Strategies and Effects of Luxury Goods in Metaverse Market Marketing: A Study from the Perspective of Consumer Engagement and Brand Awareness

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Abstract: The metaverse, an aggregated virtual shared environment born from the intersection of breakthrough technologies such as virtual reality (VR), augmented reality (AR), and artificial intelligence (AI), emerges as a revolutionary stage for brand advertising. The advent of the COVID-19 pandemic expedited digital transformation, compelling brands to venture into creative marketing strategies within this virtual arena. While few studies have forayed into metaverse marketing, a holistic understanding of marketing techniques and their efficacies, especially in luxury brands, remains largely uncharted. This research addresses this lacuna, probing consumer behavior, and luxury brand promotional strategies within the metaverse while gauging their influence on market performance. This study adopts a hybrid research approach amalgamating survey questionnaires and literary analysis. Findings highlight a significant youth demographic within the metaverse. However, they simultaneously reveal that the degree of engagement and recognition of luxury brand promotional initiatives within this virtual world is relatively modest. This research also proposes that present luxury brand promotional strategies exert limited sway over actual purchasing decisions within the metaverse, signaling the necessity for further innovative and adaptive strategies to cater to this novel market landscape. With additional insights and in-depth observations, this research expands the understanding of luxury brand marketing in the metaverse, providing an empirical basis for further study and strategic development in this rapidly evolving digital environment.

Keywords: metaverse market marketing, strategies, luxury goods, consumer engagement, brand awareness

1. Introduction

Since the conceptualization of the metaverse, initially depicted in Neal Stephenson's science fiction novel, "Snow Crash," in 1992, it has evolved from a sci-fi notion to a promising new technology that could drive the fourth industrial revolution [1-3]. This technology amalgamates advanced elements such as virtual reality, augmented reality, extended reality, and artificial intelligence to form an immersive virtual environment, presenting a platform with social, economic, and cultural functions where consumers maintain a virtual life via their digital avatars [4]. The progression of the metaverse

has been further expedited with the COVID-19 pandemic, as more activities were compelled to transition from the real world to virtual environments [5]. However, a key implication of the digital medium nature of the metaverse is that associated experiences are not constrained by the laws of the physical world , which was depicted in Boellstorff's two-year anthropological study of the "Second Life" platform where incidents of racism, unregulated pedophilic behavior, and potential money laundering were reported [6-8]. Consequently, the metaverse presents a novel market environment for brands, filled with challenges. The question of how brands can devise effective marketing strategies to attract and retain consumers and navigate these challenges presents an essential research query.

In metaverse marketing literature, some research has begun to explore and outline the various potential characteristics of this emerging phenomenon and its appeal to brands and consumers, portraying a landscape that, while still evolving, is promising. On the consumer level, Cheah and Shimul pointed out the metaverse's potential to alter consumer behavior patterns by creating entirely new customer journeys, immersive 3D experiences, and community open spaces fostering creativity [9]. At the brand echelon, the propositions by Cheah and Shimul hint that enterprises have the potential to erect virtual commercial facades and brand-specific locales within the metaverse, thereby exhibiting their offerings in unprecedented and inventive manners. [9]. This presents brands with a method of interacting with and displaying their brand values to consumers not bound by geographic restrictions. In 2022, McKinsey & Company evaluated marketing opportunities within the metaverse in a report and projected that the virtual product sales market through trade with virtual personas could reach $54 billion [10]. This further accentuates the tremendous potential the metaverse holds for brands. Some research validated the mutually beneficial brand-consumer relationships formed within the metaverse environment [1,11]. Furthermore, some brands have already commenced marketing trials within the metaverse. For example, prestigious fashion houses like Gucci and Burberry have ventured into unveiling NFT-based luxurious apparel for gaming personas within the metaverse. This suggests that while metaverse marketing is in its infancy, some brands have acknowledged its significance and initiated experimentation. Sung et al.'s research on the impact of the COVID-19 pandemic on luxury brand marketing also attempted to understand and analyze this issue from the perspective of the metaverse [4]. This insinuates that amidst the repercussions of the COVID-19 pandemic, brands necessitate a revision of their marketing stratagems to align with this emerging consumer habitat of the metaverse.Joy et al. also speculated on the virtual world's future role in stimulating the continuous growth of consumer demand for digital luxury items [12].

While existing research has made some preliminary explorations into metaverse marketing, very little has specifically examined strategies and the effectiveness of luxury brand marketing within the metaverse, and a comprehensive understanding of this aspect is still lacking. This represents a significant research gap since luxury brands differ substantially from other brands in marketing strategies and consumer behavior. The literature gap indicates a need for a more detailed analysis of consumer engagement to investigate further and understand metaverse marketing, particularly its impact on luxury brands.

