# NFT Artwork Trading Market Trends Analysis

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**Abstract:** Blockchain tech led to the NFT art market, but it faced early issues like poor regulation and transaction quality. To thrive, it needs a more stable environment. The study found a strong link between NFT art prices and liquidity, suggesting potential value growth in the secondary market. Users prefer NFTs creating art with trendy themes, and celebrity collaborations boost NFT promotion. In conclusion, the study suggests marketing steps: clarify platform position, improve pricing, engage celebrities, and implement rewards to boost NFT art market popularity and user engagement.

Keywords: NFT, NFT Art Market, NFT Art Marketing

## 1. Introduction

## 1.1 Research Background

Firstly, blockchain technology's evolution, starting with Bitcoin and Ethereum, paved the way for NFTs. Bitcoin initiated this technological shift, and Ethereum introduced NFTs.

Secondly, NFT art sales have surged with some reaching high prices, but quality varies. The NFT art market has seen remarkable sales but struggles with inconsistent product quality. Rushed creations can lead to technical issues, as seen with Beeple's and Uniswap's NFTs. The influx of creators has led to quality instability, as seen with Tanuki National Comic IP's NFTs, which OpenSea removed, raising concerns about product quality and transparency.

Thirdly, the regulation is needed in the NFT art trading market to prevent speculative hype and ensure fairness, similar to stock market regulations being considered by some countries.

## 1.2 Research Content

We will analyze the NFT art trading market, looking at sellers, buyers, NFT artworks, and trading platforms. Sellers include creators and resellers, while buyers purchase NFT artworks based on perceived value. NFT artworks exist online, so platforms like OpenSea and NiftyGateway play a crucial role in facilitating transactions.

We'll use SPSS software to examine data from large NFT art trading platforms, studying factors like pricing's impact on transactions, commodity liquidity, distribution of NFT artwork types, and user characteristics.

Additionally, we'll use the SPIS model to address marketing challenges in the NFT art trading market. Based on our analysis, we'll create tailored marketing recommendations to promote market growth and cater to diverse audiences.

## 1.3 Innovations

Scholarly research on NFT artwork has typically concentrated on NFT-specific aspects like pricing and regulations. In contrast, this paper adopts economic and marketing theories, such as the SIPS user consumption behavior model, to analyze the NFT art market and its marketing strategies. The article delves into the NFT art trading market, exploring potential future trends and marketing strategies from the viewpoints of suppliers, platforms, and demand.

#### 2. Literature Review

#### 2.1 Traditional Art Trading Markets

The art market has undergone significant changes in recent decades, as it has converged with finance and commerce, resulting in a global art market boom. Academics have increasingly focused their attention on the art market, examining issues such as capital flows and market efficiency.

#### 2.1.1 Characteristics of Traditional Works of Art

Traditional artworks are unique, and their value depends on the individual's recognition of the artwork and spiritual enjoyment<sup>[1]</sup>. The market is influenced by various factors such as cultural policies, social popularities and values, forming an art market with different regions and characteristics<sup>[2]</sup>.

#### 2.1.2 Investment Motivation for Traditional Artworks

Investors in traditional artworks mainly come from high-net-worth individuals and investment institutions, with diversified investment motives, including asset allocation, spiritual enjoyment, family inheritance and social construction<sup>[3]</sup>. Scholars have found that the average return on investment in calligraphy, painting, and art is roughly between the average returns on low-risk bonds and ordinary stocks, giving investors the possibility of combining calligraphy, painting, and art with general financial instruments into an investment portfolio<sup>[4]</sup>. Art investment has certain circle attributes, but also can bring spiritual satisfaction <sup>[5]</sup>.

## 2.1.3 Internet Development of Traditional Artworks

With the development of the Internet, the art market is facing some problems, such as difficult to distinguish authenticity and information asymmetry<sup>[6]</sup>. The Internet provides a convenient way to provide information about the art market, but most online art trading sites struggle to survive due to low visibility and fierce market competition<sup>[7]</sup>. Digital artworks are also emerging, but their value building is still similar to traditional artworks and requires the participation of many parties.

