Unlocking the Potential of NFTs: Revolutionizing Digital Ownership, Facing Challenges, and Shaping the Future of the Creative Industries

Maciej Kozieł & Anna Karpińska

NFTs: Revolution or Exploitation?

The meteoric rise of NFTs has shaken up the art and entertainment industries, promising new ways for creators to monetize their work and connect with audiences. However, behind the allure of digital ownership and decentralized markets lies a complex reality. NFTs are not just revolutionary tools; they also mirror and, in some cases, amplify existing societal issues, such as economic inequality, environmental concerns, and legal complications. As NFT platforms continue to flourish, questions about the sustainability, ethics, and true value of this digital gold rush become increasingly pressing. In this article, we delve into both the innovative possibilities and the contentious challenges that NFTs present, exploring how they are reshaping various sectors while also raising serious criticisms and regulatory concerns.

What are NFTs?

Non-Fungible Tokens (NFTs) are a type of cryptocurrency – but they differ from traditional cryptocurrencies like Bitcoin by being unique and non-exchangeable on a like-for-like basis. This uniqueness makes NFTs suitable for verifying the existence and ownership of digital assets such as videos, images, artwork, and event tickets. An NFT can be defined as a unit of data stored on a blockchain that certifies a digital asset's uniqueness and provides a digital certificate of ownership. NFTs establish the provenance of a digital object, offering clear answers about ownership, previous ownership, creation, and the originality of copies (Nadini and others 2021). NFTs allow creators to earn royalties from trades and offer features like full-history tradability, deep liquidity, and interoperability, making them a promising solution for intellectual property protection. Despite being essentially just code, NFTs have value to buyers due to their digital scarcity (Wang and others 2021).

»As stated in Mapping the NFT revolution: market trends, trade networks, and visual features: Items exchanged on the NFT market are organized in collections, sets of NFTs that, in most cases, share some common features. Collections can be widely different in nature, from sets of collectible cards, to selections of art masterpieces, to virtual spaces in online games. Most collections can be categorised in six categories: Art, Collectible, Games, Metaverse, Other, and Utility« (Nadini et al. 2021: 1).

Criticism

One of the most prominent criticisms of NFTs is that they have become mere status symbols, a way for the wealthy to flaunt their financial power in the digital realm. This phenomenon can be likened to the concept of conspicuous consumption introduced by economist Thorstein Veblen. Veblen's theory posits that individuals purchase expensive items not for their intrinsic value but to display wealth and social status (Veblen 1899). Similarly, high-priced NFTs, such as digital art pieces and collectibles, are often purchased not for their artistic merit but for the prestige associated with owning a rare and costly digital asset.

The trend of using NFTs as status symbols has been exemplified by several high-profile purchases. A notable example is the purchase of CryptoPunk #7523, one of the 10,000 unique 24x24 pixel art characters created by Larva Labs. This particular CryptoPunk was sold for $11.7 million to Israeli entrepreneur Shalom Meckenzie, a major shareholder in the digital sports company DraftKings (Locke 2021). These transactions illustrate how NFTs have become a playground for the affluent, creating an environment where financial capability overshadows artistic appreciation. This purchase not only highlighted the extreme wealth disparity within the digital art community but also underscored how NFTs are being used as tools for social signaling.

This trend has exacerbated economic inequality, as the NFT market becomes increasingly dominated by wealthy individuals and corporations. The entry barrier is high, making it difficult for average consumers to participate meaningfully in the NFT ecosystem. Several factors contribute to this. First, creating and promoting high-quality NFTs requires significant financial investment, with additional costs for minting the tokens on the blockchain. Furthermore, the poorly regulated NFT market allows for manipulation, turning it into a tool for speculators aiming to profit from resales. Wealthy investors can afford the priciest NFTs, shaping market values, while corporations boost their token worth by investing in popular brands and artists. As a result, the digital divide widens, with the rich getting richer by speculating on high-value NFTs and the less affluent being left out or even exploited. For instance, artists often sell their works for a fraction of what they are later resold for, receiving minimal compensation compared to the profits made by resellers. Data suggests that only a small group of artists make significant profits, while the vast majority earn less than $200 from their NFTs. Additionally, as many as 33 % of artists made between $100 and $200 from NFT sales, indicating that for many creators, the NFT market is not a lucrative source of income (Parker 2021).