To delve deeper into this topic, this paper will first analyze how the metaverse environment shapes consumer purchasing decisions. Understanding how consumers choose in this burgeoning virtual environment will provide crucial insight into their buying behavior. Next, this paper will study how luxury brands implement marketing strategies within the metaverse. Case studies of luxury brands that have attempted marketing within the metaverse will shed light on how they leverage the unique attributes of this environment to engage consumers and increase participation. Subsequently, through empirical research, this paper will explore how consumer engagement impacts the market performance of luxury brands within the metaverse. This section will use a comprehensive coding scheme to analyze social media data to understand consumer responses to luxury brands' behaviors

within the metaverse. Finally, based on the results of the empirical research, this paper will provide strategic recommendations on effective market marketing for luxury brands within the metaverse. This research aims to provide data-driven guidance for luxury brands' decision-making in metaverse market marketing, enabling them to attract and retain consumers more effectively and thereby enhancing their market performance.

2. Methods

2.1. Survey Questionnaire

As a data collection tool in quantitative research, survey questionnaires gather respondents' perspectives, attitudes, behaviors, or facts [13]. In this study, questionnaires are utilized to quantify consumers' engagement in the metaverse and their response to the marketing strategies of luxury brands within the metaverse. There are two main reasons why survey questionnaires were selected as the primary research method. Firstly, they provide ample quantifiable data for statistical analysis and result inferences. Secondly, since the metaverse is an online environment, online questionnaires can be conducted directly in the target setting, which aligns with the actual situation of this research.

The questionnaire design process in this study considered various factors and adapted and referenced Kim and Bae's questionnaire [14]. Firstly, the questionnaire covers consumers' behaviors in the metaverse, such as the amount of time spent and the types of goods purchased. Secondly, the questionnaire includes questions about luxury brands' marketing strategies in the metaverse, like whether consumers know about certain luxury brands' marketing initiatives and their reactions to these activities. Lastly, the questionnaire includes questions to quantify consumer engagement, like whether they would participate more actively in the metaverse due to luxury brands' marketing initiatives. The questionnaire will be distributed to the target consumers via links, and all responses will be collected within a predetermined period. The questionnaire design will strictly adhere to research ethics, ensuring participants' anonymity and privacy. Subsequently, the collected data will be coded and statistically analyzed to understand consumer behaviors and attitudes.

2.2. Literature Analysis

Literature analysis is a qualitative research method aimed at gaining an in-depth understanding of the research topic through reading and interpreting relevant scholarly literature [15-17]. In this research, literature analysis is employed to explore consumer behaviors in the metaverse and how luxury brands are leveraging the metaverse as a new marketing channel. The reason for choosing literature analysis as a research method is that it provides detailed background knowledge about the metaverse and marketing strategies, offering theoretical support for the questionnaire survey results.

To achieve this objective, this research has selected a range of scholarly articles closely related to the research topic, including studies on the metaverse, consumer behaviors, and luxury brand marketing strategies. These papers are read and analyzed in detail, with key insights and findings distilled for reference in this study.

2.3. Implementation of Mixed Research Methods

The questionnaire survey will be conducted first in implementing the mixed research methods, followed by the literature analysis. Ultimately, the outcomes derived from both methodologies will be amalgamated to foster an all-encompassing comprehension of the tactics and impacts of luxury brand promotion in the metaverse milieu.This mixed-methods approach will enable us to deeply understand and interpret the research topic from different angles and dimensions, leading to more accurate and insightful conclusions.

