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Technological Innovation and Web3 Strategies: Bulgari's First High-Jewelry NFT Capsule Collection

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Abstract:
This paper investigates how Web3 technologies, particularly NFTs, can create value even in traditional manufacturing companies that are generally recognized as distant from more advanced technological innovation. Using Bulgari's launch of its first high-jewelry NFT capsule collection as a case study, the research aims to understand how Web3 strategies can be effectively adopted by manufacturing, in particular luxury brands, with an exclusivity positioning, and what forms of value they can generate and capture. Through a case study based on secondary (company's websites, social media, magazines and fashion journals) and primary data (semi-structured interviews and focus groups), the research shows that Web3 strategies can successfully reinforce brand storytelling, create new customer engagement avenues, and preserve brand prestige while innovating. Bulgari's approach suggests that NFTs can serve not only as digital extensions of physical luxury products but also as tools for enhancing brand equity, reaching new audiences, and unlocking emotional and experiential value. The case illustrates that digital transformation in heritage brands does not have to come at the expense of tradition. Rather, when executed thoughtfully, technologies like NFTs can become powerful instruments for reinforcing brand identity, enhancing storytelling, and engaging new audiences. The study also highlights the importance of learning outcomes in entering new value creation processes during periods of discontinuity, before enabling technologies are mature enough to ensure a high level of customers' experience.

Purpose
This paper investigates how Web3 technologies, particularly NFTs, can create value even in traditional manufacturing companies that are generally recognized as distant from more advanced technological innovation.

Methodology
Using Bulgari's launch of its first high-jewelry NFT capsule collection as a case study, the research aims to understand how Web3 strategies can be effectively adopted by manufacturing, in particular luxury brands, with an exclusivity positioning, and what forms

of value they can generate and capture. Through a case study based on secondary (company's websites, social media, magazines and fashion journals) and primary data (semi-structured interviews and focus groups), the research shows that Web3 strategies can successfully reinforce brand storytelling, create new customer engagement avenues, and preserve brand prestige while innovating.

Findings
Bulgari's approach suggests that NFTs can serve not only as digital extensions of physical luxury products but also as tools for enhancing brand equity, reaching new audiences, and unlocking emotional and experiential value.

Research limitations/implications
The case illustrates that digital transformation in heritage brands does not have to come at the expense of tradition. Rather, when executed thoughtfully, technologies like NFTs can become powerful instruments for reinforcing brand identity, enhancing storytelling, and engaging new audiences.

Originality/Value
The study also highlights the importance of learning outcomes in entering new value creation processes during periods of discontinuity, before enabling technologies are mature enough to ensure a high level of custumers' experience.

Keywords: Case study, NFT, Innovation, Experiential Marketing

Paper type: Case Study

1. Introduction:

Technological innovation has consistently acted as a catalyst for transformative change across industries (Porter & Hepperlmann, 2014; 2015). In recent years, Industry 4.0 has revolutionized the manufacturing sector, reshaping how physical products are conceptualized, designed, and produced through the integration of advanced technologies such as the Internet of Things (IoT), Artificial Intelligence (AI), and Big Data Analytics (Zheng et al., 2021). While this industrial shift focused largely on improving operational efficiency and product quality in the physical realm (Brynjolfsson & Mitchell, 2017; Big Data Analytics, 2022), a new technological movement, commonly referred to as Web3, is now steering innovation into the domain of the intangible. Web3, built on blockchain technologies, brings forward concepts such as the metaverse and non-fungible tokens (NFTs), creating novel opportunities for value generation in areas where physical constraints no longer apply (Chohan & Paschen, 2021; Colicev, 2023; Malik et al., 2022). This study explores how Web3 technologies, and NFTs in particular, are redefining value creation in branding and marketing. The transition from Industry 4.0 to Web3 marks not just a technological shift but a paradigmatic one: moving from enhancing production processes to reinventing how brands engage with consumers in digital ecosystems. In this context, NFTs have emerged not only as speculative digital assets but also as powerful tools for brand storytelling, exclusivity, and community engagement (e.g. Bain, 2022).

