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## NFTs and the Art World: Understanding the Role of Social Media in the Emergence of Digital Collections

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### ABSTRACT

This article delves into the intersection of Non-Fungible Tokens (NFTs), the art world, and the instrumental role of social media in advancing the proliferation of digital collections. NFTs, unique digital assets built on blockchain technology, have sparked a revolution in art ownership, identity verification, and creative expression. Through comprehensive exploration of its significance, challenges, and opportunities, this study demonstrates how NFTs have democratized art ownership, provided global recognition to artists of diverse backgrounds, and simultaneously granted direct access to collectors. A significant driving force behind the success of this blockchain technology lies in its investment potential. Social media platforms have transformed into virtual galleries, effectively amplifying artists' voices, enhancing societal insights and cultural levels, and shedding light on the global visibility of NFT projects. Case studies of successful NFT collaborations underscore the coexistence between NFTs and social media, highlighting the potential of both mediums in shaping the future of art and creativity. While acknowledging concerns such as copyright issues and environmental impacts, this article underscores the need for responsible actions and ongoing research to ensure a sustainable and pervasive future for NFTs in the art world.

**Keywords:** NFTs, Art World, Social media, Digital collections, Blockchain, Democratization, and NFT opia.

### INTRODUCTION:

In recent years, the art world has witnessed a pioneering technological phenomenon that has revolutionized the way art is perceived, collected, and traded, and that phenomenon is Non-Fungible Tokens (NFTs). NFTs have altered the traditional paradigms of the art market, guiding artists and collectors towards innovative approaches. NFTs are currently employed to transform digital items into the commodities across various domains, including art, gaming, and the sports collectibles. While initially associated with the Ether-

eum blockchain, the many other blockchains have now integrated their own iterations of the NFTs (Lounge, 2020). Unlike digital currencies like the Ethereum or Bitcoin, NFTs are indivisible and possess an inherent scarcity that makes each token unique and irreplaceable. An NFT represents a piece of information housed on a blockchain, verifying the uniqueness and non-interchangeability of a digital asset, and also providing an exclusive digital proof of ownership for that NFT (Evans, 2019). In a broader sense, an NFT enables the establishment of the 'provenance' of the designated

digital item, providing the unquestionable information about its ownership, previous ownership, and creation, as well as specifying the original among numerous copies. Various types of digital items can be linked to an NFT, including photographs, videos, and the audio files.

This distinctive feature has opened a new dimension of digital ownership, introducing unparalleled value and significance to digital creations. NFTs have permeated various domains, but their transformative impact and unique power have been most pronounced in the art world. Artists can now tokenize their digital artworks, grant them exclusive ownership, and bestow the credibility of their creations to others. For collectors, NFTs have redefined the concept of ownership, enabling them to possess exclusive digital artworks in ways that were once inconceivable. Furthermore, the art market has experienced a fusion of creativity and innovation, as artists explore new artistic forms and engage with audiences through this innovative medium. A Non-Fungible Token (NFT) is a form of encrypted currency (Fairfield, 2021) derived from Ethereum smart contracts (Wood *et al.*, 2014), initially proposed in EIP-721 (William *et al.*, 2018) and further developed in EIP-1155 (Witek *et al.*, 2018). However, this currency differs in inherent characteristics from classic cryptocurrencies (Shirole *et al.*, 2020) such as Bitcoin (Nakamoto, 2019). Bitcoin is a standard coin in which all coins are equivalent and indistinguishable (Nakamoto, 2019). In contrast, NFTs are so unique that they cannot be traded like-for-like (non-fungible) and are ideally suited for identifying something or someone uniquely. Specifically, by using NFTs in smart contracts (on the Ethereum blockchain) (Wood *et al.*, 2014) a creator can easily establish ownership in the form of films, images, artworks (Franceschet *et al.*, 2020), event tickets (Regner *et al.*, 2019), and more.

Another point about NFTs is that they are primarily traded through their dedicated marketplaces, and it was in early 2021 that we witnessed an explosive surge in the popularity of this market (Dowling, 2021). In fact, after the emergence of NFTs, digital collections gained significant popularity, leading to a global craze for unique virtual assets. The concept of owning rare digital items transcended traditional art perceptions. This upward trend has given rise to digital art markets

and platforms solely dedicated to NFT trading, transforming the way art is bought, sold, and the held. A market that occurs either peer-to-peer or through NFTs. The undeniable impact of this phenomenon on the art market is twofold. Firstly, NFTs have democratized the art space, providing a platform for artists with diverse backgrounds to showcase their works, reach a global audience, and generate direct income from their creations. Secondly, the traditional art market has witnessed a surge in interest in NFTs and a shift of collectors towards digital art. Galleries & auction houses have embraced this digital revolution and host events for special NFT sales, blurring the boundaries between traditional and digital art.

The aim of this article is to provide a comprehensive analysis of the multifaceted relationship between NFTs, the art world, and the instrumental role of social media in the expansion of digital collections. Through an in-depth examination of the impact of NFTs on the art market, our goal is to elucidate the transformative potential of this technological innovation. At the same time, we address the challenges and opportunities it presents for artists, collectors, and art institutions.

#### **METHODOLOGY:**

The research method employed in this article is a combination of qualitative and quantitative approaches. To understand the significance of NFTs in the art world, an extensive examination of relevant authoritative texts, reports, & expert opinions was conducted. Additionally, statistical data and the significant case studies were analyzed to discern the growth and impact of NFTs in the art market. Furthermore, to investigate the role of social media in the emergence of digital collections, qualitative methods such as the content analysis of social media platforms, interviews with artists and influencers, and an examination of social media interaction criteria related to NFT campaigns will be the utilized. This multidisciplinary research approach provides a comprehensive understanding of the dynamic relationship between NFTs, the art world, and social media platforms.

