# **Boosting customer experience through using Non-Fungible Tokens (NFTs)**

# **Mohammed Boukouyen**

Arrawaj Foundation, Morocco

## Fatiha Boukouyen

University of Bordeaux, France

#### Abstract

Non-Fungible Tokens (NFTs) are being used by different brands to enhance customer experience (CX) and thus gain customer trust, loyalty, and engagement. Prior research has reviewed the literature on NFTs by discussing their functioning as well as indicating their opportunities and challenges without investigating how NFTs are elevating CX. Therefore, to fill this gap our study focuses on exploring this topic by conducting a document analysis.

Keywords: Customer experience, Non-Fungible Token (NFT), Blockchain

#### Introduction

Nowadays customers become more demanding and look for authenticity, uniqueness, and exclusivity. Thus, one of the blockchain technologies used by brands is: NFT (Table 1; Bao and Roubaud, 2022; Hawkins, 2022; Kaczynski and Kominers, 2021; PYMNTS, 2022; Regner et al., 2019; Rodeck, 2022; Wang et al., 2021).

NFT is considered as an emerging digital property rights' blockchain technology that represents the ownership of a digital asset. Brands like Adidas, Gap, Coca Cola, BMW, Nike, and Louis Vuitton, are using NFTs to enhance the experience of their customers, improve their sense of community and thus engage them as well as to make a profit. For example, by launching its NFT's collection, Gap gave its customers the opportunity to own an exclusive edition of Gap hoodie. Moreover, BMW turned 19 original BMW M engines' sounds into an authentic NFT collection called "Museum of Sound".

Prior research discussed NFTs by providing their meaning, explaining their functioning, their opportunities, and challenges. However, to the best of our knowledge, no study has analyzed CX's improvement using NFTs. Therefore, our current study addresses the following research question by conducting a qualitative approach based on a document analysis: **How do NFTs elevate CX?** 

## **Background**

Throughout the years, brands try to adapt to marketing trends to gain trust and loyalty of their customers through enhancing their experience in innovative ways as they become more demanding. Therefore, to impress and wow their customers, brands have used high impact technologies namely, virtual reality and augmented reality in different industries (e.g., retail, hospitality, finance; Chylinski et al., 2020; Flavián et al., 2019; Hoyer et al., 2020; Orús et al., 2021; Wei, 2019).

Therefore, one of the current blockchain technologies which is the most adopted and integrated in virtual and augmented realities is NFTs. NFTs have appeared a few years ago but have moved out from the shadow into the limelight in 2020 and have known an epic rise in 2021. NFTs stand for a digital code and a certificate that proves the ownership of a specific item like artworks, videos, games, tweets, etc. They specify clearly property rights (Kaczynski and Kominers, 2021). Furthermore, they are characterized by: authenticity, uniqueness, originality, and they cannot be replicated. NFTs are tied to the blockchain technology which designates a set of data stored and linked together online in blocks forming a chain. Thus, all NFTs' history is stored in blocks of data to know easily their owners and buyers. The blockchain mainly used to secure NFTs is called Ethereum which is an open source platform dedicated to smart contracts (Frankenfield, 2022; Wang et al., 2021). Although NFTs are extensively used in art, they become part of other industries like gaming, fashion, sports, ticketing, membership, apps, metaverse (Bao and Roubaud, 2022; Regner et al., 2019; Wang et al., 2021).

Given the emerging importance of NFTs, some brands (e.g., Adidas, Gap, Louis Vuitton, Gucci, Balenciaga) started using them to boost CX and thus gain customer engagement, trust, and loyalty. In fact, NFTs allow brands to raise their profit as well as to retain their customers who could choose a brand over another as they look for transparency, exclusivity, and authenticity.

NFTs take place in the virtual world through online marketplaces or digital platforms, also called NFTs platforms or NFTs marketplaces. These platforms gather developers and collectors who could be artists, gamers, marketers or anyone who is interested in buying

digital items (PYMNTS, 2022), and require a crypto wallet to be able to create, sell or get NFTs. One of the most known digital NFTs platforms which profit has been increased is OpenSea. This platform is dedicated to a variety of NFTs, namely: art, music, photography, trading cards and virtual worlds (Rodeck, 2022).

Different celebrities have invested in NFTs – particularly the bored apes – to strengthen their relationship with fans which attracted the attention of the latter and hence raised the value of NFTs (e.g., Eminem, Marshmello, Shaquille O'Neal, Stephen Curry, Mark Cuban, Jimmy Fallon, Madonna; Hawkins, 2022).

NFTs aid in verifying various assets such as artworks that are sold online and are considered as the only ownership proof of a particular item. Thanks to blockchain technology, their authenticity is verified, confirmed, and ensured. Wang et al. (2021) mentioned other NFTs' beneficial attributes such as: verifiability, transparent execution, availability, tamper-resistance, usability, atomicity, tradability. However, NFTs could be linked to security and privacy issues like speculation, high volatility, plagiarism, fraud, and scam (Bao and Roubaud, 2022; Regner et al., 2019; Wang et al., 2021). Although integrating NFTs in CX has created value to both brands and customers, prior research has not shed light on this topic.