The fashion and luxury sectors, traditionally anchored in heritage, exclusivity, and physical craftsmanship, are uniquely challenged and simultaneously empowered by these technologies (Joy et al., 2022). While early Web3 activations have largely been dominated by tech-savvy brands or those culturally close to gaming (such as Balenciaga or Burberry) this study investigates whether and how brands associated with strong traditional craftsmanship can successfully adopt Web3 strategies. Specifically, it focuses on the case of Bulgari, a high-jewelry brand known for its legacy and craftsmanship, and its pioneering initiative: the launch of a high-jewelry NFT capsule collection. The central research question guiding this investigation is as follows: *Can Web3 strategies bring value to brands that based their narrative on tangibles? And if so, how?* More specifically, through a case study, this research seeks to understand whether Web3 can be leveraged by heritage-rich luxury brands whose positioning has historically been rooted in physical craftsmanship and exclusivity, and what forms of value can be captured through such strategies.

The adoption of Web3 technologies by Bulgari presents an opportunity to examine how luxury brands can leverage digital innovation without compromising their core identity.

By linking digital artworks with physical products and presenting NFTs as extensions of their artistic and narrative heritage, Bulgari illustrates a nuanced approach to Web3 integration. This case challenges the assumption that such strategies are reserved for digital-native or trend-driven brands. Instead, it shows that even traditional manufacturing companies may adopt Web3 technologies to enhance their brand equity.

The paper is organized into four main sections. Par1 outlines the methodology adopted for the study, providing an overview of the research approach. The second section presents the case study, focusing on Bulgari's launch of its first high-jewelry NFT capsule collection in 2022. The third section offers a discussion of the case, aimed at highlighting the key insights that emerged. Finally, the fourth section presents the main conclusions and contributions of the study, reflecting on their relevance for both research and practice.

2. Part 1: Methodology

The study adopts a qualitative research approach, which is particularly suitable for exploring emerging phenomena such as Web3 strategies and their applications in luxury branding. Given the novelty and complexity of the topic, as well as the limited academic literature available, qualitative methods offer the necessary flexibility and depth to examine how value is created through technological innovation in real-world settings.

The core of this research is built on a single, in-depth case study: Bulgari's first high-jewelry NFT capsule collection. Bulgari was selected due to its unique positioning within the luxury industry, combining a heritage deeply rooted in manufacturing craftsmanship with a recent push into Web3 technologies. The brand's characteristics make it a particularly relevant example for addressing the central research question.

The case study design follows established principles in qualitative research, especially those recommended for analyzing complex, contemporary, and context-bound phenomena. As Yin (2009) defines, such an approach is well-suited to explore "how" and "why" questions, which align with the research objective of understanding how Bulgari implemented Web3 and what value was generated.

The research relies on both primary and secondary data sources. Secondary data were collected from the company's websites, social media, magazines and fashion journals. Primary data were collected through semi-structured interviews and focus groups with internal stakeholders at Bulgari. These included project contributors, high-jewelry product managers, and senior marketing executives who were directly involved in the NFT initiative. In total, four Bulgari employees participated in multiple interview sessions between May and September 2022. The interviews were designed to elicit both factual information and interpretive insights related to the strategic objectives, brand positioning, and perceived value outcomes of the NFT project. All sessions were digitally recorded and transcribed to ensure accurate data analysis. Emerging themes and related illustrative quotations from semi-structured interviews were reported in Table 1 in Annexes.

In parallel, 2 focus groups were held at Bulgari's headquarters to further explore collective interpretations of the project's goals and impacts. This helped uncover organizational dynamics and the corporate unique strategy and perspective about the NFT initiative.