3. Results

3.1. Quantitative Results from Survey

3.1.1. Descriptive Statistics

(1) Participants' Demographics

In this survey, a total of 114 valid questionnaires were collected. The demographic distribution of the participants revealed significant biases, which will provide important insights for the study on metaverse marketing strategies and effectiveness. Firstly, based on the age distribution, the 18-24 age group constituted the main participants in the metaverse, accounting for 57.9% (n=66) of the total sample. This was significantly higher than other age groups, as shown in Figure 1. Participants aged 25-34 constituted the second largest group, accounting for approximately 21.1%. Secondly, from the perspective of gender distribution, as shown in Figure 2, there were slightly more female participants, with a total of 62, accounting for 54.4% of the total sample, while male participants numbered 48, accounting for 42.1%.
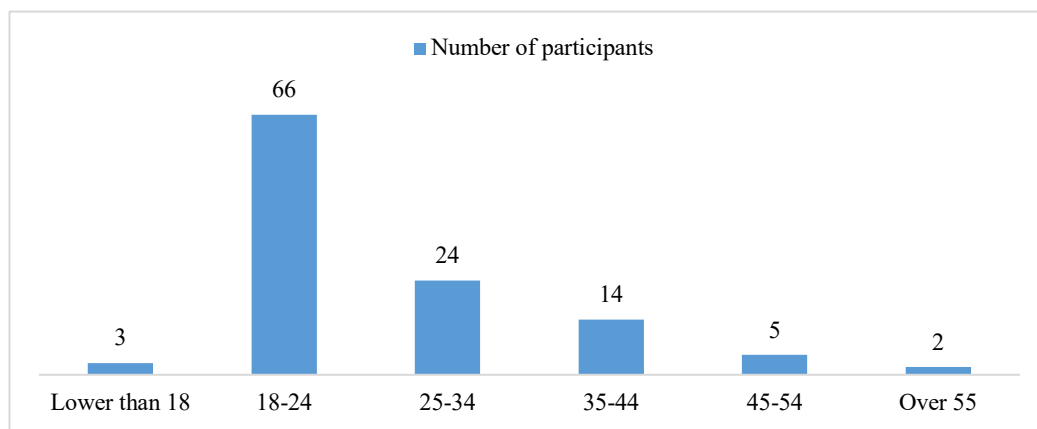

Figure 1: Distribution of consumer age.
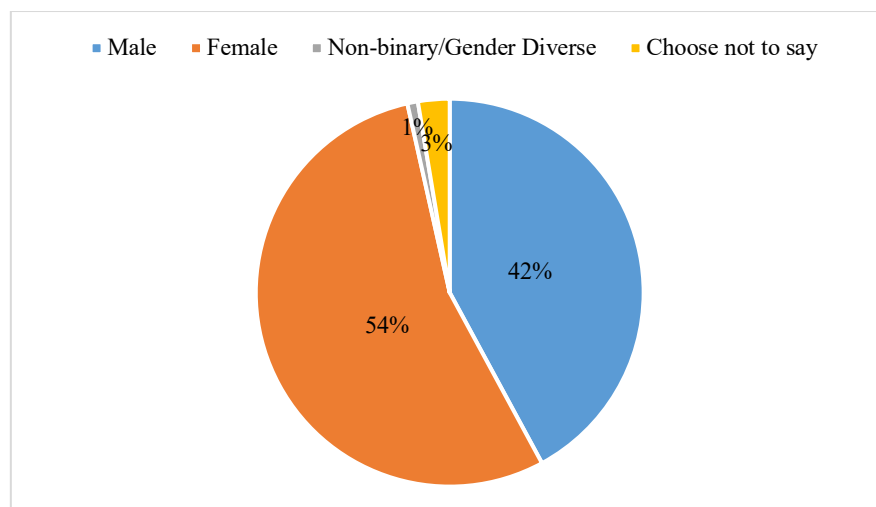
(Photo credit: Origin)

Figure 2: Cosumer gender identity ratio.

(Photo credit: Origin)

(2) Participants' Engagement in the Metaverse

Figure 3 illustrates the participants' level of familiarity with the metaverse. 73.7% (n=84) of the respondents indicated some level of familiarity with the metaverse, while 26.3% (n=30) indicated no knowledge of the metaverse, suggesting a need for increased awareness in the field. Figure 4 reflects the participants' time commitment in the metaverse. The results show that the majority of participants (77.2%, n=88) spent less than 1 hour per week in the metaverse, while 17.5% (n=20) spent 1-3 hours per week. Only 5.3% (n=6) of the participants spent more than 3 hours per week engaging in metaverse activities.
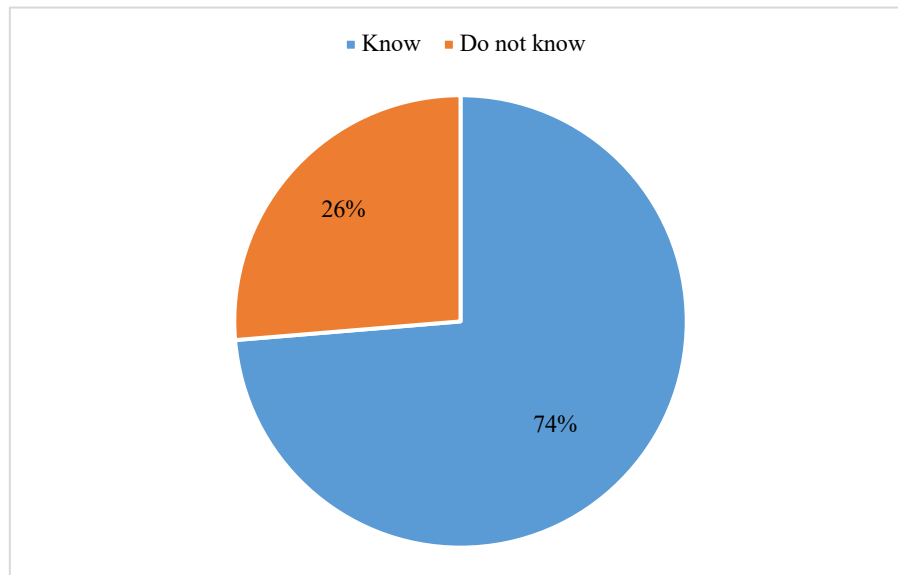

