FROM VIEWS TO VALUE: ANALYZING THE IMPACT OF ONLINE ENGAGEMENT ON NON-FUNGIBLE TOKENS MARKET VALUATIONS IN THE SANDBOX METAVERSE

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Abstract

This study investigates the correlation between the number of views and non-fungible tokens (NFTs) valuation, explicitly focusing on Sandbox land assets. This study uses data from the OpenSea marketplace to examine various valuation metrics, including current price, offer price, and floor price. It develops a digital investment valuation and analysis (DIVA) model to predict NFT valuations. This study employs a quantitative research design, incorporating descriptive statistics, correlation analysis, and multiple regression analysis to analyze the data. The findings reveal significant positive correlations between views, offers, and current prices, highlighting the critical role of attention in NFT valuation (Wang et al., 2021). The validated DIVA model demonstrates strong predictive power, explaining 75 percent of the variance in current prices. These insights are crucial for investors, creators, and platform operators, emphasizing the importance of visibility and engagement in maximizing NFT values (Sun, 2024). This study aims to contribute to the literature on digital asset valuation and offers insights that may inform investment strategies and market efficiency in the evolving NFT market. Future research should consider more extensive and diverse samples and explore additional variables to refine the valuation model.

Keywords: Artificial Intelligence, Non-Fungible Tokens Valuation, Metaverse, Intangible Assets, Managerial Accounting

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1. INTRODUCTION

This study investigates the correlation between the number of views and non-fungible tokens (NFTs) valuation by explicitly focusing on their impact on offer prices, selling prices, and overall valuation. NFTs are unique digital assets verified using blockchain technology and sold on various auction sites, with OpenSea being one of the largest platforms. OpenSea tracks the views of each NFT and allows owners to list their assets for sale over a specified period (White et al., 2022). Understanding the role of attention, as measured by views, in evaluating NFTs is critical for sellers and buyers in the burgeoning market.

The subject of this study is Sandbox land assets, a popular choice because of their association with celebrities such as Snoop Dogg and

DJ Steve Aoki, who own highly valued land in this virtual world (Boellstorff, 2022). In the Sandbox metaverse, plots of land near or adjacent to celebrity-owned properties often command significantly higher prices than those further away. This phenomenon suggests that attention and proximity to well-known figures influence the value of virtual real estate. The metaverse, a collective virtual shared space created by the convergence of enhanced physical reality and physically persistent virtual space, has become a significant focus of digital innovation and investment, further highlighting the importance of understanding NFT valuations within this context (Song et al., 2023).

The primary objective of this research is to determine whether the number of views and traffic to a specific NFT correlates with its offer price, selling price, and overall valuation (Kapoor et al., 2022). To this end, the study will analyze the relationship between views and valuation metrics of Sandbox land assets. Additionally, a valuation model will be developed to test if a significant correlation exists between views, current price, offer price, and floor price. This model incorporates various quantitative methods to ensure robust analysis, providing insights into the dynamics of NFT pricing (Nakavachara & Saengchote, 2022).

Understanding the factors that drive the valuation of NFTs, particularly virtual land, is essential for several reasons. Virtual land is one of the most significant assets in the Metaverse and serves as the foundation for virtual buildings and other assets. Virtual land presents opportunities for NFT owners to generate income by leasing or renting (Hutson et al., 2023). By examining the impact of views on NFT valuation, this study provides insights that could help investors, creators, and platform operators optimize their strategies for buying, selling, and managing virtual land assets.

These findings can contribute to developing more sophisticated valuation tools and platforms that enhance market efficiency and transparency. The primary research objective of this study is to determine whether the number of views and traffic to a specific NFT correlates with its offer price, selling price, and overall valuation. This study focuses on Sandbox land assets, analyzing the relationship between views and various valuation metrics, such as the current price, offer price, and floor price (Elias & AL-Wattar, 2022). Additionally, the research aims to develop a comprehensive valuation model incorporating these variables to test whether there is a significant correlation and provide insights into NFT pricing dynamics (Zhang, 2023).

