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How can non-fungible tokens bring value to brands

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ABSTRACT

Non-fungible tokens (NFTs) have registered tremendous growth in the past year, and their importance is expected to increase with the expected development of Web3. From a brand perspective, NFTs can be seen as representations of the brand components, such as the product, the logo, or the image. I argue that NFTs have immense potential to become standalone brand assets. I illustrate how this can be achieved by relating the brand's NFT strategies to the marketing funnel stages. Brands can turn into an NFT their physical products such as shoes, shirts, or art to attract brand awareness, generate cross-selling opportunities, and spark stronger perceived ownership of certain brand elements. Importantly, NFTs can allow brands to form a highly engaging brand community that can support the brand, blend online and offline product ownership, and potentially create a bond between the brand and consumers. These exciting possibilities generate a rich research agenda I present in this paper.

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1. Introduction

Non-fungible tokens (NFTs) have registered a whopping 17 billion USD in sales in 2021 and are on their way to beating these figures in 2022 (EY, 2022; McKinsey, 2022). Peres, Schreier, Schweidel, and Sorescu (2022) editorial defines NFTs as “cryptographic assets on a blockchain with unique identification codes and metadata that distinguish them from each other.” From a brand perspective, NFTs can be seen as representations of the brand components, such as the product design, the logo, or the image. For instance, a branded NFT can be a digital twin of a physical product, a graphical representation of a brand's logo in the digital environment, or a ticket to a concert (AdAge, 2022). However, I argue that NFTs have much more potential as they can become standalone brand assets and thus largely contribute to the overall brand equity. I propose that this can be achieved by affecting consumers in the pre-purchase, purchase, and post-purchase stages of the marketing funnel in two ways.

First, NFTs can become standalone brand components (e.g., new products) that can play an important role along the whole marketing funnel. Launching a branded NFT can raise brand awareness and attract previously unreachable audiences (e.g., Gen-Z). For instance, Anheuser-Busch has successfully launched several NFT collections accompanying the launch with events (music, concerts) and giveaways from tech companies (AdAge, 2022). Consumers can also be persuaded by the NFTs to buy the brand's physical products, thus creating cross-selling opportunities. A prominent example is digital fashion brands like Nike and Adidas, which have sold many physical shoes as NFTs and vice-versa (McKinsey, 2022). Finally, brands can build loyalty by creating stronger perceived ownership of certain brand elements, such as the brand logo or design.

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Second, NFTs can form a brand community that can support the brand. As webpages revolutionized commerce and social media have created a two-way communication channel with consumers, NFTs can become the catalyst for the third wave of commerce through the power of online brand communities (Schau, Muñiz, & Arnould, 2009). Discord, Telegram, and Reddit are highly engaging, decentralized, and anonymous social media platforms where users spend an increasing amount of time (Influencer Marketing Hub, 2022). Brands can use platforms to create customer engagement in NFT communities through organic messages or creative content that can increase brand awareness. For example, Time Magazine uses Discord to engage users with daily games and challenges (Ewen, 2021). Brands can also utilize the community aspects of NFTs for blending the NFT ownership with offline use cases, increasing purchase intentions for the brand's products. This can be done by rewarding NFT holders with access to exclusive merchandise (e.g., The Hundreds' and Adam Bomb Squad), premium service (e.g., priority in seating in concerts), or even private parties (e.g., Bored Ape Yacht Club yacht party) (AdAge, 2022; Kaczynski & Kominers, 2021). Finally, brands create a bond with consumers by designing authentic and creative storylines around the brand's identity.

Overall, this article aims to contribute by proposing that NFTs can become standalone brand assets. In this respect, I discuss how NFTs can create value for brands by (1) being standalone brand components and (2) forming and harnessing the power of NFT brand communities. Specifically, I illustrate how these two avenues can be connected with the marketing funnel stages. Finally, I generate several exciting research directions to spark innovative ideas (see Schreier, Peres, Schweidel, & Sorescu, 2021).

