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To be or to want to be: how followers engage with NFTs, their communities and how it influences their identity journey

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Abstract

Purpose – Often associated to the cryptocurrency markets and to future metaverses, the NFT market and its determinants must be investigated on their own. Many determinants of consumer behaviors with NFTs remain undetermined. Besides early adopters, a significant population of followers has yet to start purchasing NFTs. This paper aims to explore identity-related determinants of followers' engagement with NFTs around the personal and social identity theories as well as identity projects.

Design/methodology/approach – This study is based on 34 semistructured interviews with respondents from France, Italy and India who self-identify as NFT followers. The data were analyzed using a simplified version of the Gioia method to explore motivations and identity expression through NFTs. The theoretical framework is grounded in personal and social identity theory and identity projects.

Findings – The authors detail specific features of NFTs followers compared to fans or purchasers. They share purchasers and fans economic and technological perceptions associated to NFTs, but their emotions toward NFTs are contrasted. They give great importance to communities but are much concerned by potential dark sides. If they do not purchase NFTs so far, they incorporate them into their identity process and identity projects, even if such projects appear rather unstructured, as are their self-presentations.

Research limitations/implications – Cultural replication as other methodological approaches as netnography and longitudinal is needed to disentangle both NFTs as identity issues. This research extends the understanding of dimensions that could influence the adoption and diffusion of a new technology by investigating NFTs followers.

Practical implications – Managers could apply the investigated dimensions to structure strategies to convert NFTs followers and optimize their impact on NFT business.

Originality/value – To the best of the authors' knowledge, this is one of the first studies to address NFTs from a deep perspective of followers of a digital consumption phenomenon. It offers insightful reflections on

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the emotions, the role of identity and communities in technology adoption. The evolution of a more shared process of self-construction and a rethinking of the economy toward a greater de-financialization.

Keywords Non-fungible tokens (NFTs), Digital consumption, Technology adoption, Identity projects, Online communities, Innovation diffusion, Sustainability

Paper type Research paper

1. Introduction

Non fungible tokens (NFTs), an acronym for nonfungible tokens, are digital files authenticated by a blockchain. As such, according to Nasdaq, they are digital assets, like cryptocurrencies or asset-backed tokens. They are among the most popular digital assets because they could authenticate images, video, audio, music and documents. Unlike cryptocurrencies, they cannot be duplicated or replaced (Chalmers *et al.*, 2022; Hofstetter *et al.*, 2022). While technically born in 2012 (Fazli *et al.*, 2021) NFTs were brought to attention in 2017 with the CryptoKitties collection sale (Nadini *et al.*, 2021). Even if NFT markets experienced a severe downturn since 2022, due to saturation of the market, cooling of the cryptocurrency market to which NFTs are linked, and the presence of scams and disputes (Rabaai *et al.*, 2024) they remain a significant market (Truby *et al.*, 2022). NFTs are strongly related to Web 3.0 and metaverses (Allen and Potts, 2023). They already have various marketing applications:

- in the gaming industry for certification and authentication of products and services around smart contracts;
- in terms of royalties and distribution (Chohan and Paschen, 2023; Gramlich *et al.*, 2023); and
- for merchandizing and ticketing strategies (Nasdaq, 2023).

Marketing literature has rapidly explored NFTs, their markets and how they may complement or question traditional marketing practices. It is anticipated they can offer new ways to create innovation (Li and Chen, 2023) or a perceived scarcity, propose decentralized practices and open the market to new intermediaries, enablers and facilitators (Hofstetter *et al.*, 2022). Still, understanding how potential consumers perceive NFTs and what they think they can do with them appears of much interest for the diffusion of NFT as a new technology and marketing tool (Alkhudary *et al.*, 2023). If most engaged members of crypto-assets and their markets have already been studied (Sousa *et al.*, 2022), research on NFTs actual and potential users remains scarce (Rabaai *et al.*, 2024). Drivers of NFT adoption and purchase, notably psychological and emotional ones, remain to be explored (Yilmaz *et al.*, 2023; Alkhudary *et al.*, 2023). If several research consider NFT and cryptocurrencies users are the same, this postulate remains to be confirmed. As digital objects and authentications devices, NFTs relate to potential immaterial possessions. NFTs are strong candidates for the position of ubiquitous and safe digital assets needed to allow consumers to purchase, possess and assess possession or authenticity of digital objects (Chohan and Paschen, 2023). NFTs, as products of postmodernity, have created a paradigm shift for creation, authentication and exchange of digital assets, including artistic objects (e.g. Wilson *et al.*, 2022). They may trigger or support potential evolutions of identity, identity projects and self-concept in a digital and more liquid world. Notably, there are many NFT followers, not clearly engaged in NFTs usage, but curious of the NFTs landscape. These followers account for the vast majority of future NFTs users and consumers (e.g. for France, 5% of purchasers vs 12% of people interested according to ADAN and KPMG, 2023). They help promoting NFTs. Yet, few research focused on their characteristics and perceptions of NFTs. This limited knowledge could hamper marketers to fully exploit the business opportunities NFTs could generate (Truby *et al.*, 2022). This is why this research seeks to understand how people decide to follow and eventually buy or use NFTs. It focusses on the following research aim:

- who are the bulk of consumers interested in NFTs, i.e. NFTs followers; and
- how do NFTs interact with followers' identity features and mechanisms.

To investigate these issues, we adopted a qualitative method conducting in-depth interviews with French (7), Italian (19) and Indian (8) NFTs followers, to explore why some consumers follow NFTs. We mobilized personal and social identity theory, specifically dialectical identity construction and dynamic model of identity development. We adopt the identity framework described by Schau (2018). Results show NFTs and their markets influence followers' personal and social identity construction, specifically their identity projects and self-presentation. NFTs followers diverge from purchasers as regards their emotions, the role of communities and their economic perceptions. Communities play a significant part in this influence by driving knowledge and interest for NFTs among followers. Opacity and defiance emerged as major contextual dimensions for NFT followers as opposed to the potential magic of metaverses and NFTs. Emotions appear contrasted, and evolve during adoption and diffusion of NFTs, fear and anticipation emerging clearly, while hope and escapism support attractiveness of NFTs.

2. Literature review

2.1 NFTs and marketing

Several definitions for NFT have been proposed. In summary, NFT is an emerging digital asset class, based on computer code, either on-chain or off-chain, taking many forms. It is recorded on a blockchain ledger, and its basic purpose is to prove ownership or authenticity of an asset as being unique (Doan *et al.*, 2021; Nadini *et al.*, 2021; Wilson *et al.*, 2022). It is a transferrable cryptographic token (Frye, 2021). NFTs cannot be used to support transactions, for two reasons. Technically, they are not fungible, which is a major difference with cryptocurrencies, and by purpose, NFTs are intended as pure assets compared to cryptos. NFTs bring unique assets into the digital space and make ownership of these assets verifiable (Doan *et al.*, 2021), i.e. secure and reassuring. NFTs combine a unique set of commercial, regulatory and legal considerations (Doan *et al.*, 2021). Cryptocurrency markets and NFT markets' participants are frequently considered to be identical (Dowling, 2022a), notably because you need cryptos and wallet to buy NFTs (Nadini *et al.*, 2021; Dowling, 2022b; Wilson *et al.*, 2022). Here, it is essential to recognize that *digital economy, digital currencies* and *NFTs* are distinct yet interconnected concepts. The digital economy refers to the overarching structure of economic activity enabled by digital technologies – ranging from e-commerce to data platforms (Bukht and Heeks, 2018). Digital currencies, such as Bitcoin and Ethereum, function as decentralized monetary systems that facilitate transactions and value storage within digital infrastructures (Catalini and Gans, 2016). As assets, NFTs require digital currencies, specifically cryptocurrencies to be valued and to be exchanged. By being exchangeable they belong to the digital economy. More broadly, it is believed that NFTs, as products of postmodernity, create a paradigm shift for the creation, authentication and exchange of digital assets, including artistic assets (e.g. Wilson *et al.*, 2022; Hofstetter *et al.*, 2022). Until now, academic literature analyzed NFTs from a technical angle (Wang *et al.*, 2021; Turchet and Ngo, 2022): blockchain (Bellagarda and Abu-Mahfouz, 2022a, 2022b), legal issues (Doan *et al.*, 2021; Wang *et al.*, 2021; Kshetri, 2022), relationship with cryptocurrencies (Dowling, 2022a, 2022b), financial issues (Aharon and Demir, 2022) and pricing issues (Chalmers *et al.*, 2022). Marketing research so far focused on how to use NFTs in marketing strategies and actions (Colicev, 2023; Dwivedi *et al.*, 2022) and how they could impact business models by facilitating unique value propositions, enhancing customer engagement and enabling novel revenue streams (Li and Chen, 2023). It considered a limited number of NFT collections or a single market at a time (Nadini *et al.*, 2021). Marketing may use NFTs in different ways, e.g. for brand strategy (Colicev, 2023; Sundararajan, 2022; Xie *et al.*, 2023) or combining the launch of a product with support for a charitable cause (Dwivedi *et al.*, 2022). Wilson *et al.* (2022) identified four groups of NFTs' stakeholders:

(1) creators;

(2) related intermediaries;

(3) ancillary, legal business entities; and

(4) consumers, collectors, investors and speculators.

For consumers, NFTs add new digital collectibles and goods to collect, own and exchange, notably art-related goods. Simultaneously they offer an authentication solution for these goods (Wilson *et al.*, 2022). Many consumers are supposedly ready to pay a premium for rare or high-quality digital items backed by NFTs (Wilson *et al.*, 2022). Above all, the "token economy" could change understanding of money, and behaviors as regards possession and ownership, appropriation (Sunyaev *et al.*, 2021). Even if several uses can be identified, few studies adopted a consumer's perspective and many questions must be addressed (He *et al.*, 2023; Alkhudary *et al.*, 2023; Dwivedi *et al.*, 2022).

2.2 NFT: a consumer perspective

Literature applies to NFTs the framework of analysis of consumer behavior developed for cryptocurrencies (Zhang *et al.*, 2023). Part of the hype surrounding NFTs stems from their projected roles in metaverses and Web 3.0, specifically commercial ones as they are connected with the various business constellations that make it up, e.g. Meta, Sandbox, Decentraland. NFTs help reinforce consumer trust and engagement with luxury brands, leading to increased purchase intentions and brand loyalty (Sung *et al.*, 2023). NFTs are strong candidates for the position of ubiquitous and safe digital assets needed to allow consumers to purchase, possess and assess possession or authenticity of digital objects (Chohan and Paschen, 2023). Potential uses for NFTs transcend possession and are linked to global movement labeled "token economy" (Lee *et al.*, 2022). Prasad *et al.* (2024) investigated the psychological determinants of purchase intention for NFTs and called for future studies that explore NFTs with different theoretical frameworks and additional constructs. Uniqueness, entertainment and expressive values help to elicit consumers' sense of status consumption and dispositional innovativeness for Gen-Z and Millennials (Xie *et al.*, 2023). Consumers with higher levels of innovation adoption and digital affinity are more likely to perceive value in branded NFTs and to express purchase intention. In the consumer's journey with NFTs, hedonic values are more important during first phase, while purchasing and possessing NFTs induce rather monetary values (Yilmaz *et al.*, 2023). In the adoption resistance framework, usage barriers and value barriers are the most impactful (Rabaai *et al.*, 2024). Alongside early adopters, NFTs attract many individuals who appreciate them, follow them on digital social networks, but do not necessarily purchase or collect them. Marketing theory postulate that followers are likely to become consumers and sometimes fans, thus we focus on influencers and fans (Yoshida *et al.*, 2015; Inoue *et al.*, 2019; Merten *et al.*, 2023). Given that NFT buyers remain few in numbers (Kumar, 2025; doit.software blog, 2025; Statista, 2025), exploring followers appears crucial. They define followers in comparison to both categories, notably when investigating social media behaviors. From the influencers' perspective, followers are those consumers aware of the brand, but who are not influencers and who regularly look for their content and posts, but with low engagement. From the fandom and the engagement points of view, followers are consumers that are not acting like other fans. Fans show greater engagement than followers, they identify with the object they cheer for and link their success to it (Wann, 2006; Merten *et al.*, 2023). Followers are consumers who inform themselves on the brand and consult its content without taking further action such as liking, republishing or other engagement behaviors, i.e. passive consumers. Fans are usually more loyal to the brand they support and such fanhood helps them define themselves through self-categorization, cheering becomes part of their social identity (Yoshida *et al.*, 2015). In contrast, followers are less involved as the "need to belong" is an antecedent of fan identification (Merten *et al.*, 2023). From a commercial perspective, the follower situation is undefined: he/she may or may not be a consumer or a prospect. Besides, the statute of follower is expected to be transitory: "followers can come and go, but fans are long-lasting" (Park, 2022). The NFT ecosystem is designed or at least well-adapted for consumers to follow NFTs and their owners easily: NFTs are displayed in galleries, display often is mandatory for owners, NFTs are discussed and advertised on digital social media. While some NFTs fans and purchasers are certainly motivated by the perspective of financial success or by promoting an ideological agenda like many cryptos fans (Breidbach and Tana, 2021), NFTs followers can be interested into cocreating the NFT market and participating to it, at least being part of the trend, being there as observers and promoters. Recent research has shown that community engagement plays a central role in sustaining interest in NFTs, even when financial expectations are not met, highlighting the importance of social identity and belonging in NFT ecosystems (Brahmstaedt, 2025). Like some NFTs purchasers identified by Alkhudary *et al.* (2023), followers may use NFTs to structure or to develop their identity.

2.3 NFT and identity: theories and issues

The token economy is likely to have a significant impact on aspects of financial identity (Sunyaev *et al.*, 2021). Values associated with NFTs may be linked to personality traits (Zhang and Phang, 2023; Xie *et al.*, 2023). NFTs are digital objects with social lives (Appadurai, 1986) and could serve as symbols of experience (Wallendorf and Arnould, 1988), carrying meanings and symbolic significance. As such, they can be leveraged by individuals to express or reinforce their personal and social identities.