Another significant criticism of NFTs is their environmental impact. Most NFTs are minted on blockchain networks that use proof-of-work (PoW) consensus mechanisms, which are highly energy-intensive. The carbon footprint associated with creating and trading NFTs has raised alarms among environmentalists and the general public. The energy consumption of blockchain networks like Ethereum, where many NFTs are minted, has been compared to that of entire countries, leading to widespread calls for more sustainable practices in the crypto and NFT space (de Vries 2021).

For example, Ethereum's annual energy consumption has been estimated to be comparable to that of Qatar, a nation with a substantial carbon footprint (Digiconomist 2023). This environmental cost has led to a backlash against NFTs, with artists and collectors alike being criticized for contributing to environmental degradation. Some artists, such as Joanie Lemercier, have halted their NFT projects due to concerns about their environmental impact, further highlighting the contentious nature of this issue (Lemercier 2021)

A study by BBC Research found that many participants in the NFT market experienced significant stress and anxiety due to the volatility and speculative nature of NFTs (BCC Research LLC and BCC Publishing 2022). This financial strain can have broader social consequences, including deteriorating mental health and increased economic disparity.

Legal Regulations and Copyright Protection for NFTs

The rise in interest in NFTs raises questions regarding legal regulations and copyright protection. While there are currently no specific laws tailored directly to NFTs, these technologies can fall under existing laws concerning copyright and other legal domains.

Copyright Directive

The Copyright Directive 2019/790 (2019) harmonizes certain aspects of copyright and related rights within the digital single market in the European Union. NFT technology, by its association with artworks, music, and other forms of creativity, is subject to the provisions of this directive. In particular, the process of creating or minting an NFT can involve making a new copy of a protected work, potentially infringing the reproduction right. The marketing and sale of NFTs, which might involve displaying thumbnails or playing recordings, could infringe the rights of public display and performance (European Union 2019).

A notable example of potential copyright infringement involving NFTs is the case of artist Damien Hirst's project »The Currency« (HENI NFT 2021). In this project, Hirst created 10,000 unique artworks and their corresponding NFTs. Each NFT represented ownership of a physical artwork, with buyers having the option to keep either the physical piece or the NFT. If someone were to mint NFTs of Hirst's works without his permission, they would be infringing on his reproduction and distribution rights.

Moreover, the case of the »MetaBirkins« NFTs illustrates the legal challenges surrounding copyright and trademark infringement (McCormick 2023). Artist Mason Rothschild created and sold NFTs of Hermès‹ Birkin bags without authorization. Hermès sued, claiming the »MetaBirkins« NFTs violated trademark and copyright laws. This case highlights how NFTs can infringe on intellectual property rights, underscoring the need for clear regulatory frameworks.

The decentralized and anonymous nature of blockchain complicates applying the Copyright Directive to NFTs. Traditional enforcement mechanisms, like takedown notices and lawsuits, are harder to implement. Identifying individuals behind unauthorized NFTs is difficult due to pseudonymous blockchain addresses, complicating copyright enforcement and accountability.

Platforms like OpenSea are implementing measures to prevent copyright infringement, such as verification systems for creators and reporting mechanisms for rightsholders to request the removal of infringing NFTs. However, these measures are not foolproof and depend on proactive enforcement and vigilance (Sato 2022).

The increasing prevalence of NFTs in the digital art and entertainment markets necessitates ongoing dialogue between policymakers, legal experts, and industry stakeholders. The aim is to develop comprehensive regulations that address the unique challenges posed by NFTs while fostering innovation and protecting intellectual property rights. Future revisions to the Copyright Directive or new legislative measures may be required to effectively govern the evolving landscape of digital assets and blockchain technology.

Consumer Rights Directive

NFT items also fall under the Consumer Rights Directive 2011/83/EU (2011), which protects consumers in commercial transactions, including e-commerce. This applies to NFT transactions, particularly concerning the right to information and the right of withdrawal, which allows consumers 14 days to return a purchase for a refund. Implementing this for NFTs is challenging due to irreversible blockchain transactions. Platforms like Nifty Gateway use escrow services to hold funds until the buyer is satisfied, enhancing consumer protection (Nifty Gateway 2024).