2. The marketing funnel stages

The marketing funnel is a term used to describe the sequential customer decision-making that occurs in several stages (Wiesel, Pauwels, & Arts, 2011). The idea is that consumers must first find out about a brand before developing purchase intentions, followed by a purchase decision and potential post-purchase deliberations (Hoban & Bucklin, 2015). While the marketing funnel is also sometimes referred to as the purchase funnel, it thus more broadly represents the entire process of the evolution of customer-brand relationships (and not only before the purchase). Thus, the marketing funnel is generally accepted to be composed of three stages: pre-purchase (e.g., brand awareness), purchase (e.g., purchase intent, purchase), and post-purchase (e.g., customer satisfaction, loyalty) (De Bruyn & Lilien, 2008; Rogers, 1995; Schweidel, 2022). Brands then design tailor-made marketing strategies appropriate for each marketing funnel stage (Wiesel et al., 2011).

3. How can brands leverage NFTs in the stages of the marketing funnel

Building upon the idea that NFTs can be standalone brand components and leverage the power of brand communities, I next illustrate how brands can use NFTs to impact consumers along the marketing funnel (see Fig. 1).



Fig. 1. NFTs and the stages of the marketing funnel.

3.1. Pre-purchase stage

The foundation of all brands and marketing efforts is the creation of pre-purchase attitudes. Ideally, consumers will be able to recognize and remember the brand in the purchase stage (De Bruyn & Lilien, 2008). To do so, brands must focus their NFT efforts on creating brand awareness through exposure to their elements.

3.1.1. NFTs as standalone brand components in the pre-purchase stage

Brands can utilize the NFT product launch as a catalyst to generate brand awareness for several reasons (Gelper, Peres, & Eliashberg, 2018). First, the NFT launch can expose the brand to previously unreachable audiences. The NFT hype cycle is fueled by cryptocurrency enthusiasts, Gen-Z Discord users, and a more technologically oriented crowd (Howarth, 2022). For example, an effective brand strategy can be launching an NFT in collaboration with an established NFT collection which can expose the brand to new audiences. Typically, the NFT market is organized in collections containing a set number of items (e.g., 10,000) under the same theme or umbrella (Nadini, 2021). Prominent cases of reputable NFT collections include the Bored Ape Yacht Club (BAYC), with each NFT presenting different variations of a “bored ape” with features that determine their rarity. Another example is World of Women, a collection of women portraits that has the aim of raising important issues around diversity and inclusion. These reputable collections have entry prices of tens of thousands of dollars on Open-Sea (the largest marketplace for NFTs) (NonFungible, 2022). Recent cases of brand collaborations include the partnership between Adidas and Sandbox, the acquisition of the digital fashion brand RTKFT by Nike, and the development of Samsung’s smart TV compatible with NFT in collaboration with Nifty Gateways (AdAge, 2022). These collaborations have helped both sides as brands have reached new audiences while the NFT collections gained hype and legitimacy.

Second, NFTs product launches enable brands to become more creative in their marketing efforts because they demand more personalized marketing strategies for specific audiences. For instance, Anheuser-Busch has launched several collections across its Bud Light, Budweiser, and Stella Artois brands, which featured real-life events (music, concerts) and giveaways from tech companies (AdAge, 2022). NFT holders were then given a chance to vote on Bud Light NEXT merchandise and gain access to partner events. Similarly, brands can combine physical product launches with an NFT collection launch to ease the more traditional consumer segments into the NFTs. Consumer brands such as Campbell’s, Gap, Pizza Hut, and Samsung have recently executed this approach, generating consumer buzz and excitement (AdAge, 2022).

3.1.2. Community building aspects of NFTs in the pre-purchase stage

Brands can also leverage customer engagement in the brand’s NFT communities. The highly engaging aspect of platforms such as Discord allows conversations between users to flow more organically, almost emulating real-life connections and friendships. In contrast to other social media platforms that carry a more indirect and corporate vibe (e.g., Facebook), Discord, Reddit, or Telegram raise the bar on the authenticity of brand communications (Schweidel & Moe, 2014). One strategy for brands is to engage consumers through more organic messages. Alternatively, brands can generate higher awareness by organizing daily activities, creating engaging content, or inviting users to digital events. In this way, NFT communities could serve as an amplifier for the brand’s marketing efforts. For instance, Time Magazine hosts daily games, challenges, and even private rooms for NFT holders in their highly active Discord servers (Ewen, 2021), exposing the brand to Gen-Z readers. Soon, brands might even use their NFT communities as the primary channel to consumers, which can change the landscape of social media marketing and consumer engagement strategies.