Digital valuation, particularly in the context of assets like NFTs, is similar to classical corporate finance valuation. However, critical differences arise due to the nature of the assets being valued. Where the junctures of paths do occur between digital and traditional methods, the fundamental lessons emanate from supply and demand. Valuation models involving discounted cash flow (DCF) and comparable company analysis (CCA), among others, rest on future cash flows, growth potential, and market conditions in corporate finance. Digital asset markets, too, are, in turn, driven by both attention scarcity and utility, whereby the perceived value is much influenced depending on the number of views or even set of engagements.

However, the contrasts between these two approaches cannot be more striking. On the contrary, classical corporate finance performs valuations for assets that are tangibles in nature or real estate and machinery relating to financial securities, such as stocks and bonds, which have considerable historical data in their accounts with measurable cash flows having regulated markets. The normal investor depends upon financial statements, color risk analysis, and performance metrics that apply predictable business operations.

In contrast, digital assets such as NFTs are intangible and unique, largely speculative, whose price depends more on factors of attention, social trends, and visibility rather than cash flows. For example, the valuation of NFT might depend on the number of views, social media attention, and perceived digital good rarity. These assets do not have the inherent earning potential to reckon with, such as dividends and interest income payments, and, therefore, cannot be supported by traditional valuation methods.

Moreover, the market dynamics of digital assets are more volatile. The trend and user sentiment spur rapid price changes. In the case of classical assets, regulatory oversight provides transparency and stability. Digital assets operate in less regulated contexts, bringing opportunities for rapid growth and risks of manipulation or speculation. While valuations of digital and classical types involve the same fundamental economic principles, their nature is intrinsically different, so an adapted approach must be adopted.

Understanding the driving factors in NFT valuation, which is, in essence, a form of virtual land, may prove material for several reasons. Virtual land has become among the highest-valued assets within the metaverse, as such, virtual buildings and commerce, among other digital assets, are to be built on it (Sun, 2024). Consequently, virtual land is highly influential in the economic activities within these virtual environments, especially regarding the broader economy conducted on virtual grounds. On one end, insights into how online engagement-viewership and traffic specifically relate to changes in the prices of NFTs are precious to investors (Bejaoui et al., 2023). Understanding what drives the value of NFTs better equips investors with making better decisions to optimize investment strategies and improve their returns in that respect.

Also, this research contributes to enhancing market efficiency by studying the connection between views and NFT valuation. More advanced valuation tools and platforms would evolve, increasing transparency and market fairness. The advanced models are also likely to drive more accurate pricing, which will reduce volatility and impart more stability to the environment of the NFT market for its participants. Discussion Cao et al. (2023) present that virtual land provides enormous opportunities for revenue generation. Similarly, NFT owners can equally lease or rent their digital properties for revenue (Gričar et al., 2024). Thus, understanding the valuation dynamics allows them to maximize such opportunities and better manage their assets.

Considering how much the metaverse today is regarded as a primary focus of both innovation and investment in the digital arena, the insights provided

through this study are aptly timed and relevant (He et al., 2022). The results will form part of an emergent body of knowledge dealing with the valuation and management of digital assets, contributing to a greater discussion regarding the economic opportunities created by both NFTs and the metaverse. Given that, such research would benefit not only investors and participants of this market but also future research in this dynamically developing field of the digital environment.

This research provides valuable insights for stakeholders in the NFT market, including investors, creators, and platform operators. By understanding the factors that influence NFT valuation, market participants can better navigate this rapidly evolving landscape and capitalize on emerging opportunities. This study also aims to contribute to the academic literature on digital asset valuation, offering practical and theoretical implications for future research.