#### **Review of Literature**

Non-Fungible Tokens (NFTs) are a pioneering manifestation of the blockchain technology that presents a paradigm shift in the concept of digital ownership. The

concept of the blockchain and its related add-ons has existed since the 1990s (Buterin, 2013). However, it was not effectively implemented until Satoshi Nakamoto proposed a peer-to-peer electronic cash system based on cryptographic proof, effectively replacing the need for a trusted third party to verify each transaction (Nakamoto, 2008). In 2009, Bitcoin made its debut, sparking global excitement for digital currencies and various blockchain applications. Bitcoin is, to a large extent, the most valuable and tradable cryptocurrency, but due to its structural limitations, the Bitcoin blockchain is limited to currency transactions (Porat *et al.*, 2017). In 2013, Vitalik Buterin introduced a more advanced framework for blockchain, Ethereum, which, instead of serving as a platform for digital currency, enables more complex and customizable applications (Buterin, 2013; Chevet, 2018; Kim *et al.*, 2018). In 2015, Ethereum was officially released, and its primary digital currency, Ether (ETH), was also born. ETH is currently the second-largest digital currency by market value. However, its unique feature is that, unlike traditional digital currencies such as Bitcoin or Ethereum, which are fungible and have equal value, NFTs are indivisible and inherently distinct. Each NFT represents a specific digital item, artwork, or collectible, making it unique and non-replaceable. This uniqueness is achieved through the cryptographic hash encoding, which assigns a unique code to each NFT, effectively verifying and confirming its authenticity and exclusivity (Sami and Arifuzzaman, 2021).

The key feature that distinguishes NFTs as unique digital assets is their ability to verify ownership and provenance through the decentralized ledger of the blockchain. This decentralized nature ensures that ownership records are immutable, transparent, and accessible to the public. A Non-Fungible Token (NFT) is a permanent and verifiable online record that links a digital artwork, commonly referred to as digital art, to its owner. The majority of NFTs are listed on a decentralized digital currency platform controlled by Ethereum, which typically utilizes blockchain technology, often used to secure energy for millions of transactions worldwide for multiple applications (Chen *et al.*, 2018). Every transaction linked to NFTs and their connected artworks is recorded in a public ledger using the Proof of Work (PoW) mechanism, ensuring

the smooth and secure transfer of digital assets and the validation of art ownership (Dowling, 2021, Wang *et al.*, 2021). Thus, NFTs provide a mechanism for artists to create digital artworks (Franceschet *et al.*, 2020) and validate their works as unique, eternal, and collectible (Bamakan *et al.*, 2021, Franceschet & Braidotti, 2021). This feature also enables collectors to exhibit their collections on digital platforms. Since NFTs are blockchain-based, they are inherently transparent and accessible to everyone by default. However, the blockchain's timestamp preserves the ownership of the NFT owner. At the time of NFT issuance, the multiple issuances, ownership history, and transaction data are accessible to everyone (Chen *et al.*, 2017). As a result, artists and creators can tokenize their digital creations as NFTs, allowing them to preserve their intellectual property rights, track subsequent resales, and automatically earn royalties from future resales. Collectors, in turn, gain the ability to demonstrate tangible ownership and establish a direct connection with the artists they support. While a new field called "Science of Science" has emerged to discover quantitatively defining patterns in science (Wang & Barabási, 2021; Fortunato *et al.*, 2018), the arts and creative industries have largely resisted quantitative scrutiny (Fraiberger *et al.*, 2018). This has recently changed with the advent of cryptocurrencies and digital assets. A market has arisen in which all transactions are open and visible, establishing a transparent artistic ecosystem that is accessible to all participants without the presence of gatekeepers or formal barriers (Taylor & Sloane, 2021). It offers unparalleled chances to measure and comprehend the influences, operations, and concealed networks that contribute to its development. The roots of NFTs in the art world can be traced back to the early 2010s. However, it was around the years 2017-2018 that they began to garner special attention. The Ethereum blockchain played a significant role in facilitating the creation and trade of NFTs through its ERC-721 standard, which provides a framework for unique digital asset development. It should be noted that today, NFTs have also expanded onto other blockchain platforms.

Blockchain technology has gone a long way since an anonymous individual or a group of people under the pseudonym Satoshi Nakamoto released the Bitcoin

white paper in the 2008 (Nakamoto, 2008). Bitcoin became one of the first and most widely known instantiations of a blockchain-based payment system but its underlying technology, blockchain, enables an array of applications aside from payments (Nærland *et al.*, 2017). In 2017, the notable phenomenon of CryptoKitties emerged, marking a significant turning point for NFTs in the art and collectibles space. CryptoKitties is a virtual game based on NFTs where users could buy, sell, and breed unique digital cats. It gained substantial popularity and highlighted the potential of NFTs as a tool for ownership and digital artistic expression. This paved the way for artists and creators to explore NFTs as a new medium for showcasing their digital art. It's worth noting that CryptoKitties wasn't the first NFT-related game; the first collection, known as "Etheria," appeared three months after the launch of Ethereum in 2015. In the following years, we witnessed a continuous growth in the adoption of NFTs in the art world. Artists and public figures with various backgrounds embraced this technology to directly sell their digital artworks to collectors. Art platforms and markets dedicated to NFT trading became more appealing, providing a conducive environment for interaction and transactions between artists and collectors. Prominent artists like Beeple (Mike Winkelmann) achieved remarkable success by selling digital artworks as NFTs in highly attended auctions, earning substantial amounts (Ahmed and Iqbal, 2020).

Masiak and colleagues (Masiak *et al.*, 2020) have shown that shocks in the pricing of digital currencies have positive effects on the market volume. Similarly, ICOs are typically reliant on payments in digital currencies. Likewise, stablecoin markets are driven by demand for digital currencies (Ante *et al.*, 2021). Therefore, the question arises as to what extent insights, issues, and other challenges from blockchain-based markets can be transferred to the NFT market. This includes issues related to qualitative signaling in pricing or token valuation (Fisch, 2019), return on investment (Domingo *et al.*, 2020), or legal challenges (Hornuf & Kück, 2021). Though this investigation concentrates exclusively on NFTs and digital currency markets, numerous other aspects or markets can exert influence on NFTs. These include areas such as market sentiment, uncertainty, social media, volatility, trans-

action fees, blockchain infrastructure, policies and the diverse asset categories. Research such as the work conducted by Umar and colleagues, (2021) offers preliminary empirical evidence in this context. According to data from NonFungible.com, the total sales volume of NFTs exceeded \$250 million in 2020. This figure rose to over \$15 billion in 2021, indicating exponential growth in NFT transactions across various industries, including art. This itself reflects a significant increase in demand and interest. A detailed and documented report for 2022 sales volume is not available for a comprehensive analysis, but one thing is clear: the NFT market is on a growth trajectory. A notable turning point in the art world was the sale of digital artworks by Beeple titled "Everydays: The First 5000 Days" at a Christie's auction in March 2021. Beeple was an artist who had not been seen in any art exhibitions or auctions prior to the sale of his digital works. This NFT masterpiece, created from 5000 uninterrupted days of graphic design and image creation, astoundingly fetched \$69.3 million, catapulting Beeple into the spotlight and boosting the recognition of NFTs. This sale was a significant force in the art market's acknowledgment and acceptance of NFTs as a legitimate and valuable medium for the contemporary art. Furthermore, artists, musicians, and celebrities have also embraced NFTs to connect with their fans, tokenize exclusive content, and offer unique experiences to their supporters. This growing trend has led to a cultural shift in how art is perceived, collected, and consumed, expanding the boundaries of creativity and artistic expression in the digital landscape. As NFTs continue to reshape the art world, it's evident that this digital revolution is not short-lived. Their unique characteristics as the verifiable, scarce, & collectible assets, coupled with increased participation in NFT art platforms, demonstrate the potential of NFTs to redefine the art market and democratize art ownership on a global scale.

