The Basics of Non-Fungible Tokens (NFTs) Explained

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The popularity of non-fungible tokens NFTs skyrocketed in early 2021, even though they have existed on various blockchains since 2012[1]. It seems like everyone is talking about these digital assets right now[2]. Despite the ubiquity of references to these digital assets in headlines and crypto-parlance, many people are still uncertain about what exactly an NFT is, how one is bought and sold, applicable intellectual property rights, and a variety of other founder and investor concerns. This article is meant as a primer for the uninitiated as well as a road map for potential issues that entrepreneurs and attorneys alike may need to understand as NFTs continue to grow as a part of the digital economy.

What is an NFT?

NFTs are crypto tokens, managed on a decentralized blockchain ledger, and coded to have unique IDs that are not replicable. Unlike fungible assets that are identical and can be substituted for one another (like bitcoin, for example), no two non-fungible tokens are the same. In short, NFTs are digital receipts representing the existence of some unique thing but are not the thing itself.

Almost anything can be an NFT. NFTs have invaded a variety of industries, including arts[3], fashion[4], sports[5], alcohol,[6] and e-gaming.[7] An NFT can represent anything from a stick figure doodle to high art, and even Sotheby's and Christie's auction houses have gotten into the market of selling NFTs.[8]

When an NFT is created, or "minted," it is encoded in the blockchain, and can't be changed. The owner of the NFT can keep it in their crypto wallet forever, or transfer ownership to someone else – and that transfer will also be immutably recorded on the blockchain. Because NFTs exist in a relatively new, speculative, and largely unregulated market, those investing should be prepared for the high risks and possible losses that accompany such innovation.

Valuation of NFTs

Some experts believe the value of an NFT is determined by its utility (how it can be used, like game assets or tickets), its ownership history (if it was created or owned by an influential person), its future value (driven by scarcity and speculation) and liquidity premium (creation on a popular platform).[9] Even still, it can be hard to determine what NFTs offer a strong purchase and potential investment growth and what is a lemon.[10] Most buyers of NFTs are driven less by the valuation analysis above and more by a collector's mentality – wanting to be the only one who has a thing that others want.[11]

Minting an NFT

To mint an NFT, a user must create an account on a blockchain platform (for example, OpenSea or Foundation). Once a user has made an account and purchased some cryptocurrency (the type depends on the underlying blockchain), the user can upload an image (along with a title and description) and then simply hit the "Mint NFT" button. Some platforms charge "gas," meaning the fluctuating price that minters charge to write new data on a blockchain, which is payable in crypto currency. Others, like OpenSea, are free to create an NFT, but later require a small fee based on a percentage of the final sale value of the asset.[12] Once the NFT is minted on your account, you "sign" the transaction, which forever links the NFT to your unique blockchain account and wallet. This process verifies the NFT belongs to the creator.

Buying and Selling NFTs

How to buy NFTs

Because NFTs are managed on a blockchain, many common platforms require you to buy cryptocurrency to purchase an NFT on their sites. OpenSea, one of the most popular platforms to buy and sell NFTs, uses the cryptocurrency Ether (used on the open-source blockchain Ethereum, which has smart contract functionality). Other websites use the cryptocurrency, Wax, while a select few do allow you to purchase NFTs in U.S. dollars.[13]

The sales themselves take place either by auction or direct, fixed price sales. Most of the sites offer both, with sale by auction being more common. There are open marketplaces where anyone can mint, buy, or sell NFTs whether they created them or are selling them secondarily. Other markets prefer to curate who is minting and selling through their marketplace, and other marketplaces are proprietary and only sell their own NFTs. Different platforms create varying degrees of scarcity and demand across the NFT marketplace.