The paper is structured as follows. Section 2 discusses prior research on the valuation of NFTs, attention in digital markets, and the economic importance of virtual real estate in the metaverse. Section 3 elaborates on how data will be collected from the OpenSea market, explains the variables used in the analysis, and then describes the quantitative methodologies used. These include descriptive statistics and regression analysis. Section 4 reflects findings from the analysis, including validating the digital investment valuation and analysis (DIVA) model and its effectiveness in NFT price predictions. Section 5 interprets these findings for their implications to the market participants, and Section 6 summarizes the research undertaken and its limitations, with possible avenues of future study.

2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

The valuation of NFTs has garnered significant attention from both academic researchers and industry practitioners. NFTs are unique digital assets authenticated using blockchain technology, making them distinct and non-interchangeable. This uniqueness drives their value alongside other factors such as scarcity, provenance, and utility. However, the role of attention, precisely measured by views, in determining NFT value remains underexplored. This literature review examines the existing research on NFT valuation, the importance of attention in digital markets, and the context of virtual real estate in the metaverse.

2.1. Attention and digital markets

The concept of attention as a valuable commodity in digital markets has been well established. In online content, attention is often measured using views, clicks, and engagement metrics. The concept of attention economy is where the value of digital content is directly linked to the amount of attention it receives. This concept is particularly relevant for NFTs, where visibility and engagement can significantly impact perceived value and market performance.

Previous research by Meraz (2009) on social media platforms shows that the number of views and user interactions can drive digital assets' popularity and subsequent value. This relationship echoes in the NFT market, where high-visibility NFTs attract higher bids and prices. The work by Meraz (2009) on user-generated content platforms further supports the notion that attention metrics are critical value indicators in digital markets.

2.2. Virtual real estate in the metaverse

The metaverse, a collective virtual shared space created by converging virtually enhanced physical reality and physically persistent virtual space, represents a significant frontier for NFTs. Virtual real estate within platforms such as Sandbox and Decentraland has emerged as a prominent category of NFTs driven by their potential for utility and income generation.

Nieradka (2019) discusses the economic potential of virtual real estate, highlighting how these assets can generate income through leasing, advertising, and virtual commerce. The value of virtual land is often influenced by its location within the metaverse area, with plots near popular or celebrity-owned areas commanding higher prices. Zhang (2023) explores this phenomenon, noting that proximity to high-traffic areas or well-known figures could significantly enhance the value of virtual real estate.

2.3. The role of celebrity endorsements

Celebrity endorsements and ownership can significantly affect NFTs' value, particularly in virtual real estate. Kamel (2020) indicates that celebrity endorsements can enhance the perceived value and desirability of products. In the case of Sandbox land assets, the association with celebrities, such as Snoop Dogg and DJ Steve Aoki, creates a premium for adjacent plots, driven by the enhanced visibility and status conferred by proximity to these figures.

2.4. Non-fungible token valuation and pricing determinants

The fundamental aspects of NFT valuation are derived from traditional economic theories of supply and demand combined with the unique characteristics of blockchain technology. Ante (2022) posits that the scarcity and uniqueness of NFTs are the primary drivers of their value. This is supported by Dowling (2022), who highlights the role of provenance and historical ownership in enhancing the perceived value of NFTs. The study further notes that NFTs associated with well-known artists or creators often command higher prices because of their association with established reputations.

Another critical aspect of the NFT valuation is its utility. NFTs that provide access to exclusive content or grant ownership rights within virtual environments are often valued more highly. Chevet (2018) discusses how utility and digital scarcity create a unique value proposition for NFTs that distinguishes them from other digital assets.

The valuation of an NFT, especially in metaverse environments, would be based on a raft of different factors, including, but not limited to, scarcity, utility, and market demand. According to Kräussl and Tugnetti (2024), the prices of NFTs reflect a series of intrinsic and extrinsic factors.

Intrinsically, NFTs derive value from their uniqueness and rarity, although the perceived scarcity is often artificially induced by limited editions. The utility offered by the NFTs, be it access to exclusive content, participation rights in virtual spaces, or ownership rights, enhances their valuation even more. Coming to the extrinsic part, there is visibility in the marketplace and social endorsement. According to Horky et al. (2022), it has been reiterated that through social media engagement and attention, a hike in the market prices of NFTs can be seen, especially in the digital art market. The idea aligns with the "attention economy" hypothesis, which means attracting more attention appropriately quantified by view and interaction metrics and valued at higher prices.

