

Navigating the New Digital Frontier: An Analysis of Luxury Brand Strategies in the Metaverse

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ABSTRACT

This paper studies how luxury brands act in the metaverse. It utilizes a literature review and two semi-structured expert interviews. It details three stages of digital adoption: resistance, selective integration, and Web3 experiments. It explains how NFTs, virtual goods, and token-gated access create technical scarcity and visible status. It shows how young consumers use digital items to build identity and community. It also lists key risks: energy use, data privacy, and brand dilution. The findings outline key digital tools that help maintain core luxury values and point to unanswered questions about long-term brand equity and consumer behavior.

KEYWORDS

Metaverse; Luxury brands; NFTs; Digital scarcity; Consumer identity; Web3

1. INTRODUCTION

In recent years, people have begun spending time in a shared virtual space often called the metaverse. Users enter as avatars, own and trade digital items, and move through experiences built with tools like blockchain for ownership records and AR/VR for immersion [1]. Luxury brands are rooted in a different tradition: their value relies on scarcity, craftsmanship, and long-standing brand stories. Yet the move toward online channels is now unmistakable. Online sales of personal luxury goods were about 9% in 2017 (as shown in Figure 1) and jumped to roughly 23% in 2020, showing that digital is no longer a side channel [2, 3]. Some virtual items have even been sold at high prices—for example, a Gucci bag in Roblox was resold for about USD \$4,115, and Tiffany & Co.'s “NFTiff” passes were sold out within minutes [4, 5]. as such, these examples suggest that luxury value can also live and thrive online.

Digital Transformation Timeline: Luxury Fashion Brands (1990s-2029)

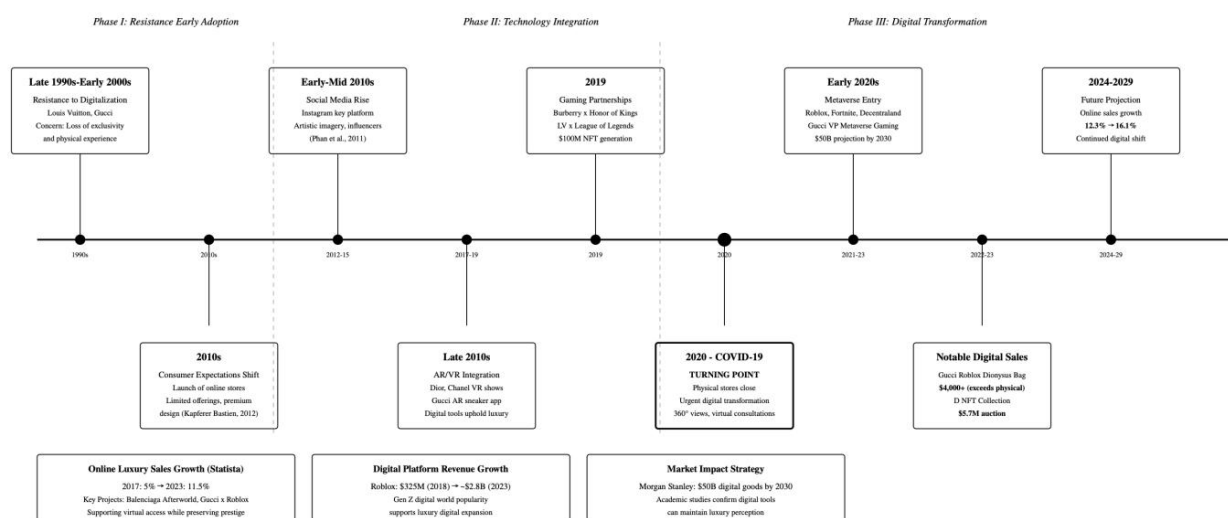


Figure 1. The growth of the global online personal luxury goods market from 2003 to 2017, showing a consistent increase in both market value and online share [2].

Even with this momentum, managers still lack clear guidance. Many articles describe what the metaverse is and show early brand experiments, but they do not tie specific tools to the values that make luxury work. It remains unclear which tools best protect scarcity and authenticity, how they build community in practice, or how to limit risks such as brand dilution, privacy concerns, and energy use. There is also no simple overview of how luxury houses moved from saying “no” to trying Web3 and what they learned along the way.

