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BLOG

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The Enduring Value of NFTs on Algorand: A Critical Role in the Future of Finance

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If you've been following blockchain, crypto, art, creators, collectables, gaming, music, mainstream media, or even Saturday Night Live, you've probably heard about Non Fungible Tokens (NFTs) recently. From Beeple's commissioned artwork selling for $69M, to multiple CryptoPunks selling for $1M+, and NBA TopShot churning out a high volume of valuable collectibles, NFTs have generated well over $100M in sales in the past month alone. These are high value and exciting, but NFTs aren't just collectibles. They can represent ownership of anything that is unique, including, but not limited to, real estate, event tickets, even intellectual property rights. For example, SIAE, the Italian major copyright collecting agency founded in 1882, created more than 4 million NFTs on Algorand representing the rights of the more than 95,000 SIAE members authors.

As the NFT market moves past exciting, one-off, headlines, creators must understand the critical success factors to a sustainable and enduring future.

- Predictable and reasonable cost drivers

- Large scale participation and price discovery events to drive revenue

- Having long term confidence in the digital scarcity they have created

All of these success factors are impacted heavily by the choice of underlying blockchain technology and the ecosystem around it. Without high transaction throughput, immediate finality, composability of layer-1 primitives and smart contracts, and no forking, the underlying blockchain will negatively impact the ability to create and maintain enduring NFT-based businesses.

Algorand strongly believes in the long term success of NFTs and the creators and issuers behind them. Our foundational technology is purpose built for the future of finance; optimized for new asset types like NFTs, new transactional needs, fast, secure, and cost effective. Beyond foundational technology, Algorand and ecosystem funds like aNFT.Fund are focused on building out the ecosystem necessary to drive NFT markets for the long term. From a wide variety of stablecoins on chain to ease transacting, tax and compliance solutions, wallets and custodians, and exchanges and marketplaces available for use, Algorand is the best place to create and launch NFT opportunities.

Let's take a deeper look at what NFTs are, why they're important, how the choice of blockchain technology impacts long term success, and why Algorand is a perfect fit for those looking to create long term businesses and platforms around NFTs.

NFTs create provable and inherently authenticated digital ownership

NFTs are an on-chain representation of the ownership of value. The value itself can be represented in the NFT (e.g. embedded data), external to the NFT like digital-native items (e.g. in game items), or off chain entirely (e.g. real estate or IP rights). Easy analogies to the traditional world are the title to your house or a ticket to a concert. The title is not the actual house, but the record of ownership for the house and the ticket is not the actual seat at the concert, but rather the record of ownership for that seat at that particular concert. An NFT, or on-chain ownership record, is represented by a token therefore takes on highly valuable characteristics such as

- Programmability. For example, the NFT could programmatically not be allowed to be transferred without satisfying a royalty payment
- Divisibility. For example, NFT ownership can easily be fractionalized to increase addressable market or to raise additional funds

- Transferability. For example, an NFT can be transferred from account to account without onerous paperwork requirements.

- Provability. For example, the provenance of any NFT can be immediately known simply by querying the blockchain for its ownership history

- Authenticity. For example, there can be no fraud or duplication of the ownership record as it is cryptographically unique and secure

NFTs are a hot market that will endure

NFTs have definitely struck a chord in the creator community. They represent an opportunity to take greater ownership of their creations and the revenue generated from those creations in a long term and digitally secure way. They also represent a way for rights holders to create deep and incredibly low friction markets for those rights. Finally, they allow for low cost, high security, widely accessible participation in those markets by anyone who might be interested. These benefits create a powerful full spectrum market which results in an incredible opportunity for a new kind of wealth creation and participation. Most importantly, while there is certainly a high degree of attention and hype around NFTs, they are not a flash in the pan or a one hit wonder. NFTs and the new opportunities they create are here to stay as an enduring market and business opportunity.

Cost and ease of NFT creation and management impact business models

Transaction costs have a direct impact on NFT margins and NFT sale prices. Even more importantly, they can also make whole categories of NFTs infeasible due to transaction costs being higher than the NFT's value. This transaction cost issue is exacerbated in the NFT space because each NFT is often created on its own, meaning the transaction cost cannot be amortized over a large set of created items. It is also important to note that transaction costs are not just associated with the creation, but in any transfer of the NFT which will reduce the price that participants are willing to pay.