This is further supported by Ante (2022), who purports that attention mechanisms and social dynamics drive the core of NFT pricing. He has shown, in the case of valuation for Ethereum (ETH) based NFTs, that some digital assets gain from market trends and increased exposure on social platforms. Ante also said that NFTs endorsed by celebrities or major brands are appreciated more since such exposure boosts their visibility. He suggests attention metrics are at least as crucial as traditional ones in setting the prices of NFTs.

2.5. The role of the metaverse in non-fungible token valuation

Where the NFT valuations are concerned, the metaverse has opened up entirely new dimensions, especially in virtual lands and assets that increasingly become part of respective digital ecosystems. As Osterrieder et al. (2024) note, the concept of the metaverse transformed NFT into virtual real estate and other digital assets where individuals and businesses can invest and trade virtual goods. Of course, no other NFTs exist for the metaverse-virtual land in the Sandbox or Decentraland. For example, their value remains intact because of digital scarcity and because they could be utilized within the metaverse. For instance, prime virtual land positions near properties held by celebrities tend to command a higher price because proximity to those easily recognizable names increases. Hence, visibility and market demand increase. That would be according to de Guzman (2022).

Accordingly, Zalan and Toufaily (2024) state that consumer value in the case of NFTs within the metaverse is financially and emotionally driven. According to them, financially speaking, NFTs are usually investment assets whose prices set off the marks against market demand, rarity, or celebrity endorsement. Similarly, a consumer derives NFT ownership as a status symbol, especially in virtual worlds where exclusivity and naming have an increasingly higher value attached to them. This is especially evident in the high-end fashion world, whereby NFTs, connected with virtual clothes and accessories, open up new opportunities for brand engagement and consumer perception (Cecchetto, 2023).

Additionally, Rane et al. (2023) discuss how marketing strategies within the metaverse further enhance the value of NFTs. Companies utilize NFTs to engage consumers with their brands through virtual experiences that pile up consumer interest and, subsequently, the perceived value that accrues to digital assets. This is bound to make the valuation models even more complicated, especially considering that more businesses seek to harness NFTs into their strategies relating to the metaverse.

2.6. Theoretical perspectives on non-fungible token valuation

While NFTs represent a new class of digital assets, their valuation can still be analyzed through the lens of classical economic theories. Dalai (2022) goes in-depth with NFTs about key concepts in classical economics, mainly supply and demand. NFTs would derive value, just like other forms of assets, from their scarcity and the utility they provide. On the other hand, unlike physical goods, NFTs rely hugely on social factors like visibility and network effects when determining demand.

Christodoulou et al. (2022) describe demand as an essential attribute in the valuation of NFTs, explaining how supply and demand dynamics play out in the digital token economy. Classically, demand is determined by the utility of goods and their scarcity, which applies to NFTs.

However, in the NFT space, demand is also a function of social validation and attention since, quite often, people do not just buy an NFT for its intrinsic value but for what may or will come with shelf life: its status and exclusivity. This is somewhat applicable to digital art and virtual real estate since, in the usual sense, the value of NFTs is pegged on their visibility and place in culture within the metaverse. Pricing models for NFTs, such as the DIVA model, attempt to bridge the gap between traditional economic factors and attention metrics, better predicting their prices. DIVA combines aspects of the flooring price, views, and offers, creating a better way of giving value to digital possessions or assets.

This model is supported by work by de Guzman (2022), who points out that NFT marketplace design and asset discoverability are essential to determining their value. The structure of the marketplace, with algorithms there to promote some NFTs, may have a significant impact on pricing. The critical result is that, while NFTs do resemble more conventional forms of assets, their valuations rely upon a very particular set of digital rationales: visibility, social validation, and market trends within the Metaverse. The theoretical frameworks supplied by classical economics remain relevant but must be moderated to account for the peculiar characteristics of NFTs in the attention economy of digital markets. Because the metaverse keeps evolving, there will be a growing need for new valuation models reflecting its full complexity.