#### 2.2 NFT Art Trading Market

## 2.2.1 Definition and Characteristics of NFT Artwork

There is no clear definition to define crypto art, but the basic consensus is that it is related to blockchain technology, with traditional or digital artworks minted on the blockchain primarily through NFTs. NFTs are indivisible, unique, and highly transparent. Unlike other electronic currencies, each NFT has a unique digital certificate that cannot be replaced or divided, making transactions traceable and immediate<sup>[8]</sup>.

#### 2.2.2 Advantages of NFT Artwork

NFT artwork has several advantages over traditional artwork. First, it improves the efficiency of art trading, removes the middleman, allows creators to get paid back instantly, and receives revenue distribution through smart contracts<sup>[9]</sup>. Secondly, NFT can better confirm rights, using blockchain technology to permanently bind digital assets to creators, changing the pattern of traditional copyright certification bodies. In addition, it encourages new creative mediums and broader artistic participation.

#### 2.2.3 Deficiencies of NFT Artwork

The NFT art market has issues like infrastructure vulnerabilities, counterfeiting risks, data interpretation difficulties, and opaque pricing mechanisms. Regulatory challenges involve defining regulatory bodies, strengthening financial oversight, enacting relevant laws, advancing regulatory technologies, and improving user knowledge and security awareness<sup>[10]</sup>.

## 2.2.4 Current Situation of the NFT Trading Market

Between 2018 and 2020, the NFT market experienced an eightfold increase in size, accompanied by a 201% surge in the number of IP addresses, as well as notable increases of 144% and 113% in the number of buyers and sellers, respectively<sup>[7]</sup>. This shows that NFT exchange market is booming. There are distinctions in how NFTs are used in China compared to abroad. Internationally, NFTs are applied in art, gaming, and various sectors, involving celebrities, companies, and organizations like the Olympic Committee. In contrast, China's NFT market is newer and primarily involves individual creators and large enterprises.

The pricing of NFTs is usually determined by the creator or seller, The article "Rich Land: Pricing of Non Homogeneous Tokens" takes the largest blockchain virtual world as an example to study its pricing and finds that it has two characteristics: low efficiency and steadily rising prices<sup>[11]</sup>, but studies have found that the price model of NFTs has a certain synergy with cryptocurrencies<sup>[12]</sup>.

In the Chinese and foreign NFT markets, there are some well-known platforms, such as OpenSea, SuperRare, Nifty Gateway, etc. Some NFT trading platforms have also appeared in China, such as "Phantom Core" and "Premium Copyright NFT Trading Platform"<sup>[13]</sup>. These platforms usually require certain "miner fees" and handling fees.

The trading methods of NFTs include fixed prices, auctions, and packaged sales. The user groups of different platforms also vary, some are aimed at users of multiple types of NFTs, and some focus on specific areas of NFTs.

In general, both Chinese and foreign NFT markets have applications in the field of art and intellectual property, and NFT has attracted attention as an effective carrier of intellectual property. From the buyer's perspective, they are more inclined to transact with people with similar interests<sup>[14]</sup>. Some studies have also found that rising returns on Bitcoin and Ether will increase interest in NFTs<sup>[15]</sup>.

## 3. Research Methods

#### 3.1 Research Protocol Design

This article focuses on analyzing the NFT art trading market and providing marketing recommendations. We will start by examining the market's key components, including participants (buyers and sellers), traded items (commodities), and the trading platform.

After collecting platform data, we will assess the current state of the NFT art trading market from various angles, such as factors influencing trading decisions, price fluctuations, market shares, and user trends.

Then we will use the SIPS model for qualitative analysis and derive marketing recommendations based on the findings.