3.2. Purchase stage

In the purchase stage, consumers decide whether to include the brand in their consideration set and develop purchase intentions (Wiesel et al., 2011). As consumers face multiple alternatives, brands need to use their NFT to create a positive contrast with the competition by highlighting attractive features and generating positive customer feedback (Morwitz, 2014).

3.2.1. NFTs as standalone brand components in the purchase stage

Regarding the NFT product design, brands can decide whether to merely create an NFT version of their physical product (i.e., digital twin), design a standalone NFT-based product line, or even produce a bundle containing both the physical product and an NFT. For instance, Nike and Adidas have sold many physical shoes in identical digital forms (BitcoinKE, 2021), while Dolce & Gabbana recently auctioned millions of dollars worth of NFT-based digital couture (FashionUnited, 2021, 2021), which contained both new products and digital replicas. Consumers are interested in such NFTs as they come from reputable brands allowing them to digitally “flex” their purchases online (e.g., on their avatars). Brands can also persuade consumers to buy a bundle containing NFT and physical products. Why would consumers buy such as bundle? For one, the bundle can be designed to give consumers access to a combination of unique symbolic and functional benefits. While most physical products are seldom unique or rare, brands can offer symbolic benefits by designing unique features for each NFT and combining them with the physical product. For instance, Gucci Garden on Roblox comprises themed rooms that pay tribute to Gucci campaigns and allow consumers to view, try, and purchase Gucci items for their avatars (Roblox, 2021). In addition, owning an NFT of a 1/1 Gucci jacket creates an attachment between the consumer and the brand, giving opportu-

nities for Gucci to cross-sell their real-life products (Texcovery, 2021). Fashion brands seem to have figured that consumers might be increasingly more interested in their online versus offline image (McKinsey, 2022).

Brands can also create more functional benefits via gamified experiences (e.g., play to earn) that can be used to offer consumers discounts for physical products redeemable with in-game tokens. For instance, Taco Bell was one of the first brands out of the gate to offer NFT with their 25 Taco Tokens, which included a \$500 Gift card. They sold out in 30 min (Kaczynski & Kominers, 2021). In addition, Coca-Cola sold a digital cooler, a jacket, and a unique sound experience for \$575 k resulting in press, media, and new revenues from digital assets (Sundararajan, 2022). Finally, NFTs can serve as a membership program where owning the NFT and the physical product as a bundle can provide extra perks. For instance, NFTs from Gucci and Adidas provide benefits such as early access to NFT drops and physical products and the possibility to prove ownership of both physical and digital products, which is especially important in the luxury sector (Hofstetter, 2022).

3.2.2. Community building aspects of NFTs in the purchase stage

Brands can utilize the community aspects of NFTs to connect consumers' online and offline brand experiences. For example, The Hundreds' famous streetwear brand has built an NFT project, "Adam Bomb Squad," that directly rewards NFT holders with access to the brand's founders and new product releases (Kaczynski & Kominers, 2021). In addition, several restaurants use NFTs for reservations that prioritize seating, while concerts can issue tickets as NFTs to give extra benefits to holders. Brands can also grant preferential access to perks or locked channels in Discord due to ownership of the brand's NFT, a physical product, or both. These perks include private parties, important financial information, or access to celebrities (Kaczynski & Kominers, 2021). For example, the famous NFT community Bored Ape Yacht Club organized a private yacht party in New York last year which boasted the presence of famous basketball players, artists, musicians, and investors (The Verge, 2021). Overall, the brand strategy can be geared towards synergies among collections by explicitly blending online NFT ownership with offline use cases.

3.3. Post-purchase stage

In the post-purchase stage, consumers compare the product experience with their pre-purchase expectations and potentially develop brand loyalty (De Bruyn & Lilien, 2008; Oliver, 1999). Compared to other marketing funnel stages, the post-purchase stage has the lowest sensitivity to marketing communications (Hult, Morgeson, Morgan, Mithas, & Fornell, 2017). This is because consumers are less likely to be persuaded by marketing appeals as they have experienced and already made up their minds regarding brand experience. Still, NFTs can help brands influence consumers in this stage in several ways.