2.7. Hypotheses and research gaps

While the existing literature provides a robust foundation for understanding NFT valuation and the importance of attention, more empirical research still needs to be linking views to NFT valuation. This study aims to address this gap by testing the hypothesis that the number of views significantly impacts NFTs' offer and selling prices. Additionally, developing and testing the DIVA model will contribute to the theoretical and practical understanding of NFT valuation.

H1: There is a significant positive correlation between the number of views and the valuation price of non-fungible tokens. Specifically, non-fungible tokens with higher views have higher offers and selling prices.

H2: The digital investment valuation and analysis value, which integrates floor price, current price, views, time, and offers, can effectively predict the current price of non-fungible token real estate properties.

These hypotheses are designed to test the relationship between attention, as measured by views, and the market value of NFTs and evaluate the efficacy of the DIVA valuation model in predicting NFT prices. The formation of *H1* is supported by literature emphasizing the "attention economy". According to Horky et al. (2022), in digital markets, the attention aspect is very well captured by a metric such as view directly influencing the value of digital goods. This concept is also supported by Zalan and Toufaily (2024), who determined that online content that receives more attention tends to receive greater popularity and market value. In the case of NFTs, there is evidence that visibility is a very determining factor throughout a bid.

H2 is grounded in research on multi-variable valuation models. Kräussl and Tugnetti (2024) show how crucial integrating multiple market signals is for understanding the value in NFTs-ownership history and social attention, which are critical in defining prices. The DIVA model here, therefore, extends the above platform by synthesizing the attention metrics along with the price data, a practice now common in corporate finance when trying to forecast the price of an asset based on several variables.

3. RESEARCH METHODOLOGY

3.1. Research design

This study employs a quantitative research design to investigate the correlation between the number of views and NFTs valuation, explicitly focusing on Sandbox land assets. This study analyzes the relationship between views and various valuation metrics, including the current price, offer price, and floor price. Additionally, the study develops and tests the DIVA model to predict the valuation of NFTs based on these metrics.

The DIVA model was designed to put several market signals to work, each with equal weighting: 1) floor price, 2) current price, 3) views, 4) time, and 5) offers. Each of these factors contributes uniquely to the overall value of an NFT, reflecting both market interest-measuring signals and tangible pricing metrics, such as floor price and offers. While we appreciate the content of this issue in light of the reviewer's comment that reliance shall not be placed solely on the views, attention alone may be superficial. Terms like the positive or negative engagement of viewers would offer deeper insights into the quality of attention, thus helping us distinguish between mere visibility and actual interest in the market. In the future, the DIVA model might also include sentiment analysis from social media and user feedback to make the model more accurate in its predictions of the value of NFTs and more in line with what type of attention they had received rather than the volume.

3.2. Alternative methods

Alternative research methods could have been used to explore NFT valuation, including qualitative analysis, such as interviews with NFT investors, creators, or other industry players, in order to get a feel for what drives the prices of NFTs. This way, there will be a better perception of subjective elements, like feeling and perception, which might not be perceived by quantitative means. Another option could be the sentiment analysis of social media platforms and forums where NFTs are discussed. This would bring in how public sentiment about NFTs affects their prices. Additionally, time-series analysis might be applied to track price fluctuations over some period to identify patterns or trends in the NFT market, therefore providing a changing picture of valuation.

3.3. Data collection

The primary data for this study were obtained from OpenSea, one of the largest NFT marketplaces. OpenSea provides comprehensive data on NFT transactions, including views, current price, offer price, floor price, and other relevant metrics (Jindal, 2024). The data collection focused on Sandbox land assets because of their popularity and association with high-profile celebrities (Nabilah et al., 2024).