3. Part 2: Bulgari's First High–Jewelry NFT Capsule Collection

In 2022, Bulgari made a significant move into Web3 by launching its first high-jewelry NFT capsule collection. This project marked a strategic step for the brand—long celebrated for its mastery in physical craftsmanship—into the digital art and NFT space. The initiative was not about chasing trends or participating in the hype surrounding the metaverse and gaming culture. Rather, Bulgari leveraged NFTs as a means to elevate its brand narrative, showcase artistic innovation, and enhance the customer experience.

The NFT capsule was launched in conjunction with Bulgari's "Eden: The Garden of Wonders" high-jewelry collection. This collection celebrated nature, vibrant colors, and the brand's connection with the Mediterranean landscape, featuring over 140 masterpieces, including more than 30 emerald-themed creations. It is from this artistic and thematic foundation that the NFT project was born. Bulgari's intention was clear: to use digital technology as a complementary layer to its physical creations, not as a replacement. The project was grounded in the belief that "there would not have been any project without a physical jewel," underlining that the tangible product remains the core of the brand.

Three NFTs were developed as part of the capsule. Two were linked to existing physical pieces (“Ruby Metamorphosis” and “Emerald Glory”) while the third, “Beyond Wonder,” existed purely as a digital creation. Each NFT was designed not merely as a static digital twin, but as a dynamic and expressive artwork. These digital pieces conveyed movement and storytelling, transforming jewels into evolving visual narratives. The NFTs were not for sale separately; instead, they were bundled with the physical necklaces as part of an exclusive client experience. This ensured that the NFT’s value was tied to the physical piece, maintaining the exclusivity and integrity of Bulgari’s high-jewelry offering.

“Ruby Metamorphosis” and “Emerald Glory” were accompanied by a physical platinum NFT card, a private minisite with multimedia storytelling, and a specially framed version of the digital artwork, certifying authenticity. Not only this model merged luxury craftsmanship with digital innovation, but it also reinforces the brand’s narrative and provides a multisensory experience for customers. The third NFT, “Beyond Wonder,” was not commercially available. Designed by Bulgari in partnership with MIAT, a tech firm specializing in digital art, this NFT symbolized the “impossible jewel”—a piece that transcends material limitations and exists only in the digital realm. It served as an artistic homage to the Eden theme, encapsulating Bulgari’s creative spirit and digital ambition.

What set Bulgari’s approach apart from other fashion and luxury brands was its refusal to commodify NFTs. Rather than exploiting digital art for speculative value or mainstream popularity, the brand opted to preserve its luxury positioning. Bulgari did not collaborate with famous digital artists nor release the NFTs on marketplaces like OpenSea. Instead, the NFTs were created internally, reflecting the same artistic processes and values used in crafting the physical pieces. This decision reinforced the coherence and integrity of the brand’s identity and narrative, aligning with its core values of “artisanship, magnificence, and timelessness”.

From a marketing perspective, the NFT project was positioned as a tool for branding and storytelling rather than sales. The initiative was unveiled at VivaTech, one of Europe’s largest technology conferences, emphasizing Bulgari’s commitment to innovation. The NFTs also played a role in key brand events and boutique experiences, such as installations at the Place Vendôme boutique in Paris. These activations reinforced Bulgari’s image as a forward-thinking brand while providing memorable touchpoints for consumers.

The NFT capsule collection also highlights Bulgari’s approach towards Web3. The brand recognizes the risks associated with the volatile NFT market and thus avoided speculative practices. By embedding NFTs into its most exclusive offerings and framing them as artistic extensions of physical jewels, Bulgari minimized financial risk while maximizing storytelling and branding value. This careful balance between tradition and innovation allowed Bulgari to explore the potential of Web3 while maintaining the prestige and exclusivity that defines high jewelry.

In summary, Bulgari’s high-jewelry NFT capsule collection exemplifies a thoughtful and brand-aligned approach to Web3. Rather than adopting NFTs as stand-alone assets or hype-driven marketing tools, Bulgari used them to deepen its core values and customer engagement. The project reinforced the brand’s heritage while introducing a new layer of storytelling and craftsmanship, affirming Bulgari’s position not just as a jeweler of physical masterpieces, but also as a digital pioneer in the luxury industry.