3.3.1. Nfts as standalone brand components in the post-purchase stage

Brands can leverage the flexible product ownership structure of NFTs to create stronger perceived ownership and brand attachment (Oliver, 1999). While most art is protected by federal law and the copyright belongs to the original creator, NFTs allow a flexible design of ownership rights. For instance, the owner of a Bored Ape Yacht Club NFT has the right to imprint their NFT on digital fashion (e.g., 10KTF), books (Jenkins the Valet), or even movie characters (McKinsey, 2022). By owning the rights to such NFTs, consumers might have stronger perceived ownership of certain brand elements such as the brand logo or design, enabling them to become closer to the brand and serve as brand ambassadors or shareholders. On the other hand, brands might not want to release the rights to their NFTs. For instance, the famous CryptoPunks collection has given full ownership rights of their NFTs. The critical challenge is that brands need to decide on the level of the trade-off between releasing the copyright rights and protecting the brand owner.

3.3.2. Community building aspects of NFTs in the post-purchase stage

Brands can leverage their NFT communities by creating authentic and creative storytelling around the brand's identity. The key, in this case, is building brand-related stories, lore, and characters with which consumers can connect. For instance, brands can create anticipation by developing a book or a story containing different chapters. Each chapter release can feature airdrops of tokens, physical merchandising, or treasure hunts in real life for QR codes. Each chapter can also feature a subsequent NFT collection that can only be minted by current NFT holders (through token ownership), improving the brand loyalty programs. In addition, consumers can be given the possibility to transfer points among NFT collections or between NFT collections and real-life purchases. For instance, luxury companies, such as LVMH, Prada, and Cartier, offer privileges to their shareholder's club members by using NFT and tokens (Treiblmaier, 2021).

4. Challenges and future research directions

This paper aims to inspire more research on the role of NFTs in branding. I summarize the potential research questions in Table 1.

Table 1
Agenda for future research.

Topic	Research Questions
NFT as a standalone brand component	
<i>NFT value structure</i>	Which elements of the NFT product design are most effective across the marketing funnel stages? Which NFT launch strategy is most effective for brands and consumers: digital copy, standalone piece or a bundle of both? What is the relative impact of functional vs. symbolic NFT benefits on consumers? What are the implications of collaborations, mergers and acquisitions, and alliances between a brand and existing NFT collections for the parties involved and for their consumers? How do the ownership rights of a brand's NTS impact consumers and brands?
<i>The fit between NFTs, brands, and consumers</i>	For which brands (e.g., digital leaders) are NFTs a better theoretical fit? Does launching an NFT collection lead to negative brand associations for brands? To what extent technology acceptance model of NFTs can be helpful in segmenting the customer base? What are the possible effective targeting strategies with NFTs?
<i>NFTs and brand's physical products</i>	To what extent brand's NFTs can cannibalize the sales of the brand's physical products? What is the extent of spillover effects of perceptions between brand's NFTs and physical products? Can brands extract the willingness to pay for their physical product from NFTs and vice versa?
Community building aspects of NFTs	
<i>Consumer engagement and brand communication strategies</i>	What is the impact of consumer engagement in NFT communities (vs. social media) on marketing funnel stages? What is the effectiveness of tailor-made communication strategies in NFT communities? Are there differences in topics discussed in NFT communities on Discord and brand communities elsewhere (e.g., Facebook)?
<i>Benefits of NFT communities for consumers and brands</i>	What are the theoretical foundations for the benefits and costs of NFT brand communities? How and to what extent can brands generate synergies by blending NFT ownership with offline use cases? How and to what extent the unique experiences in NFT communities can affect the marketing funnel stages? What is the effectiveness of the brand's promotional efforts in NFT communities? What is the effectiveness of influencer marketing in NFT brand communities in terms of marketing funnel stages?

4.1. NFTs as standalone brand components

4.1.1. NFT value structure

The value structure attributed to the NFTs can be divided into several levels (Sundararajan, 2022). At the basic level, NFTs can be seen as collectibles (similar to comics or baseball cards) that carry symbolic benefits for their owners due to their rarity and uniqueness. For instance, NFTs can be a unique pair of digital shoes or a rare digitalized action figure that can allow their owner to “flex” these items online. When designing such NFTs, brands can decide on whether they should include the brand logo and message or adopt an interactive 3-D representation. It is yet unclear which elements of the NFT product design are critical for consumers. Future studies are needed to determine how the NFT design can affect consumer perceptions, perhaps using experiments or conjoint analysis (Dzyabura & Peres, 2021). Another potential avenue is exploring whether NFTs can be launched as mere digital copies of physical products or rather be designed as standalone pieces. Future studies could collect secondary data on NFT launches to investigate which of these choices are most successful in consumer sentiment and marketing funnel metrics.