3.4. Sampling method

A purposive sampling method was employed to select a representative sample of Sandbox land assets. The sample included a diverse range of land plots in location, proximity to celebrity-owned properties, and visibility. The sample size consisted of 40 Sandbox land assets, providing a robust dataset for analysis.

3.5. Data points collected

For each selected Sandbox land asset, the following data points were collected:

- *Location*. The coordinates of the land plot within the Sandbox metaverse.
- *Floor price* (ETH). The lowest price at which a similar land asset is listed.
- *Current price* ($). The price at which the land is currently listed or the most recent sale price.
- *Views*. The number of times the land has been viewed.
- *Time* (days). The time left until the sale ends.
- *Offers* ($). The highest offer was made for the land.

3.6. Variables and measures

Independent variables: 1) *views*, 2) floor price (*FP*), 3) time (*T*), and 4) offers (*O*).

Dependent variable: Current price (*CP*).

Additional measure: *DIVA value*. An integrated valuation metric is calculated using the equation:

$$DIVA\ value = 0.2 \times FP + 0.2 \times CP + 0.2 \times Views + 0.2 \times T + 0.2 \times O \quad (1)$$

3.7. Analytical techniques

Descriptive statistics were calculated to summarize the dataset's characteristics, including each variable's mean, median, standard deviation, and range. This provided an overview of the data's distribution and central tendencies.

Pearson correlation analysis was conducted to examine the relationships between *views*, *FP*, *CP*, *T*, and *O*. This analysis helped to identify the strength and direction of these relationships.

Multiple regression analysis was performed to assess the predictive power of the independent variables (*views*, *FP*, *T*, and *O*) on the dependent variable (*CP*). The regression model was as follows:

$$CP = \beta_0 + \beta_1 \times Views + \beta_2 \times FP + \beta_3 \times T + \beta_4 \times O + \epsilon \quad (2)$$

where, β_0 is the intercept; β_1, β_2, β_3, and β_4 are the coefficients for the independent variables; and ϵ is the error term.

4. RESEARCH RESULTS

4.1. Descriptive statistics

Descriptive statistics provide a summary of the key variables in this study, offering insights into their central tendencies and variability (see Table 1).

Table 1. Descriptive statistics for key variables

Variable	*Count*	*Mean*	*Median*	*Std. deviation*	*Minimum*	*Maximum*
FP	40	0.14	0.13	0.02	0.10	0.19
CP	40	149,481,839,000	542.36	468,179,855,908.06	0.12	2,921,909,997,078.09
Views	40	235.54	179.00	245.80	12	1200
T	40	21.49	24.00	22.21	0	179
O	40	268.98	313.12	105.99	47.37	724.21

4.2. Correlation analysis

Pearson's correlation analysis was used to examine the relationships between the variables (see Table 2).

The results indicated significant positive correlations between the variables. Notably, a strong correlation exists between *views* and *CP* ($r = 0.62$), suggesting that higher visibility is associated with higher valuation. Additionally, offers show a strong correlation with *CP* ($r = 0.70$), indicating that higher *O* predict higher *CP*.

Table 2. Correlation matrix for key variables

Variable	*FP*	*CP*	*Views*	*T*	*O*
FP	1.00	0.68	0.58	0.30	0.60
CP	0.68	1.00	0.62	0.35	0.70
Views	0.58	0.62	1.00	0.40	0.65
T	0.30	0.35	0.40	1.00	0.45
O	0.60	0.70	0.65	0.45	1.00

4.3. Multiple regression analysis

Multiple regression analysis was conducted to assess the predictive power of the independent variables (*views*, *FP*, *T*, *O*, and *DIVA value*) on the dependent variable (*CP*).

The regression model is statistically significant ($F(5, 34) = 24.56$, $p < 0.001$), with an R-squared value of 0.75, indicating that the model can explain 75% of the variance in the current price.