## RESULTS:

While social media and its commercial applications are established (Benthaus *et al.*, 2016) in 2016, Steem was introduced as an example of this emerging category, boasting roughly 1 million registered user accounts and a market capitalization of around 2 billion USD (CoinMarketCap, 2018), effectively establishing itself



as one of the initial and most substantial instances of such the Blockchain Social Networks. Other notable examples of BSN include Synereo, Nexus, ReddCoin, Minds, InDorse, and Dock. In the art world, much of their success can be attributed to the coexistence they share with social media platforms. Social media has proven to be a catalyst, instrumental in the popularity and proliferation of NFTs, serving as a bridge between artists, collectors, and a global audience. The interactive and viral nature of social media has brought NFTs to unprecedented levels of exposure, providing an ideal platform for digital artists to showcase their work and the connect with their communities. The capacity of social media to facilitate instant sharing and interaction has further amplified the visibility of NFTs. Artists can promote their NFT editions, display behind-the-scenes content, engage directly with their audience, and reinforce transparency and authenticity.

Additionally, the social media has transformed into a virtual gallery space, where artists can exhibit their digital creations and the generate excitement among potential collectors. Real-time feedback and support from followers provide artists with added motivation to the produce and symbolize unique artworks. Social media platforms have significantly simplified the process of the creating, promoting, and selling digital collections as NFTs. Initially, social media serves as a creativity catalyst, allowing artists to share their artistic journey and works in progress with their followers and make the necessary preparations for the final NFT release. As the launch date approaches, artists use social media for the unveiling their NFT offerings, revealing hidden insights, limited-time previews, and exclusive announcements to generate excitement.

Furthermore, the use of specific NFT hashtags and targeted marketing campaigns on various social media platforms helps expand the artist's existing follower base and attract potential collectors and enthusiasts from various backgrounds. Promoting NFT sales through social media often takes the form of live events & virtual exhibitions. Artists and NFT markets host live broadcasts, Q&A sessions, and collaborations with influencers to create buzz and shape a sense of community around the artworks. This not only strengthens the sense of belonging among collectors

but also instills a sense of ownership and earning NFT within a shared digital ecosystem for collectors.

Influencers, artists, and the celebrities have played a crucial role in promoting NFTs through their extensive reach and influence on social media. The endorsement of NFTs by the prominent figures has brought this technology to the mainstream, making it visible and credible. Celebrities, especially by tokenizing their exclusive content, such as music, artworks, or personal memorabilia, have engaged with NFTs and established direct connections with their fans. The support of influencers and celebrities has not only led to increased NFT adoption but has also elevated the status of NFTs as a medium for digital art and collections. As these influential individuals share their NFT experiences and achievements, they enhance curiosity and enthusiasm within their communities, encouraging their followers to explore the world of NFTs. Furthermore, artists have realized that social media platforms are valuable for the showcasing their unique creative processes, coexisting with their audiences, and gaining new, meaningful followers. Emerging artists who may not have been visible in traditional art circles can utilize social media to gain recognition and attract potential buyers, democratizing access to the world of art.

#### **DISCUSSION:**

The emergence of NFTs has had a profound impact on traditional art markets and the galleries, challenging conventional norms and reshaping the dynamic model of the art industry. NFTs have introduced a paradigm shift in the way art is bought, sold, and collected, offering a digital alternative that complements the physical art world. Since NFTs are blockchain-based, they are transparent by default and open to everyone.

However, the blockchain's timestamp preserves the ownership of the NFT. At the time of NFT issuance, multiple issuances, ownership history, and transaction data are also accessible to everyone (Chen *et al.*, 2017). NFT is a permanent and verifiable online token that links digital artworks to their owners, often referred to as crypto art. Most NFTs are registered on decentralized digital currency platforms controlled by Ethereum, which typically uses blockchain technology for directing millions of transactions worldwide for various applications (Chen *et al.*, 2017). Each trans-

action related to an NFT and associated artworks is recorded in a global ledger through the Proof of Work (PoW) mechanism, allowing for easy and secure transfer of digital assets and verifiable ownership of artworks (Dowling, 2021). Therefore, NFTs provide artists with a mechanism to create digital artworks and to verify their creations as distinctive, timeless, and collectible, while this also empowers collectors to the exhibit their collections on digital platforms (Franceschet & Braidotti, 2021).

One of the significant impacts of NFTs on traditional art markets is democratizing access to art. NFTs empower artists from various backgrounds and regions to showcase their works on the global stage without the need for costly gallery representation. This direct artist-to-collector model gives artists control over their careers and income. Traditional galleries have recognized the potential of NFTs as an acceptable revenue stream, identifying and embracing this digital revolution. Many art institutions are now exploring ways to incorporate NFTs into their collections, leading to the hosting of NFT exhibitions and collaborations between physical & digital artists. However, this transformation also presents challenges for galleries as they navigate the digital landscape, adapting their business models to align with the evolving art ecosystem.