#### 3.2 Data Sources

Our research relies on data from two websites: OKLink and Nonfungible. OKLink provides blockchain data, with a specific focus on NFT art data. Nonfungible tracks Ethereum blockchain transactions and offers tools for monitoring the NFT market.

We concentrate our analysis on the art and collectibles category, which accounts for over 80% of the NFT market. This distinction between collectibles and art in the NFT realm has been noted by Michael Bouhanna from Sotheby's.

Our data covers the period from January 1, 2021, to December 31, 2021, with daily tracking to capture market trends. Notably, we observed a surge in active users (Fig 1) and NFT art prices (Fig 2) on trading platforms during the third quarter of 2021. However, in the fourth quarter, major platforms experienced a decline in active users (Fig 1).

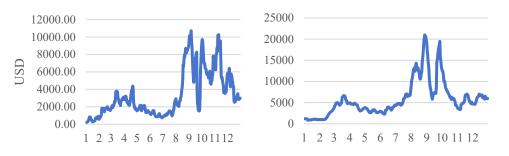


Figure 1 Number of active users of the platform in 2021 Figure 2 Average NFT artwork price in 2021

#### 3.3 Research Methods

We use a case study to analyze the NFT art trading market, focusing on first-time buyers and sellers. Participants create an account, acquire cryptocurrency, and use a "Non-custodial" Wallet like "Metamask." Then, they choose a trading platform.

Our main goal is to study the NFT art trading market and propose marketing recommendations. We explore the market components through a transaction process example, including participants (buyers and sellers), assets (NFT artworks), and the trading platform.

We also analyze the market from supply and demand angles using SPSS software, examining how NFT artwork prices impact buyers and sellers. We compare primary and secondary market sales and values to identify trends. We conduct a case study on Niftygateway to understand user demographics and motivations.

Lastly, we use the SIPS model for qualitative analysis to create marketing recommendations, understanding user behavior and improving marketing strategies.

#### 4. NFT Art Trading Market and Marketing Strategy

#### 4.1 Preliminary Analysis of the Current Situation of the NFT Art Trading Market

#### 4.1.1 Factors Influencing the Willingness to Trade

The NFT art trading market involves a variety of participants, including domestic and international artists, as well as government agencies. While the reasons for which different individuals are involved in trading vary, there are some factors that are universally applicable. Previous studies have shown that there is a certain correlation between the price of cryptocurrencies and the price and attention of NFT artworks. Therefore, we can speculate that buyers and sellers involved in NFT art transactions are price sensitive to NFT artworks, including average price and liquidity.

#### 4.1.2 Different Market Share of Products

NFT artworks, like traditional art, gain value through multiple trades in the secondary market. However, in the primary market, creators have control over their selection, which affects future performance. If creators flood the primary market with the same artwork in large quantities, scarcity decreases, making it harder to see significant value growth in the secondary market. With the increasing popularity of NFT art and more artists participating, it's likely that the primary market mainly includes low-priced NFTs from unknown artists and a few limited-edition NFTs from well-known artists.

#### 4.1.3 User Positioning of the Platform

Nifty Gateway is an NFT trading platform aiming to make digital collectibles accessible. Users consist of art enthusiasts and artists/creators. They seek NFTs for investment or personal enjoyment and value high-quality offerings. Their main goal is to buy limited-edition art with collectible value, using the platform for trading. Nifty Gateway's focus on curating artworks enhances the user experience, encouraging repeat engagement.

#### 4.2 Empirical Analysis of NFT Art Trading Market

## 4.2.1 Correlation between the Average Price of NFT Artworks and its Liquidity

This article speculates that there is a correlation between the average price of NFT artworks and the liquidity of NFT artworks. Liquidity refers to the frequency with which NFT artworks are re-traded after the first sale, and we express liquidity as a proportion of the total supply of NFT transactions in the secondary market for art categories. According to the data in Table 1, it can be seen that there is a significant positive correlation between the average price of NFT artworks and liquidity, that is, the higher the average price of NFT artworks, the stronger their liquidity in the trading market. This is consistent with previous speculations.