Identity can be conceptualized as a combination of personality, self-concept, identity projects and self-presentation (Schau, 2018). Consumers engage in multiple identity projects, enacted through self-presentation, which are facilitated by marketplaces. By ensuring ownership of digital objects, NFTs enable collection practices, allowing collectors to document and authenticate their acquisitions. These digital assets support storytelling about how items were obtained, reinforcing self-presentation and identity narratives. Even without direct ownership (Belk, 1988), the practice of following NFTs allows individuals to express aspects of their identity, whether by signaling who they are, who they aspire to become (Belk and Costa, 1998), or who they seek to distance themselves from (Thompson and Arsel, 2004; Leonardelli *et al.*, 2010). We intend to understand which identity projects are supported by following the NFTs market. As regards social identity, the obvious analysis would link interest in NFTs to the need for ostentation and financial success (Bagwell and Bernheim, 1996). Following NFTs can help position oneself as holding the social and cultural capitals needed to participate to the Web 3.0 revolution and access to new forms of consumption and possession. Consequently, it is essential to examine whether such followers perceive themselves as early adopters or as collectors and passive consumer of highly symbolic digital assets. Simultaneously, whether materialism is conceptualized as a set of personality traits (Belk, 1988) or as a system of values, following NFTs may facilitate the expression of a new form of materialism. Belk *et al.* (2022, p. 302) introduced the concept of "immaterialism," a novel form of materialism to which NFTs are inherently connected, given their nature as "objects that we cannot touch, except virtually." This perspective aligns with the second consumer cluster identified by Alkhudary *et al.* (2023), which embodies this shift. Values rooted in libertarian ideology are frequently associated with cryptocurrencies, and it is highly likely that such values extend to NFTs, given their intrinsic link to the crypto ecosystem. NFTs exist at the intersection of multiple dichotomies: they are both public (as they are displayed in digital galleries) and private (since nonfollowers or nonpurchasers may only access partial information, and some collectors prefer to engage in private acquisition, akin to traditional art collecting); they are digital yet often connected to the physical world. Still today the question remains as to whether NFTs primarily serve as tools for new materialists or classifiers. Beyond their social value, NFTs also hold emotional significance, influencing purchase intent in ways that extend beyond purely financial motivations. While economic benefits are relevant, they appear secondary to other drivers, such as group belonging, cooperation, goal achievement and discovery (Lee *et al.*, 2022).

According to social identity theory (Tajfel and Turner, 1979), self-concept is shaped and enriched by social identities that emerge from group memberships, fostering a sense of belonging and a desire for inclusion (Tajfel and Turner, 1979). These groups play a crucial role in fulfilling followers' emotional attachment needs (Bhattacharya and Sen, 2003). Consequently, NFTs may influence social identity based on the type of NFT (e.g. images, music, real estate certificates, gaming assets) and the online communities with which individuals engage (Yoshida *et al.*, 2015). In this perspective, the role of communities in shaping and promoting identity warrants further investigation, particularly in relation to the emotional responses of NFT followers (Alkhudary *et al.*, 2023) While the focus has remained mostly on fans little is known about the role and characteristics instead of followers of the phenomenon (Lee *et al.*, 2022; Vollero *et al.*, 2025).

NFTs are perceived both as an investment tool but also as an emotion-evoking asset (Yilmaz *et al.*, 2023) but the extent to which emotions drive NFT followers' engagement remains underexplored. Thus, we explore the integration and identification dimension (Wang and Tucker, 2021) in relation to emotions related to NFTs (Valor *et al.*, 2022).

2.4 Problem statement and research questions

While the rise of NFTs has drawn widespread attention from media, investors and creators, as previously mentioned, the academic literature so far, focused primarily on their technological foundations, market dynamics and speculative behaviors. This focus, while valuable, tends to conflate NFTs with other blockchain-based innovations such as cryptocurrencies or broader trends within the digital economy. Despite their increasing presence in popular culture and online communities, NFTs have been underexplored in terms of the social, emotional and identity-related meanings they carry for individuals who engage with them. In particular, there is limited understanding of how users make sense of NFTs, how these digital assets shape personal identity and self-concept, and what role online communities play in this process. These aspects are critical to understanding the broader cultural implications of NFTs and their adoption beyond financial speculation. NFTs, represent unique digital assets used to certify ownership and authenticity of digital or physical content, often involving cultural, creative and symbolic dimensions (Nadini *et al.*, 2021; Dowling, 2022b; Wilson *et al.*, 2022). To address this gap, our study investigates the lived experiences and perceptions of individuals actively following NFT-related communities. Grounded in an interpretive qualitative approach, our research is guided by the following research question (RQ):

RQ1. What are the most frequent emotions associated to NFTs by followers?

RQ2. What are their perceptions of NFTs' business environment and sustainability?

RQ3. How is NFT following related to the followers' identity and self-concept?

RQ4. What is the role of communities as regards NFTs followers' identity?

3. Methodology

3.1 Research design and data collection

Due to the emerging nature of the phenomenon and the objectives of the research we decided to rely on a qualitative approach (Goulding, 2005) through semistructured interviews (Vichiengior *et al.*, 2023). This approach aligns with the exploratory nature of the study (Schwaeke *et al.*, 2025; Magnani and Gioia, 2023). To ensure both reliability and validity, rigorous procedures were implemented throughout the research process. A detailed and standardized research protocol was established. Two researchers designed a first draft of the interview guide in English. Both drafts were compared, and two researchers validated a final guide. Subsequently, this guide was tested and amended to optimize the understandability of the themes. Interviews were recorded, transcribed and then translated in English, to ensure accuracy of the analysis, verbatims, in fact, were analyzed by all authors. All correspondence with potential participants, including invitations and reminders, was carefully crafted to provide clear and consistent information, reducing the risk of misunderstanding or misinterpretation. The interview guide and themes were designed based on academic literature and aimed at addressing the objectives of the analysis. Interviews were recorded and transcribed in English to ensure accuracy of the analysis, and verbatims were analyzed by both authors. All correspondence with potential participants, including invitations and reminders, was carefully crafted to provide clear and consistent information, thus reducing the risk of misunderstanding or misinterpretation. To enhance participation rates, contact attempts were made with each potential participant using different channels.

Rather than pursuing superficial breadth, the study focuses on a theoretically relevant and information-rich core sample, consistent with the goal of generating contextualized insights (Gioia *et al.*, 2013). Hence, a purposive sampling method was used with a well-defined rationale for country selection. The purposeful sampling strategy (Patton, 2014) was used to ensure that the participants selected could provide valuable information relevant to the study. This approach aligns with established qualitative research practices in management and organization studies, which emphasize depth, meaning-making and theoretical contribution over statistical generalizability. This method allowed us to deliberately target communities and individuals with knowledge and experience in the NFT space, facilitating the inclusion of units that are critical for theory development by focusing on individuals who could illuminate key aspects of the phenomenon under investigation (Maxwell, 2013). To allow for generalization, we did not focus on a specific community or operator. And we interviewed NFT followers from three different countries: France, India and Italy. While, sociocultural environment, notably national culture, influences people perceptions and behaviors (De Mooij and Hofstede, 2011; Cleveland *et al.*, 2015), it was not considered in early NFT research. NFTs are mostly related to financial investments, art, brands, sports and entertainment, whose perception maybe significantly impacted by national culture. National culture also influence the concept of self (De Mooij and Hofstede, 2011). The rationale behind choice of these countries was guided by economic, cultural and regulatory considerations: attention to sustainability, purchasing power, nation's digital stage and NFTs attention as different fanship culture. For example, all three nations use sport as a medium for identity formation and social cohesion, but the Italian context emphasizes a deeply ritualistic form of support, the French model exhibits a more balanced and civic engagement and the Indian experience is marked by a dynamic synthesis of traditional passion with the immediacy of digital communication (Chaturvedi *et al.*, 2021). These variations underscore the complex interplay between local cultural traditions and community phenomena, inviting further interdisciplinary inquiry into their socioeconomic and political implications. Furthermore, we selected Italy and France as they represent two significant European markets for NFTs. Italy and France have both adopted legislation allowing NFTs to be considered as works of art and offered at auction, thus institutionalizing art-related NFTs (PR Newswire, 2023). Moreover, both countries have active digital economies and established blockchain ecosystems that make them relevant contexts to study NFT engagement. But Italy's art scene and rich cultural heritage make it a privileged market for art NFTs, and their artist "Italy, a pioneer in the generation of NFT artists, has witnessed a strong adoption of digital crypto art and NFTs, helping the country to achieve the title of 'Crypto Art Renaissance'". Furthermore, Italy ranked third globally for total gross sales in the core NFT market' (Business Wire, 2022a, 2022b). France has a larger art market (Statista, 2025) but Italians appear much more interested in crypto-assets than French (56% vs 37% – ADAN and KPMG, 2023). In terms of financial investments, French consumers prefer more secure assets (Brooks and Williams, 2024) [1]. To introduce a non-European perspective and explore NFTs within a different socioeconomic and technological context, we included India. India represents an ideal field of investigation for understanding the determinants influencing NFT adoption considering that is one of the first four countries for NFTs passion in Asia (Zhang, 2023). Chainanalysis (2021) ranks India as the second highest country globally in terms of cryptocurrency adoption, and the State is in the process of developing its own cryptocurrency. This burgeoning interest in cryptocurrencies provides a foundational understanding of blockchain technology, which is fundamental to NFTs. NFT adoption seems limited, but the familiarity with cryptocurrencies suggests a readiness to explore and engage with NFT activities. India's digital economy is expanding rapidly. The Indian digital economy is expected to reach US$1tn by 2025 (IBEF, 2022). This growth creates a large market for NFTs, where NFTs are mostly considered as investments. In each country, we interviewed exclusively nationals. We selected followers based on marketing and brand strategy literature, which emphasizes the importance of influencers and fans (Yoshida *et al.*, 2015; Inoue *et al.*, 2019; Merten *et al.*, 2023), Thus, participants were recruited based on their engagement with NFTs. The purposive sampling criteria are to include people that come from the selected country in terms of nationality, demonstrate potential interest in NFTs as active participation in digital communities focused on NFTs, cryptocurrencies and blockchain. A plus criterion was having created or bought NFTs or being an NFT community manager.

Announcements of the project were published on Facebook – Instagram, LinkedIn and X (formerly Twitter), targeting specific NFT-related communities with the aim of recruiting knowledgeable and interested participants. Posts and direct messages were shared with groups focused on NFTs, Web3 and digital art. A detailed list of all communities and platforms we reached out to is now provided in Table 1, indicating the number of members/followers and the outcome of each contact attempt (i.e. successful recruitment, no response or access denied).

Table 1. Digital communities and platforms contacted for participant recruitment

Platform	Community/account name	Members/followers	Outcome
Facebook	NFT Italia (group 1)	8,059	Successful recruitment
Facebook	NFT Italia (group 2 – same name, different account)	3,077	Successful recruitment
Facebook	NFT Arts India	4,177	Successful recruitment
Facebook	NFT France	12,595	Successful recruitment
Facebook	EmergingTech – Blockchain, Web3, Crypto, DeFi, NFTs, Metaverse – India	180	No response
Instagram	WEB 3 Italia	5,05	No response
Instagram	Blockchain NFT Italia	15,9	No response
Instagram	No memory pixel	4,736	Successful recruitment
Instagram	Foxxex NFT	918	Successful recruitment
Instagram	Digital Crypto Art	89	No response
Instagram	NFT India	338	No response
Instagram	NFT memes India	4,315	No response
LinkedIn	NFT Italia	302	Successful recruitment
LinkedIn	NFT Community	5,832	No response
LinkedIn	Blockchain Jobs – Web3, Crypto, DeFi, NFT, CBDCs, Metaverse, Cryptocurrencies, Bitcoin, Ethereum	8,048	No response
LinkedIn	Digital Art, AI	3,904	Access denied
LinkedIn	Art and NFT Network	3,904	No response
LinkedIn	EmergingTech – Blockchain, Web3, Crypto, DeFi, NFTs, Metaverse – Investors, Devs, Owners, Agency in India	216	Successful recruitment
LinkedIn	NFT France	12,544	Successful recruitment
X (Twitter)	@nftitaliaoff	40	No response
X (Twitter)	@NFT_Ita	213	No response
X (Twitter)	@nftitalia	4,336	No response
X (Twitter)	@nft_france_	106	No response
X (Twitter)	@nft_paris	67,917	No response
X (Twitter)	Agathe Davray (@coinbase)	Coinbase: 6.5 m	Successful recruitment
X (Twitter)	@india_nft	33	No response
X (Twitter)	@NFTindia_	413	Successful recruitment
YouTube	@Hasheur (Owen Simonin)	771,000	Successful recruitment

Source(s): Authors' own elaboration

Although substantial persuasion efforts were made, particularly toward Indian and French communities, strict moderation rules and low responsiveness posed challenges. Some communities did not approve our membership requests, while others remained unresponsive despite repeated contact attempts. Thus, sample was completed using a snowballing approach prioritizing depth over breadth by strengthening data triangulation within the selected countries and conducting a second interview round (May–July 2024).

Participant familiarity with NFTs was assessed using a two-step process. First, we considered membership in NFT-specific communities and the act of expressing interest in our study as a preliminary indicator of NFT awareness. Second, each interview began with a short screening in which participants were asked to report their degree of interest and familiarity with NFTs (e.g. low vs high), and to describe their level of engagement as if they own or even created an NFT. This allowed us to verify and categorize participants' NFT literacy levels before proceeding with the full interview.