NFTs present challenges and opportunities for both artists and art collectors alike. For artists, the main challenge lies in navigating the complexities of blockchain technology, understanding NFT minting, their royalties, and embedded smart contracts. Furthermore, the increasing popularity of the NFTs has heightened competition, making it essential for artists to differentiate themselves and establish a strong online presence through social media and digital marketing. However, the opportunities offered by the NFTs are abundant. Artists can now directly engage with their collectors and receive a fair share of secondary sales revenue through smart contracts. NFTs also provide a medium for artists to experiment with new digital formats and interactive experiences. Collectors can invest in a portion of an artwork, as NFTs facilitate instant and secure global transactions, eliminate intermediaries, and reduce transaction costs. In the traditional art world, owning a physical artwork often requires substantial financial resources, limiting access

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to a select few. On the other hand, NFTs have lowered entry barriers and allowed a more diverse audience to participate in art collection. Emerging artists can now gain recognition within limited communities and present their art differently while generating income. However, recent research by Vasani and colleagues, (2022) indicates that, despite a significant number of artists joining the NFT digital art market, artists tend to cluster, meaning that successful artists invite other successful artists into the NFT market, creating similar sales patterns. They highlight the emergence of artist-collector relationships, where some successful artists receive repeated investments from a small group of collectors. According to Nadini and colleagues, (2021) as of April 2021, 10% of buyer-seller pairs accounted for as much as 90% of the transaction volume. These findings lead us to consider that the NFT ecosystem may be linked to specific communities and members. Buyers interested in purchasing a high-value NFT from a collection expect the NFT to serve as an entry ticket into the community behind the collection.

Owning these NFTs might grant some private communications for the owners and benefits for the members, such as the right to receive airdrops from new NFT project-related projects or participate in decisions regarding project budgets, and more. In addition to private interactions and benefits, project teams primarily establish public communities on social media platforms like Twitter or Discord. Community engagement concerning project development continues, attracting not only NFT owners but also every social media user to join and participate in these communities. We anticipate that price increases driven by social media-formed communities may be observed. Therefore, we intend to investigate the relationship between social media content and NFT price movements to understand the NFT market better.

### **Critiques and Concerns**

Hype is a significant driver within the NFT ecosystem, which influencing trading (Sarkar, 2022). A significant portion of the excitement around NFTs is driven by the 'fear of the missing out' (Financial Conduct Authority, 2022) on potential futures: such as increased value or utility. Primary value propositions are grounded in the connection to the underlying cryptocurrency, implying that the NFT's value will appreciate, enabling the

owner to sell it at a profit, or are based on the prestige of the owning an exclusive NFT within a limited collection (for instance, those also owned by celebrities and high-profile individuals, like the Bored Ape Yacht Club and analogous series). Setting aside the allure of celebrity connections, the value propositions associated with the NFTs are often speculative and commonly rely on fictional forecasts to stimulate sales, thereby inflating the value of the NFT, the NFT collection or the underlying cryptocurrency (Dash, 2021). Furthermore, most utility claims can already be realized using current technology (Lielacher, 2022). One of the significant criticisms leveled against NFTs pertains to their association with price volatility. Critics argue that some NFT purchases are driven more by the desire for quick profit than a genuine appreciation of art or the digital collection itself. These speculations and assumptions can lead to inflated prices and market instability, potentially undermining the long-term value of NFTs as a legitimate art medium. In addition, the NFT space has witnessed cases of copyright infringement and literary theft. As the barriers to the creating NFTs are relatively low, concerns have arisen about the unauthorized copying and selling of digital artworks. The lack of robust mechanisms to confirm the authenticity and ownership of digital content has raised ethical questions regarding artists' rights and the authenticity of NFTs. In other words, the immutability and decentralized nature of the blockchain create obstacles in enforcing copyright protection and regulating unauthorized reproductions. As a result, artists may expose their works to potential exploitation and unauthorized distribution, impacting their ability to receive fair compensation for their creations.

While NFTs are designed to verify authenticity, critics argue that the digital nature of assets allows identical copies to be shared and viewed elsewhere, potentially diminishing the perceived value of NFTs as truly scarce and unique assets. Artists and collectors may also face legal complexities when licensing and reselling NFTs. Smart contracts that automatically distribute copyright royalties among artists in secondary sales have attempted to address this issue. However, the practical examination of such contracts in different platforms and legal domains remains a

challenge. One of the significant concerns regarding NFTs is related to the environmental impacts of blockchain networks, especially the energy-intensive process of mining and NFT transactions. Most NFTs are created on the Ethereum blockchain and use a proof-of-stake consensus mechanism, which derives its security through a set of the rewards and penalties imposed on assets locked by stakeholders. This system requires complex mathematical computations to validate transactions, resulting in substantial energy consumption. Critics argue that the high energy consumption of blockchain networks, particularly during the surge in NFT activity, leads to the emission of greenhouse gases and exacerbates climate change. This concern has garnered attention from environmental activists and artists who are increasingly aware of the environmental footprint associated with their digital creations. However, efforts are currently underway to reduce the environmental impact of NFTs. Some blockchain projects, such as the proof-of-stake, are exploring more energy-efficient consensus mechanisms, but widespread adoption of greener alternatives is still in progress. As the NFT market continues to expand, addressing the environmental impact of the blockchain technology becomes an essential aspect of its sustainable growth. However, blockchain technology is the currently employed in various domains (Centobelli *et al.*, 2021), and multiple governments have recently leveraged this technology to improve environmental sustainability (Glavanits, 2020). Blockchain technology can, in fact, provide new tools for green production, monitoring, and storage of activities related to data on pollution and environmental degradation, as well as the collection and analysis of green or low-carbon data for timely decision-making. Blockchain can also assist in the development of green supply chains (Bai & Sarkis, 2019; Mora *et al.*, 2021; Saberi *et al.*, 2019).

### Case Studies

People have shown interest in various types of NFTs through case studies. They enthusiastically engage in games related to NFTs or transactions. CryptoPunks (Crypto Punks, 2021), one of the earliest NFTs on Ethereum, has created over 10,000 collectible punks (6039 male and 3840 female) and elevated the ERC-721 standard to gain more popularity. CryptoKitties