4. Part 3: Discussion

The analysis of Bulgari's high-jewelry NFT capsule collection reveals a strategically nuanced and brand-aligned approach to Web3 integration, one that bridges tradition and innovation in a way that is both respectful of heritage and forward-looking. Unlike many fashion brands that have embraced NFTs for their speculative or hype-generating potential, Bulgari seems to adopt a different approach. Its decision to embed NFTs into its most exclusive and iconic product category (high-jewelry) offers valuable insights into how heritage brands can generate value through emerging digital technologies.

A central takeaway is Bulgari's commitment to preserving its identity while exploring new digital formats. The NFTs were not developed as commercial products to be sold independently. Instead, they were integrated into a broader brand experience, "gifted" alongside physical jewelry masterpieces. This bundling strategy ensured that the NFTs did not exist in isolation or become subject to speculative volatility in secondary markets, a critical concern for a brand whose value is deeply tied to exclusivity and timelessness.

In doing so, Bulgari reinforced the concept that the NFT was not a separate asset, but an extension of the jewel, both artistically and symbolically. The digital artworks (e.g., "Ruby Metamorphosis," "Emerald Glory," and "Beyond Wonder") acted as animated visual representations of the physical pieces. These NFTs were developed internally, involving the same design team that created the jewelry itself, which ensured coherence in aesthetics, storytelling, and branding. The decision not to collaborate with external digital artists or release the NFTs on mass-market platforms like OpenSea further emphasized the brand's control over the creative and commercial narrative.

Examining the case through the lens of the AIDA framework helps to clarify the effectiveness of Bulgari's marketing strategy at each stage of the model (Awareness, Interest, Desire, and Action). Bulgari's NFTs contributed to each phase of the marketing funnel. By entering the Web3 space, the brand gained visibility among younger, digitally engaged audiences, thereby increasing awareness and sparking interest. At the same time, the exclusive and artistic nature of the NFTs, coupled with their physical counterparts, evoked desire and motivated high-value purchases. The project extended even into the post-purchase phase, with features such as a private mini-site, digital ownership certificates, and custom frames turning the NFTs into lasting memorabilia (Johnson, n.d.; Reed, 2021) and proof of ownership.

Brand positioning and storytelling were further strengthened through this initiative. Bulgari used the NFT medium to reinterpret and expand the narrative of its "Eden: Garden of Wonders" collection. The "Beyond Wonder" NFT, for instance, symbolized a mythical, impossible jewel—one that could only exist in the digital realm. Through this lens, the NFT served not only as a digital twin or certificate but as an abstract storytelling vehicle, enhancing the emotional and artistic dimensions of the collection. By embedding such layers of meaning, Bulgari added depth to its heritage and reinforced its reputation as both an innovator and a guardian of luxury tradition.

Another key insight concerns Bulgari's approach to risk and innovation. The brand deliberately positioned itself as a follower rather than a trendsetter in the Web3 space, ensuring that its entry was considered authentic and brand-enhancing. This strategic restraint aligns with the internal philosophy expressed by Bulgari executives: "that innovation must never dilute the brand's timeless image". As such, Bulgari's NFTs were framed not just as technological novelties, but as artworks capable of enduring value both artistically and symbolically.

Additionally, the case underscores how NFTs can act as tools for deepening customer engagement. The multisensory experience offered to buyers—including access to exclusive content, personalized storytelling, and artistic displays—elevated the perceived value of the jewelry. This suggests that, for luxury manufacturing brands, Web3 technologies may be most effective when integrated into high-touch, immersive brand experiences rather than mass-market digital campaigns.

5. Part 4: Conclusion

This study explores whether and how Web3 strategies, particularly NFTs, can bring value to brands traditionally perceived as distant from digital innovation. Using Bulgari as a case study, the research aims to understand how a brand historically associated with physical craftsmanship and exclusivity might adopt Web3 technologies in ways that are both coherent with its core identity and valuable from a strategic standpoint.