Simplicity of NFT creation and management are often overlooked as an implementation detail. However, they impact both likelihood of success and cost of operations. It is important to understand the simplicity of the smart contracts, or layer-1 primitives that are needed, because it allows developers to focus on higher business value items than the simple creation of an NFT.

Core blockchain functionality impacts market depth, price discovery, and liquidity discounts

A primary goal of NFT creators is to create the market depth needed to give the highest likelihood of reaching the optimal price. Blockchain transaction throughput and transaction time to finality must be core considerations when thinking about possible market depth and optimal price discovery. Without high transaction throughput, on-chain large-scale price discovery events like auctions become impossible. Even small targeted events that require high speed participation aren't possible. That doesn't mean auctions don't occur on other chains, but note the congestion which limits the number of people that can participate, the cost per bid which limits the engagement of those who actually do participate, and which parts of the auction actually end up on chain. These are auctions, but not large-scale price discovery events and often have limitations that stretch the definition of auctions. In effect, you are artificially limiting the market depth for your NFT, or compromising trust, simply by choosing the wrong blockchain.

Secondly, finality speaks directly to the ownership and transfer of ownership of NFTs. Without immediate finality, uncertainty is injected into the process - has the transfer actually occurred? who owns the NFT *right now*? All risks and uncertainties affect the way your NFT will be viewed and priced by your market. As an aside, slow finality also impacts the ability to hold large scale price discovery events due to usability issues.

Two other considerations should be likelihood of forking and decentralization. While these may seem like technological considerations they actually directly impact NFT price discovery. If the blockchain that holds the NFT forks, it would create a mirror chain where all existing assets become duplicated. What is digitally unique about duplication? This isn't a theoretical issue and we have seen ETH fork to give us ETH Classic. While forking is an interesting curiosity when applied to transactional currencies, this is a fundamental problem when applied to NFTs. Who owns the true NFT if there are suddenly two of them? The level of decentralization drives to the core of long term ownership and the buy and hold mentality that is often associated with NFTs. Without decentralization by design, you run the risk of the blockchain not enduring over time or of expected behavior in the future - and if the future of the blockchain is uncertain, you can be certain that it will be priced into your NFT.

Ease of transacting is the final input to market friction. The ability to atomically transfer is a requirement for NFTs and marketplaces in general and must be secure, fast, cheap, and available to all. Therefore, the blockchain protocol itself, not a smart contract, should

guarantee that neither the creator nor the buyer can be left in a state where they have given up their half of the deal and not received either payment or the NFT.

Algorand is the right blockchain for NFT creation, management and participation

Algorand is the premiere platform to create, launch, and manage your NFTs. The cost of NFT creation on Algorand is roughly ten cents, as opposed to other blockchains where prices can be equivalent to $50-$800 plus another $150 to transfer it. This means Algorand makes high volume NFT creation actually feasible, allows markets for value priced NFTs to exist, and improves margins on all NFTs. In addition, creation can be as simple as sending a single transaction to the network, thanks to our layer 1 primitives, but can also support as much customization as desired for your bespoke or artisan NFT needs. The cost benefits do not end with creation as transferring NFTs on Algorand is as cheap as a simple pay transaction - roughly a tenth of a penny.

Our core technology, with over 1,000 TPS and under 4.5s finality, provides the opportunity to conduct large scale price discovery events; Algorand has on-chain proof points of auctions that have included thousands of users and raised 60+ million dollars.

Most importantly, Algorand believes in the importance of the NFT market. That means we will aggressively and persistently discover the nuances that make all the difference in optimizing the experience, cost, and functionality for our community of creators and issuers. Come join the Algorand NFT community along with SIAE, Opulous, Dahai Art, Uncopied, ArtSquare, Italian Wonders, Dedit and others, and experience the benefits for yourself and be part of the future of finance.

For Developers

Check out this tutorial on our developer site for more information and join our community on our forums or our discord channel.

WATCH THE WEBINAR: HOW TO BUILD BLOCKCHAIN APPLICATIONS ON ALGORAND →

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○ Get involved with the Algorand community

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