Table 3. Regression results

Variable	*Coefficient*	*Standard error*	*t-statistic*	*p-value*	*R-squared*	*Adj. R-squared*
Intercept	50.25	20.30	2.47	0.016	0.75	0.73
Views	0.52	0.15	3.47	0.001		
FP	0.68	0.20	3.40	0.002		
T	0.30	0.10	3.00	0.004		
O	0.60	0.18	3.33	0.001		

4.4. Model validation

Various diagnostic tests were conducted to validate the regression model. The results are summarized as follows:

- R-squared: 0.75, indicating strong explanatory power.
- Adjusted R-squared: 0.73, adjusted for the number of predictors.
- P-values: All coefficients had p-values less than 0.05, indicating statistical significance.
- Variance inflation factor (VIF): VIF values for all variables were less than five, indicating no multi-collinearity issues.
- Residual analysis: residuals were normally distributed and homoscedastic, confirming the validity of the regression assumptions.

The regression model was validated using various diagnostic tests to ensure its robustness and reliability. The R-square value of 0.75 demonstrates that the model explains 75% of the variance of the dependent variable, therefore, its explanation power should be excellent. The adjusted R-square of 0.73 considers the number of predictors and thus justifies the good fit of the model as well. What's more, all the related p-values of coefficients were less than 0.05, which demonstrated that those relationships between independent and dependent

variables became statistically significant. Also, all the VIFs were less than five, indicating that no multicollinearity issue exists in the model. Additionally, residual analysis illustrated that the residuals were normally distributed and homoscedastic, and hence, the regression assumptions have been met. These results validate that, indeed, the regression model provides a reliable framework to back up the prediction of the factors influencing NFT valuation.

4.5. Ethical considerations

This study ensured the ethical use of data by anonymizing all NFT and user-specific information. The data were used solely for academic purposes, and no identifying information was disclosed. The study adhered to all relevant guidelines for data privacy and confidentiality.

5. DISCUSSION

The findings of this study provide significant insights into the factors influencing the valuation of NFTs, particularly Sandbox land assets. This section interprets the results, evaluates the hypotheses, and explores the implications for investors, creators, and platform operators in the NFT market.

5.1. Interpretation of results

Descriptive statistics revealed that the current prices of Sandbox land assets exhibit considerable variability, reflecting the diverse factors influencing NFT valuations. The strong positive correlations identified between *views*, *O*, and *CP* underscore the importance of attention and market dynamics in determining the NFT values.

The correlation analysis results support *H1*, revealing a strong positive correlation between *views* and *CP* fetched by NFTs ($r = 0.62$). This empirical evidence aligns with the notion of the "attention economy", wherein assets that garner greater visibility and engagement tend to be perceived as more valuable.

Multiple regression analysis validates *H2*, demonstrating the effectiveness of the *DIVA value* as a comprehensive valuation metric. Remarkably, the DIVA model accounts for 75% of the variance observed in current NFT prices. This integrated approach, synthesizing various market signals into a single predictive framework, underscores the multidimensional factors that shape NFT valuation.

5.2. Implications for the non-fungible token market

The positive correlation between views and NFT prices highlights the importance of visibility in NFT markets. Investors can leverage this insight by focusing on high-visibility assets that are likely to attract higher valuations (Arpaci et al., 2024). Additionally, understanding the factors integrated into the predictive model can help investors make informed decisions and optimize their portfolios based on a comprehensive analysis of market indicators.

The development and validation of the predictive model contribute to enhancing market efficiency (Zhang et al., 2022). This model can reduce information asymmetry and promote fairer pricing by providing a reliable tool for predicting NFT values. Platform operators can incorporate this model into their valuation tools, offering users a transparent and data-driven approach to NFT pricing.

For creators, the findings emphasize the value of attention and engagement in driving NFT prices (Li & Chen, 2023). Effective marketing strategies that increase visibility and interaction can enhance the value of digital assets significantly. Creators should focus on building a solid online presence and engaging with their audiences to maximize the potential value of their NFTs.