Consumers must be clearly informed about the NFTs they purchase and may have the right to withdraw from the purchase agreement under certain conditions (European Union 2011). Transparency is crucial in NFT transactions. Platforms should provide clear information about digital assets, associated rights, and potential risks. For instance, sellers must disclose whether the NFT includes reproduction or display rights or just ownership of the token.

A notable example highlighting the need for such transparency and consumer protection is the »Evolved Apes« project. The creator, known as »Evil Ape,« raised $2.7 million from investors by promising a compelling gaming experience. The project was marketed with elaborate promises of an upcoming game featuring the NFTs, which were digital representations of unique, collectible ape characters. However, shortly after the initial sale, Evil Ape disappeared with the funds, leaving investors with worthless tokens and no game in sight. This incident not only resulted in significant financial losses for the investors but also underscored the urgent need for consumer protection and regulatory oversight in the burgeoning NFT market (Genç 2021). Without proper safeguards, the NFT space remains vulnerable to fraudulent schemes and bad actors, emphasizing the necessity for clear regulations and enforcement mechanisms to protect consumers and ensure the legitimacy of NFT projects.

Digital Markets Act and Digital Services Act

The Digital Markets Act (DMA) and the Digital Services Act (DSA) aim to regulate the digital market and digital services in the EU. NFT trading platforms may be subject to these regulations concerning transparency, content liability, and user protection. These regulations require platforms to be clear about their operations, terms of use, and to remove illegal content promptly (European Commission 2020).

The DMA ensures fair competition by preventing monopolistic practices by large platforms. For NFT marketplaces, this means not unfairly promoting their own NFTs over those of independent creators. Meanwhile, the DSA addresses responsibilities regarding user content and safety, requiring NFT platforms to swiftly remove illegal content, such as counterfeit NFTs.

»Rug pulls« are another significant issue in the NFT market, where developers vanish with investors‹ money after selling NFTs. The »Frosties« NFT project is a notable case, where the creators disappeared after raising $1.1 million. If the DSA had been in effect, it could have enforced stricter vetting processes and accountability for platforms to protect consumers from such frauds (Robertson 2022).

The DSA promotes algorithm transparency in NFT marketplaces, requiring platforms to disclose how NFTs are promoted to ensure fairness. Platforms must provide clear terms of service, effective customer support, and dispute resolution mechanisms. OpenSea and Rarible are implementing these measures to meet regulatory expectations.

NFT on art market

As the authors of Mapping the NFT revolution: market trends, trade networks, and visual features states: the first popular example of NFTs was CryptoKitties, a collection of virtual cat images used in a game on Ethereum where players could purchase, collect, breed, and sell the cats. Initially viewed as an example of market irrationality, CryptoKitties remained the most popular NFT until 2020. The NFT market garnered significant attention in March 2021 when the artist Beeple sold an NFT for $69.3 million at Christie's, achieving the third-highest auction price for a living artist. The profitability of NFTs has motivated celebrities to create their own, with sports collectibles also fetching high prices (Nadini and others 2021).

Data from NFT18.com, which tracks NFT sales across Ethereum, Polygon, and four other networks, illustrates the fluctuation of the NFT market over time, stabilizing at a lower level in 2023. NFT platforms encompass various collectible categories, including art, sports, music, entertainment, and in-game items. Initially, art-related NFTs comprised 12 percent of the combined value of art and collectibles in 2019, growing to 67 percent by 2020. However, since 2021, collectibles have taken the lead, reaching 84 % of the total value in 2023, with art representing only 16 percent (McAndrew 2024).

Studies have demonstrated the advantages of applying blockchain technology in art operations, enhancing authenticity, lawful origin, traceability of sales, and protecting collector privacy. This technology is revolutionizing the art market, but further investigation is required, particularly in managing copyright and contract stipulation. Regarding copyright, if blockchain provides protection and property certification, traditional notary registration might become unnecessary. However, legitimizing public faith for a private entity like blockchain poses challenges (de Sousa 2022).

