Review of: "Characterizing the Initial and Subsequent NFT Sales Market Dynamics: Perspectives from Boom and Slump Periods"

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Potential competing interests: No potential competing interests to declare.

Paper Summary:

1. This paper critically examines the dynamics and characteristics of the Non-Fungible Token (NFT) markets, focusing specifically on the initial and subsequent sales during both boom and slump periods.
2. A prominent finding from the researchers is that NFT prices generally fetch higher rates in subsequent sales as compared to initial sales, and this trend persists irrespective of the market condition.
3. A rapid pace of the NFT market movement was reported, particularly evident in the initial sales market where most transactions occur within 24 hours of listing.
4. The researchers observed a consistent power law distribution in revenue among sellers and buyers across all market types and periods, barring collections during the boom period.
5. Several strong predictors of resale returns were identified, including factors like the number of days a collection was on sale, the previous and median price of a collection, the profit-to-loss ratio within a collection, and the creator's royalty rate.

Implications of the Results:

The outcomes of this study offer insightful implications for a range of NFT market participants, encompassing investors, policymakers, and marketplaces. First, investors can utilize the findings pertaining to the factors predicting resale returns to devise effective investment strategies. Second, these findings could assist policymakers in formulating regulations and policies aimed at enhancing the fairness of the NFT markets, such as the design of taxation systems and educational programs for low-revenue sellers and buyers. Third, the results can guide marketplaces in tailoring their offerings to align with prevailing market trends and behaviours. Finally, this study also offers a useful springboard for researchers undertaking further explorations of the NFT market, potentially expanding the existing dataset and probing new lines of inquiry.

Concerns/Suggestions:

Unexplored Psychological Factors:

Despite the detailed analysis of initial and subsequent sales, market speed, pricing dynamics, and influential factors affecting resale returns, the study does not thoroughly explore the role and impact of investor sentiment and investor attention. Both factors, which respectively denote the general attitude of investors towards a market or asset and the level of interest or focus investors place on a certain market or asset, are significant contributors to digital finance markets. Hence, the existing analysis or future research might consider the exploration of these psychological elements and their ramifications on the NFT market.

Validity of the LDA Approach:

The Linear Discriminant Analysis (LDA) technique was utilized in the study to predict resale return types in the NFT market. The authors employed LDA as a predictive model to ascertain which variables were statistically significant for determining the type of resale return. While the LDA approach appears to be suitable for this context, its effectiveness relies on certain assumptions, such as the normal distribution of independent variables and equal variances within each group. The manuscript, in its current form, does not clarify whether these assumptions hold true in this specific context. Furthermore, LDA is a linear method, and it might not capture intricate non-linear relationships between features and classes. Therefore, for a comprehensive evaluation of the study's robustness and reliability, more details on data distribution and a comparative performance analysis of LDA with other potential methods would be beneficial.

Lack of Contextual Information:

The study predominantly focuses on a quantitative analysis, which might not capture essential contextual information about the market such as regulatory changes, technological advancements, or the socio-economic backdrop that could potentially impact the NFT market. To attain a holistic understanding of the market, the authors should consider integrating more contextual and qualitative analyses.

The Covid-19 Shock:

The paper does not discuss the possible impact of the Covid-19 pandemic on the NFT market, an area that could provide interesting insights. For example, the pandemic may have prompted a shift towards digital art and collectibles due to lockdowns and restrictions on physical events.

In sum, this study offers substantial contributions to the understanding of the dynamics and characteristics of the NFT markets, particularly in relation to initial and subsequent sales during distinct market phases. It provides valuable insights for a broad range of market participants and could pave the way for future research. Given the current manuscript, the paper could be further enhanced by addressing several key areas of concern. First, a deeper exploration of psychological factors such as investor sentiment and attention, which are important drivers in digital finance markets. Second, additional validation and context to the LDA approach used. Finally, more qualitative and contextual information to provide a more comprehensive analysis of the market, including the potential impact of significant events like the Covid-19 pandemic.

If these areas are addressed, the paper has the potential to make a more robust and impactful contribution to our understanding of the NFT markets.