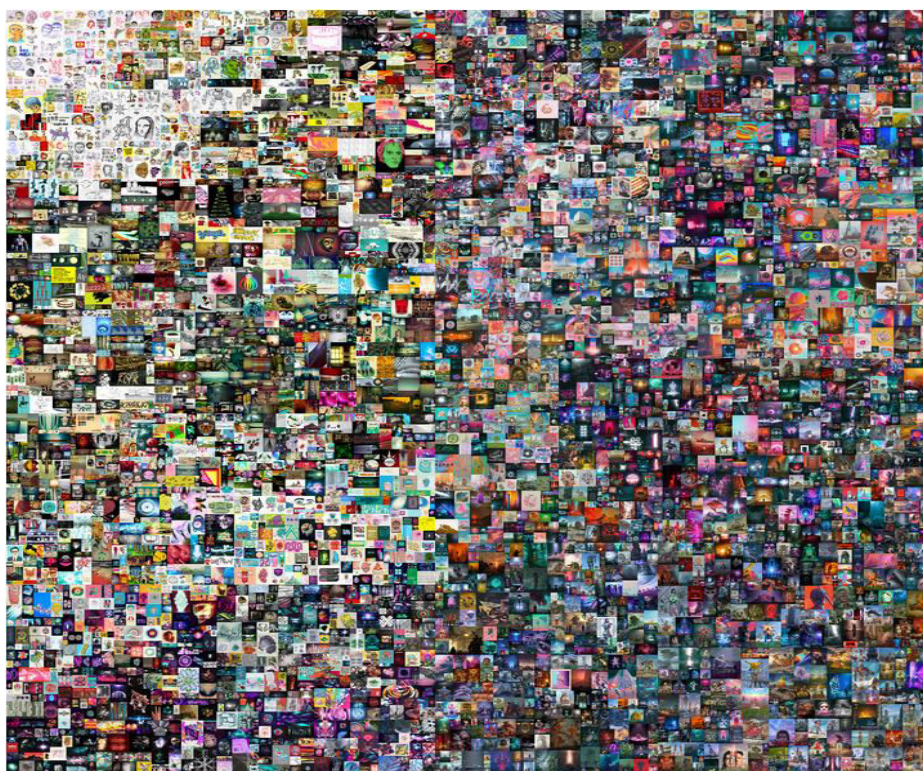


(CryptoKitties, 2021) officially introduced NFTs and entered the market in 2017 with gamified breeding mechanics. During this event, participants engaged in fierce competition, leading to high prices for rare kittens, with the highest bid reaching over 999 ETH (equivalent to 3 million dollars). Another prominent example is NBA Top Shot (NBA Top Shot, 2021), an NFT marketplace dedicated to the trading of short digital videos capturing NBA moments. Enthusiastic fans from all corners of the globe have amassed over 7.6 million top shots, featuring a range of rookies, veterans, and emerging star players. Other subsequent projects have also enjoyed the significant success, including (Picasso Punks, 2021; Hashmasks, 2021; 3D Punks, 2021; Unofficial Punks, 2021; Polkamon, 2021; Chubbies, 2021; Bullrun Babes, 2021; Aavegotchi, 2021; CryptoCats, 2021; Moon Cats Rescue, 2021; NFT Boxes, 2021) and more. There's no doubt that

there's a marketing cycle around NFTs where many products can be sold at high prices, even for hundreds or thousands of the ETH. In addition to games and collections, NFTs also promote art development, ticket sales events (Regner *et al.*, 2019), the value (Chevet, 2018), (Chohan, 2021), the Internet of Things (Omar & Basir, 2020) and financial matters (Dowling, 2021), (Musan *et al.*, 2020). The integration of NFTs into the art world has led to the creation of the numerous successful projects and collaborations that showcase the transformative potential of this technology. Here, we examine a few noteworthy case studies that have had a significant impact on the NFT space and how social media played a fundamental role in their success.

### Case Study 1

"Everydays: The First 5000 Days" by Beeple.



Beeple: Everydays: The First 5000 Days - <https://onlineonly.christies.com/s/beeple-first-5000-days/beeple-b-1981-1/112924>.

In March 2021, the digital artist known as Beeple, also recognized as Mike Winkelmann, made headlines when he sold his NFT artwork titled "Everydays: The First 5000 Days" at a staggering price of \$69.3 million in a Christie's auction. This artwork is a collage of digital images created and shared by Beeple every day  
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over a span of the 13 years, marking an innovative moment not only for the artist but also for the NFT community and the art world as a whole.

### Case Study 2

"Pixel" by PAK



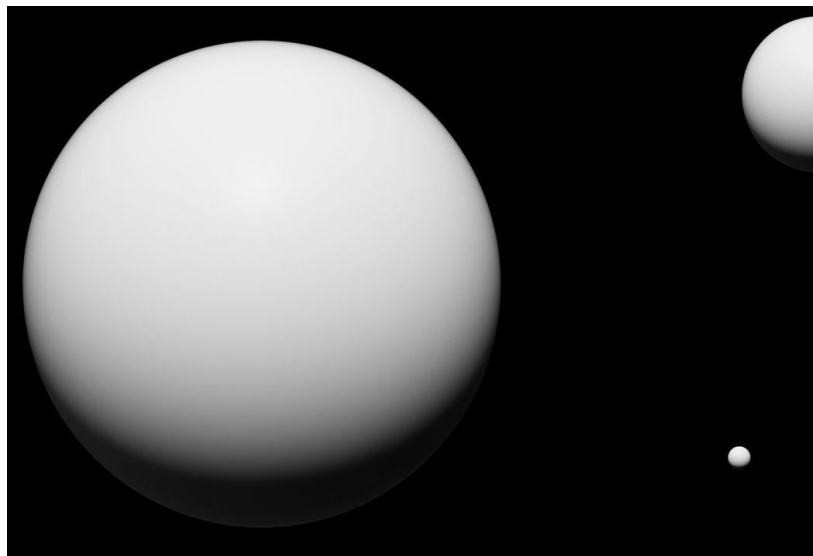


PAK: Pixel - <https://artreview.com/crypto-artist-pak-single-grey-pixel-nft-sold-for-1-36-million-dollars/>

PAK, a renowned digital artist and one of the early adopters of NFTs, created a unique project called "Pixel," which was sold for \$1.36 million. In this artwork, the PAK offered a pixel as an NFT on the Ethereum blockchain. Collectors could bid on these individual pixels and become their owners, collectively forming a complex and shared digital canvas. As more

collectors acquired pixels, the artwork transformed into a mosaic of colors and patterns, symbolizing the creativity and the communal participation of the NFT community.