In this study, I ask three questions. First, how have luxury brands shifted from early resistance to selective adoption and, more recently, to Web3 trials? Second, which tools—such as on-chain provenance, limited-edition mints, token-gated communities, and immersive stores—help keep luxury’s core values? Third, what do experts see as the main opportunities and risks as these tools scale? To answer, I review recent research and industry reports, and add two semi-structured expert interviews to ground the findings.

2. LITERATURE REVIEW

Luxury brands first reacted to the metaverse with caution, then tested low-risk pilots, and now explore full Web3 tools. Early literature helps explain the hesitation. Research shows that luxury value rests on proven quality, rarity, heritage, and high price; managers feared that open virtual worlds would dilute these signals [6]. Consumers buy luxury for four distinct rewards—financial prestige, functional excellence, personal identity, and social recognition—so any digital move had to protect all four of the rewards [7]. Field studies on prestige cosmetics illustrate how delicate these motives can be: sensorial pleasure shapes attitudes, while the desire for status and ownership drives actual use. [8]. Together, these studies explain the first “resistance” phase—brands stayed out because early game environments seemed unable to deliver touch, rarity, or secure ownership.

Selective integration began once firms saw ways to map classic cues onto virtual settings. A conceptual roadmap outlines this pivot: brands realized that immersive 3-D stores can recreate hedonic pleasure through sound, motion, and mini-games, and that limited digital drops can mimic scarcity [1]. For instance, Gucci and Balenciaga built temporary flagships inside Roblox and Fortnite; studies show that rich audio-visual design revives hedonic value, while strict time windows preserve rarity [9]. This point is supported experimentally: even simple 360-degree product spins raise perceived exclusivity in online shops, supporting the idea that digital imagery can protect the functional pillar [10].

The current iteration of Web3 delves deeper. It has been established that NFTs from luxury brands can reduce consumer uncertainty and enhance consumers' willingness to purchase; therefore, technical scarcity can enhance social and financial value [11]. Token authentication can also confirm authenticity, being a root cue to heritage [12]. Avatar-customization mechanisms enable users to co-produce personal looks, enhancing the individual pillar by affording buyers with a new method of signaling their identity [13]. Experimentation with XR game events consistently reports increases in brand equity, implying that gamified quests can anchor hedonic, social and identity motives together [14]. For luxury brands, the reasons to participate are clear: they gain closer access to Gen Z and detailed engagement data, and the chance to build high-margin virtual product lines is especially appealing [15, 16].

Risk research also reminds managers to moderate enthusiasm in moving across the innovation continuum. A hype cycle has been observed, in which initial enthusiasm ends in over-investment, and a subsequent and extended slump in user adoption [17]. Real dangers are also identified, including energy usage, privacy and brand dilution, also noted by Dwivedi, et al. [15]. By mapping classic motives onto three adoption stages—resistance, selective integration, and Web3 experiments—the literature shows how technical scarcity, avatar identity, and immersive design can keep luxury values intact while flagging gaps for future research on sustainability, data ethics, and long-term equity.

3. METHODOLOGY

This paper follows a two-step qualitative design that joins a structured reading review with expert insight. First, I searched Scopus, Web of Science, and Google Scholar for work published between 2009 and 2025, combining terms such as “luxury,” “metaverse,” “NFT,” “virtual goods,” “avatar,” “token-gated access,” and platform names (e.g., Roblox, Fortnite, Decentraland). After removing duplicates, I kept peer-reviewed articles, major industry reports, well-documented case studies, and relevant Statista tables that offered verified market figures; brief opinion pieces or sources without clear methods were set aside. Each text or dataset was read carefully, its facts and arguments coded line by line, and the codes were then grouped into themes through reflexive thematic analysis, aligned with my three adoption stages and the four classic pillars (scarcity, authenticity, price premium, and community). Numerical indicators drawn from Statista and subscription industry dashboards were folded into these themes to ground the discussion in concrete market trends (used as context rather than causal tests).