Still, while we acknowledge the influence of communities on NFTs' followers, our objective was to neutralize as much as possible attitudes and values specific to each community. However, due to community rules restricting promotional content and a low response rate in some regions, we supplemented our recruitment with snowball sampling to enhance participant diversity (Gummerus *et al.*, 2024). Thus, participants were encouraged to suggest or invite others who met the necessary criteria and could provide valuable insights. We contacted them before interviews to ensure that they met the selected requirements (Bell and Bryman, 2007). This multistep recruitment strategy (Gummerus *et al.*, 2024) allowed us to balance the challenges of direct recruitment while ensuring representation across our targeted regions.

Interviews were conducted online between June 2022 and October 2022. When recruiting potential respondents, we verified their engagement behavior, ensuring that they demonstrated cognitive, behavioral or emotional involvement in NFTs, such as discussing NFTs online, researching their workplace applications, creating/buying NFTs, or considering doing so within six months. The average duration of interviews was close to one hour (55 min). Interviews were conducted until data saturation occurred (Hennink *et al.*, 2017; Saunders *et al.*, 2018). To strengthen our findings, we conducted a second round of interviews from May 2024 to July 2024, aimed at triangulating our data and confirming our saturation point (Fischer and Guzel, 2023). While defining saturation remains debated, it is commonly determined by the realization that additional interviews yield minimal new insights (Hood, 2007, p. 161; Tight, 2024). In qualitative research, data and theoretical saturation occur when additional samples no longer reveal new thematic insights, indicating that the existing codes sufficiently capture the range of information in the data set (Saunders *et al.*, 2018). Saturation is considered a "gold standard" in determining sample adequacy and data quality (Guest *et al.*, 2006). The final sample consisted of 19 Italian interviewees, 7 French interviewees and 8 Indian interviewees (Table 2), making it the largest qualitative sample on NFTs to date (Brahmstaedt, 2025; Vega and Camarero, 2024). Limitations in time and resources prevented further international extension. Selection bias was mitigated by contacting potential respondents via different channels. Cultural and geographical considerations were explicitly accounted for in our sampling design, ensuring that our European and Indian samples provided meaningful comparative insights. In terms of gender, most of our respondents identified as male, which is reflective of the current demographics of NFT markets. Furthermore, to limit cognitive and reflexivity biases of the authors (Berger, 2015), two interviewers conducted the interviews. According to the literature, saturation in empirical studies is frequently found to be in the range of 9–17 interviews (Hennink and Kaiser, 2022). Although there are no definitive strategies for defining sample saturation, it

Table 2. Description of interviewees

Interview	Create NFT	Owns NFT	*Gender*	Age	Study title	Occupation	Nationality
IT1	Yes	No	M	30	High school	Project manager	Italy
IT2	No	Yes	M	30	Study specialization on communication	Social media manager	Italy
IT3	No	Yes	M	29	Medical doctor	Hospital facility manager	Italy
IT4	No	No	M	37	Master in informatics	Technologies transformation’s educator	Italy
IT5	No	No	M	60	Bachelor in economics	Marketing sales intelligence division	Italy
IT6	No	Yes	M	44	Bachelor in design	Entrepreneur	Italy
IT7	No	Yes	M	34	MBA engineering	Product manager	Italy
IT8	Yes	Yes	M	25	Master degree in economics	Digital consultant	Italy
IT9	Yes	Yes	M	36	Bachelor in arts	Employee	Italy
1IT0	No	Yes	M	20	Engineering student	Student	Italy
IT11	No	Yes	F	53	Middle school	Colf	Italy
IT12	No	Yes	M	25	High school	Cybersecurity specialist	Italy
IT13	No	Yes	M	31	Digital course	Freelance	Italy
FR1	Yes	Yes	M	21	High school	Student	France
FR2	No	No	M	30	Master’s	PhD student	France
FR3	No	No	M	29	Master’s	University assistant	France
FR4	No	No	F	44	Master’s	Business analyst manager	France
FR5	No	No	M	35	Master’s	Advertising	France
FR6	No	No	F	42	Master’s	Head of innovation	France
FR7	Yes	No	M	38	Master’s	Financial services	France
IT1_R2	No	Yes	M	27	Bachelor in literature and languages	Cybersecurity consultant	Italy
IT2_R2	No	No	F	29	Master degree in business communication	Administrative secretary	Italy
IT3_R2	No	No	M	30	Bachelor’s degree in computer science	Technology sector employee	Italy
IT4_R2	No	No	F	30	Law degree	Legal advisor in crypto and blockchain	Italy
IT5_R2	No	No	M	25	Masters in blockchain infrastructure	Freelancer	Italy
IT6_R2	No	Yes	M	44	Computer science diploma	Web 3.0 consultant	Italy
IND1	No	No	M	23	Bachelor in marketing	Student	India
IND2	No	No	M	29	Bachelor in marketing	Student and freelance	India
IND3	No	Yes	M	65	PhD in business and management	Academic professor – writer	India
IND4	No	No	M	26	’Master’s in food process engineering	Researcher and consultant in food process engineering	India
IND5	No	No	M	27	Bachelor in informatics	Game developer	India
IND6	No	No	M	36	Management master	Operations team leader	India
IND7	No	No	F	25	Management in marketing	Social media and video attendant	India
IND8	No	No	M	39	Executive MBA	Bank vice president	India

Source(s): Author’s own elaboration

was easily assessed as only one author carried out the interviews for each national subsample.

3.2 Data analysis

Coding analysis was sorted manually after that we arrive to the "saturation point." The Gioia method (Gioia *et al.*, 2013) was adopted as it is particularly suited to investigate theories and identity studies (Garnelo-Gomez *et al.*, 2022). Gioia method aims to produce a model that accomplishes several objectives:

- affirming existing concepts and relationships (as an emergent model must align with some known findings;
- extending existing knowledge by broadening known frameworks; and
- introducing new concepts or perspectives on the phenomenon, goal is to develop substantive theory, which explains processes, actions or interactions related to a specific topic at a broad conceptual level and not only inspires innovative ideas but also helps define relevant categories, properties and integration methods.

In fact, most grounded formal theories are rooted, at least partially, in substantive theories (Magnani and Gioia, 2023). The analysis began with an open coding of the raw data (opening up the data, identifying patterns), Gioia's methodology emphasizes the importance of connecting first- and second-order interpretations to build a grounded process model that explains the phenomena of interest (Magnani and Gioia, 2023). In the first stage, each author independently identified first-level concepts by thoroughly analyzing the data. A second round of coding was then conducted to organize these initial findings, identify cross-code patterns and detect similarities and differences among the codes according to a constant comparison (identifying variation, looking for links between categories across all interviews). At this stage, categories were created and labeled to represent emerging themes (engaging with a core category) (Demunter and Bauwens, 2023). Subsequently, the authors shared their respective categories and findings, engaging in discussions to reconcile interpretations. A new round of analysis was carried out collaboratively and iteratively to refine the results while minimizing potential biases (Magnani and Gioia, 2023; Garnelo-Gomez *et al.*, 2022). Care was taken to mitigate risks of "corruption" or unconscious biases stemming from the authors' prior experiences and personal influences (Sobh and Perry, 2005). This iterative process ultimately led to the identification of core categories and aggregate dimensions (Koponen and Julkunen, 2022; Tienken *et al.*, 2023; Corley and Gioia, 2004) and allow to "depict theory-based understanding" (Magnani and Gioia, 2023). To strengthen and refine these dimensions, additional interviews were conducted with a new sample of participants from Italy and India, for France we receive a declination. These subsequent interviews provided further data, which confirmed the saturation point and reinforced patterns and connections between the emerging concepts (Fischer and Guzel, 2023). Emotion can affect behavior and marketing choice to buy or adopt a product (Valor *et al.*, 2022). To analyze emotions most frequently associated with NFTs, Plutchick's (2001) emotion wheel model was adopted. Coding procedure is presented in Appendix.

4. Findings

To answer our research questions, we find the present final codes: general perception of NFTs (4.1), Emotions (4.2), NFT sustainability issues (4.3), economic and business reflections (4.4), identity perceptions (4.5) and communities (4.6).

4.1 General perception of NFTs

Followers' overall perception of NFTs is extremely diverse. Most of the interviewees associate them to identification devices, both on a commercial side such as a membership card, for royalties and on an administrative side as identification services, for example a passport or another Identificative, including proof of property.

Some transcend it and see uses more linked to the investment and speculation, e.g. collateral product; some see it as nothing more than an accessory to gaming or as new forms for art and the reporting of artistic value or contract. NFTs, as new "Digital assets," make up the NFT ecosystem but they can be, components of some other ecosystems, like cryptocurrencies and Metaverse (Vidal-Tomás, 2022).

NFTs "could be something" but they already are "not something" Int.16. NFTs are proposed, advertised, sold, marketed, by or in ecosystems. Ecosystems members work together to push followers and buyers into becoming more active and involved. Possibly, NFT ecosystems are herding (in the Zuboff, 2019, meaning) followers and users toward specific actions and behaviors. Strikingly, none of interviewees seems to mention this possibility. These ecosystems are very similar to the exclusive sneakers micro market explored by Dolbec and Fischer (2015). NFTs lend themselves to various uses. Two major "Risks" perceived by NFT followers are: speculation, that is NFTs having too much success; wallet theft, scams related to anonymity and other crimes:

> There's a whole aspect that I didn't mention: speculation. In fact, there's a whole speculative market around NFTs. FR6.

> The risk of the NFTs is the speculation in fact. Finally, art is only a pretext, somewhere, to speculate. FR3.

Opinions converge on NFTs high potential and the multiple possibilities they offer, "They are an empty box" IT6R2 and all agreed on the "Uniqueness" and their intangible, almost abstract nature "they are an abstraction of an abstraction" IND2. Thus, one can consider NFTs are at the heart of a general semantic ambiguity about what they are and can do. Five major themes were identified concerning NFTs, their interactions with NFTs and the NFTs' ecosystems.

4.2 Emotions

Emotions play an important role in the act of consumption (Watson and Spence, 2007) and can affect behavior and decision-making (Lerner *et al.*, 2015). To analyze the emotions most frequently associated with NFTs, Plutchick's (2001) emotion wheel model is the most suitable. NFT followers express multivalent emotions toward the phenomenon depending on their trust in NFTs. The most frequent emotion is fear and caution toward NFTs:

> You have to be careful IT8.

> You have to be attentive and need safety education IT9.

Followed by anticipation and disgust:

> I don't approve of selling access to content on an ethical level. I find it just a marketing strategy and I don't think everyone likes or approve such actions by some brands IT3.

Joy is the fourth most frequently reported feeling:

> It's fun, you get to see other people's collections. There are some very pretty things and some very ugly things. That side, it's really that playful side FR2.

If I have NFT, it will be interesting for me and I will be really happy that I have NFT IND2.

Less frequently, followers express positive feelings related to novelty and curiosity that attract NFTs followers. Trust, anger and sadness are the least reported or identified emotions. Emotions appear related to new technologies and change during adoption and diffusion of NFTs, fear and anticipation emerging clearly, while positive sentiments as joy, escapism support attractiveness of NFTs and are related to the opportunities that followers see in NFTs: "personal fulfillment, creativity, and empowerment" IND4.

Emotions perfectly reflect sentiments toward NFTs. They can be an obstacle to their adoption. The perceived emotions of NFTs followers vary depending on the elements related to NFTs that are being analyzed. It can stem from their polysemic nature, usefulness and potential as well as to the critical issues regarding their security. The most negative feelings are often linked to speculation on NFTs and the hype that is generated around them, especially in untrustworthy communities. Joy is connected to epistemic and creative act and are related to possession or creation of something capable of satisfying the soul both in an aesthetic and in a hedonic way. NFTs are strongly linked to freedom and to the need to feel. Fear stems from the sentiment of anticipation as many of interviewees associate the NFT phenomenon with the possibilities of redefining their opinion of themselves as innovative persons and hopes that NFTs will bring benefits and allow people to change their status. In this respect, the strength of emotions triggered by NFTs underlines their importance for NFTs followers.

4.3 Economics and business environment

Economic issues are very frequent in the interviews. As NFTs are related to cryptocurrencies, several respondents, notably Indian ones, first and foremost see them as financial investments, despite they frequently do not have money resource to buy them. NFTs are economic and business objects. Among these economic and business reflections on NFTs three subthemes are of interest:

- "Cryptocurrencies";
- "Economy Reconfiguration"; and
- "Artist or Brand preference."

First subtheme may seem obvious for less informed consumers. Above all, it is a technical and logistical imperative as NFTs need blockchains to exist and crypto wallet to be purchased. NFTs and cryptos thrive on security issues. Respondents consider opportunities and concern related to the to the anchoring of NFTs to cryptocurrencies. For instance, a NFT value and its volatility are impacted by the blockchain it uses. As many NFT followers have expectations of a transparent and perfect market, NFT price volatility and irrationality are perceived more vividly. Still, for many NFT followers, there is "no coincidence between the two": cryptos are perceived as currencies, NFTs as unique tokens.

Cryptocurrency is the speculation of the poor. FR3.

NFTs is what that allow to exchange the value of the crypto, we have coin, now we could have contracts and product to trade IT1.

Respondents refer to the fact that there may be a poor perception of the monetary value linked to NFTs:

There you don't even have the perception of how much it's worth in real money. IT5.

It is difficult for NFT followers to assess their value and to link it to the monetary dimension:

> Both are volatile, but their value does not vary equally FR1.

> It has a multidimensional answer IND5.

NFT buyers believe that traditional monetary value only partially explains their price, creating a sense of uncertainty and resistance to adoption according with the idea of a "Reconfiguration of the economic system" where disintermediation, decentralization and perceived freedom of transactions and monetary power are often emphasized:

> My point of view is that crypto-economy cuts through intermediaries and the use of banks to make transactions. It forces us to completely rethink the concept of economy FR4.