At the intermediate value level, NFTs can contain more elaborate functional benefits such as tokens, access to private channels, or free content and merchandise. We do not yet know how and to what extent these benefits affect consumers. Studies can, for example, run field experiments to examine the effectiveness of a range of symbolic and functional benefits of NFTs. In addition, a popular brand strategy is to partner with existing NFT collections to provide unique user benefits (AdAge, 2022). However, given the premature state of the market, a partnership with existing NFT collections can create adverse spillover effects for the brand (e.g., if a scandal breaks out). Future studies can draw parallels to research on mergers and acquisitions and brand alliances to examine whether such partnerships are harmful or beneficial for all parties involved.

Finally, at the most advanced value level, NFTs can include full IP rights to the token and participation in the decentralized autonomous organization (DAO) (Cointelegraph, 2022). On the one hand, keeping full ownership of the NFT can protect the brand but, at the same time, would not allow consumers to become brand shareholders. On the other hand, fully releasing the copyright of the NFT might be technically or legally challenging. Therefore, future theoretical and analytical research can focus on studying the optimal design of ownership rights for NFTs for consumers and brands.

4.1.2. The fit between NFTs, brands, and consumers

The second avenue for research revolves around the fit between NFTs, brands, and their consumers. In terms of NFT-brand fit, past technological revolutions can provide several hints as to which brands might lead the way (Kaczynski & Kominers,

2021; Sundararajan, 2022). For instance, bookstores adopted eCommerce more quickly because books are rather easy to describe, non-perishable, and fit well with the online delivery concept. One could argue that NFTs might be a good fit with digital leaders because they are built on novel digital technologies. NFTs might also be suited for brands with a passionate online community, easing the transition into NFT brand communities. Another potential good fit with NFTs can be brands that produce physical collectible items (e.g., antique products, comic books). In contrast, NFTs might not be best suited for brands that mostly cater to traditional consumers. Overall, drawing a parallel to research on brand-cause and brand-gender fit (Andrews, Luo, Fang, & Aspara, 2014), a potential avenue is developing a theoretical framework for the NFT-brand fit.

The risk for all the brands is to face negative associations due to high price volatility (NFTs are priced in cryptocurrency) and alleged connections between NFTs, the dark web, or other nefarious usages. Thus, an open question is whether launching an NFT collection can lead to negative brand associations for brands?

Regarding NFT-consumer fit, it is yet unclear whether NFTs can and will be mass adopted or remain a niche product (Kaczynski & Kominers, 2021; Sundararajan, 2022). Currently, buying NFTs requires a certain level of financial literacy, such as understanding the basics of cryptocurrency and Web3 wallets. In addition, users need to understand and appreciate the value levels of NFTs to buy them or be satisfied with their purchase. Due to these factors, NFTs have seen low adoption numbers among even digitally-sophisticated crowds (EY, 2022; McKinsey, 2022). However, in contrast to the other Web3-based innovations (e.g., cryptocurrency, decentralized finance), NFTs are visually appealing, hyper-interactive, and make intuitive sense to users (e.g., similarly to collecting a rare comic book). Thus, NFTs might become gateways to Web3 adoption as technology becomes more accessible and more and more users are drawn into the space (EY, 2022; McKinsey, 2022). Therefore, research is needed to understand the appropriate customer segments that can be most suited for NFT adoption. For example, one potential category is Gen-Z consumers who are more familiar with new technologies. Accordingly, an idea for research is to utilize the Technology Adoption Model (TAM) (Davis, Bagozzi, & Warshaw, 1989) to evaluate NFT adoption among different customer segments. The conjecture is that NFTs might have a similar adoption curve to niche physical collectibles such as art or comic books. If so, NFTs could become niche products with high adoption rates among a select group of consumers and low adoption rates among others. Another conjecture is that NFTs might carry psychological biases related to the “hype” products (Aral, 2021) and “fear of missing out” (Rosen & Samuel, 2015), making their adoption curves potentially similar to consumer electronics such as mobile phones or gadgets. In this more optimistic scenario, consumers could be segmented into well-known groups with established targeted marketing strategies.