The Bulgari high-jewelry NFT capsule collection was selected as a relevant case. The analysis of the case suggests that Web3 can be a meaningful innovation channel even for brands historically anchored in tangible craftsmanship and exclusivity. Rather than treating NFTs as standalone products or speculative assets, Bulgari approached them as artistic extensions of its physical creations. This approach enabled the brand to integrate digital elements without compromising its identity, showcasing how innovation can align with tradition.

The analysis of the case suggests multiple layers of value creation. On a marketing level, NFTs supported customer engagement across the entire funnel, from awareness to post-purchase. On a branding level, they served to reinforce Bulgari's image as a forward-thinking yet heritage-driven brand. On an experiential level, they contributed to storytelling and customer immersion, offering a new, digital layer of narrative around the jewelry. The "Beyond Wonder" NFT, for example, added artistic and symbolic depth to the Eden collection, serving as a "digital jewel" that could never be made in the physical world.

Importantly, Bulgari implemented this innovation while managing the potential risks associated with NFTs, especially their volatile resale value. By bundling NFTs with physical products and avoiding their sale on public marketplaces, the brand preserved the exclusivity and prestige that define its offering. In doing so, Bulgari avoided the pitfalls that have affected other brands entering Web3 primarily for trend-driven reasons.

Finally, the Bulgari case contributes to the broader academic discourse on Web3 by illustrating how NFTs can serve multiple strategic functions—branding, storytelling, customer engagement, and ownership authentication—without being monetized directly. This approach contrasts with prevailing literature that often emphasizes NFTs as standalone assets or community engagement tools (Colicev, 2023). Bulgari, instead, demonstrates that NFTs can reinforce and amplify the core business when carefully aligned with a brand's identity and values.

While insights from the case study are relevant, the research also acknowledges its limitations. The findings are industry-specific and rooted in a single case study, making generalization difficult. Future research could benefit from expanding this case-based approach across different industries and including the consumer's point of view. Given that Bulgari's NFTs are tied to high-end purchases, it would be valuable to understand how luxury customers perceive the added digital layer, and whether it genuinely enhances their sense of value and engagement.

In sum, this study contributes to the growing academic dialogue on Web3 and luxury branding. It illustrates that digital transformation in heritage brands does not have to come at the expense of tradition. Rather, when executed thoughtfully, technologies like NFTs can become powerful instruments for reinforcing brand identity, enhancing storytelling, and engaging new audiences.

ANNEXES

Table 1: Emerging themes and quotations from semi-structured interviews

CATEGORY	INTERVIEW QUOTES
Web3 value creation & strategy	*"We are trying to create value finding a personal path in the Web3 and NFT realm without forgetting the nature of our brand's main scope: high-jewelry."* (Bulgari High-Jewelry Product Manager, B)
	"A commercial approach is most definitely to be excluded, as we did not launch the NFT on the market in itself. This simply because NFTs as collectibles belong to a market that is very much fluctuating all the time. This could be extremely risky for Bulgari as a brand" (Bulgari High-Jewelry Product Manager, B)
	"*We stepped into the NFT realm as followers. Yet, our objective was that of adding value to incredible, unique objects in ways that would go beyond what's considered classic. […] We did not want to be compared to the fashion players. As a luxury brand in the jewelry industry, we strive for timelessness.*" (Bulgari High-Jewelry Senior Product Manager, A).
Branding & Positioning through the NFT project	*"We really thought about our positioning and where we stand in regards to the metaverse and NFTs. We avoided all that could be related to gaming, like Gucci did, or even other brands. We looked at this from an artistic perspective, in order to elevate the brand and not tamper its heritage."* (Bulgari High-Jewelry Product Manager, B)
	"In short, the NFT capsule collection is innovative in its domain, that of jewelry, but it also highlights the historical innovativeness of the brand, which has reshaped how jewels are conceived." (Bulgari High-Jewelry Product Manager, B)
	"We must always be extremely elevated in our approach, given the brand image and the luxury positioning. As a brand, we do not have to be the first ones, that is a prerogative of other brands." (Bulgari High-Jewelry Senior Product Manager, A)
	"It is important to remember that when dealing with high-jewelry, timelessness is a key aspect, also from an investment perspective. This is why we must be cautious. The brand is innovative at its core, but it does not want to dilute its image."