This economic reconfiguration is associated to the need for more "transparency." Finally, respondents evoke the preference between NFTs of "Artists or Brands." If several respondents express a preference for NFTs art pieces, most of them do not spontaneously differentiate categories of NFTs. Still, NFT followers clearly distinguish perceived advantages and disadvantages of artist and marketing or brand NFTs, as described in Table 3.

Companies and professionals in these ecosystems are actively shaping them and defining rules. Unfortunately, these actions are compared to "Ponzi scheme," inducing negative feelings:

> Membership yes, Royalties if I were a producer or participant in some part, even if it is very much linked to the concept of network marketing and Ponzi scheme, a sort of chain markup that I don't like. IT4.

The success of marketing ideas through NFTs depends on how they are executed, but the association with marketing may diminish their appeal for NFT enthusiasts. Some marketing professionals still view NFTs as separate from their field, similar to Kozinets' (2002) observations of Burning Man participants. NFTs in marketing are seen as attempts by large companies to infiltrate new areas, with marketing and finance viewed as potentially corrupting forces. However, some consumers may embrace marketing and use NFTs for personal or "higher" purposes, signaling that NFTs are digital objects that can shape their identities.

4.4 Sustainability

No respondent spontaneously evoked sustainability. When their opinion is requested, followers mostly perceive NFTs sustainability at an environmental and governance level. Three second order themes related to environmental, social and governance – ESG emerged. "Environmental" subtheme is articulated in the following sub concepts – second order themes: "Energy consumption" which largely depends on the second sub concept: "Blockchain protocols" and the last sub concept albeit the need to find new "Alternatives solutions" to reduce the environmental impact, e.g. resorting to countries with an energy surplus and opting for renewable energies:

> It is a problem for NFT. People should invent with 0 impact but passing on the blockchain in the end would cancel this effort. I think it should change the way energy is taken, creating farm companies that have sustainable systems and that go with renewables. The energy transition should be implemented in all fields IT3.

> Even electric cars are very expensive to produce batteries, but does everything you do improve? If we used our money to plant trees and make polluting packaging, wouldn't it be worse? IT1.

Table 3. Positive and negative perceived elements for artist and companies

Artist		Company brand	
Positive side	Negative	Positive	Negative
Artist work appreciation	Disvaluation	Services	Non fungible
Talent’s support	Speculation	Merchandising	Spot offers
Direct relationship with the artist	Anonymity	Prestige	Negative impact on brand
Artist continues to create	Unacceptable and unrealistic project	Defined project and more reliability	As trend
Royalties		Royalties	More common
Both: Uniqueness		Both: Tied to material object	

Source(s): Author’s own elaboration

When acknowledged, sustainability problems are deemed temporary and caused by cryptos and blockchains, not NFTs. Some respondents also express “non-mortality of data” and NFTs “perenniality.” All respondents react negatively to this issue, using a wide array of neutralization techniques (Nelson, 1995). Following and potentially purchasing NFTs is important to them. Then, sustainability dimension appears irrelevant to their willingness to follow NFTs, but it may threaten their expectations around them.

Respondents stress the challenges of the current government system and regulations them for individual and companies to arrive to a regulation “in and between countries” (Indian Int.8). It may stem from the “disintermediation” and “decentralization” concept linked to Decentralized Autonomous Organizations (or DAO) and the requirement for a new “responsibility”:

> The economic system should be changed. Businesses and economy should change. IT6.

> Yes! there is a governmental subject, there is what we call the DAO. So governmental in societal sense, in sense of democracy in the sense. Putting in place a system that is socially responsible. FR6.

Sustainability also leads to a concern for the “reconfigurations” of jobs, such as that of the notary and art galleries, replaced by individual NFTs. They are also many links to creation and sales of NFTs with charity initiatives for social causes. Overall, it is possible to interpret these conflictual, contradictory opinions and reactions as highlighting the importance of NFTs and their ecosystem to our respondents’ identity, whose is detailed in the next paragraph.

4.5 NFT and identity

NFTs are rooted in “New digital worlds,” such as possible metaverses and Web 3.0 applications. But this connection is not systematic. NFTs act as a bridge between the different realities: NFTs will be needed for the “dissemination of the Metaverse” (IT1R2). Feelings and opinions regarding Metaverses and NFTs still are conflicting as Metaverse(s) did not happen so far:

> In metaverse, NFTs are an abstraction of an abstraction, take for example Decentraland, I have the representation of a land and NFTs is the abstraction that give me property, maybe something is changed, for example gold doesnt’ have any value but we decide to give it a value of richness and we posit as monetary benchmark, they are abstraction FR2.

That constitutes a “loophole” (IT9). This discourse is associated to the word: “trick” as several respondents think it will be very similar to a circus with different performances, everyone can perform. The boundary with magical experience (Arnould and Price, 1993) is as unclear as humor is vivid: “If we all lived in the metaverse, in one generation we would be extinct” IT3

Still NFTs will be exhibited, traded or used to play games or as identity markers in metaverses. Magic items and skins in videogames and virtual realities, represent the archetype of such NFTs. Related subthemes are: “avatars,” “metaverse” and “games and play to earn”:

> A certain number of NFTs, these NFTs, you are going to use in a metaverse either as NFTs that allow you to change your avatar, such as shoes FR5.

> I would say I would invest in fantasy gaming because, yes, I was a, you know, I’m a fantasy gaming enthusiast and I invested a lot of money into it and I got some return as well. IND7.

NFTs allow you to dress your own Avatar in the Metaverse. The sense of uniqueness prevails, of “Being globally recognizable” (FR3), as well as having NFTs and particular attributes in order not to lose status even in the new reality. With NFTs, most of the appeal revolves around connoting digital objects creations with digital scarcity:

> Digitality is the added value. I don’t have to wait for the mail but I quickly buy the contract and I am entitled to that service or work. IT9.

NFTs support individuals’ administrative digital identities by securing objects that enhance them, translating the physical logic of possessions into the digital realm. They contribute to the articulation of both digital and physical identities. Instead of acting as virtual collectors or classifiers, individuals can expand their materialism and consumption into the digital space.

In detail, to better understand the relationships between NFTs and their followers, we explored three questions related to identity and NFTs: What is their role in terms of identity? Do consumers reorient their identity to align with the NFTs they follow? How do NFT followers classify themselves to relevant others (Alkhudary *et al.*, 2023)?

The desire for “self-affirmation” is tied to the aim of confirming one’s identity both in the physical and digital dimension, as well as not wanting to lose status in both dimensions (Jeong *et al*., 2024) NFTs directly allow for this:

> It’s a personal process, not particularly constructed either. It was a bit of an exploration, like you read sometimes, articles on subjects to learn, to see what it was and so you adapt IT6.

The concept of self-expression is embodied both at creative level, and on the artistic side as profit expectations guide many artists in experimenting with NFTs. Artistic lovers or followers should help their favorite artists and confirm his/her interest in art:

> In my case I vent my artistic vein and then I have the opportunity to those who have many cryptocurrencies that if they like it they can buy it. IT 9.

> NFTs can reflect my personal interests, artistic tastes, and support for certain artists or cultural movements. They can represent an extension of my digital identity FR2.

Overall, it seems identity projects are not always much structured. Thus, we identified two concepts associated to basic dialectic and categorization of the identity building process (Leonardelli *et al.*, 2010): “inclusion” and “differentiation”:

> it’s serious, it’s your irrational path. Irrational in any case. Is temporary, it is the techno appetite. It’s, people who show up on the net and they don’t think anything of it. FR3.

> I also have a life outside: family, work, for me are an outlet and a pastime to always be with a window open to the future. IT9.

But identity building process highlights the role of one's "social identity." The construction of one's own individuality is reconsidered through the confirmation of being part of a particular community, social group or under a particular role such as that of the technology expert or innovator:

> When you are in a club or you are part of a group of people, or you are part of a tribe, of a community of people who like this product there and therefore a sign of recognition. Like a tattoo or things if not such or such clothing which allows to say. I am a surfer or a Harley Davidson owner, a biker[…] FR1.

> Very often the use if NFTs appears tied to curiosity and attitude typical of geek culture and to technophiles and their techno appetite FR7.

> NFTs offer a unique way to express and assert one's identity. They allow individuals to own digital assets that represent their interests, beliefs, and affiliations, artists for example have strong social identities. In India, where identity is often closely tied to cultural and regional heritage, NFTs can play a crucial role in preserving and promoting this identity on a global scale. For instance, owning an NFT of a famous Bollywood scene or a moment from a cricket match can be a way for individuals to showcase their personal and cultural identity IND1.

Discussing NFTs and their built-in authentication capabilities induce elaborate anticipations of how people will demonstrate their identity, developed in "authentication," the second subtheme. Most participants anticipate that NFTs may become a proof of identity or even a ubiquitous official personal identification device, offering new tools to develop one's social identity:

> I want to be recognized because I wear brands. It's not just in your street, it's not just in your neighbourhood, is in the whole world! They could be an identity card, my key to digital. NFT allows for strict identification. FR5.

They can also allow for recognition of objects and, interestingly, life events:

> You're giving me a virtual ticket to a concert that's becoming memorable, exceptional and a household name. And I can certify that it's mine, that it's real and better than that. It's certified. FR2.

> I think they could be useful for authenticate objects, for example on my side I will buy if it allows to certify diamonds, there is a company that is starts to do that and we follow the process. I think could be interesting IT9.

> Well, for me they could be as a personal passport or related to certified tourism information as tickets or other facilities IND1.

Interviewees develop many beliefs in relation to NFTs. Identity authentication also operates through the issue of "anonymity" that is linked to NFTs and their "recognition": NFT operators can remain anonymous. For the most part, anonymity appears as a negative topic: "Anonymity preserves but for us as users it is a danger, you can't trust it" IND6.

4.6 Followers and NFTs communities

Unsurprisingly, "Communities" is one of the most frequent dimensions. To explain how NFT ecosystems are working, most interviewees evoke the importance of communities. They express several dimensions related to communities, notably the "Role" they have for NFTs followers: an individual dimension, a collective one and a professional sphere. Another theme is the presence of "Bright and dark side of communities." Finally, there is the issue of the "Channels" where these communities do develop. Respondents identify two major functions of communities: (a) to create an environment favorable to knowing and supporting NFTs followers and (b) as promotion and expression channel for creators and traders:

> If there were not a project and a community there would be no market. They are fundamental. Like Coca Cola or Pepsi if there were no buyers there would be no Coke. If there are no people supporting the project, that project is doomed to fail. IT7.

> Then there's the community aspect that I find a bit interesting. People are looking to identify themselves as belonging to a group, as defending same cause. There's a social utility. FR7.

As collective spheres, communities are compared to "clubs" and "circles" to which one can belong or not, voluntarily or because they are excluded. For some communities in fact, the access is not free, or it is opaque, limited. Communities, especially for creators and investors/speculators are mostly a strategic business support tool. They are "places" where one's promotes oneself or one's projects. The members of the community are the audience capable of creating advocacy and to spread such projects. Their role is to provide their members with an economic advantage. For example, in the art market, the quotation frequently is the result of outstanding vibrant development and appreciation of the artist and marketing dimension (Hernando and Campo, 2017). Thus, the presence of an identity with high reputation could lead to intention to purchase NFTs (Xia *et al.*, 2022):

> Is that it's a kind of obligatory passage if you don't want to have bad surprises, when you buy an NFT. It's actually a healthy thing. IT11.

Communities also provide a social utility and create a very strong sense of belonging:

> They allow you to create engagement - relationships - knowledge IT6R2.

For some respondents, a community is a kind of reassurance against potential risks and a way to demonstrate a personal status symbol, prestige. NFT thrill, based on gamification and complexity is simultaneously accentuating potential risks or threats. It is particularly true when NFT is considered as a financial investment with a potential herding behavior, and lack of confidence in counterparts. The communities cited by our respondents are based on curiosity, a personality trait often associated to geeks. People interested into NFTs are getting close to communities to have more knowledge on the NFT ecosystem:

> Well, you have to be curious. There's a mnemonic that's used a lot, that everybody repeats, it's not do it yourself, it's do your own research too FR3.

Interviewees distinguish the "bright and dark side" of communities. Especially for those who are learning to use NFTs, who would exchange and create them, communities are available at every hour and days and most of them are international, they facilitate knowledge, collaboration, creation and knowledge sharing. There is also a perception that smaller, vertical communities will remain "healthier" than communities with many participants:

> I preferred when there were fewer people and really knew and believed in NFTs IT3.

> I don't like massive communities. Where there are 500. I prefer smaller and more vertical communities the more I prefer them and the less risk of finding the speculator IT 4.

Conversely, most participants refer to community messages that fuel discomfort. The dark sides of some communities are those where is a lack of dialogue, as fanatism practices. Scams, crimes, bullying also occur in them. To answer Colicev (2023) research question, depending on the media used, communities change in their behaviors, interactions and intentions. Perceptions and interactions change, with the communities and within them:

> Instagram is for promoting and showing, Twitter is like Instagram but more suitable for discussions, Discord is a mixture, much more speculative, more immediate than Twitter. They are not very open to dialogue. Those on social media follow quieter and more traditional social policies than such media. While on Discord it is messy, and they also seem much more bullying persons. FR1.

For instance, Discord remains a more speculative channel, while Instagram, Facebook or classical social media due to their control policies, remain less speculative and more adapted for self-promotion (Instagram) or education (Facebook, LinkedIn). Most of the time, these communities are structured around nonofficial media, in accordance with Granovetter (2016) weak tie theory. For most respondents, community participation is not strong and the attractiveness of each community is balanced by the will to remain free from influence. While NFT followers know that communities exist, probably understand how to become members, in the end most of them do not apply for membership:

> I actually just came in contact with one community. Which one was it? You know, it was the community. There was a community that was around an NFT. After that, no, I haven't necessarily seen any others. It's like we are in tribe. FR5.