### Case Study 3 "Merge" by PAK



PAK: Merge - <https://www.barrons.com/articles/paks-nft-artwork-the-merge-sells-for-91-8-million-01638918205>

"Merge" is another work designed by the digital artist PAK, and it has become a symbol of innovation and artistic brilliance in the rapidly evolving world of non-fungible tokens (NFTs). This revolutionary collection has left an indelible mark on the art world and the garnered critical acclaim while setting records in sales. The unique mechanism and dynamic smart contract have equally captivated collectors and the enthusiasts, UniversePG | [www.universepg.com](http://www.universepg.com)

introducing new possibilities for in-game applications and changing credit scoring mechanisms. The "Merge" project was unveiled in December 2021 and provided a unique perspective on the significant shift of Ethereum from Proof of Work (PoW) to Proof of Stake (PoS) consensus mechanisms from an environmental standpoint. The PAK's creation commemorates this historic event with artistic brilliance, combining technological

proWess with creative genius. Through the innovative integration of the blockchain technology and smart contracts, Merge NFTs effectively reduced Ethereum's energy consumption by a staggering 99.95% and the established a new standard for sustainable blockchain approaches. Social media played a vital role in the promoting and succeeding in these specific NFT projects. For "Everyday: The First 5000 Days," BEEPLE actively engaged with his followers across various social media platforms, sharing the daily progress of his digital images and the preparing them for their eventual NFT release. BEEPLE's transparent & credible approach resonated with his audience, generating excitement & curiosity about the historical significance of this artwork. Furthermore, prominent figures in the art and technology communities shared BEEPLE's NFT on their social media accounts, enhancing its access to a global audience. Influencers & celebrities, recognizing the importance of this milestone in the art world, voiced their support for the project, drawing more attention to increase the perceived value of the NFT. Similarly, the Pixel project utilized social media to strengthen the sense of collective ownership and foster creative collaboration. The artist engaged various social media platforms to showcase the evolving art pieces as collectors acquired pixels and celebrated each participant's stake in the larger digital canvas. This interactive and pervasive approach encouraged ongoing participation within the NFT community and created a digital artwork that transcended the boundaries of traditional art spaces.

The Merge NFT project has, to a large extent, garnered significant attention and admiration, thanks in part to the influential role of social media platforms. The Merge NFT, with its groundbreaking mechanism and record-breaking sales, attracted the attention of both the art and blockchain communities. Social media platforms such as the Twitter, Instagram, and Reddit played a fundamental role in amplifying the visibility of this artwork, allowing PAK to showcase these marvelous creations to a global audience. In all three case studies, social media provided a platform for artists to build their dedicated communities, share their creative processes, and directly engage with collectors. The viral nature of social media allowed these projects to gain a wide perspective and capture the attention not

only of art enthusiasts but also mainstream media. The buzz created by the social media around these NFT projects ultimately contributed to their astonishing success and solidified their place in the history of the digital art and NFTs.

### **Future Perspectives**

Currently, we are facing Industry 4.0, characterized by technological and communication advancements. One of the technological breakthroughs includes blockchain development. Blockchain was founded in 2008 and introduced by the Satoshi Nakamoto through a digital currency called Bitcoin (Hassani *et al.*, 2018). Blockchain is the currently growing, especially during the COVID-19 pandemic. New developments, including the introduction of smart contracts, allow any user to create & deploy a program on a global shared infrastructure, paving the way for a new conceptual framework for simplifying large-scale human interaction and collaboration (Regner *et al.*, 2019).

This expansion includes non-fungible tokens (NFTs), which were previously used for purchasing digital art, music, and games. It has also become one of the Bitcoin's advancements, signifying its significance not only as a digital currency for transactions but also for conducting various types of transactions. The future of NFTs in the art world, given their potential to the redefine artistic expression, ownership, and collaboration, appears promising. As the technology matures and gains broader acceptance, we can anticipate the several key transformations that may shape the future of NFTs:

### **Hybrid Artistic Experiences**

The fusion of physical and digital artistic domains is likely to intensify in the future, leading to immersive and hybrid artistic experiences. Artists may experiment with combining NFTs and Augmented Reality (AR) to create interactive and dynamic artworks that bridge the gap between the virtual realm and the physical world.

### **Virtual Museums and Galleries**

NFTs may facilitate the establishment of the virtual museums and galleries, providing artists and collectors the opportunity to the showcase digital artworks in a borderless and accessible environment. This could democratize art in a way, reaching global audiences.

### **Cross-Cultural Collaborations**

NFTs have the potential to facilitate the collaborations between artists with diverse cultural backgrounds, enhancing cross-cultural exchanges and the creative dialogues on a global scale. Digital platforms and social media will play a significant role in connecting artists and facilitating these collaborations.

### **Integration with Gaming**

NFTs and the metaverses are likely to transform the gaming industry, where virtual assets and in-game items can be tokenized and traded as unique digital collections. The growing interest in metaverses may lead to the creation of virtual art spaces and exhibitions within these pervasive digital environments.

### **Establishing Regulations and Standardization**

With the increasing adoption of the NFTs, regulatory frameworks and NFT standards may be established to address issues such as copyright, intellectual property rights, and security. Standardization efforts could simplify the NFT creation process and enhance transparency for artists and collectors. The role of social media in the NFT space is evolving in sync with technological advancements & changing user behavior. Social media platforms are likely to continue to influence the promotion and popularity of NFT projects, allowing artists to engage with their audience and the strengthen online art communities. Several potential advances in the role of social media in relation to NFTs include:

#### **NFT-Centric Platforms**

Social media platforms dedicated specifically to NFT enthusiasts & digital artists may emerge. These platforms can facilitate seamless NFT sharing, discussions, and purchases, while strengthening a cohesive and specialized NFT community.

#### **Social Media Integration**

Major social media platforms may integrate NFT features and enable direct NFT purchases or display NFTs in user profiles. This integration brings NFTs closer to a broader audience and facilitates easier access to the NFT market.

#### **Advanced Content Sharing**

Social media platforms may introduce a feature that allows artists to showcase their NFTs with previews or

interactive animations, enhancing the visual appeal of NFTs for potential buyers.

### **CONCLUSION:**

The article extensively examines the intricate relationship between the NFTs and the art world, notably focusing on the influence of social media in this context. It begins by outlining NFTs as unique digital assets and their impactful surge within the art market, particularly highlighting the successes of artists such as Beeple and PAK. The investigation delves into the pivotal role of the social media in advancing the prominence of NFTs, emphasizing its facilitation of digital collection creation, promotion, and the sales, enabling direct artist-audience engagement & community building and addresses the transformative effects of NFTs on traditional art markets, spotlighting the democratization of art ownership & the challenges faced by conventional art institutions in adapting to the digital landscape. It recognizes both the promise and challenges entwined with NFTs for artists & collectors, acknowledging revenue potential along-side concerns related to copyright and authenticity. Moreover, the article underscores the influential role of social media in amplifying artists' voices, promoting NFT initiatives, and fostering a shared sense of art ownership within the NFT community. It highlights how artists leverage social platforms to transparently exhibit their creative processes, prepare for NFT releases, and engage in meaningful interactions with their audience. Additionally, it notes the beneficial transparency and artist connectivity found in the NFTs for collectors, alongside the validation and attention garnered through endorsement by influencers and celebrities.