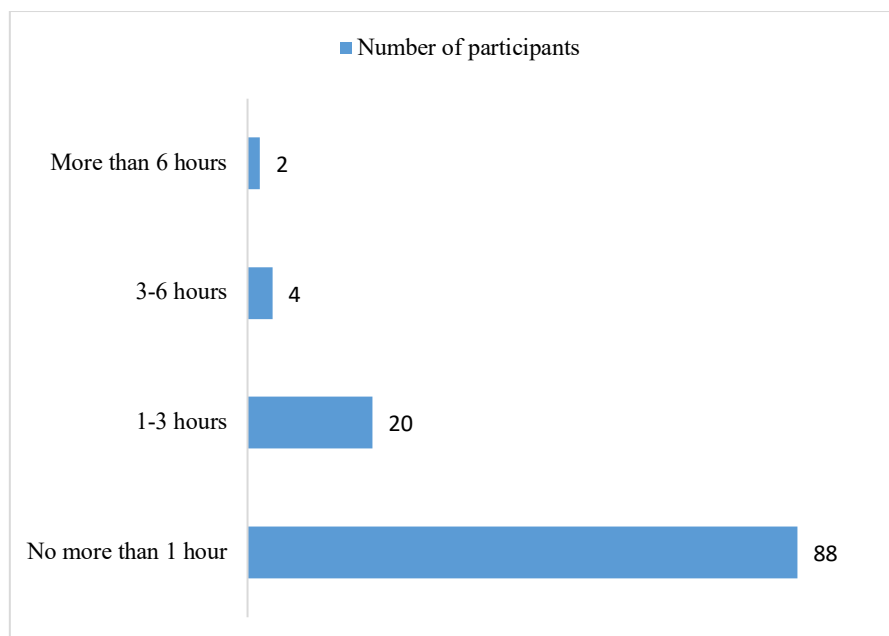Figure 3: Consumer's knowledge of metaverse.

(Photo credit: Origin)

Figure 4: Time invested by cosumers in metaverse.

(Photo credit: Origin)

3.1.2. Inferential Statistics

(1) Influence of Luxury Brand Marketing Strategies on Consumer Engagement

Figure 5 illustrates the participants' level of awareness of luxury brands' marketing activities in the metaverse. 44.7% (n=51) of the participants indicated some level of awareness, while 55.3% (n=63) remained unaware. This may suggest that luxury brands' marketing activities in the metaverse have not fully reached all potential consumers or that their promotional efforts need strengthening. However, despite luxury brands' various marketing activities in the metaverse, only 15.8% (n=18) of the participants reported having purchased related products or services, while non-purchasers accounted for 84.2% (n=96), as shown in Figure 6. Figure 7 presents consumers' perceptions of luxury brand marketing strategies in the metaverse. Louis Vuitton and Gucci tied for first place, each receiving 14.9% (n=17) of the endorsements, followed by Prada (7.9%, n=9), Burberry (6.1%, n=7), and Balenciaga (5.3%, n=6). However, 48.2% (n=55) of the participants expressed uncertainty about 'the most successful brand's marketing strategy.
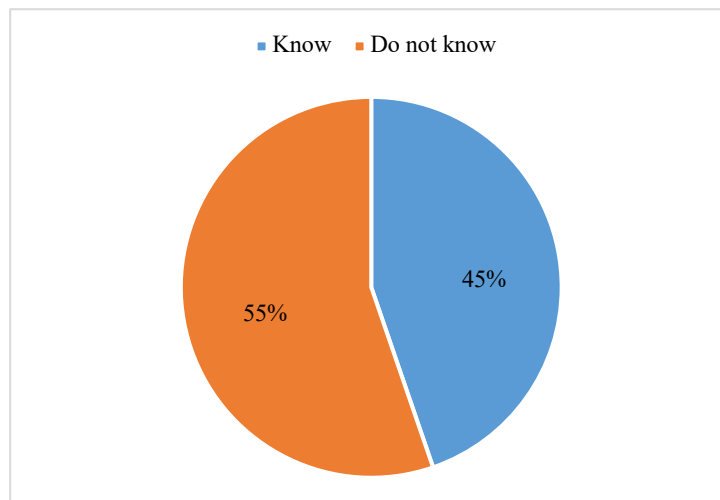