Instead, if passion about NFTs is present, the involvement or engagement of most followers is best described as intermediate. They mostly display that they belong to the vast group of NFT lovers. Most interviewees are mostly connected to friends or family members who may have initiated them into the field of NFTs.

5. Discussion

Obviously, some identity-related differences stem from differences between generations. The younger generations are more inclined to experiential and unique consumption, while older generations usually prefer more mundane consumption (Bhattacharjee and Mogilner, 2014; Xie *et al.*, 2023). Still, we observe several intergenerational results as regards identity issues. To address our research questions on identity and NFTs, we explore further the following subjects: profile, emotions and identity issues of NFTs followers, NFTs extended-self and possessions, NFT communities as expression and support of identity, the rise of defiant financial digital society, two adverse approaches to conformity.

5.1 NFTs followers' emotions and their perceptions about NFT business environment and sustainability issues

Our findings offer interesting insights to answer our research question. To address *RQ1*, emotions reflect sentiments toward NFTs and obstacles to their adoption and diffusion. Perceived emotions vary depending on the NFT aspects being analyzed. There is significant uncertainty and caution, stemming from their polysemic nature, their usefulness, their potential and security issues (Kshetri, 2022; Chohan and Paschen, 2023). Negative feelings often relate to speculation and hype, especially with untrustworthy communities. Joy is linked to the creative act and the possession or creation of something aesthetically and hedonically satisfying. NFTs are associated with freedom and the need to feel. Fear is born from anticipation, as interviewees see NFTs as a means of redefining themselves as innovative and hope these products, despite their issues, will bring benefits and changes in status: innovator, wealthy, expert acting. They are like the Pandora's box: despite negative emotions attached to this new technology, if correctly used, there is hope in new digital world possibilities. Emotions triggered by NFTs, shaping their embedded values, highlight their importance and influence on their diffusion. Hope and freedom were two of most frequent terms among those who follow NFTs. It can be related to optimism about the future. Despite monetary and functional values, the apparent innovation, the desire to feel free and empowered, to share one's discoveries, creations and have fun, recognitions, pleasure with others are other leading values emerged. It confirms the impact of technology on consumer imagination (Schau, 2018). These four affections attributes projected onto NFTs both reinforce followers' personal identity and boost their social identity. Here NFTs adopters and purchasers act like an aspiration or reference group (Leonardelli *et al.*, 2010; Merten *et al.*, 2023). Such values can also justify the less positive economic and social landscape that is envisioned. NFTs followers may believe or feel NFTs support a very harsh and individualistic society, but it is the price to pay for innovation, modernity, freedom and the possibility to share achievements and moments with others. NFT followers do not reorient their identity to align with NFT. Instead, they search in NFTs what they perceived is missing to have an ideal identity: remaining a technophile, belonging to an elitist, prestigious or outsider group or simply functionality and monetary benefits. Basing on the different multidimensional definition of NFTs and connected values and perceptions, Figure 1 describes the matrix of the possible characteristics that could guide the different followers and the NFTs key profile dimensions as per Floch (1990) semiotic square. The presented semiotic quadrant relates directly to the theory of Floch (1990), who distinguishes four modes of valuing products and consumer choices. In the hedonistic and serious quadrant are the Idealists/Artists, who value symbolic expression, creativity and authenticity. In the hedonistic and playful quadrant emerge the Gamers, for whom value is linked to entertainment, sensory experience and lightness. On the functional and serious side are the Materialists, consumers oriented toward efficiency, practicality and durability for example in terms of the certification nature of NFTS. Finally, in the combination of the functional and playful we find the Speculators, who see consumer choices as opportunities for gain and

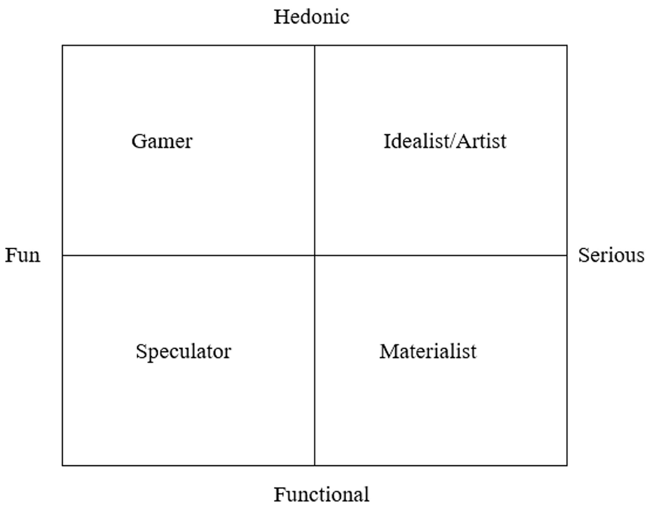

Figure 1. Matrix of NFTs followers
Source: Authors' elaboration

strategic advantage. This structure highlights how different value types influence the way consumers perceive and choose products or brands, and how marketing strategies can adapt to each of these categories.

Nonetheless, NFT followers, and in this there is one of the main differences with buyers, may also try to escape the unfavorable aspects they perceive in the NFT markets (Rabaai *et al.*, 2024), by not entering them and only observing events unfolding there, in very complex environments. To answer *RQ2*, NFTs followers share with NFTs purchasers or fans the interest or fascination for these objects and their environment. But with regard to sustainability nobody shows any major problems than the same as other high-polluting products. They give great importance to digital communities and projects allowed by Web 3.0. They appear to look for balance between purely financial goals and creative objectives. Obviously, followers share innovation, freedom and at large economic values conveyed by NFTs and cryptocurrencies with purchasers or fans (Yilmaz *et al.*, 2023). But for Followers, NFTs appear less central in defining their identity. Specifically, they evoke or develop less structured identity projects. Their self-presentations are more limited. Their emotions toward NFTs are more contrasted between positive and negative feelings. Notably, they are concerned with the dark sides of communities developed around NFTs. It is unclear whether these perceptions explain their more limited engagement compared to fans and purchasers, or if their personality and personal journey make them inherently less inclined to fully immerse themselves in the NFT space.

The interplay between identity facets and following NFTs occurs in a renewed perception of economic and social relationships. One of the themes we identified: “Reconfiguration of the economic system,” relates to the goal of achieving a new order that does not rely on central authorities. It is mostly based on neoliberal and libertarian ideas of eviction of central banks and institutions from the government of money. Libertarian ideas promote the need for a very limited central state (Dhali *et al.*, 2023). Through their connection with cryptos, NFTs are strongly associated to the free market or, more precisely, to the idea of economic free will. However, respondents do not explicitly identify who or what threatens this financial freedom within digital markets. At the same time, many express concerns about the lack of fair opportunities in traditional financial systems, believing that individual investors have limited prospects for profit compared to “initiates” – financial experts, industry gurus and corporate entities. According to this perspective, profitable opportunities in financial markets are primarily reserved for these insiders, who belong to the so-called dominant order. This skepticism toward traditional financial institutions fuels their confidence in NFT ecosystems.

Followers exhibit highly optimistic views of NFTs, particularly regarding their potential for security and authentication. Some interviewees even suggest that NFTs could authenticate life events, reinforcing a broader belief that we live in an increasingly individualistic world where trust is scarce beyond one’s close social circle. As a result, many NFT followers prefer to rely on proven systems – such as algorithms and blockchain ecosystems – rather than traditional human relationships when engaging in economic or social interactions. Despite recognizing the security challenges within NFT systems, followers emphasize the democratization of financial participation that NFTs facilitate. In theory, NFTs allow anyone to invest and potentially profit, regardless of social status or economic background. This opens up new possibilities for monetary innovation, but paradoxically, many of these innovations recycle traditional conservative financial structures rather than creating radically new ones.

Thus, while some followers see NFTs as part of a transformative economic shift, others remain skeptical about whether this emerging system is truly superior to the current one. The critical flaws of cryptocurrencies and NFT markets often remain unaddressed, and not all

NFT followers are convinced that this "new order" will lead to a fairer financial system. In reality, this envisioned market structure does not yet exist, leaving its promises unfulfilled and its future uncertain.

5.2 NFTs followers' identity: extended-self and the new possession

In response to *RQ4* regarding identity, while some NFT followers primarily focus on personal identity, most engage in a dialectical process of identity construction, using their association with NFTs as a mechanism of opposition or differentiation. Leonardelli *et al.* (2010) posit that individuals have two fundamental and competing needs: the need for inclusion and the need for differentiation. Our findings suggest that most NFT followers articulate social identity processes rather than emphasizing personal identity formation. NFTs support followers' self-presentations and identity projects. Our evidence strongly supports the notion that the needs for inclusion and differentiation influence self-categorization. These needs shape perceptions and judgments of both the self and others, as well as the nature of intragroup and intergroup relations. For instance, the exclusivity of owning rare NFTs can enhance social status within a community while simultaneously fostering competition and distinctiveness among members. Understanding these dynamics provides deeper insights into the motivations behind NFTs acquisitions and the emerging social structures within digital communities. However, most NFTs projects remain relatively unstructured, revolving around traditional, materialistic aspirations. This is due either to the complexity of NFTs and their environment, which makes them difficult for consumers to navigate, or to the excessive breadth of meanings that NFTs can embody. Although we did not attempt to establish a strict typology of NFTs followers, a dialectical perspective helps distinguish two primary groups. The first related to NFT followers who develop identity through opposition try to present the profile of consumers not much subject to materialism and they define themselves by what they do not consume. They do not adopt NFTs to underline they are in control of their consumption: they do not succumb easily; thus, they stand out. The second relate to other group of followers use NFTs and their early adopters as an aspirational group (Inoue *et al.*, 2019; Merten *et al.*, 2023). Proximity to NFTs convey modernity, technology, high value, to help them differentiate from the average consumer. Both groups leverage materialism and its signifiers in their identity construction. In a world of gaseous identities (Timossi, 2020), simultaneously multiple identities fight and seek expression and opposition through multiple means. The individual now proceeds in his/her ongoing digital identity quest from the synergy of these dimensions. In the digital universe, the self can be liberated and find expression through a multiplicity of objects. It is possible to "truly" be oneself, acquire new facets and make personal idealizations real. Here, NFTs support individual identity expressions through two features: (a) their versatility allows for indefinite variations of individual expressions, (b) NFTs allow people to certify and capitalize their identities, thus giving them salience. In this frame, the low positive symbolic relevance and the frequently negative connotations associated to NFTs are potential obstacles to their purchase by followers. The mode of consumption influence consumer relationship, values, preferences and desires tied to products or services (Chen, 2009). Increasingly, consumption is driven by identity rather than ownership (Bauman, 2007; Belk, 2013), and the process is becoming more virtual. Contrary to Reed II *et al.* (2012), there remains a necessary distinction between the self and society, with a persistent need for a filter between personal identity and social identity (Dunn, 1997; Leonardelli *et al.*, 2010).

At least two possible paths emerge from these evolving patterns of consumption. In recent years, the concept of ownership significantly evolved. The need for possession is questioned. Sharing and real access to products redesigned the way of using, paying and conceiving consumer objects (Eckhardt *et al.*, 2019) and the way they contribute to the self. This shift also influences how possessions contribute to one's sense of self. Digitalization has further attenuated the role of ownership while amplifying the role of shared experiences, commonalities, cocreation and reaffirmation. Belk *et al.* (2022, p. 203) refers to the concept of immaterialism "If we can become possessive, stingy, and envious when it comes to non-material things, we might more aptly call it immaterialism." But maybe the adequate analysis revolves around the well-known "phygital society" (Vergine *et al.*, 2019). Thus, we shall refer to "phygitalism," a situation where digital and material are expressions of one and the same reality, and where measures of materialism find new redefinition in the light of the connected digital reality. Hence the centrality of acquisitions becomes the centrality of access. Possession-defined success and acquisition in pursuit of happiness remain, but recognition becomes more significant. This could correspond to the rise of a new conceptualization of materialism (Fox and Alldred, 2019), in which the most relevant of its three dimensions remain happiness and centrality. The alternative is to consider digital possessions are fully belonging to extended self, thus enriching and influencing one's self concept. Consumption is usually aimed at satisfying the hedonic pursuit of pleasure, the desire for consumption remains and even negative emotions find recognition in this act as opposition and self-definition (Wilk, 1997). NFTs align with postmodern consumer culture, where the personalization of objects fuels identity complexity. Simply following NFTs can be enough to establish a new identity project, as NFTs provide convenient, ready-made identity components.

Identity is in a constant state of flux, uncertainties, breaking down and reassembling in response to new collections and identity projects. As NFTs are considered as conveying versatile meanings, they fully embrace a postmodern view or stance of identity and identity projects. Following some NFTs remain a commitment easy to stop and free of charge. Simultaneously, digital worlds endow us with a "digital body," whose boundaries and appearance still escape us by lack of habit. It is not a coincidence that one respondent refers to NFTs as "tattoo." What was identified for tattoos by Pentina and Spears (2011) can be applied to NFTs as they are the new tattoo of the digital world. So, to adopt NFTs, it is necessary to negotiate between private and public, social parts of self and above all between conformity and differentiation. The advantage of NFTs compared to tattoos is that they can be easily detached from oneself, and their meaning probably are more diverse. The tattoo-like aspects of NFTs also relate to authentication. This property supports a dual purpose: commercial and social. Commercial purpose of authentication helps to assess possession, notably digital or modern possession, simplifying psychological ownership. Social purpose helps people assess what we label as digital truth, i.e. offering a way to check if someone truly – or rather most presumably – participated to an event or is related to an object or to an event, helping this person to obtain prestige and recognition.