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### **CONFLICTS OF INTEREST:**

The authors affirm that this research, writing, and publication of this article have not been influenced by any conflicts of interest.



## REFERENCES:

- 1) 3d punks, (2021). Project Accessible: <http://www.3dpunks.com/>
- 2) Aavegotchi, (2021). Project Accessible: <https://aavegotchi.com/>
- 3) Ahmed M, and Iqbal MA. (2020). An execution of a mathematical example using Euler's Phi-function in Hill Chiper cryptosystem, *Int. J. Mat. Math. Sci.*, **2**(6), 99-103. <https://doi.org/10.34104/ijmms.020.0990103>
- 4) Ante, L., Fiedler, I., & Strehle, E., (2021). The Influence of Stablecoin Issuances on Cryptocurrency Markets. *Financ. Res. Lett*, **41**, 101867.
- 5) Bai, C., and Sarkis, J. (2019). Green supplier development: A review and analysis. In Handbook on the sustainable supply chain. *Edward Elgar Publishing*.
- 6) Bamakan, S. M. H., Bodaghi, O. and Qu, Q., (2021). A Decentralized Framework for Patents and Intellectual Property as nf in Blockchain Networks.
- 7) Benthous, J., Risius, M., & Beck, R. (2016). Social media management strategies for organizational impression management and their effect on public perception. *The J. of Strategic Information Systems*, **25**, 127-139.
- 8) Bullrun babes, (2021). Project Accessible: <https://opensea.io/collection/bullrunbabestoken>
- 9) Buterin, V. (2013). A next-generation smart contract and decentralized application platform. Ethereum white paper, **3**(37). <https://ethereum.org/en/whitepaper/>
- 10) Centobelli, P., Esposito, E., and Oropallo, E. (2021). Surfing blockchain wave, or drowning? Shaping the future of distributed ledgers and decentralized technologies. *Technological Forecasting and Social Change*, **165**, 120463. <https://doi.org/10.1016/j.techfore.2020.120463>
- 11) Chen, W. , Xu, Z. & Zhao, J., (2018). A survey of blockchain applications in diferent domains. *In Proceedings of the 2018 International Conference on Blockchain Technology and Application*, 17-21
- 12) Chen, Z., Li, Y., and Luo, J. (2017). The transition from traditional banking to mobile internet finance: an organizational innovation perspective - a comparative study of Citibank and ICBC, *Financ. Innov.*, **3**(1). <https://doi.org/10.1186/s40854-017-0062-0>
- 13) Chevet, S., (2018). Blockchain technology and non-fungible tokens: Reshaping value chains in creative industries. Available at SSRN 3212662.
- 14) Chohan, U.W., (2021). Non-fungible tokens: Blockchains, scarcity, and value. Critical Blockchain Research Initiative, Working Papers.
- 15) Chubbies (2021). Project Accessible: <https://chubbies.io/>
- 16) CoinMarketCap (2018). Steem (STEEM) price, charts, market cap, and other metrics | CoinMarketCap [WWW Document]. <https://coinmarketcap.com/currencies/steem/>
- 17) Cryptopunks, (2021). Accessible: <https://www.larvalabs.com/cryptopunks>
- 18) Cryptokitties, (2021). Project Accessible: <https://www.cryptokitties.co/>
- 19) Cryptocats, (2021). Project Accessible: <https://cryptocats.thetwentysix.io/>
- 20) Dash, A. (2021). NFTs weren't supposed to end like this [WWW document]. *The Atlantic*. URL. <https://www.theatlantic.com/ideas/archive/2021/04/nfts-werent-supposed-end-like/618488/>
- 21) Dowling, M.M. (2021). Fertile land: Pricing non-fungible tokens. Available at SSRN 3813522.
- 22) Domingo, R.-S., Piñeiro-Chousa, J., & Ángeles López-Cabarcos M., (2020). What Factors Drive Returns on Initial Coin Offerings? *Technol. Forecast. Soc. Chang.*, **153**, 119915.
- 23) Dowling, M. (2021). Is non-fungible token pricing driven by cryptocurrencies? *Finance Res. Lett*, **66**, 102097.
- 24) Evans, T. M. (2019). Cryptokitties, cryptography, and copyright. *AIPLA QJ*, **47**, 219-247.
- 25) Fairfield, J. (2021). Tokenized: The law of non-fungible tokens and unique digital property. *Indiana Law J., Forthcoming*.
- 26) Financial Conduct Authority, (2022). Hype - spot the signs and manage your fomo [WWW document]. *FCA*. <https://www.fca.org.uk/investsmart/hype-spot-signs-manageyour-fomo>
- 27) Fisch, C. (2019). Initial Coin Offerings (ICOs) to Finance New Ventures. *J. Bus. Ventur.* 2019, **34**, 1-22.