Paying Creators

A smart contract is the code on the blockchain that stores the information about the NFT. The smart contracts through which NFTs are minted are programmed to automatically make payments to the owner upon the sale of the NFT. They can also be programmed to automatically transfer a portion of the resale amount back to the creator of the underlying digital asset.[14]

NFTs and Intellectual Property

Because anyone can take an image or sound clip from the internet and mint an NFT from that image or clip, this marketplace creates an array of copyright concerns. Websites are supposed to have processes in place to comply with copyright law (specifically, the Digital Millennium Copyright Act (DMCA)),[15] and typically require in their terms of use representations from creators that they fully own their work. Complying with the notice and takedown framework of the DMCA could be a way for NFT platforms to avoid liability.[16] Regardless of whether the infringement policy actually names the DMCA, some NFT marketplaces provide a way for copyright owners to enforce their rights if an NFT creator used their work without permission.[17] As an example, OpenSea's Terms of Service states that it "will take down works in response to formal infringement claims and will terminate a user's access to the services if the user is determined to be a repeat infringer."[18] However, OpenSea does not conduct any ownership verification[19] and the NFT purchaser is responsible for verifying the legitimacy and authenticity of the underlying art or other object.

While the owner of the copyright in a work of authorship can lawfully create an NFT of that work, the converse does not hold true: Owning the NFT does not necessarily confer copyright ownership in the underlying digital asset.[20] Owning an NFT represents ownership of a receipt of a unique digital work of authorship. This ownership structure can be analogized to owning a copy of a book: The owner of a copy of a book, like the owner of an NFT, can enjoy that copy and then sell it, but she does not own any intellectual property rights in the book. She cannot make copies of it, or scan it and distribute it over the internet, or make a movie or video game based on it. If someone wants to mint an NFT of a work of authorship she does not own, she will need a license from the owner of the intellectual property rights in that work of authorship. And while some intellectual property owners have embraced tokenizing their works,[21] others have not yet joined the craze.[22]

Trademark rights can also be implicated in minting NFTs. Minting NFTs that display trademarks without a license from the owner of those trademarks can expose the minter and/or the NFT platform to a claim of trademark infringement. Lawsuits for trademark infringement by NFT minters/platforms have been filed by Nike,[23] Hermes[24] and Lil Yachty.[25]

NFTs and Regulatory Concerns

Securities Law

NFT sales can also raise securities law concerns. The question of whether NFTs are "collectibles" or "securities" is one on which the SEC and broader regulatory bodies have not yet taken a position, but all signs point that they intend to in the near future. The solution here is likely for the platform to offer straightforward sales of NFTs to avoid any ambiguity.

Where issuers sell a fractional interest in NFTs, the likelihood that the NFT would be deemed a security under the *Howey* test increases. That principle states that securities law applies where (1) there is an investment of money or some other consideration, (2) in a common enterprise, (3) with a reasonable expectation of profits, (4) to be derived from the efforts of others. There is also potential for holders of NFTs to be entitled to royalty payments or dividend streams from the underlying music/art, which would increase the chances it could be considered a security.[11]

Commodities Law

The sale of NFTs could similarly implicate commodities law, but there has not yet been an official statement from the Commodities Future Trading Commission (CFTC) on this issue. If an NFT is deemed a commodity, the Commodity Exchange Act's (CEA) general prohibitions on deceptive and manipulative trading may apply to NFT transactions effected on a "spot" basis, i.e., fully-funded, unleveraged transactions. If an NFT is offered that way, regulators could require that the NFT may only be traded on a registered derivatives exchange. The CFTC *has* stated that bitcoin and other cryptocurrencies are commodities under the CEA[26] and that digital assets are under CFTC oversight.[27] However, the CFTC has yet to officially release any guidelines or statements explicitly naming NFTs.

Conclusion

Already in this fast-changing field, NFTs are being posted as collateral, new standards are developing for royalty and licensing payments, and other financialization techniques are emerging beyond the initial creation and purchase of the NFTs. Such developments raise a host of novel legal issues, which will need to be considered as new marketplaces are created, economic viability of NFTs increases and how they are traded becomes more common and sophisticated.

For more information on NFTs, please contact Peter Cifichiello or Amanda Schreyer.

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