5.3 NFTs communities as expressions and support of identity

While questioning the authenticity of objects and events, and being defiant toward others in general, our respondents appear to rely significantly on communities to best navigate the complex NFTs' markets. To answer *RQ5*, all NFTs followers rely significantly on NFTs' communities to access educational material, to get information, discuss news and technical issues as share their tastes. Potentially, NFTs communities help proving and broadcasting followers' identity. However, some communities hide toxic and potentially dangerous sides. Consequently, digital communities are in competition with circles of relatives and close friends as reference groups: today, the role of NFT communities in followers' identity appear limited. Hence, psychological ownership does not seem to work at group level for NFT followers. As digital extensions of individuals, NFTs allow for the extended self to compose itself (Belk, 1989). Identity confirms itself with language. NFTs, as for emojis, compose a visual language useful to build one identity. The extended self may not, however, be shown to everyone, but it apparently finds value through conversations with other followers or those well-disposed toward Web 3.0 ecosystem. For some followers, NFT communities are classical consumer communities which offer them a status and a proof they are NFT followers. They contribute to identity construction (Kim and Manoli, 2023) and are often referring to an intimate sphere like family, team, group. Simultaneously, a majority of followers limit their interactions with the community to people they already know as friends or family, and listen to experts for advice. Here, it seems, digital involvement effectively precludes digital engagement. In addition, in communities, especially healthy and safe communities, there are never large enterprises or large interference by brands. Finally, online communities or networks that are created enable and facilitate the diffusion of a technology and its innovation when they are "safe/healthy communities" (Muller and Peres, 2019), there are in fact positive communities and fertile ground for constructive exchange and potentially more negative communities with some distortions. Distinguishing healthy communities from toxic ones is strategic. We are also moving toward a self-construction process that is more shared. People develop a "sharing self," that will have elements in commons, shared, between the multiple identities and identity projects of an individual. A shared self-building process doesn't mean that it is less individualistic. Today, in a collaborative economy (Ertz *et al.*, 2022), where we are connected for personal and professional reasons, being part of a network that has its own logics has much more relevance. Algorithms in search engines influence how we are and how we are not. They help us hide some elements and highlight others. The social media we interact with and especially WhatsApp-like groups where we share, with peer groups mostly, what happens to us almost instantaneously and constantly appear on live streaming platforms (Zhou *et al.*, 2022). Hence, NFT followers may prefer very close communities, mostly made of friends or relatives. As highlighted by Yilmaz *et al.* (2023), besides social dimensions, NFTs followers appear subject to several emotions, even if they do not necessarily acknowledge it.

5.4 Two adverse approaches to conformity

The desire for conformity of NFTs followers also emerges. Most respondents interpret conformity today as trying to follow trendsetters by adopting NFTs. They want to be perceived as innovative or skillful traders in using, possessing or exchanging NFTs. These followers probably wait for the right opportunity or deeper knowledge of NFTs markets to cross the digital Rubicon. However, some interviewees opposed NFTs by wanting to affirm they are rational and not reckless in the expenditure of monetary resources, or in having other more traditional interests. Some appear disenchanted. And they do not want to be "just digital numbers" (Wang and Tucker, 2021). They will consider themselves responsible and cautious nonconsumers by not purchasing NFTs but only following them, such as the "not-me identities" expressed in Reed II *et al.* (2012). Some features of NFTs markets can encourage them to be cautious. Notably, several NFT-based communities display worrying elements, and NFTs' versatility of use restrains the possibility of giving them the label (Reed II *et al.*, 2012) that would enable them to be useful identity tools. More simply, being a NFT follower can be interpreted as a not being a consumer of NFTs (Thompson and Arsel, 2004; Leonardelli *et al.*, 2010). From an identity point of view, it shows an individual exerts full control on his life as this individual did not succumb to the latest trend (as per Baudrillard view of the elitist consumer, 1970). Followers are different from fans and could potentially turn into adopters or the worst rivals of a new technology. Here, we can distinguish:

followers who want to rebel and emphasize new forms of freedom; followers who are influenced by social movements, Very Important Persons or other famous or less famous artists and the desire to own a specific collection to signal belonging to a certain group; and those who do not want to be associated with this group as they remain satisfied with the present world values and its functioning, while not being necessarily nostalgic or traditionalist. The category most closely associated with the private person dimension is cultural symbolism. Interviews and projective analysis reveal that NFTs attract individuals drawn to fashion, social distinction and technological innovation. This aligns digital art with luxury goods, fueling a strong desire for possession (Sung *et al.*, 2023). Unlike Xie and Muralidharan (2024), NFT buyers prioritize artists over brands. Consumption is driven both by desire and purpose-seeking.

When asked about representative NFTs, many cited Bored Apes, which reflect society – unique yet similar individuals navigating identity within fleeting communities (Bardhi and Eckhardt, 2017). They seek a future but remain trapped in instantaneity, risking obsolescence (Danaher, 2022). While NFTs symbolize individuality, they may also be linked to loneliness and mortality salience (Gobrecht and Marchand, 2023), serving as tools for self-affirmation and existential reassurance (Sedikides and Hart, 2022).

6. Implications for theory and practice

The research helped identify why some consumers follow NFTs and how they perceive and integrate them in their identity building and evolution process. These elements can help NFT marketing strategies in persuading NFTs followers to adopt them. What emerged was an interpretation and conceptualization of NFTs partly different from definitions in the literature and linked to the various perception and uses of NFTs especially on the side of fans (Lee *et al.*, 2022; Vollero *et al.*, 2025). For followers, NFTs are complex digital objects, sometimes too versatile to be safely purchased. NFTs communities and the economic ideology associated to NFTs contribute to this definition. Followers associate NFTs with values, emotions such as fear because of the uncertainty and disgust as a desire to distance oneself from NFTs' world, and the expression of identity (Schau, 2018). The most enthusiastic followers expressed eagerness for freedom and search to reconfirm their status. Our respondents integrated some of the distinctive features of NFTs such as aesthetic refinement and uniqueness, as well as the desire to confirm themselves as innovators and bold experimenters. But they refrain themselves to purchase NFTs. Usefulness of NFTs appears as a less vivid issue, perhaps because of the reduced expendability of such tools to date. The metaverses might be the place where NFTs will be most used tomorrow, however it is not exclusive. These issues appear to hamper followers' adoption as they induce three significant uncertainties: (i) NFT usages today are too versatile, and the market does not provide clarification. Followers envision many roles for NFTs: assets, contracts and certificates, tokens, collectibles, art objects or authentication tools. Confronted to a NFT, they like to understand first the NFT creator's purpose, especially with marketing NFTs whose objectives maybe multiple. The related absence of a real, regulated market where NFTs can be used, narrows their perceived usefulness; (ii) Followers are much concerned with separating positive from negative or even toxic communities. This perception depends on the social media used, but overall, positive communities facilitate adoption by reducing perceived risks, encouraging collaboration, awareness and support from other members; (iii) NFTs are often linked to the theme of the de-financialization of the economy and the dream of more democratic markets. By comparison with Kozinets' (2002) Burning Man participants, NFTs followers, like purchasers and users try to escape a market that they perceive as too unfavorable to them.

NFTs may provide individuals with identity supports whose meaning can evolve when their identity projects change, NFTs facilitate such projects, specifically their narrative. In this scope, the possibility to authenticate experience embedded in NFTs – thanks to blockchain – is of particular importance. Objects such as NFTs may contribute to an interpenetration of personal and social identity. At the moment, we cannot discern such a pattern. Identity theories need to adapt to both evolutions. Besides high-profile NFTs and economic value, our research uncovered other potential adoption levers: new materialism, distinctiveness and broadly speaking identity expression and development. NFTs are potential enablers of new digital skills that can be applied in different ways on the labor market and for creators to monetize and partly protect their works. But contrary to many claims, today they appear to many followers as adaptations or evolutions of the classical economic systems, generating disappointment among them. As regards self-concept and identity, NFTs give evidence to three transformations in motion: (a) development of a phygital identity, (b) an increasing role of a sharing identity building process (c) legitimization of systematic or at least frequent authentication.

But while these technologies open up new spaces for self-expression, they also impose a constant demand for self-definition. Identity today is no longer just liquid, as Bauman described, but unstable, gaseous, pressured by algorithms, expectations and the accelerated rhythms of digital life. The self becomes a project in permanent beta, shaped and reshaped through NFTs, Artificial Intelligence (AI) and performative platforms. These tools promise individuality, but often amplify stress. The need to maintain visibility, coherence and distinction across contexts can be exhausting. While tools like AI and NFTs promise individuality and creative freedom, they often amplify the pressure to remain coherent, distinctive and algorithmically relevant. In this landscape, the self is not just expressed but calculated, filtered and ranked. What emerges is not a more liberated self, but a more exposed and fatigued one. The demand for constant presence across fragmented publics, and the need to perform within systems of real-time evaluation, turn selfhood into a form of labor. Expression is continuous, but so is its cost. The individual is no longer simply becoming but always being measured. Yet, paradoxically, in scrolling through feeds and engaging with AI-curated content, NFTs, social media and algorithms, individuals often retreat into comfortable bubbles. These technologies simultaneously facilitate identity performance and lull to sleep the inherently fluid and "gaseous" nature of identity, compressing it into more stable, predictable forms. By offering reassurance through repetition and conformity, they both enable and constrain, shaping identities that feel safe but may lack genuine transformation or challenge. In this tension lies the complexity of digital identity today: a space of endless possibility shadowed by the comfort of predictability.

At a managerial level, this research provides insights for artists, business managers, marketplaces and organizations looking to use NFTs for promotion and certification strategies. Marketing strategies should aim to maximize traffic and visibility of NFTs and NFT galleries. To encourage adoption and purchase, the uses of NFTs must be clarified and brands should clearly state their objectives with NFTs to reduce their perceived versatility. Marketing managers must attenuate the uncertainties and fears by creating specific services and communities, and leveraging actions based on epistemic values and status seeking strategy. Industry labels can help users feel safer in unfamiliar NFT communities. The community manager plays a central role in maintaining online community safety. Regulation shall also be enforced to limit opportunistic, criminal and fraudulent activities, while reassuring genuine participants and facilitating cross-country exchanges. However, followers have ambiguous attitudes toward regulation, preferring market self-regulations like joint brand initiatives. Artists and creators can use to build direct relationships with their audience and support personal branding. Companies should highlight the economic benefits of such regulations, proving NFTs create a fairer market. Strategies must align with the brand and target audience, ensuring initiatives are genuine and not superficial. NFTs should be integrated into a chain of products and events to maintain customer loyalty. Collection of "authentic" experiences may be developed to certify experiences or moments in the life of consumers, hence assessing major elements of their identity and life. Associating NFTs with elaborate experiences can help followers develop stronger bonds with them. Strengthening brand reputation and transparency, reframing NFTs as complementary products, fostering partnerships and enhancing accessibility and functional benefits can help NFTs become valuable identity markers. Even skeptics who define themselves by not purchasing NFTs may be persuaded through these strategies. But taking always in mind that the choice to not consume is often "more frequent, more obtrusive, and more important in forming personal and social identity than choices to consume" (Wilk, 1997, p. 181). The follower phenomenon has a major impact not only on support on the field but also on marketing and commercialization, the present study highlights that if followers can be converted and remain loyal to a product, brand or artist, then it is the followers themselves whom managers must engage and persuade. Their support can be strategic for adoption – otherwise, no new technology will ever succeed in crossing the chasm.

From a theoretical standpoint, this research sheds light on NFTs, followers' identity and the uncertainties facing them and the role of emotion on their adoption attitude. It contributes to the literature on identity based on objects perceived as essentially intangible and digital in nature and on identity construction process, toward a shared self-building process, but not without questioning dimensions such as individualism. With or without metaverses, phygitalism is taking shape with NFTs, changing the current dimensions of materialism and guiding us toward new research. NFTs authentication features can be used to certify experiences or moments in the life of consumers. But what is marketed, digital, authenticity for an individual, is there a genuine authenticity and a commercial one, is there a market for authenticity, these suggestions highlight both the inherent limitations of this study and directions for future research.

The semiotic square presented, grounded in Floch's (1990) framework, delineates distinct consumer value orientations – hedonic vs functional and fun vs serious – each carrying theoretical and managerial implications. Theoretically, it refines consumer behavior models by integrating symbolic, pragmatic and experiential dimensions. Managerially, it informs segmentation strategies, guiding tailored branding and communication efforts.

7. Limitations and future research directions

Despite its contributions, this paper suffers from several limitations.

Sample was not representative of the NFT population. Interviews could include other countries where NFTs markets are active, notably the USA, China, Japan or Brazil to better explore the phenomena we observed and concentrate on different type of NFT interests as the role of detractor or firms-user relationships. Future research will have to better investigate NFTs followers and NFT communities using quantitative or experimental methods and conduct them in other areas or in different cultures. Adopting mixed methods as ethnographic or netnographic analyses could be valuable to study communities and identity construction in physical and digital dimension. Longitudinal studies could investigate the flow of a new technology.

Beyond the obvious development of an adoption model adapted to NFTs, further research could investigate their diffusion and impact of other dimensions such as emotions, extroversion and other constructs, e.g. individualism and collectivism, materialism.

Future research could explore how the digital creation, through NFTs or other technologies, could be certified and exchanged. On the consumer side future research must investigate how consumer use and navigate through multiple identities, the impact on their wellbeing, health and revenue opportunities. Conversely, with near immortality of data, or perenniality, consumers will have to thoroughly curate their digital identity, a task that is completely new to them, as the impact of sustainability could change NFTs use.

Another interesting research opportunity revolves around the concept of transience and the role of self-verification themes and all the negative sides underlined such as loneliness and narcissism. Creation and management of digital memories by consumers, their possible individual legacy strategies for next generation are to be investigated. For NFT followers, potentialities of NFT for self-concept and creation are contradicted by the rising defiance toward institutions and people. Hence, the path for marketing NFTs to a majority of consumers appears narrow and treacherous. Defiance issues, the frustration they create, must be understood as it may escalate and create frictions in the marketing and economic spheres overall, opening new ways a to the study of the financial investor behavior and entrepreneurial opportunities.