- 28) Fortunato, S. *et al.* (2018). Science of science. *Science*, **359**, 66.
- 29) Fraiberger, S. P., Riedl, C. & Barabási, A.-L. (2018). Quantifying reputation and success in art. *Science*, **362**, 825-829.
- 30) Franceschet, M., and Braidotti, C., (2021). Enhancing Art With Information: The Case of Blockchain Art, *Univ. Stud. Di Udine Dip. Di Mat. E Inform.*, **1**(1), pp. 1-11, 2021. <https://users.dimi.uniud.it/~massimo.franceschet/publications/jocch20.pdf>
- 31) Franceschet, M. *et al.* (2020). Crypto art: A decentralized view. *Leonardo*, **66**, 1-8.
- 32) Franceschet - Hashmasks, (2021). Project Accessible: <https://www.thehashmasks.com/>
- 33) Glavanits, J. (2020). Sustainable public spending through blockchain. *European J. of Sustainable Development*, **9**(4), 317-327. <https://doi.org/10.14207/ejsd.2020.v9n4p317>
- 34) Hassani, H., Huang, X., & Silva, E. , (2018). Big-crypto: Big data, blockchain, and cryptocurrency, *Big Data Cogn. Comput.*, **2**(4), pp. 1-15. <https://doi.org/10.3390/bdcc2040034>
- 35) Hornuf, L., and Kück, T. (2021) Schwienbacher, A. Initial Coin Offerings, Information Disclosure, and Fraud. *Small Busines. Econ*, **58**, 1741-1759.
- 36) Kim, S.K., Z. Ma, S. Miller, and M. Bailey. (2018). Measuring Ethereum network peers. In *Proceedings of the Internet Measurement Conference*, 2018, 91-104.
- 37) Lielacher, A. (2022). 6 NFT Use Cases That Will (Probably) Remain After the Hype Dies Down [WWW Document]. URL. <https://cryptonews.com/exclusives/6-nft-use-cases-that-will-probably-remain-after-hype-dies-down.htm>
- 38) Ludlow, P. (2001). Crypto anarchy, cyberstates, and pirate utopias, digital communication (Ed.). Cambridge, Mass: MIT Press.
- 39) Lounge, T. W. (2020). Choosing the right blockchain for your NFT. <https://medium.com/phantasticphantasma/choosing-the-right-blockchain-for-your-nfd1df2bebae91>
- 40) Masiak, C., Block, J.H., and Neuenkirch, M., (2020). Pielen, K.N. Initial coin offerings (ICOs): Market cycles and relationship with bitcoin and ether. *Small Bus. Econ*, **55**, 1113-1130.
- 41) Moon cats rescue, (2021). Project Accessible: <https://mooncatrescue.com/>
- 42) Mora, H., Mendoza-Tello, J. C., & Szymanski, J. (2021). Blockchain technologies to address smart city and society challenges. *Computers in Human Behavior*, **122**, 106854. <https://doi.org/10.1016/j.chb.2021.106854>
- 43) Musan, D.I., William, J., & Gervais, A., (2020). Nft. finance leveraging non-fungible tokens.
- 44) Nadini, M., Alessandretti, L., & Baronchelli, A. (2021). Mapping the NFT revolution: market trends, trade networks and visual features, *Scientific Reports*, **11**, 20902.
- 45) Nakamoto, S., (2019). Bitcoin: A peer-to-peer electronic cash system. *Tech. rep., Manubot*.
- 46) Nakamoto, S. (2008). Bitcoin: A peer-to-peer electronic cash system. White paper.
- 47) Oh, S., S. Rosen, and A. L. Zhang, (2022). Investor experience matters: Evidence from generative.
- 48) Nærland, K., Beck, R., & Palmund, S., (2017). Blockchain to Rule the Waves - Nascent Design Principles for Reducing Risk and Uncertainty in Decentralized Environments, in: *International Conference on Information Systems (ICIS2017)*, Seoul, South Korea.
- 49) Nba top shot, (2021). Accessible: <https://nbatopshot.com/>
- 50) Nft box, (2021). Project Accessible: <https://nftboxes.io/>
- 51) NonFungible.com, (2018). About Non Fungible <https://nonfungible.com/>
- 52) Omar, A.S., Basir, O. (2020). Capability-based non-fungible tokens approach for a decentralized aaa framework in iot. In: *Blockchain Cybersecurity, Trust and Privacy*, Springer, pp. 7-31.
- 53) Picasso punks, (2021). Accessible: <https://opensea.io/collection/picassopunks>
- 54) Porat, A., A. Pratap, P. Shah, and V. Adkar. (2017). Blockchain consensus: An analysis of proof-of-work and its applications.
- 55) Polkamon (2021). Project Accessible: <https://polkamon.com/>
- 56) Regner, F., Schweizer, A., & Urbach, N., (2019). NFTs in practice - Non-fungible tokens as core component of a blockchain-based event ticketing

- application, 40th *Int. Conf. Inf. Syst. ICIS 2019*, pp. 1-1.
- 57) Saberi, S., Kouhizadeh, M., & Sarkis, J. (2018). Blockchain technology: Apanacea or pariah for resources conservation & recycling? *Resources, Conservation and Recycling*, **130**, 80-81.  
<https://doi.org/10.1016/j.resconrec.2017.11.020>
- 58) Sami HM, and Arifuzzaman SM. (2021). Comparing pure stock portfolio with stock and crypto-currency mixed portfolio through LSTM to compare & analyze investment opportunities for portfolio performance measurement, *Aust. J. Eng. Innov. Technol.*, **3**(3), 45-56.  
<https://doi.org/10.34104/ajeit.021.045056>
- 59) Sarkar, A. (2022). Beyond the NFT hype: The need for reimagining digital art's value proposition [WWW Document]. Cointelegraph. URL.  
<https://cointelegraph.com/news/beyond-the-nft-hype-the-need-for-reimagining-digital-art-s-value-proposition>
- 60) Shirole, M., Darisi, M., and Bhirud, S., (2020). Cryptocurrency token: An overview. *IC-BCT 2019*, pp. 133-140.
- 61) Taylor, J. and Sloane, K. (2021). Art markets without art, art without objects. *Garage J. Stud. Art Museums Cult.* **02**, 152-175.
- 62) Umar, Z., Gubareva, M., & Teplova, T., (2021). Tran, D.K. COVID-19 impact on NFTs and major asset classes interrelations: Insights from the wavelet coherence analysis. *Financ. Res. Lett.*, **47**, 102725.
- 63) Unofficial punks, (2021). Project Accessible: <https://opensea.io/collection/unofficialpunks>
- 64) Vasan, K., Janosov, M., and Barabási, A. L. (2022). Quantifying NFT-driven networks in crypto art. *Scientific reports*, **12**(1), 1-11.
- 65) Wang, D. & Barabási, A.-L. (2021). *The Science of Science*, Cambridge University Press.
- 66) Wang, F.-Y., Yuan, Y., & Hu, B. (2021). Non-fungible tokens: Constructing value systems in parallel societies. *IEEE Trans. Comput. Soc. Syst.*, **8**, 1062-1067.
- 67) William, E., Dieter, S., & Nastassia, S. (2018). Erc-721 non-fungible token standard. Ethereum Improvement Protocol, *EIP-721*.  
<https://eips.ethereum.org/EIPS/eip-721>
- 68) Witek, R., James, T., & Ronan, S., (2018). Eip-1155: Erc-1155 multi token standard. Ethereum Improvement Protocol, *EIP-1155*, Accessible: <https://eips.ethereum.org/EIPS/eip-1155>
- 69) Wood, G., *et al.* (2014). Ethereum: A secure decentralised generalised transaction ledger. *Ethereum project yellow paper*, **151**(2014), 1-32.

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<https://doi.org/10.34104/bjah.02302770290> 