Figure 5: Consumer awareness of luxury brands' marketing activities in metaverse.
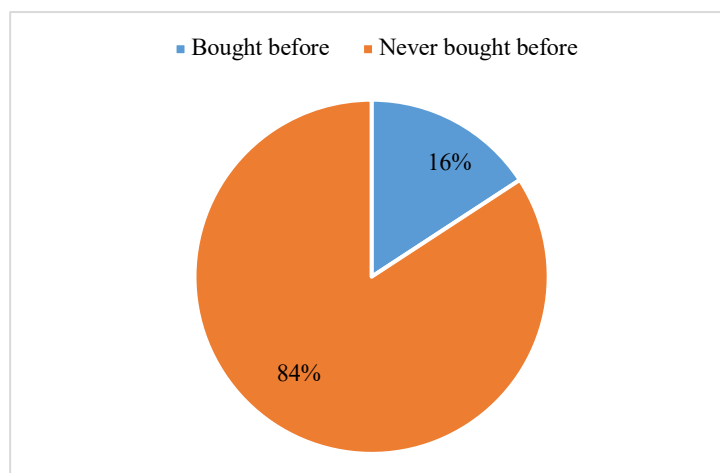
(Photo credit: Origin)

Figure 6: Consumers' consumption in the luxury brand metaverse.
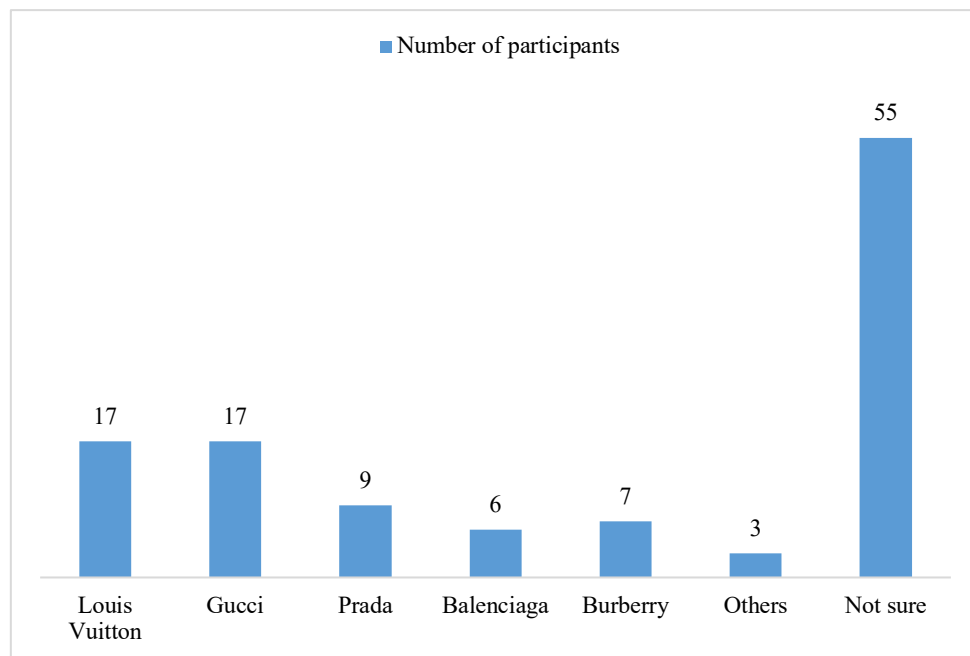
(Photo credit: Origin)

Figure 7: Consumer preferences for the most successful luxury brand in metaverse marketing.