We are never quite ready for change. However, knowing them and learning how to use and manage remain crucial.

Ethics statement

This study has not been published anywhere else and it is not under consideration by another journal. All study participants approved the manuscript and agree with the submission.

Declaration of Interests

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Note

[1.] In the article, risk scores differences are significant at 90%.

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Appendix

Table A1. Coding structure and analysis

Representative code	1st order concept	2nd order theme	Aggregated dimension
"You have to be careful" IT8	Caution	Fear	Plutchik's emotions classification
"You have to be attentive and need safety education" IT9			
"I have a little bit of insecurity about NFT because in my point of view, someone can hack the system. So I think it's a little bit of insecurity if someone hacks the system." IND2			
"Well, there are danger, One of my friends was scammed" FR3	Danger		
"OK, there are great possibilities, but at the same time there are also danger" IT2R2			
"Currently, myself, I'm quite neutral towards the concept, but from what I've seen in the market, people are not having a very positive image of NFTs. And perhaps that is also a barrier to widespread adoption." IND3	Dislike	Disgust	
"Some of them make me feel a bit skeptical, not everyone has talent" FR1			
"There is this desire to have something unique in your possession that you can display, that you are proud to displaying." FR7	Pride	Anticipation	
"A sort of exclusivity in access before others, is perceived as very important" IT9			
"I am passionate about digital art, and I believe it has allowed the monetization of digital objects I am optimist about that, they could have potential" IT6	Optimism		
"But there you go, maybe One of the emotions is that, hope of a future value" IT1_R2			
"I think, happiness, I like the ideas behind it." IT8	Happiness	Joy	
"It's fun, you get to see other people's collections. There are some very pretty things and some very ugly things. That side, it's really that playful side" FR2			
"If I have NFT, it will be interesting for me, and I will be really happy that I have NFT" IND2			
"I believe in the project, I inquired, and I am convinced" FR5			

(*continued*)

Table A1. Continued

Representative code	1st order concept	2nd order theme	Aggregated dimension
"personal fulfilment, creativity, and empowerment" IND4 "Happiness couldn't come from NFTs, but I feel curiosity." IT4_R2 "Include curiosity and excitement" IT3_R2 "I'm pretty curious I guess" FR8	Curiosity and novelty	Surprise	
"Certainly, that of security, of tranquillity, in the main. Then it can also be seen as a crusade against counterfeiting, so always security, confident" IT5_R2 "Wellbeing related tamper data and use blockchain make me feel more secure" Ind Int4	Security	Trust	
"I tried to understand what it was, simply because I heard the words, but I didn't understand the meaning behind and that made me mad!" FR6 "In this world there is no defined dynamic. Today they are a little inflated, there will be a collapse as has with Bitcoin. This lack of references makes me feel angry" IT5	Upset	Anger	
"Sadness. I can see only speculation: the casino side, the irrational side." FR3 "it's a personal opinion, but I find it a bit aberrant" IT2	Sadness	Sadness	
"This exclusivity can be emotionally appealing to those who value being part of a niche group or having unique, rare digital items. For example, think about bored apes NFT. Owning a Bored Ape NFT feels like being part of an elite club. The exclusivity associated with these NFTs can be a status symbol, and within the Indian context, it's a way to show that I'm on the cutting edge of digital trends. It's a form of social capital" IND1 "The issue is also to understand how to move, let's say, as I told you before, is up to you" FR7	Personal	Role	Community power
"Then there's the community aspect. People are looking to identify themselves as belonging to a group, as defending same cause. There's a social utility." FR2	Social		

(continued)

Table A1. Continued

Representative code	1st order concept	2nd order theme	Aggregated dimension
"They are very important and there you can also find people to create a project with, our is a team from different countries: Italy, Germany, France but there is also an Australian girl, and they really believe in NFT projects and then they are useful to support them, and we would like to give great value to ours" IT1			
"I actually just came in contact with One community. Which One was it? You know, it was the community. There was a community that was around an NFT. After that, no, I haven't necessarily seen any others. It's like we are in tribe." FR5			
"So, the communities obviously can have a thousand and a thousand facets, but they are a touch of the heart of most cases. Because they support various projects, they do education, they do, in some way, they externalize the conditions of this environment that has a closed self-referential perspective and they try to bring it to the common users, which obviously not all of them do. Many are simple market communities where people publish their work hoping that someone else will discover it, but in reality, it's just a poor war in that case. But, if you find communities that are very active and obviously encourage discussion and comparison, then those are absolutely values of non-consumers and that's what I try to do in my communities." IT 5			
"So, you can collectively engage in problem solving for NFT projects or blockchain projects and you will get rewarded like tokens or NFTs in NFTs. So that's how I got my first NFT. Like I contributed collectively, collaborated work, like it's called like that, CCC - Collectively Collaborated Works" IND4	Commercial and professional		
"They are fundamental also in terms of build your personal brand, to empowering" IT4R2			
"I don't like massive communities. Where there are 500. I prefer smaller and more vertical communities the more I prefer them and the less risk of finding the speculator" IT4			

(*continued*)

Table A1. Continued

Representative code	1st order concept	2nd order theme	Aggregated dimension
They allow you to create engagement - relationships - knowledge" IT10 "If the community creates a high level of engagement and creates relationships, an exchange of opinion the more an exchange and education is created and therefore they become more useful." IND1 "The are experts and neofits and they talk and exchange information 24 h a day" FR2	Continuous knowledge	Bright and dark sides	
"Through online forums and social media, I connect with people from diverse backgrounds, sharing insights and experiences, but without a loss in terms of belonging, we are all accumulated and united but our passion" IT5R2 "Generates conversation, exchange of ideas, the social world in general lives on community" FR7	Collaboration and creation		
"One of the most critical aspects of communities are incorrect activities and risks associated with NFTs, scams and the like, as well as outright scams and illegal activities" IT6 "They could exclude you, because you are not "mature enough"" IND4 "While on Discord it is messy, and they also seem much more bullying persons." FR1	Bullying		
"They have this cult and could be transformed in a negative thing with damage for the member" IND5 "I preferred when there were fewer people and really knew and truly believed in NFTs" IT3	Fanatism		
"They spread fake information. So, I do not trust. I am using Facebook, Telegram, Instagram, sometimes X as well. I prefer X after that Facebook. Because it is really common and easy" IND 7	Easy and safe	Influence of different channel	
"Instagram is for promoting and showing, X is like Instagram but more suitable for discussions, Discord is a mixture, much more speculative, more immediate than X They are not very open to dialogue. Those on social media follow quieter and more traditional social policies than such media." FR1	Speculative and chaotic		

(*continued*)

Table A1. Continued

Representative code	1st order concept	2nd order theme	Aggregated dimension
"On Discord, you can just hide your identity and you just do whatever you want to, is more speculative and commercial, on specific projects" IND7			
"For example, some communities publish privileged information that facilitates the members of the community but that damages the market. These are real market manipulations" IT6			
"On YouTube and Twitter, I simply don't express myself, like, I don't want to Instagram is more for artists as twitter. They're not platforms that lend themselves to that kind of exchange." FR5	Specialization		
"If you had asked me this question some years ago, maybe I would have said no, but because today there is a lot of awareness and the UN talks about this, so I am also concerned" IND1	Energy consumption	Environmental	Sustainability issues
"Unfortunately, I don't look at the problem in terms of technology, but I think it's bitcoin that consumes a lot of energy but it's a question of thinking about how to reduce this consumption. There are CSR reflections on it, but I want to say is it worse than all the cars with their exhaust? Is it worse than the consumption of households in heating, of factories?" FR5			
"It is a problem, and I know that Ethereum which has more critical issues, is working to solve it by switching to another" IT3	Blockchain protocol		
"They really consume a lot and some operators themselves are considering how to optimize for example, changing the POW and POS" IT12 "They are a problem, they should invent them with zero impact but passing on the blockchain in the end wouldn't cancel this effort." FR2			
"The NFT does not guarantee to be CSR, it is CSR depending on the blockchain that is chosen behind it and what it replaces or those" FR3			

(*continued*)

Table A1. Continued

Representative code	1st order concept	2nd order theme	Aggregated dimension
"They are a problem; they should invent them with zero impact but passing on the blockchain in the end wouldn't cancel this effort. I think it should change the way energy is taken, create farm companies that have sustainable systems, harnessing the hydroelectric power of waterfalls and go with renewables, even if only a percentage initially. If this type of structure did not have high costs, I would also be willing to pay a little more. The energy transition should be implemented in all fields" FR2	Find alternative solutions		
"The NFT does not guarantee to be CSR, it is CSR depending on the blockchain that is chosen behind it and what it replaces or those, the new ones replace nothing for valuation that creates new value. But if they replace the concert ticket, we can make comparisons" FR3			
"There are many aspects that can be improved for the environmental impact in our life, but no One puts in place, there are major problems that should be improved first, it is not the most critical aspect" IT3	Neutralization techniques		
"Well, let's put things in perspective! It is mankind. If we do not pollute with NFTs, we will pollute with something else. If we go on like this, in 20 years we will implode" IT 2			
"You have to be careful of the codes and the risk that by making a mistake the wallet will lose for ever, this is connect to non-mortality of the data, it becomes extinct and does not create digital junk. For example, Facebook is full of dead data" FR5	Data immortality and digital junk	Social	
"Many projects like us give something for charity and give something back in terms of sustainability, e.g. for children, communities, I am concern if they are pure or not" IT10	Charity		
"I see also Save the Children use for sustain their actions, its original" IT6R2			

(*continued*)

Table A1. Continued

Representative code	1st order concept	2nd order theme	Aggregated dimension
"We have to remain updated because all these technologies could substitute us, our role in security, in certificate, thinks to lawyer or at all timestamping related jobs" IT4	Work reconfiguration		
"I am afraid to be substitute from all these technologies, I am also a gallerist so I think they could substitute our role, surely reconfigure" IT6			
"The sustainability and social responsibility are like the government should come into it and they should regulate. We don't know who is actually regulating these assets" IND7	Regulation turmoil	Governance	
"Yes! there is a governmental subject, there is what we call the DAO. So governmental in the societal sense, in the sense of democracy in the sense. Putting in place a system that is socially responsible" FR6			
"So in India, as I said, there's some tax regulation issues around both crypto and NFTs, there is turmoil, those who are afraid and those who take advantage of it also enterprises" IND 5			
"There will be important also in terms of regulation in and between countries" IND8			
"Is a problem also in how and if declare and pay taxes" IT12	Responsibility		
"Once you've bought an NFT, are you subject to some form of value added tax because it's a transaction that should be taxed. Is there any taxation? How do I have to declare this? And companies? It's not clear." FR2			
"In the years to come, it will be very useful, that it will be regulated, that there will be a little less aberration" IT4_R2			
"Cryptogaming involves using your NFTs. You can use your character with those characteristics" IT10	Games and play to earn	Web 3.0	Technological examinations
"I would say I would invest in fantasy gaming because, yes, I was a, you know, I'm a fantasy gaming enthusiast and I invested a lot of money into it and I got some return as well." IND7			
"I see them closely linked to the metaverse because they are used to buy items and to increase the characteristics of their avatar and play			

(*continued*)

Table A1. Continued

Representative code	1st order concept	2nd order theme	Aggregated dimension
better. Gamers, however, have already lived in the metaverse for years, it will be more evolved. I'm a bit scared to find myself in Ready Player One but I welcome it." IT 6			
"well is also strictly related to play to earn dimension" IT 5 AND IND 4			
"In metaverse NFTs are an abstraction of an abstraction, take for example decentraland, i have the representation of a land and NFTs is the abstraction that give me property, maybe something is changed, for example gold doesnt' have any value but we decide to give it a value of richness and we posit as monetary benchmark, they are abstraction" IND2	Features		
"Is a way to being globally recognizable" FR3			
"It's a good for us that's more tangible intellectually." FR4			
"I don't know if you've seen Ready Player One, if our real world is unlivable then it will be the only way, going digital will be a loophole." IT9			
"We have a whole system with metaverse where we come. We're mixing all the possible worlds of digital technology. And as such, we're going to see more and more things coming out of musicians that include NFT and crypto currencies, and with video games or geek culture, more generally" FR5			
"Intangibility, on the other hand, does not scare me, on the contrary it gives me new ideas. Even my parents give me this speech that they see nothing behind it, but this is a wrong thing. You have your money on your credit card, do you see it? No, so what is different? People of older generations can't understand it. Few have believed in the new technology and have lost the opportunities they are behind it." IT10			

(*continued*)

Table A1. Continued

Representative code	1st order concept	2nd order theme	Aggregated dimension
"Maybe users can customize their avatars. Like in today's world their own avatars and virtual spaces." IND 8	Avatars	New digital worlds	
"maybe users can customize their avatars. Like in today's world, people are making their own avatars and virtual spaces" IND7			
"I'm going to dress my avatar, or I'm going to furnish my apartment in my virtual world." FR4			
"A certain number of NFTs, these NFTs, you are going to use in a metaverse either as NFTs that allow you to change your avatar, such as shoes" IT3_R2			
"Maybe the movie Ready Player One. A virtual environment where I can access with viewers or similar, where your avatar moves on multi-platforms, always the same, always myself but on different worlds. The problem is that every company wants to create its own metaverse, so the NFT if I can use it on all platforms then it will have a much more real and higher value than other NFTs. It is still very smoky" IT4			
"In metaverse NFTs are an abstraction of an abstraction, take for example decentraland, i have the representation of a land and NFTs is the abstraction that give me property, maybe something is changed, for example gold doesnt' have any value but we decide to give it a value of richness and we posit as monetary benchmark, they are abstraction" IND2	Metaverse		
"The metaverse is very connected. 50% of NFTs will be tied to it, anyone who wants their character to be seen or not to be confused" IT10			
"NFTs are the building block of Metaverse" IT13			
"A certain number of NFTs, these NFTs, you are going to use in a metaverse" IT3_R2			
"If we all lived in the metaverse in One generation we would be extinct." IT3			
"I see them closely linked to the metaverse because they are used to buy items and to increase the characteristics of their avatar and play better." IT 6			