Second, to balance reading-review patterns with real-time professional views, I conducted two semi-structured Zoom interviews with professors who publish on consumer culture and digital marketing. Each session lasted about an hour, recorded with consent, transcribed verbatim, and anonymized. In my coding process, I open-coded each transcript, then axial coded the related ideas. After that, I compared these interview themes with those from the literature review, which included topics such as technical scarcity and provenance, avatar identity and co-creation, community metrics, and operational risks like energy use, data privacy, and brand dilution. Overall, this cross-source check compared scholarship with expert judgment. The check surfaced where they aligned and where there was divergence. It also highlighted where our questions remained open. This process provided breadth in broad themes and depth in themes related to practice.

4. RESULTS

My examination unfolds in two steps. First, I confirm the three-part diffusion narrative established above—resistance → selective adoption → acceleration/metaverse, as represented in Figure 2.

Luxury brands were moving online in three distinct waves; the first part was what I call the "resistance years", which occurred before 2009, when most luxury brands and houses would not sell on the

internet at all because they felt that purchasing online, without the face-to-face interaction or service and luxury experience, would not seem like a luxury purchase [18]. The second wave is considered the "selective-adoption" wave that occurred during the years 2010-2019; during this wave, some luxury brands started to trial arrangements with certain e-commerce sites (Net-a-Porter in particular) to sell products online but did not embrace a real web presence. Even by 2019, only 12 percent of personal-luxury purchases were done online [3]. The pandemic period of COVID-19 pushed the industry into the third wave, which I dub the "acceleration" wave; web sales of luxury products doubled from 12 percent to 23 percent in a single year after COVID-19 [19], and has now remained steady at around one-fifth of personal-luxury purchases each year as a result of lavish brands testing out Web3 capabilities, decentralized approaches, NFT/crypto marketing, and metaverse flagship stores. Few commentators suggest that by 2030, online e-commerce and mono-brand stores could account for almost two-thirds of all luxury consumption [20]. The confirmation of a clear path, as explored through a study of diffusion in three waves or phases, seems to support the notion of abrupt formation of adoption wherein luxury brands began the adoption of selling online, and moved quickly towards a remarkable e-consumer experience and a sync back to the trifecta of luxury consumption: exclusivity, service, and experience.

Global online personal luxury goods market, 2003–17E (€ billions)

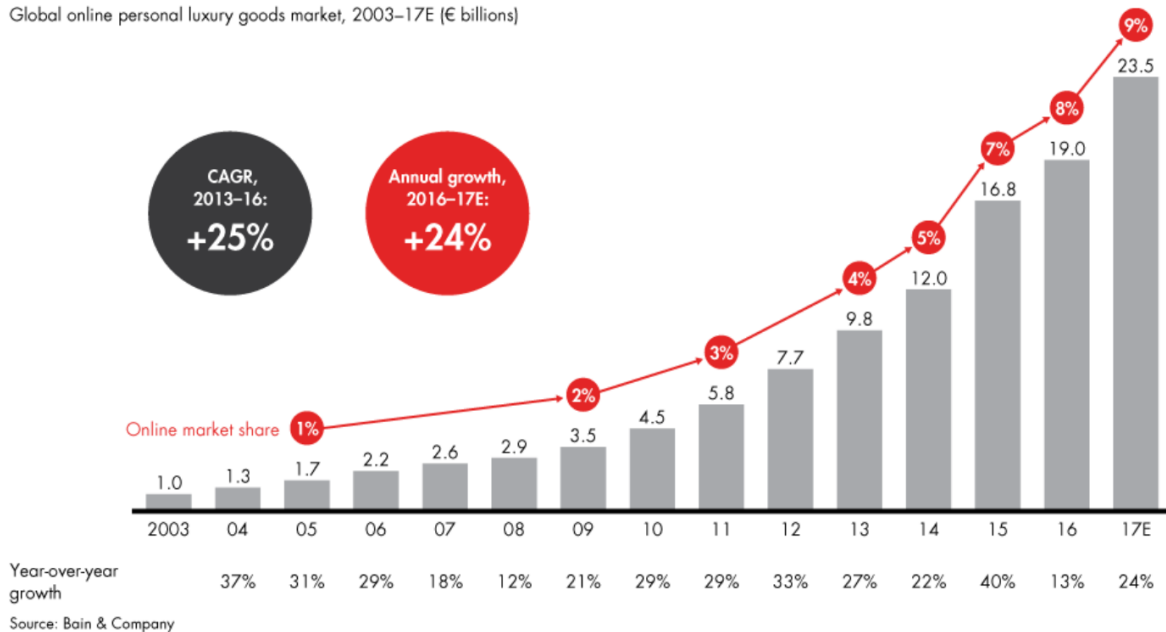


Figure 2. A timeline of the digital transformation of luxury brands, showing the evolution from initial resistance to Web3 integration and future digital shifts