(Photo credit: Origin)

(2) Correlation between Consumer Awareness and Active Participation

Figure 8 shows that despite 42.9% (n=49) of the participants indicating that luxury brand marketing activities in the metaverse did not change their purchasing behavior and 34.2% (n=39) expressing uncertainty, we also observed that the cognition and behavior of some individuals were indeed influenced. Figures 9 and 10 illustrate whether luxury brand marketing activities in the metaverse influenced participants' perceptions of the brand and whether it led to increased engagement in metaverse activities. Of the participants, 51.8% (n=59) and 45.6% (n=52) gave affirmative responses.
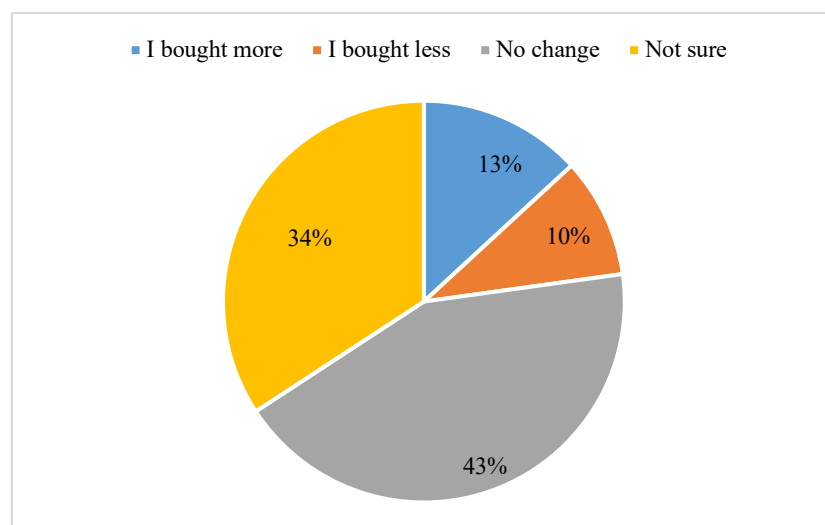

Figure 8: Consumer purchasing behaviour change scenarios for luxury brand metaverse marketinkg.
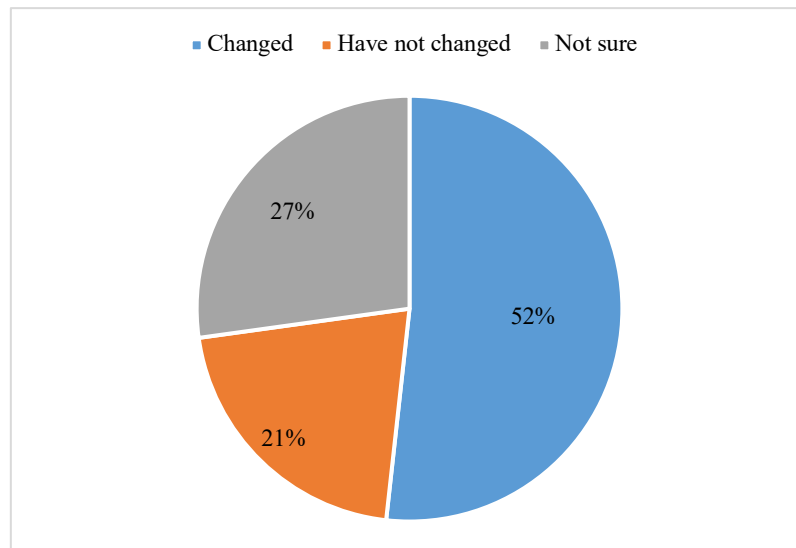
(Photo credit: Origin)

Figure 9: Changes in consumer perceptions of luxury brands influenced by metaverse marketing.
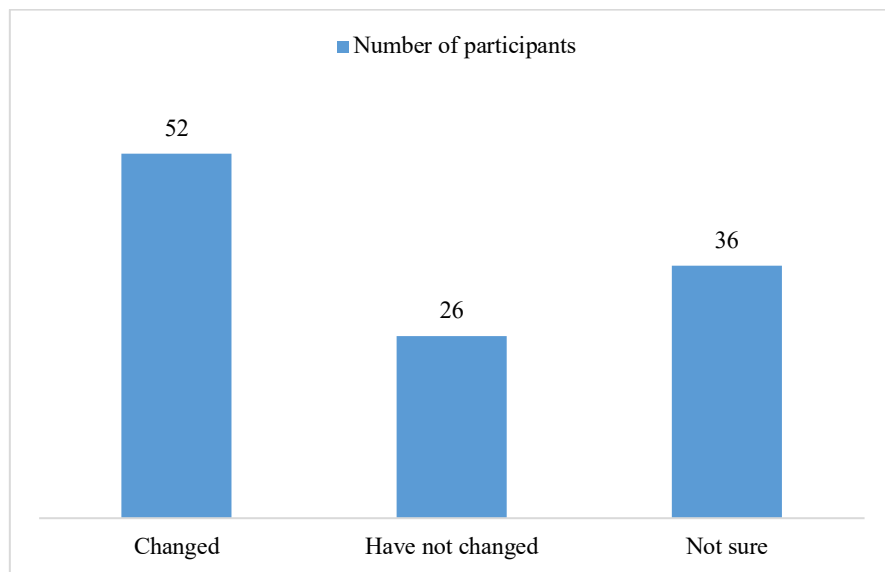
(Photo credit: Origin)

Figure 10: Consumers' motivation to engage with luxury brands' metaverse marketing changes.