4.1.3. NFTs and brand's physical products

A third avenue concerns studying the interplay between NFTs and a brand's physical products. A key question is whether NFTs and physical products can co-exist to increase the pie of potential sales. NFTs might be a double-edged sword as their sales can subtract demand from physical counterparts (Kanellopoulos, Gutt, & Li, 2021). We also don't know how consumer perceptions about the brand's NFT can translate into the brand's physical products and vice-versa. Studying such spillover effects can present a fresh look at the research regarding brand extensions and product launches (Balachander & Ghose, 2003).

A final important direction concerns the area of demand forecasting, which is critical for brands in sectors such as apparel, cars, or even beverages (ITConverge, 2022; ToolsGroup (2021), 2021). Studies have relied on analytical modeling or time-series sales models to predict demand (Feiler & Tong, 2022) for goods and services. NFTs can provide a novel approach for testing potential demand for a brand's product. In several cases (e.g., Coca-Cola's NFT jacket for 575 k USD), customers have even spent more on a company's branded NFTs than the brand's physical products. However, research has also found that consumers are willing to spend less on digital goods vs. physical goods (Atasoy & Morewedge, 2018). Thus, it might be essential to study whether NFT launches for some brands can be used as a trial run to verify the willingness to pay for the physical product.

4.2. Community building aspects of NFTs

4.2.1. Consumer engagement and brand communication strategies

While the number of active users in NFT communities is still far smaller than on more traditional social media platforms (e.g., Facebook or Instagram), they are already showing higher engagement rates (Influencer Marketing Hub, 2022). The contraposition of a smaller but more committed crowd creates an exciting opportunity for brands to create tailor-made communication strategies that drive brand loyalty and advocacy. For instance, brands can hire Discord moderators from the most active brand loyalists pool, serving as a more trustworthy source of brand-related messages. In turn, digital fashion brands can create proxies of brand advocacy by measuring the reach of the users who wear their NFT shoes online. However, future work is needed to understand the differential impact of consumer engagement in NFT communities (vs. social media) on marketing funnel stages.

We need to know more about the role of communication strategies in NFT communities. On the one hand, brands can design authentic and creative storytelling around their NFTs. As a result, brands have a chance to create an almost one-to-one connection with the consumer base, which was not possible before. On the other hand, NFT communities are challenging due to users' high degree of anonymity and difficulties in controlling or censoring the content. Unlike social media, where brands can rely on centralized algorithms to filter content on their owned pages, social media platforms such as Dis-

cord require heavy manual moderation due to more loose rules on censorship and expressions. Furthermore, users in NFT communities also rarely reveal their real identities. Thus, brand strategies can backfire as spreading negative comments about the brand might be more straightforward for users, given that they are not risking a backlash on their identity. In this respect, experimental studies are needed to examine the effectiveness of tailor-made communication strategies on Discord or Reddit. For instance, studies can apply topic modeling to understand the latent topics discussed across Discord and Reddit (Berger, 2020).

4.2.2. Benefits of NFT communities for consumers and brands

Regarding consumer benefits, reputable NFT collections boast private access to secret group chats, real-life parties, and investment advice (Pastel, 2021). A key research question is whether brands can or need to replicate this approach. Theoretical studies are needed to lay down the foundations of critical aspects of NFT brand communities. Empirically studies can examine whether brands can generate synergies by explicitly blending NFT ownership with offline use cases. Experimental papers can study how designing unique experiences in NFT communities affects consumer perceptions of brands.

Regarding brand benefits, it seems that NFT communities might not be particularly fruitful for promotional efforts. This is because consumers might perceive the more decentralized social media platforms (e.g., Discord) as more democratic and user-driven. Consequently, it is still unclear whether consumers can be less prone to promotional messages. In addition, experimental and empirical studies are needed to understand whether and how advertising messages can spread in such communities. For instance, can brands place virtual billboards in play to earn games, and how effective could they be vis-à-vis the physical billboards? Finally, it is also not yet clear whether brands can employ influencers on these platforms.

On the one hand, NFT communities are filled with highly influential users who can stir conversations. On the other hand, given the small but highly engaging nature of NFT communities, such influencers might care about their reputation. Thus, we need to better understand the role of such influential community members for brand purposes and whether they can be conceptually seen as “influencers” or micro-influencers on social media (Lanz, Goldenberg, Shapira, & Stahl, 2019).