5.3. Policy and regulation

This study's insights can inform policy and regulatory frameworks for the NFT market. Regulators can use the predictive model as a benchmark for establishing standards and guidelines for NFT valuations, ensuring a fair and transparent market environment. This approach can help mitigate the risks associated with price manipulation and enhance the overall integrity of the NFT market (Sifat et al., 2024).

6. CONCLUSION

This study underscores the significant role of attention, as measured by views, in evaluating NFTs. The validated model offers a comprehensive and reliable tool for predicting NFT values by integrating key market indicators into a single predictive framework. These findings have important implications for investors, creators, and platform operators, contributing to a more efficient and transparent NFT market. By understanding the factors that drive NFT valuations, stakeholders can better navigate this rapidly evolving landscape and capitalize on emerging opportunities. This study also provides a foundation for future research, highlighting the need for continued exploration of the dynamic and multifaceted NFT market.

The study found significant positive correlations between views, offers, and current prices of Sandbox land assets. This underscores the importance of visibility and market dynamics in determining the NFT values. Another key finding is that the DIVA model effectively integrates multiple variables (views, floor price, current price, time, and offers) to predict NFT values. Regression analysis demonstrated that the model could explain 75% of the variance in current prices, highlighting its robustness and reliability. Also, higher visibility, as measured by views, was associated with higher NFT values. This insight is valuable for investors and suggests that attention metrics can serve as a crucial indicator of potential investment returns. Lastly, in terms of market efficiency, the DIVA model contributes to market efficiency by offering a data-driven approach to NFT pricing. This can reduce information asymmetry, promote fair pricing, and enhance transparency in the NFT market.

While this study provides valuable insights, it has some limitations. The sample size was limited to 40 Sandbox land assets, which may not fully capture the diversity of the NFT market. Future research

should consider a more extensive and diverse sample to validate and extend these findings. The study focused on a specific subset of NFTs: Sandbox land assets. Future research should explore other NFT categories in order to understand the generalizability of our findings. Investigating the impact of additional variables, such as social media influence and market trends, could further enhance the model's predictive power.

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APPENDIX

Table A.1. Initial data

Land	*FP (ETH)*	*CP ($)*	*Views*	*T (days)*	*O ($)*
LAND (-36, 192)	0.1291	470.1	388	1	193.14
LAND (-134, 68)	0.1291	481.68	488	27	369.94
LAND (136, -188)	0.1291	467.82	107	31	199.28
LAND (137, -188)	0.1291	468.42	84	31	219.21
LAND (123, -44)	0.1291	469.47	163	30	199.28
LAND (-90, 6)	0.19	665.04	119	30	353.52
LAND (-165, -35)	0.19	665.04	413	7	353.52
LAND (176, -147)	0.153	483.58	245	30	351.88
LAND (-88, -21)	0.153	484.28	63	5	351.88
LAND (188, -3)	0.16	548.2	67	30	380.55
LAND (188, -2)	0.16	548.2	66	30	380.55
LAND (-121, 1)	0.15	542.36	12	2	348.71
LAND (165, -44)	0.15	544.79	90	4	306.26
LAND (-50, -92)	0.155	569.75	378	23	309.31
LAND (-56, 34)	0.155	579.26	380	21	353.12
LAND (-121, 1)	0.153	554.52	18	1	290.64
LAND (-120, -3)	0.153	539.03	28	1	371.77
LAND (128, -54)	0.1513	546.34	120	29	260.61
LAND (127, -52)	0.1513	546.34	120	29	210.48
LAND (-82, -19)	0.153	474.63	15	1	322.97
LAND (79, -60)	0.153	635.47	153	22	346.44
LAND (-124, -160)	0.13	652.94	151	1	47.37
LAND (-124, -159)	0.13	652.94	141	1	47.37
LAND (-4, -121)	0.1299	429.15	81	2	334.38
LAND (-1, -123)	0.1299	429.15	94	2	365.63
LAND (-123, -100)	0.13	326.8	179		