(Photo credit: Origin)

3.2. Qualitative Results from Literature Review

3.2.1. Overview of the Metaverse Market for Luxury Brands

With the arrival of the COVID-19 pandemic, the development and use of digital tools and products have accelerated and become widespread [18]. This change is also reflected in the development of luxury brands in the metaverse market. Today, these luxury brands are comprehensively reshaping their online e-commerce presence to better align with the new market environment [19]. In further exploration and experimentation, some luxury brands have begun offering unique metaverse access keys as an entry point into this emerging field [12]. However, the metaverse also brings new

challenges, including establishing and maintaining the brand image in this new virtual space and meeting and attracting consumers in this market [16].

3.2.2. Consumer Behaviour in the Metaverse

The metaverse environment has greatly transformed consumer behavior patterns. In the metaverse, consumers not only experience a sense of detachment from the real world but also gain new experiences that differ from the real world [9]. This experience is particularly evident in the virtual environments provided by luxury brands, where consumers can own and use virtual goods from various luxury brands and interact with other users in the metaverse, which may be difficult to achieve in reality [9]. This change has affected consumers' purchasing behavior and provided them with new shopping experiences and satisfaction [3].

3.2.3. Marketing Strategies Employed by Luxury Brands in the Metaverse

In response to the new metaverse environment, luxury brands are innovating their marketing strategies to adapt to the specificities of the metaverse market. In order to meet the new demands and expectations of consumers, luxury brands have begun integrating new technologies and elements deeply into their distribution channels and shopping environments, aiming to provide a richer and more appealing shopping experience [20,21]. For example, the use of immersive marketing strategies, which is a method that can evoke consumers' perceptions and emotional responses, can further influence consumers' purchasing behavior and make them more inclined to choose the brand's products [22,23].

3.3. Integrated Results

3.3.1. Combination of Quantitative and Qualitative Results

Firstly, the quantitative results show that the main users of the metaverse are young people with relatively low levels of engagement. Most users have low awareness of luxury brand marketing activities in the metaverse. These quantitative findings align with the qualitative research description of the metaverse market. The qualitative research mentioned that the metaverse market is an emerging market that emerged during the COVID-19 pandemic, and luxury brands are attempting to enter this new field by providing unique metaverse access keys. When analyzing these two results together, it can be observed that although the metaverse market presents new business opportunities for luxury brands, the current level of consumer awareness and engagement with luxury brand marketing activities remains relatively low. On the other hand, qualitative data signifies that the metaverse milieu offers consumers an entirely unprecedented shopping journey, harmonizing with the quantitative revelations concerning consumer cognizance of luxury brand promotional undertakings within the metaverse. Yet, regardless of consumer awareness concerning these marketing endeavors, their buying conduct remains largely unaltered. This could insinuate that while marketing endeavors within the metaverse may pique consumer curiosity, their influence on tangible purchasing behavior remains confined.

3.3.2. Major Findings

The following key findings were derived after combining the quantitative and qualitative analyses. Firstly, participants in the metaverse are mainly young people with relatively low levels of engagement. Secondly, although luxury brand marketing activities influence some individuals' cognition and behavior in the metaverse, the majority of consumers still lack awareness and significant changes in their purchasing behavior. Lastly, luxury brand marketing activities in the

metaverse have not fully reached all potential consumers, or their promotional efforts need strengthening. These findings provide important insights for developing and adjusting marketing strategies for luxury brands in the metaverse.

4. Discussion

4.1. Interpretation of Major Findings

4.1.1. Insights from Quantitative Results

The main participants in the metaverse were found to be predominantly young individuals aged 18-24, accounting for 57.9% of the sample. This observation aligns with the increasing interest of teenagers and young adults in emerging technologies and digital spaces. Moreover, despite a slightly higher representation of female participants, the gender ratio remained balanced overall, suggesting that the appeal of the metaverse extends beyond specific gender demographics. This finding holds significance for luxury brands aiming to develop marketing strategies that cater to a wider range of users. Furthermore, participants exhibited a generally high level of awareness regarding the metaverse; however, their engagement time within the metaverse was relatively limited. This suggests that the current metaverse environment and content may not fully satisfy the demand for long-term engagement of a larger user base or that certain users perceive high barriers to entry into the metaverse.