5. Concluding thoughts

NFTs are becoming a driving force behind the Web3 revolution. However, NFTs are still highly unregulated, and we are witnessing only the raw form of what is yet to come. Challenges such as decentralization, design of ownership rights, and environmental impact are looming over the NFTs. On the bright side, brands have the potential to benefit from the first-mover advantage and are on the right side of history. I hope this paper has provided a convincing case that NFT can bring value to brands.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

References

- AdAge (2022). Anheuser-Busch Hosts NFT Brewery Takeover With Themed Cans [Blog Post, March 28, 2022]. *How Brands Are Using NFTs - A Continually Updated List*. Available at: <https://adage.com/live-blog/how-brands-marketers-use-nfts-updated-list>.
- Andrews, M., Luo, X., Fang, Z., & Aspara, J. (2014). Cause marketing effectiveness and the moderating role of price discounts. *Journal of Marketing*, 78(6), 120–142.
- Aral, S. (2021). The Hype Machine: How Social Media Disrupts Our Elections, Our Economy, and Our Health—and How We Must Adapt. *Currency*.
- Atasoy, O., & Morewedge, C. K. (2018). Digital goods are valued less than physical goods. *Journal of Consumer Research*, 44(6), 1343–1357.
- Balachander, S., & Ghose, S. (2003). Reciprocal spillover effects: A strategic benefit of brand extensions. *Journal of Marketing*, 67(1), 4–13.
- Berger, J. et al (2020). Uniting the Tribes: Using Text for Marketing Insight. *Journal of Marketing*, 84(1), 1–25.
- BitcoinKE. 2021. Nike and Adidas Take Notice of the Metaverse with NFT Drops. Available at: <https://bitcoinke.io/2021/12/nike-and-adidas-take-notice-of-the-metaverse/>.
- Cointelegraph. 2022. What is a decentralized autonomous organization, and how does a DAO work? Available at: <https://cointelegraph.com/decentralized-automated-organizations-daos-guide-for-beginners/what-is-decentralized-autonomous-organization-and-how-does-a-dao-work>.
- De Bruyn, A., & Lilien, G. L. (2008). A multi-stage model of word-of-mouth influence through viral marketing. *International Journal of Research in Marketing*, 25(3), 151–163.
- Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1989). User Acceptance of Computer Technology: A comparison of two theoretical models. *Management Science*, 35(8).
- Dzyabura, D., & Peres, R. (2021). Visual Elicitation of Brand Perception. *Journal of Marketing*, 85(4), 44–66.
- Ewen, S. (2021). *Note to Brands: Crypto Isn't Funny Money*. Coindesk: It's Community. Available at: <https://www.coindesk.com/business/2021/11/30/note-to-brands-crypto-isnt-funny-money-its-community/>.
- EY. 2022. *Monetization of non-fungible tokens*.
- FashionUnited. 2021. Dolce & Gabbana sells 6 million dollar fashion NFT. Available at: <https://fashionunited.uk/news/business/dolce-gabbana-sells-6-million-dollar-fashion-nft/2021100858280>.
- Feiler, D., & Tong, J. (2022). From Noise to Bias: Overconfidence in New Product Forecasting. *Management Science*, 68(6).
- Gelper, S., Peres, R., & Eliashberg, J. (2018). Talk Bursts: The Role of Spikes in Pre-release Word-of-Mouth Dynamics. *Journal of Marketing Research*, 55(6), 801–817.
- Hoban, P. R., & Bucklin, R. E. (2015). Effects of Internet Display Advertising in the Purchase Funnel: Model-Based Insights from a Randomized Field Experiment. *Journal of Marketing Research*, 52(3), 375–393.
- Hofstetter, R. et al (2022). Crypto-Marketing: How Non-Fungible Tokens (NFTs) Challenge Traditional Marketing. *Marketing Letters*. Forthcoming.