(*continued*)

Table A1. Continued

Representative code	1st order concept	2nd order theme	Aggregated dimension
"Think from a company, a Brand. Because they're more reliable, very well established" IND8 "I'm a short-term investor. I would prefer to buy from a brand, I have to be involved to support artist" IND5 "If I find an indie artist who sells cheaply, I will choose with the hope that he will then reevaluate himself. Is an investment to buy a beautiful thing and make money. I expect a more real benefit from a company, services and other options" FR2	Brand	Brand vs artist	Economic and business reflections
"I would go for the artist instead of brand because when there is a brand, there are a lot of people involved into it Brand is not a person. So, at the same time, if you are backing a person, so obviously maybe you admire that person or maybe there are some qualities of that person that attracts you." IND7 "Support a digital artist that I admire, also as a long-term investment, hoping it appreciates in value. An artist because I value artistic expression and originality more. An artwork has a deeper and more personal meaning compared to a branded product." IT3_R2	Artist		
"My point of view is that the cryptoeconomy cuts through intermediaries and the use of banks to make transactions, such a thing from the state point of view is a big problem because it forces us to completely rethink the concept of economy." Int 7 "If with decentralization we want to avoid paying sums that we would have paid with banks and other operators, knowing that there are gas fees here too does not mean that in future we will not find ourselves in the same mechanism as today" FR3 "Blockchain technology is used to get rid of the influence of central banks, We're getting more into, let's say, the dematerialization of exchanges and as soon as there's a property to be exchanged," FR4 "But what I'm going to say instead is all those that are backed by the decentralized virtual world. Uh, yes, there's a sense of freedom or there's no authority that's going to say. who's going to say well who's going to dictate how it should evolve or how to set a price? And all that? The price is set by the public" IT12	Freedom and decentralization	Reconfiguration of the economic system	

(*continued*)

Table A1. Continued

Representative code	1st order concept	2nd order theme	Aggregated dimension
“If I have to talk about everything that will revolve around crypto-currencies, it’s more about breaking the big dominant orders. Whether it’s in finance, in data management, in all these principles, we give back a little bit of freedom to the users and it allows us to avoid big monopolies that impose their way of doing things, which sometimes is ethically borderline or a bit aggressive” FR3 “There you don’t even have the perception of how much it’s worth in real money.” IT5 “So suppose I say they want to inflate money, the government can control it now, right? Isn’t it? Yes. If they want to inflate, yeah. But with blockchain technology or if you adopt a global currency, it’s really hard. You cannot control on like the inflation, like it’s already coded like for Bitcoin. It’s coded like in 2040, there will be only a limited supply of coins. So it’s deflationary in nature and this could change the entire economic order. India is already working in make its cryptocurrency but let see” IND4 “Digitality is their added value. I don’t have to wait for the courier but I quickly buy the contract and I am entitled to service or work.” IT9 “The fact that they are digital is not a problem because they are my property, the blockchain gives me security and therefore I would trust to buy them.” FR1 “If I want to trade this NFT or I want to trade this art piece I would only look at the monetary aspects first, okay? But if I’m like a tech-savvy person or if I want to hold a piece of technology, then I would give more importance to its inherent value. Like, okay, suppose the artist, like One famous artist in my locality is making an NFT and he’s putting it on sale on the network.So I would give value to the person’s hard work and efforts initially, our personal relations, like Leonardo da Vinci,if his artwork is made an NFT, definitely it would price higher. But will I continue to hold it or not? I can switch off or I can sell it on a platform, crypto exchange or an NFT exchange.It has a	Value perception		

(*continued*)

Table A1. Continued

Representative code	1st order concept	2nd order theme	Aggregated dimension
multidimensional answer to this.If I'm a gamer and I'm holding something like a car or a racing, suppose it's a racing game and there's a racing car NFT that's for sale. So maybe a hedonic and social also on this side, an aesthetic and last monetary."IND5 "My point of view is that the crypto economy cuts through intermediaries and the use of banks to make transactions, such a thing from the state point of view is a big problem because it forces us to completely rethink the concept of economy." IT7			
"Would trust to buy them if there was a price-value reference point" IT 5 "Once these blocks are created, all the information you find on the blockchain is transparent to everyone. It means that you can trace from the starting point to the end point everything that happened with this NFT. So basically, that's it. The advantage is that when you buy an NFT, you can have access to its entire history" FR5 "when I said transparency, I think that brings me back to the same point that how are you ensuring that the principle the whole world is based on in the NFT is based on authenticity and transparency?" IND8	Transparency		
"NFTs is what that allow to exchange the value of the crypto, we have coin, now we could have contracts and product to trade" IT1 "Well, the point is, if you want to be a purchaser, you have to trade in cryptocurrency" IND1 "The common thing is that both are declared on the blockchain, they are like Two means of transport traveling on the same road, blockchain the road, cryptocurrency is fuel and NFT a motorcycle." IT10 "With integrated metaverse and experiments on these technologies will now be almost outdated and we will move towards that, if now they lose value from the bursting of the bubble, they will not lose their importance" IT7 "If I have to talk about everything that will revolve around crypto-currencies, it's more about breaking the big dominant orders. Whether	NFT opportunities due to the link with cryptocurrency	Link with crypto currency	

(*continued*)

Table A1. Continued

Representative code	1st order concept	2nd order theme	Aggregated dimension
it's in finance, in data management, in all these principles, we give back a little bit of freedom to the users and it allows us to avoid big monopolies that impose their way of doing things, which sometimes is ethically borderline or a bit aggressive" FR6			
"For example, both are volatile, but their value does not vary equally. For example, in NFTs, there is a floor price that varies and cryptocurrency has little to do with it" FR1			
"Cryptocurrency is the speculation of the poor." FR3	NFT concern due to the link with cryptocurrency		
"They are for who want to make money easy and in short time and for who that own money but want to demonstrate something" IND2			
"They are Two tokens, most also in cryptocurrencies are also tokens. I see them as Two separate things. There is trading and there is the NFT market. In NFT there is a lot, there is collecting, speculation, cash-washing, there are many things" Int 23			
"Membership yes, Royalties if I were a producer or participant in some part, even if it is very much linked to the concept of network marketing and Ponzi scheme, a sort of chain markup that I don't like." IT4			
"Yeah, they initially like this, how this technology works out there, how this Ponzi scheme in NFTs or blockchain technology works. You'll put this 2,000 expecting 4,000. But what would happen? You will lose all your $2,000 and you're out of the game. So gathering customer trust in NFTs has been a big problem" IND4			
"NFTs can reflect my personal interests, artistic tastes, and support for certain artists or cultural movements. They can represent an extension of my digital identity" IT3R2	Self-affirmation	Identity building process	Identity
"It's a personal process, not particularly constructed either. It was a bit of an exploration, like you read sometimes, articles on subjects to learn, to see what it was and so you adapt" IT6			
"it's serious, it's your irrational path. Irrational in any case. Is temporary, it is the techno appetite. It's, people who show up on the net and they don't think anything of it." FR3	Inclusion and opposition		

(continued)

Table A1. Continued

Representative code	1st order concept	2nd order theme	Aggregated dimension
“I also have a life outside: family, work, for me are an outlet and a pastime to always be with a window open to the future.” IT9			
“the identity of an artist is a social construction. Whereas here, it is a social construction of the identity of being a good artist, an artist of great potential and communities of expert validate or nurture this credention. So I feel like, to connect NFTs to your identity, there should be a certain level of personal identification features or personalization for the technology” IIND3	Social construction		
“When you are in a club or you are part of a group of people, or you are part of a tribe, of a community of people who like this product there and therefore a sign of recognition. Like a tattoo or things if not such or such clothing which allows to say. I am a surfer or a Harley Davidson owner, a biker…” FR4			
“In my case I vent my artistic vein and then I have the opportunity to those who have many cryptocurrencies that if they like it they can buy it.” IT9			
“Anonymity preserves but for us as users it is a danger, you can’t trust it.”FR6	Anonymity	Authentication	
“I want to be recognized because I wear brands. It’s not just in your street, it’s not just in your neighborhood, is in the whole world! They could be an identity card, my key to digital. NFT allows for strict identification.” FR3	Recognition		
“Now, the difference is that the artist puts a digital signature to his artwork. So, in good old days, you know, it is like Raphael putting a signature, you know, on his work.” IND 3			
“You’re giving me a virtual ticket to a concert that’s becoming memorable, exceptional and a household name. And I can certify that it’s mine, that it’s real and better than that, I can post it in the virtual world that goes from the metaverse, to Facebook, Meta and Facebook now we’re in the same world and all of a sudden I can say I was there and the I was there It’s certified.” FR2			

(*continued*)

Table A1. Continued

Representative code	1st order concept	2nd order theme	Aggregated dimension
"I think they could be useful for authenticate objects, for example on my side I will buy if it allows to certify diamonds, there is a company that is starts to do that and we follow the process. I think could be interesting" IT 9			
"There are many and they also join a cultural discourse that is very linked to the generations. Being exclusively digital, for example, I need something material so people are more reluctant to understand them. For example, younger generations being born and raised with this world are freer from this sense than older generations more likely to use them. By using apps and living online, they are used to exchanging virtual content and currencies, buying online, have a greater predisposition and see lower risks. Those aged 30 and over may be more interested in having the physical object in exchange for money. The attitude to consumption is different"FR5	Generational discourse		
"I think there is a generational issue too. But I think that the younger people who are even more, who have grown up even more in virtual worlds than me, even if I was already the generation that was very much into video games. And all that, I think that they will value it even more. After the 2000s, because they're used to being on their phones all the time living life through,chatting, see the proposed image and reels mediated by a digital device"IT6			
"People of older generations can't understand it. Few have believed in the new technology and have lost the opportunities they are behind it." IT10			
"It is a digital identifier,could be a piece of art or something that can be tokenized or for example as passport or for tourism certificate" IND1	Digital identifier	Digital asset	NFTs perception
"it's a type of a data asset which definitely represents the ownership or in some cases a proof of authenticity of a unique item or a price. Currently very famously, you know, it is linked to art, music, videos, you know, that sort of stuff" Ind.Int.8			

(*continued*)

Table A1. Continued

Representative code	1st order concept	2nd order theme	Aggregated dimension
“So the NFT was a certificate that certified that that car had been subjected to, I don’t know, a radiator change and the NFT, let’s say, recorded on the blockchain the change that occurred on that piece of car.” IT4R2			
“I see it as a financial instrument. So it’s subject to volatility” IT17	Investment		
“NFTs are often seen as a new form of investment, akin to collectibles or digital assets. Indian consumers interested in wealth accumulation might view NFTs as a potential investment opportunity” IND7			
“I don’t see it as a means of having liquidity, perhaps real liquidity. So it’s an investment. An investment, I’ve always seen it either in cryptocurrencies like NFT” IND3			
“There is this way of certifying is being extracted as far as diamonds are concerned and anyway it’s a very difficult environment also, so probably investing in diamonds and obtain a NFT certificate give me more trust”IT2R2			
“Well it is a multidimensional concept if I’m a trader, I only think in terms of return.So monetary aspect would come first	Art object		
“The painting that you will have made in virtual with an NFT tag. In a million years, it will be the same as the paintings that are worth a certain value in museums today and there is a perenniality. There is something which makes that, except if you decide to destroy it or to make it disappear. Today, some artist’s works disappear through fire, war, theft. I see more the principle of recognition, a bit like the art collector, or the NFT collector at night, it’s true that it’s fun, afterwards it’s really playful..”FR2			
“We reason that at the moment they are only digital art forms” IT12			
“An NFT in my opinion is a unique and irreprintable certificate, i.e. if I have an object whose authenticity I want to certify, I can easily do so, giving it an NFT, also because they exploit blockchain “technology, so there are no problem.” IT3R2	Uniqueness	Potentialities and concern	

(*continued*)

Table A1. Continued

Representative code	1st order concept	2nd order theme	Aggregated dimension
"The NFT is deeply philosophical. Yeah, it is deeply philosophical. It's a question of the rarity feeling that this is the only One. I got a digital signature. See, I think digital blockchain NFT and smart contracts, these are telling artists they are trying to raise the rarity value of that art much more than what is there in the physical world. The moment I start circulating it, then the whole purpose of holding that is gone because it is no longer rare. So it creates greater exclusivity than today, NFT, because there is no scope for exhibiting it at any point. Now look at most of the Guggenheim or any top museum in the world, it is contributions of a lot of rich people. Rockefeller had put his personal collections now into Guggenheim and today everybody appreciates it, before was restricted, only for "special people." But what happens in NFT? It doesn't happen that way. Rockefeller wants to give it, he'll say, okay, take an image of it." IND2			
"So for us, NFTs are basically as a concept, it's like something that you cannot replicate, it can't be anything. For example, art pieces that are sold on OpenSea or for example, the kind of stuff we use in video games like CSGo." Ind. Int 5			
"They are an empty box, you decide how to refill" IT5_R2			
"There's a whole aspect that I didn't mention: speculation. In fact, there's a whole speculative market around NFTs." Int.19	Risks		
"The risk of the NFTs is the speculation in fact. Finally, art is only a pretext, somewhere, to speculate." Int.16			
"Short-term speculation that has failed to appreciate its technological fundamentals. Adoption is facilitated by a wider range of use cases to be grounded." IT4R2			
"They are for who want to make money easy and in short time and for who that own money but want to demonstrate something" IND1			
"So unless and until we have a proper mechanism to regulate or like we don't know who is actually manipulating it. That is literally creating more volatility, variation in prices on that's also creating an adoption hindrance." IND 5			

Source(s): Authors' own work