	(Bulgari High-Jewelry Product Manager, B)
	"On one side the project had to be original, in other words never-been-done before, on the other it had to respect our values, which are all about magnificence and artisanship. This is why we could not explore projects in the hyped domains of manga or gaming, which are far from the jewelry business."(Bulgari High-Jewelry Product Manager, B)
	"*Bulgari is a high jeweler first and foremost*" (Bulgari High-Jewelry Senior Product Marketing Manager, A).
NFTs & physical jewels	*"Everything had to start from the jewels"* (Bulgari High-Jewelry Senior Product Marketing Manager, A).
	"*There would not have been any project without a physical jewel."* (Bulgari High-Jewelry Senior Product Manager, A).
	"Yet, that can only act as a first approach, as the product is physical and the client must touch it at the end of the day." (Bulgari High-Jewelry Product Manager, B)
NFTs as works of art	*"We looked at this from an artistic perspective, in order to elevate the brand and not tamper its heritage."* (Bulgari High-Jewelry Senior Product Manager, A).
	"A way to express its magnificence. If you take a look at the teaser, we start from the artisan who does the drawings, we then move onto the laser and then you see what happens at the computer and the final NFT." (Bulgari High-Jewelry Product Manager, B)
Storytelling	*"On another note, Beyond Wonder works on another aspect. Besides elevating Bulgari's image as innovator, it also further enhanced the collection's theme (Eden). This artwork is a digital representation of this garden and Bulgari's nature, narrated through Eden. Bulgari's Eden is not only a blossoming garden, but also an exploration of the deepest petals' color. It is an interpretation of nature's colors and contrasts. In this sense, Beyond Wonder is perfectly in aligned with this attempt, as it even describes a digital Eden (one that does not exist). Internally, we always referred to this jewel as "the impossible piece/jewel", as this nature cannot exist but is Bulgari's interpretation."* (Bulgari High-Jewelry Product Manager, B)
	"In this sense, the NFT project worked on two levels of storytelling: brand innovation and digital Eden […] In short, we declined the

	project in different ways, all coherent with the brand but with different targets." (Bulgari High-Jewelry Product Manager, B)
	"This way of doing storytelling was so important because it served as a way of communicating that even if Bulgari is a traditional jeweler, it is very much in the present. It helped in restating the innovative spirit of the house and make its brand image more contemporary" (Bulgari High-Jewelry Product Manager, B)
Collection theme: Eden	"*Eden is the celebration of Bulgari's innate connection with the Mediterranean, as the cradle of its heritage and as its homeland to cherish and protect. It is also the deep joy given by crafting the most wonderful gifts of nature: colored gems and precious stones."* (Bulgari High-Jewelry Product Manager, B)
	"*an endless territory of imagination that only Bulgari's aesthetic sense can sublime into artworks*" (Bulgari Jewelry Product Marketing, D)
Customer focus	*"The objective of the project is to offer the customer who buys the physical jewel a fuller, more innovative experience."* (Bulgari High-Jewelry Product Manager, B)
Future & capabilities	*"It is a jeweler that also looks into the future and is not afraid to experiment, taking jewels to another dimension."* (Bulgari Senior High-Jewelry Product Manager, A)
	"We have to be ready to see where new ventures have to be taken. If the metaverse can become a hub for luxury as well, some place where we do not have to give up our brand values, then we can find our spot in it." (Bulgari High-Jewelry Product Manager, B)
	"The learning curve is essential: the more we do exercises like this (i.e. the HJ NFT capsule collection), the more agile we become and the more we are able to move in this technological and innovation environment" (Bulgari High-Jewelry Product Manager, B)

Source: Author's elaboration

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