Introduction to NFTs

What is an NFT?

NFT stands for non-fungible token and refers to a unique digital item that is built on a blockchain and can be sold or traded on digital markets. NFTs have risen in prominence in the art and pop culture realms as of late, with many high-profile NFT sales gaining significant media attention and bringing the concept into the mainstream. However, NFTs are more than just a pop culture fad. They have substantial implications for the business world and can be employed as powerful – and lucrative – business tools.

Background

While some debate exists, many in the space believe the first NFT, known as Quantum, was created in 2014, which actually predates Ethereum. More recently, Ethereum has become the blockchain of choice for the majority of NFT creation and has played a significant role in their rise in popularity, due to Ethereum being the home of the ERC-721 standard. An important characteristic of NFTs is that, unlike most digital assets, they cannot be replicated. During their creation – or minting – each NFT is verified and registered to a given owner using a smart contract. This is what makes them non-fungible, in essence irreplaceable, as they are all unique and have distinct contract codes baked into their metadata.

For businesses, the NFT space has great potential as a tool for brand building, connecting with audiences, and even interacting with customers. NFTs are more than simply a collectible; they allow for built-in code that enables interaction between a customer and a brand. This programmability is a key aspect of NFTs' business value. Companies can program in special features or benefits to help promote customer engagement and ensure ongoing revenue. For example, a company could create a collectible NFT with embedded code that allows customers to earn rewards. Or, it could program VIP access to certain items or events directly into an NFT, which helps create demand and drive customer engagement and loyalty.

In the same vein, NFTs are great for community building, as they can grant automatic, near-instant access to both digital and physical events. Due to the nature of NFTs, no manual verification is needed and since access is stored and accessible on the blockchain, there's no risk of delivery failure, a common issue with emails.

QUICK TAKEAWAYS

NFTs, or non-fungible tokens, are unique digital assets that are built on the blockchain and can be bought, sold or traded. During their creation – or minting – each NFT is verified and registered to a given owner using a smart contract. This is what makes them unique, as they all have distinct contract codes baked into their metadata.

NFTs are programmable using smart contracts, which opens up a world of business use cases, including building customer loyalty, driving engagement, developing communities, augmenting CRM strategies and more.
Some in the business world have also suggested that NFTs could help power CRM strategies, due to their ability to record purchasing information and ownership. In fact, this record of ownership is critical when it comes to the business value that NFTs present. Generally speaking, it is difficult to prove ownership in the digital world as copies can usually be easily made. This is not the case with NFTs, and the fact that users can prove ownership is what allows the assets to be sold and money to be made.

Finally, a common example of how NFTs can drive revenue relates to royalty rates, which can be baked into the assets using smart contracts, which take action automatically upon pre-programmed conditions. Thus, whenever an NFT is sold, the business receives a share of the sale price as dictated by the smart contract. This means the NFTs remain profit drivers long after the initial sale.

Clearly, NFTs hold huge potential for businesses. However, they are still a new technology and thus do carry some risks and challenges. One such challenge relates to security. The smart contracts that make NFTs programmable are immutable, and any bug introduced in the code at launch leaves the NFTs more susceptible to hacks. Another risk relates to how NFTs are sometimes used. It’s incorrect to assume that an NFT linked to a separate asset, whether digital, such as an image file, or physical, such as property, actually controls that other asset. In fact, the original asset needs to require (legally or otherwise) the NFT ownership in order for the NFT to properly represent that asset.

There are also a number of legal and regulatory questions surrounding the space, with different countries and regions having varying approaches to NFT management, which could contribute to compliance issues. Finally, in the past, NFTs caught some negative press related to the energy they took to mint and the environmental impact this had. While this critique was not unwarranted, it was put into perspective in a recent EEA blog. Additionally, it’s important to note that following Ethereum’s recent switch to Proof of Stake (PoS), known as The Merge, these environmental challenges are now a thing of the past. To learn more about Ethereum’s diminished environmental impact, read our recent primer, Introduction to Ethereum and Sustainability.

Without a doubt, NFTs have already made their mark in pop-culture and are gaining significant traction as a business tool, with many obvious benefits and clear potential. While they have some challenges to overcome, they have emerged as a cutting-edge way for businesses to innovate and engage with their audiences.

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**About the EEA**

The Enterprise Ethereum Alliance (EEA) enables organizations to adopt and use Ethereum technology in their daily business operations. The EEA empowers the Ethereum ecosystem to develop new business opportunities, drive industry adoption, and learn and collaborate.

To learn more about joining the EEA, reach out to james.harsh@entethalliance.org or visit https://entethalliance.org/become-a-member/.

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