Table 1: Correlation between the average price of NFT artwork and its liquidity

index	Average	liquidity
Average	1	
liquidity	0.611**	1
**. At level 0.01 (double-tailed), the correlation is significant.		

#### 4.2.2 Proportion of NFT Artwork Primary and Secondary Markets

The primary and secondary NFT art markets differ significantly. Most NFT art sales, approximately 60% of the total, occur in the primary market, but they contribute only 25% to the overall transaction value. This indicates that NFT artworks often appreciate in value after moving to the secondary market. This trend is consistent with the idea that the primary market mainly features lower-priced NFTs from less-known artists and a few high-value NFTs from famous artists. New and unique users in the market may prefer to start with NFTs from lesser-known artists rather than high-priced ones.

#### 4.2.3 SIPS Model Analyzes NFT Artwork

Traditional and NFT artworks have unique characteristics, particularly NFTs, which are one-of-akind and cannot be copied. This leads to diverse and personalized user needs. In the digital realm of NFT artworks on social media, analyzing user spending behavior requires an appropriate model, and the SIPS model fits this purpose.

#### The SIPS model has four phases:

Empathy: Users emotionally connect with NFT artworks, influenced by evolving art definitions and trendy appeal among younger generations. NFT artworks blend traditional and trendy elements, appealing to diverse aesthetics and fostering empathy among a wide audience.

Confirm (Identify): After empathizing with NFT artworks, users validate their connection through online research, often using social media platforms like Instagram, Twitter, Weibo, and WeChat to find information and content matching their interests.

Participate: Users, having confirmed their empathy and the value of NFT artworks, actively engage with the platform and other users, leading to consumer behavior. These interactions often occur in user communities with similar interests, enhancing loyalty and repeat purchases.

Share & Spread: After consumption, some users share positive product experiences on social media, sparking interactions with fellow users. Celebrity involvement amplifies NFT adoption, even in emerging markets like China.

## 4.3 Analysis of NFT Art Trading Marketing Strategy

## 4.3.1 Clarify the Positioning of the Platform and Optimize the Price Mechanism

Firstly, the importance of platform positioning in user choice is highlighted through the comparison of Opensea and Nifty Gateway. A well-defined platform positioning can attract specific user groups, and emerging platforms can specialize in niche segments, like ArtBlock in generative art.

Secondly, pricing mechanisms, such as those offered by Opensea, include fixed prices, Dutch auctions, and English auctions to accommodate different user preferences. Creators and distributors should consider product volume when setting prices to balance scarcity and visibility.

In summary, a platform's positioning and pricing mechanism significantly impact the NFT art market's development and user experience. Clear positioning and flexible pricing options can attract more users and creators, promoting market activity and diversity.

#### 4.3.2 Set up A Reward Mechanism to Stimulate User Sharing

Users actively participate in online social and interest communities, with information spreading quickly via social media. Marketing accounts often encourage sharing through rewards like NFTs or virtual currency.Lottery participation, based on retweets or tagging friends, is another common strategy to boost user engagement. Topics, particularly those related to NFT artwork investment value, stimulate user discussions. Combining incentives and engaging discussions effectively encourages users to share NFT artworks, expanding their reach.

#### 5. Summary

This article explores the NFT art market and consumer behavior. It begins by discussing the early challenges and regulatory impact on the NFT market. Then, it introduces the SIPS model, which analyzes user behavior in four stages: resonance, confirmation, participation, and sharing. The article highlights NFT art characteristics, like non-exchangeability and price correlation with cryptocurrencies. It concludes with marketing recommendations, such as clarifying platform positioning, optimizing pricing, partnering with celebrities, and incentivizing users to share NFTs. These suggestions aim to guide and enhance the NFT art market.

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