Concerning the influence of lavish brand promotional endeavors in the metaverse, the findings denote that although a subset of individuals was cognizant of and involved with these undertakings, the overall yield in terms of sales conversion did not achieve notable heights. This suggests that the approaches employed in the metaverse for luxury brand marketing might not be entirely congruous with the virtual environment or the metaverse's potential to stimulate sufficient purchasing drive remains untapped. Notably, although most participants' purchasing behavior did not significantly change due to luxury brand marketing activities in the metaverse, some individuals demonstrated an influence on brand awareness and metaverse engagement. This suggests a potential trend where luxury brand marketing activities in the metaverse, while not currently leading to significant changes in purchasing behavior, are starting to have psychological effects on consumers.

4.1.2. Insights from Qualitative Results

The COVID-19 pandemic has undoubtedly acted as a catalyst, accelerating the digital transformation of luxury brands. In this process, the emergence of the metaverse has provided a new domain for luxury brands to pursue innovation and maintain competitiveness. However, this transition is not without challenges, as luxury brands must balance preserving their high-end image and pursuing innovation within the metaverse. Consumer behavior has significantly transformed in the metaverse environment. On the one hand, their behavior patterns seem to detach from the real world, potentially due to the immersive experiences offered by the metaverse that fulfill their desire for novelty and unique experiences. On the other hand, consumer behavior in the metaverse reflects their pursuit of personalized services and highly interactive experiences, presenting new challenges for luxury brands in delivering high-quality services that meet consumer expectations. Consequently, significant adjustments are required in luxury brands' marketing strategies in the metaverse market. While luxury brands traditionally rely on the unique qualities of physical products, such as quality, design, and brand heritage, to attract and retain consumers, the metaverse environment diminishes the significance of these attributes. Instead, brand storytelling, innovation, and unique virtual experiences gain prominence.

4.2.   Potential Improvements and Opportunities

Improving consumer awareness of luxury brands within the metaverse is crucial to capitalize on the metaverse's new markets and opportunities. Luxury brands should intensify promotional efforts to increase brand exposure and inform more metaverse users about their presence and related marketing activities. Establishing brand-exclusive areas, organizing brand-related events, and collaborating with popular metaverse events or personalities can enhance brand visibility. Additionally, enhancing metaverse users' engagement is essential. Luxury brands can strive to provide captivating metaverse experiences encouraging users to spend more time within the metaverse. Initiatives like hosting online fashion shows, art exhibitions, product launches within the metaverse, or offering virtual fitting experiences can directly immerse consumers in the brand's products and heighten their awareness and engagement. Finally, innovative technological marketing strategies present opportunities for luxury brands. Exploring the digitization of physical luxury products through technologies like non-fungible tokens (NFTs) enables consumers to purchase and own luxury brand products in the metaverse. Continuous experimentation and innovation are key for luxury brands to leverage the potential of this new market.

5.   Conclusion

The metaverse presents a new frontier for luxury brand marketing, with its innovative, immersive, and interconnected experiences offering unique opportunities for brand-consumer interaction. However, it is also evident that luxury brands face significant challenges in leveraging this platform effectively. The current research has illuminated that despite a demographic skew towards younger users in the metaverse, the overall engagement and awareness of luxury brand marketing remain relatively low. This indicates that current marketing strategies within the metaverse have a limited influence on purchasing behavior, pointing to the need for further innovation and adjustments to meet the unique demands of this digital environment. Luxury brands must prioritize boosting user awareness and engagement and experimenting with novel marketing strategies, such as incorporating non-fungible tokens (NFTs) into their campaigns. Understanding consumer behavior within the metaverse is paramount for developing effective marketing strategies, necessitating a shift from traditional paradigms toward more immersive and engaging approaches.

However, the findings should be contextualized within the study's limitations. The demographic skew towards younger users might limit the generalizability of the findings to other age groups. The focus on current marketing strategies might also become outdated, given the rapid evolution of the metaverse. A deeper exploration of qualitative aspects, such as consumer sentiments and motivations, and the potential influence of external factors, such as the ongoing effects of the COVID-19 pandemic on digital transformations, are needed to provide a more nuanced understanding. While the study provides a foundation for understanding luxury brand marketing within the metaverse, continuous research is required to keep pace with the rapid evolution of this platform. Future research should aim to address these limitations, offering more robust and comprehensive insights into this burgeoning marketing frontier. The aim of the present research is to stimulate ongoing dialogue and innovation in luxury brand marketing within the metaverse, laying the groundwork for more in-depth explorations in this digital age.

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