Subsequently, I will explore whether the four legacy elements of luxury - exclusivity, authenticity, price premium, and identity with the community - migrate into the virtual realm.

Being digital does not subtract exclusivity; in fact, exclusivity is coded into the tech. Gucci's Dionysus bag, re-imagined for use in Roblox, was resold for \$4,115, almost a 50% premium over the physical price [4]. Tiffany's 'NFTiff' pass minted 250 tokens (limited to 250 passes) and were sold for 30 ETH. They were sold out in 22 minutes for about \$12.5 million [5]. Limited mint size, resellers, price premiums, and exchange volume are all examples of digital scarcity. This was further supported by an interview that stated: 'younger consumers are investing in virtual goods for exactly the same status cues that were once associated with leather and silk'.

Authenticity and traceable origins also translate well online. NFTs with verified smart-contract IDs make shoppers view brands as more genuine and boost their intent of purchase[12]. An expert added that blockchain proof is "as close as a craftsman's signature" but even tougher to fake. These points show that metaverse tools can protect, not weaken, brand equity.

High profit margins can continue in the digital world. Limited-edition NFTs and metaverse-only fashion drops need no physical materials or shipping, so costs stay very low. Token-gated digital experiences, such as exclusive virtual shows or member clubs, can also generate continuing fees or royalties. An analysis of 40 luxury NFT campaigns identifies revenue mechanisms and value-creation strategies; these models combine low costs with built-in ways to create repeat income [16]. Still, one expert warns that chasing short-term profits too hard may hurt a brand's long-term prestige, a caution that contrasts with many upbeat corporate reports.

Community and identity, once built mainly through runway shows and private parties, now follow new digital measures. For example, Gucci Town on Roblox attracts more than 100,000 visitors a day, and users who collect special badges return about twice as often. This repeat activity—sometimes called wallet-level “stickiness,” meaning how often a customer's digital wallet interacts with a brand—has become a key indicator for online brand communities. Surveys show that such engagement strengthens brand attachment by giving people “fantasies, feelings, and fun” in immersive worlds [21]. Both experts interviewed agreed that these social features help explain the focus on younger consumers, who are projected to account for 25%–30% of luxury purchases by 2030 [20].

All told, the numbers, the research, and the expert voices point to one main idea: virtual worlds can keep the four classic pillars of luxury—scarcity, authenticity, strong margins and status-driven communities—while giving brands more reach and flexibility. Rather than diluting luxury, the metaverse offers a new stage where old codes of prestige still shine.

5. DISCUSSION

In this section, I ask why these mechanisms appear, when they might fail, and what managers and researchers should do next.

I see two simple reasons why luxury values can move online. First, coded signals of trust and status can strengthen a brand's narrative when carefully aligned with it. Limited releases and blockchain-based proofs make scarcity and authenticity more visible and verifiable, which in turn reinforces consumers' ability to signal social status. Second, community-driven value comes from accessibility. Many digital items to consumers are like tickets into quests, member spaces, or co-creation. People come back for the experience, rather than solely for the object. Together, these two reasons help keep the four classic attributes—scarcity, authenticity, price premium, and community identity—alive in virtual space.

But these forces are not automatic. Code-based scarcity fails if drops are too frequent or feel off-brand. Community value fades if the platform's culture does not align with the brand's identity or heritage. Energy use and data privacy also matter. If buyers lack clear, transparent rules governing supply, access, resale, and data management, their trust diminishes even when the underlying blockchain technology remains fully operational.

