	Elizabeth Arden	24	British	Master	Marketing Assistant	Drunk Elephant, Smashbox	Yes	No
7	Female	Charlotte Tilbury	23	American	Bachelor	Junior Event Manager	Rhode, Urban Decay Charlotte Tilbury Mac	Yes	No
8	Female	Laura Mercier	25	American	Bachelor	PR Associate	Estee Lauder, NARS, Laura Mercier	Yes	No
9	Female	Olaplex	21	Slovenian	High School	Student	L'Oreal, Maybelline, Nyx	Yes	No
10	Female	Kiehl's	24	American	Bachelor	Marketing Associate	Lancome, Kiehl's	Yes	No
11	Female	Lancome	28	Canadian	Master	HR Business Partner	Chanel, Vichy, Clarins	Yes	No
12	Female	Clinique	30	British	Bachelor	Customer Service Quality Manager	Dior, Estee Lauder, Clinique, L'Oreal	Yes	No
13	Female	Armani Beauty	27	British	PhD	Marketing Research Assistant	Rimmel, MaxFactor	Yes	No
14	Female	Nars	27	British	High School	Make-up Artist	Mac, Nars, Smashbox	Yes	No
15	Female	Lancome	24	Polish	Master	Sales Trainee	Tolpa, Dr. Jaart, Urban Decay	Yes	No

Appendix D – selected aspects of Too Faced stimuli – retrieved from: <https://www.maisontooofaced.com/>

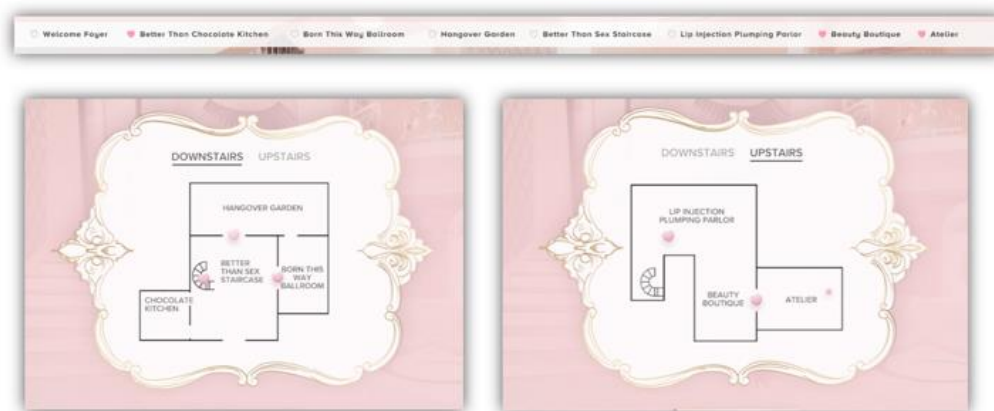
1 Store Entrance



2 Store Interior



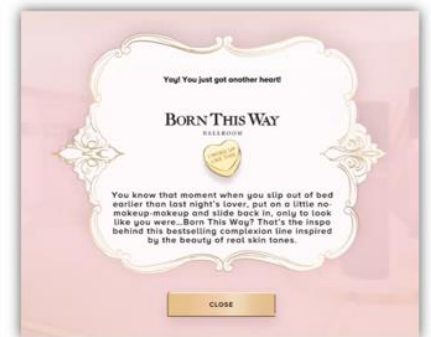
3 Store Layout



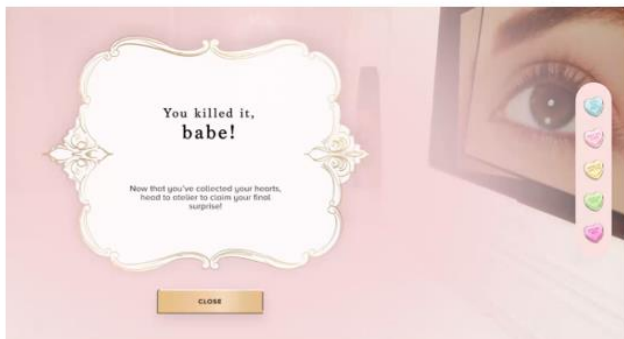
4 Shop with Friends feature



5 Brand related knowledge



6 Scavenger Hunt game



Appendix D – selected aspects of Too Faced stimuli – continued

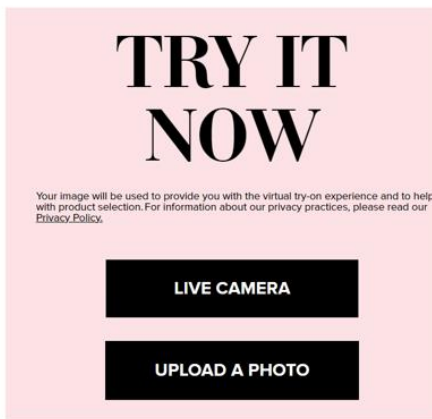
7 Gamification with rewards



8 In-store purchase area



9 Try-on feature



Appendix E – Interview Guide

Interview Guide

Warm-up

My name is Izabela Gierko, and I am currently pursuing a Double Degree in Management at Warsaw School of Economics and NOVA School of Business and Economics. First of all, thank you for your willingness to participate in this interview.

The purpose of this interview is to gather insights on your engagement related to beauty virtual store experience. This interview will last around 45-50 minutes and will consist of two parts. In the first part I will ask you a question related to your prior experience. In the second one, you will be asked to complete a task which will be a main theme of our further discussion.

Feel free to share all your thoughts and feelings, as there are no right or wrong answers here.

Please note that all answers provided will remain anonymous. However, with your permission, I would like to record the interview - the records will be used solely for my thesis research, thus they will remain confidential.

Part 1: *I would like to ask you a first question: could you please describe a virtual store of a beauty brand that you had explored?*

Part 2: Please enter provided link and enable screen sharing. You now are about to enter a virtual store launched by the Too Faced brand. Please take your time to fully explore and interact with the store's features. Please do not comment on the experience simultaneously, you will be asked to do so afterwards. Please inform the interviewer once you finish the task.

What are your thoughts and feelings on the virtual store experience you have just explored?

_____ Topics to be developed during the interview _____

- | | |
|------------------------------------|-----------------------------------|
| • Ease of use | • VS vs e-commerce |
| • Outstanding features | • VS vs Physical Store |
| • Perceived Usefulness | • Use & Purchase drivers |
| • Gamification / Education - value | • Use & Purchase limitations |

Demographics:

- | | |
|----------------------|--|
| • Gender | • Occupation |
| • Age | • Which beauty brands they use the most? |
| • Nationality | • Have you ever purchased beauty brand online? |
| • Level of education | • Have you ever purchased virtual thing of beauty brand? |