#### Methodology

For this first stage of our current study, we opted for a qualitative approach drawing upon a document analysis to address our research question. Document analysis is a systematic procedure for reviewing and evaluating documents (i.e., printed and electronic). Furthermore, it consists of examining and interpreting collected data to elicit meaning, gain understanding, and develop empirical knowledge (Bowen, 2009; Corbin and Strauss, 2008; Rapley, 2007). Therefore, we gathered over 100 documents from different online sources that we started analyzing following the thematic content analysis.

### Conclusion

The present study contributes to the existing literature by addressing an interesting research topic which remained unstudied. The findings of the study will provide managers with insights on how they could use NFTs to offer a great CX as well as the core elements to consider while designing and delivering it.

#### References

Bao, H., & Roubaud, D. (2022). Non-Fungible Token: A Systematic Review and Research Agenda. *Journal of Risk and Financial Management*, *15*, 215.

Bowen, G.A. (2009). Document Analysis as a Qualitative Research Method. *Qualitative Research Journal*, 9(2), 27–40.

Chylinski, M., Heller, J., Hilken, T., Keeling, D.I., Mahr, D., & de Ruyter, K. (2020). Augmented reality marketing: A technology-enabled approach to situated customer experience. *Australasian Marketing Journal*, *28*(4), 374–384.

Corbin, J., & Strauss, A. (2008). *Basics of qualitative research: Techniques and procedures for developing grounded theory (3rd ed.)*. Thousand Oaks, CA: Sage.

Flavián, C., Ibáñez-Sánchez, S., & Orús, C. (2019). The impact of virtual, augmented and mixed reality technologies on the customer experience, *Journal of Business Research*, *100*, 547–560.

Frankenfield, J. (2022). *What Is Ethereum and How Does It Work?*. Investopedia. <a href="https://www.investopedia.com/terms/e/ethereum.asp">https://www.investopedia.com/terms/e/ethereum.asp</a>

Hawkins. (2022). *NFTs*, an overblown speculative bubble inflated by pop culture and crypto mania. The Conversation. <a href="https://theconversation.com/amp/nfts-an-overblown-speculative-bubble-inflated-by-pop-culture-and-crypto-mania-174462">https://theconversation.com/amp/nfts-an-overblown-speculative-bubble-inflated-by-pop-culture-and-crypto-mania-174462</a>

Hoyer, W. D., Kroschke, M., Schmitt, B., Kraume, K., & Shankar, V. (2020). Transforming the Customer Experience through New Technologies. *Journal of Interactive Marketing*, *51*(1), 57–71.

Orús, C., Ibáñez-Sánchez, S., & Flavián, C. (2021). Enhancing the customer experience with virtual and augmented reality: The impact of content and device type. *International Journal of Hospitality Management*, 98.

Kaczynski, S., & Kominers, S.D. (2021). *How NFTs Create Value*. Harvard Business Review. https://hbr.org/2021/11/how-nfts-create-value?ab=at\_art\_art\_1x4\_s01

PYMNTS. (2022). *NFTs Offer Cultural and Crypto Bridge for Newcomers Who Want Out of Fiat*. PYMNTS. <a href="https://www.pymnts.com/nfts/2022/nfts-offer-cultural-and-crypto-bridge-for-newcomers-who-want-out-of-fiat/">https://www.pymnts.com/nfts/2022/nfts-offer-cultural-and-crypto-bridge-for-newcomers-who-want-out-of-fiat/</a>

Rapley, T. (2007). Doing conversation, discourse and document analysis. London: Sage.

Regner, F., Schweizer, A., and Urbach, N. (2019). *NFTs in Practice – Non-Fungible Tokens as Core Component of a Blockchain-based Event Ticketing Application*. Fortieth International Conference on Information Systems, Munich.

Rodeck, D. (2022). *Top NFT Marketplaces Of 2022*. Forbes. https://www.forbes.com/advisor/investing/cryptocurrency/best-nft-marketplaces/

Wang, Q., Li., R., Wang, Q., and Chen, S. (2021). *Non-Fungible Token (NFT): Overview, Evaluation, Opportunities and Challenges*. <a href="https://arxiv.org/abs/2105.07447">https://arxiv.org/abs/2105.07447</a>

Wei, W. (2019). Research progress on virtual reality (VR) and augmented reality (AR) in tourism and hospitality: A critical review of publications from 2000 to 2018. *Journal of Hospitality and Tourism Technology*, 10(4), 539–570.

### **Appendixes**

Table 1: All about NFTs

NFT	
Technology used	Blockchain: Ethereum
Definition	A digital code and a certificate that proves the ownership of
	digital assets
Attributes	Verifiability
	Transparent execution
	Availability
	Tamper-resistance
	Usability
	Atomicity
	Tradability
Industries	Art
	Gaming

	• Apps
	Entertainment
	Fashion
	Retail
	• Sports
	Ticketing
	Membership
	Metaverse
Actors involved	Developers (who create them)
	Collectors (who buy them)
Place	Online marketplaces, digital platforms, or NFTs
	marketplaces, among them :
	OpenSea
	NBA Top Shot
	Rarible
	Sandmilk
Uses	They can be :
	• Created
	Bought or collected
	Sold
Types	Collectibles
1,700	Artworks
	• Videos
	Music
	Gaming
	Trading cards
	Event tickets
Benefits	They specify clearly property rights
Deficites	They specify clearly property rights They aid in verifying various items
	They are considered as the only ownership proof of a
	particular item
Risks	Plagiarism
KISKS	Speculation
	High volatility
	Fraud
	• Scam