What should brands do? They can start with small and clear pilot projects, planning how many items to release and when. They should share what they measure—such as resale price, repeat visits, time spent, and co-creation—because these show how engaged customers are. Brands can also use “phygital” bundles (mixing physical and digital experiences) to connect online offers with real-world craft, service, or events. This link helps keep value steady and avoids short-term hype. Finally, it is better to focus on a few well-chosen platforms and clear audience groups instead of trying to cover many virtual worlds at once.

This study has limitations. My evidence is qualitative and recent. I used a structured reading review and two expert interviews. The study outlines the main mechanisms at work and the limits of their application, but it does not claim that the findings apply in all situations.

Future research could track buyers over time, compare different platforms with the same metrics, and examine differences among categories such as couture, jewelry, and beauty. Because the metaverse is still young, brand experiments should remain flexible and transparent as new evidence emerges.

6. CONCLUSION

This study investigates the approaches luxury brands are taking to embed themselves in the metaverse. The analysis has identified a clear three-stage cycle of adoption: the first being initial resistance due to fears of dilution of the brand; the second is selective entry points; and the third is current experimentation with NFTs and virtual worlds as we move towards 'Web3'.

The findings of this study suggest that the metaverse is not a threat to a luxury brand and that technology brings with it tools of reinforcement of the traditional pillars of luxury: scarcity, authenticity, price premium, and community. The mechanisms that underpin, and the transition of the valuation of traditional signals of exclusivity and status to the digital space, can be achieved by supporting the traditional notions of luxury with technology- for example, through the verification of provenance using the blockchain, digital drop limited-edition products, and token-gated access.

Moreover, branded virtual worlds can also serve as a new community platform for community and co-creation, especially for younger consumers. However, caution is needed, and the top risks must be mitigated. These include brand dilution due to a lack of brand planning, energy costs, and data privacy. Long-term success must be framed with a strategy, transparency, and a critical connection to the actual space.

Lastly, this study serves as a first step toward understanding how luxury brands operate in the evolving metaverse. It shows that the findings open questions rather than close them, and it calls for long-term research on brand equity and consumer behavior as digital environments continue to change.

REFERENCES

- [1] Barrera, K. G., and D. Shah, "Marketing in the Metaverse: Conceptual Understanding, Framework, and Research Agenda," *Journal of Business Research*, Vol. 155, p. 113420, 2023. <https://doi.org/10.1016/j.jbusres.2022.113420>
- [2] Bain & Company, "Luxury Goods Worldwide Market Study: Fall–Winter 2017," 2017. [Online]. Available: <https://www.bain.com/insights/luxury-goods-worldwide-market-study-fall-winter-2017/>
- [3] Bain & Company, "Covid-19 Crisis Pushes Luxury to Sharpest Fall Ever but Catalyses Industry's Ability to Transform," Nov. 18, 2020. [Online]. Available: https://www.bain.com/about/media-center/press-releases/2020/covid_19_crisis_pushes_luxury_to_sharpest_fall_ever_but_catalyses_industrys_ability_to_transfor_m/
- [4] South China Morning Post, "A Digital Gucci Bag Sold for US\$4,000 on Gaming Platform Roblox," Jun. 7, 2021. [Online]. Available: <https://www.scmp.com/tech/innovation/article/3136400/digital-gucci-bag-sold-roblox-platform>
- [5] Blockworks, "Tiffany & Co. Turns CryptoPunks into \$12.5 Million Luxury Jewelry Sale," Aug. 12, 2022. [Online]. Available: <https://blockworks.co/news/tiffany-cryptopunks-nftiff>
- [6] Ko, E., J. P. Costello, and C. R. Taylor, "What Is a Luxury Brand? A New Definition and Review of the Literature," *Journal of Business Research*, Vol. 99, pp. 405–413, 2019. <https://doi.org/10.1016/j.jbusres.2017.08.023>
- [7] Wiedmann, K.-P., N. Hennigs, and A. Siebels, "Value-Based Segmentation of Luxury Consumption Behaviour," *Psychology & Marketing*, Vol. 26, no. 7, pp. 625–651, 2009. <https://doi.org/10.1002/mar.20292>
- [8] Ajitha, S., and V. J. Sivakumar, "Understanding the Effect of Personal and Social Value on Attitude and Usage Behavior of Luxury Cosmetic Brands," *Journal of Retailing and Consumer Services*, Vol. 39, pp. 103–113, 2017. <https://doi.org/10.1016/j.jretconser.2017.07.009>
- [9] Hu, L., M. Olivieri, M. Giovannetti, and E. Cedrola, "The Retail Strategies of Luxury Fashion Firms in the Metaverse: Enhancing Brand Experiences," *Journal of Retailing and Consumer Services*, Vol. 84, p. 104202, 2025. <https://doi.org/10.1016/j.jretconser.2024.104202>