- Howarth, J. (2022). *50+ Incredible NFT Statistics [Blog Post, March 16, 2022]*. Available: Exploding topics. at: <https://explodingtopics.com/blog/nft-statistics>.
- Hult, G. T. M., Morgeson, F. V., Morgan, N. A., Mithas, S., & Fornell, C. (2017). Do managers know what their customers think and why? *Journal of the Academy of Marketing Science*, 45(1), 37–54.
- Influencer Marketing Hub (2022). *Discord Statistics: Revenue*. Available: Users & More. at: <https://influencermarketinghub.com/discord-stats/>.
- ITConverge. 2022. How Accurate Demand Forecasting Can Transform Automotive Manufacturing. Available at: <https://www.itconvergence.com/blog/how-accurate-demand-forecasting-can-transform-automotive-manufacturing/>.
- Kaczynski, S., & Kominers, D. S. (2021). How NFTs Create Value. *Harvard Business Review*, 1–12.
- Kanellopoulos, I. F., Gutt, D., & Li, T. (2021). *Do Non-Fungible Tokens (NFTs) Affect Prices of Physical Products?* SSRN Electronic Journal: Evidence from Trading Card Collectibles.
- Lanz, A., Goldenberg, J., Shapira, D., & Stahl, F. (2019). Climb or Jump: Status-Based Seeding in User-Generated Content Networks. *Journal of Marketing Research*, 56(3), 361–378.
- McKinsey (2022). *Value creation in the metaverse*.
- Morwitz, V. G. (2014). Consumers' purchase intentions and their behavior. *Foundations and Trends in Marketing*, 7(3), 181–230.
- Nadini, M. et al (2021). Mapping the NFT revolution: Market trends, trade networks, and visual features. *Scientific Reports*, 11(1).
- NonFungible (2022). *Quarterly NFT Market Report (Q1)*. Available at: <http://nonfungible.com/>.
- Oliver, R. L. (1999). Whence consumer loyalty? *Journal of Marketing*, 63(4_suppl1), 33–44.
- Pastel. 2021. NFT Overview: The Bored Ape Yacht Club. Available at: <https://pastel.network/nft-overview-the-bored-ape-yacht-club-bayc/#:~:text=BAYC holders get access to,wallets holding a BAYC NFT.>
- Peres, R., Schreier, M., Schweidel, D. A., & Sorescu, A. (2022). Blockchain Meets Marketing: Opportunities, Threats, and Avenues for Future Research. *International Journal of Research in Marketing*.
- Roblox (2021). The Gucci Garden Experience Lands on Roblox. Available at: <https://blog.roblox.com/2021/05/gucci-garden-experience/>.
- Rogers, E. M. (1995). Diffusion of Innovations: Modifications of a Model for Telecommunications. In *Die diffusion von innovationen in der telekommunikation* (pp. 25–38). Berlin, Heidelberg: Springer.
- Rosen, L., & Samuel, A. (2015). *Conquering digital distraction*. Harvard Business Review (June).
- Schau, H. J., Muñiz, A. M., & Arnould, E. J. (2009). How brand community practices create value. *Journal of Marketing*, 73(5), 30–51.
- Schreier, M., Peres, R., Schweidel, D., & Sorescu, A. (2021). IJRM 2021–2024: Innovation, speed, diversity, let's push things forward together. *International Journal of Research in Marketing*, 38(4), 807–810.
- Schweidel, D. A. et al (2022). How consumer digital signals are reshaping the customer journey. *Journal of the Academy of Marketing Science*, 1–20.
- Schweidel, D. A., & Moe, W. W. (2014). Listening in on social media: A joint model of sentiment and venue format choice. *Journal of Marketing Research*, 51(4), 387–402.
- Sundararajan, A. (2022). How Your Brand Should Use NFTs. *Harvard Business Review*.
- Texcovery (2021). Gucci And Others In Fashion Are Looking To Blockchain To Enable Digital Twins As Well As Fully Virtual Collections. Available at: <https://texcovery.com/innovative/gucci-and-others-in-fashion-are-looking-to-blockchain-to-enable-digital-twins-as-well-as-fully-virtual-collections>.
- The Verge (2021). How to sneak into a Bored Ape Yacht Club party. Available at: <https://www.theverge.com/22824387/bored-ape-yacht-club-nft-party-new-york>.
- ToolsGroup (2021). Fashion Industry Challenges Require Elegant Demand Planning. Available at: <https://www.toolsgroup.com/blog/demand-forecasting-fashion-industry/>.
- Treiblmaier, H. (2021). Beyond blockchain: How tokens trigger the internet of value and what marketing researchers need to know about them. *Journal of Marketing Communications*, 1–13.
- Wiesel, T., Pauwels, K., & Arts, J. (2011). Practice Prize Paper–Marketing's Profit Impact: Quantifying Online and Off-line Funnel Progression. *Marketing Science*, 30(4), 604–611.