NFT in film industry

When it comes to positive practical usage of NFT technology, it has vast potential across various cultural sectors, including film, music, and video games. In the film industry, NFTs can revolutionize the way films are financed, distributed, and consumed. One of the most promising applications is in crowdfunding and investment. By minting NFTs linked to a film project, filmmakers can raise funds by selling these tokens to investors and fans. These NFTs can represent ownership stakes, profit-sharing agreements, or exclusive content access.

NFT-based crowdfunding revolutionizes film financing by offering ownership stakes or profit-sharing opportunities to investors, fostering a supportive community. For example, »Zero Contact« starring Anthony Hopkins was the first feature film sold as an NFT in 2021. Buyers on the Vuele platform gained access to the film, exclusive behind-the-scenes content, and virtual meet-and-greet sessions with the cast and crew (Niftify 2022). This innovative approach to film distribution allowed the filmmakers to raise funds directly from fans and investors while offering unique experiences and content.

NFTs enable decentralized film distribution, ensuring content security and direct-to-fan sales, reducing reliance on traditional channels like cinemas and streaming services. This method allows filmmakers to retain more control and revenue while combating piracy. For instance, filmmaker Kevin Smith plans to release his horror anthology »KillRoy Was Here« as an NFT, allowing the buyer to exhibit, distribute, and stream the movie, bypassing traditional channels and engaging directly with his audience (D'Alessandro 2021). However, reducing reliance on cinemas and streaming services could be problematic, as it may limit accessibility for broader audiences and undermine traditional revenue streams that many filmmakers and theaters still depend on for sustainability.

NFTs offer filmmakers a platform to provide exclusive content and unique experiences, such as special editions, director's cuts, behind-the-scenes footage, and interactive elements. This fosters a deeper connection between fans and creators. For instance, the documentary »Claude Lanzmann: Spectres of the Shoah« used NFTs to give fans exclusive access to rare interviews and unseen footage, enhancing audience engagement (Ravindran 2021).

NFTs simplify rights management for filmmakers by encoding agreements directly into the blockchain, ensuring transparent and immutable transactions. This helps manage royalties and ensures fair revenue distribution, countering unethical practices by media giants. For instance, Trevor Hawkins‹ »Lotawana« was released as an NFT, with each token representing a share of the film's ownership, enabling investors to profit transparently based on their investment level (Wang, quotated in Costigan 2021).

However, one cannot ignore the potential for misuse and unethical practices within the NFT market. A notable example is the controversy involving Quentin Tarantino. The director had an idea of selling some of his work in the form of NFTs. In 2021, Tarantino announced plans to auction off seven uncut scenes from »Pulp Fiction«, containing handwritten scripts and exclusive commentary. This led to a legal battle with Miramax, the studio that owns the rights to the film, arguing that Tarantino did not have the right to sell these tokens. This incident highlights the potential for intellectual property disputes and the need for clear regulations and agreements regarding the sale of NFTs (Werpin 2021).

Conclusions

In conclusion, Non-Fungible Tokens (NFTs) represent a unique form of digital asset with applications across various sectors, including art, entertainment, and film. NFTs, stored on blockchain technology, provide proof of ownership and authenticity for digital assets, revolutionizing how creators monetize and distribute their work. However, the rise of NFTs has brought about criticisms and challenges.

One of the main criticisms of NFTs is their role in exacerbating economic inequality, as they often serve as status symbols for the wealthy. Additionally, concerns about the environmental impact of NFTs, particularly regarding energy consumption, have raised alarms among environmentalists and the public (Calma 2021). Furthermore, the speculative nature of the NFT market can lead to financial stress and anxiety among investors, while the exclusivity of high-value NFTs can foster elitism within the community.

Legal regulations and copyright protection are also significant concerns in the NFT space. While blockchain technology offers advantages in terms of authenticity and traceability, it also presents challenges in enforcing copyright and protecting intellectual property rights. Clear regulatory frameworks are needed to address these issues and ensure fair practices within the NFT market.

Despite these challenges, NFTs offer innovative solutions for financing, distribution, and rights management, empowering creators and engaging audiences in new ways. As the technology continues to evolve, it is crucial to strike a balance between innovation and regulation to maximize the potential benefits of NFTs while mitigating their risks.

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