- [10] Beuckels, E., and L. Hudders, “An Experimental Study to Investigate the Impact of Image Interactivity on the Perception of Luxury in an Online Shopping Context,” *Journal of Retailing and Consumer Services*, Vol. 33, pp. 135–142, 2016. <https://doi.org/10.1016/j.jretconser.2016.08.014>
- [11] Cho, M., and E. Cho, “Digital Luxury in the Metaverse: How Non-Fungible Tokens Shape Resistance to Negative Information and Brand Purchase Intention,” *Journal of Consumer Behaviour*, in press, 2025. <https://doi.org/10.1002/cb.70007>
- [12] Sung, E., O. Kwon, and K. Sohn, “NFT Luxury-Brand Marketing in the Metaverse: Leveraging Blockchain-Certified NFTs to Drive Consumer Behaviour,” *Psychology & Marketing*, Vol. 40, no. 11, pp. 2306–2325, 2023. <https://doi.org/10.1002/mar.21854>
- [13] Chakraborty, A., V. Jain, and R. Belk, “Exploring Avatar Selves in the Metaverse: Consumer Co-Creation of Experiences,” *Journal of Consumer Behaviour*, Vol. 24, no. 2, pp. 694–716, 2025. <https://doi.org/10.1002/cb.2440>
- [14] Arya, V., R. Sambyal, A. Sharma, and Y. K. Dwivedi, “Brands Are Calling Your AVATAR in Metaverse: A Study to Explore XR-Based Gamification Marketing Activities and Consumer-Based Brand Equity in Virtual World,” *Journal of Consumer Behaviour*, Vol. 23, no. 2, pp. 556–585, 2024. <https://doi.org/10.1002/cb.2214>
- [15] Dwivedi, Y. K., L. Hughes, Y. Wang, A. A. Alalwan, S. J. Ahn, et al., “Metaverse Marketing: How the Metaverse Will Shape the Future of Consumer Research and Practice,” *Psychology & Marketing*, Vol. 40, no. 4, pp. 750–776, 2023. <https://doi.org/10.1002/mar.21767>
- [16] Bao, W., L. Hudders, S. Yu, and E. Beuckels, “Virtual Luxury in the Metaverse: NFT-Enabled Value Recreation in Luxury Brands,” *International Journal of Research in Marketing*, in press, 2024. <https://doi.org/10.1016/j.ijresmar.2024.01.002>
- [17] Jacobides, M. G., F. Candelon, L. Kraymer, K. Round, and W. Chen, “Building Synthetic Worlds: Lessons from the Excessive Infatuation and Oversold Disillusionment with the Metaverse,” *Industry & Innovation*, Vol. 31, no. 1, pp. 105–129, 2024. <https://doi.org/10.1080/13662716.2023.2279051>
- [18] Kapferer, J.-N., and V. Bastien, *The Luxury Strategy*, 2nd ed. Kogen Page, 2012.
- [19] Bain & Company, “The Future of Luxury: Bouncing Back from Covid-19,” Jan. 2021. [Online]. Available: <https://www.bain.com/insights/the-future-of-luxury-bouncing-back-from-covid-19/>
- [20] Bain & Company, “Long Live Luxury: Converge to Expand Through Turbulence,” 2024. [Online]. Available: <https://www.bain.com/insights/long-live-luxury-converge-to-expand-through-turbulence/>
- [21] Jiang, Y., J. Liao, J. Chen, Y. Hu, and P. Du, “Motivation for Users’ Knowledge-Sharing Behaviour in Virtual Brand Communities: A Psychological Ownership Perspective,” *Asia Pacific Journal of Marketing and Logistics*, Vol. 34, no. 10, pp. 2165–2183, 2022. <https://doi.org/10.1080/13662716.2023.2279051>