

*Abstract—Through Non-Fungible Tokens (NFTs), Blockchain technology introduces a novel method for asserting authenticated uniqueness in digital assets, marking a significant paradigm shift in the digital economy. Despite the rapid growth of this market, there remains a substantial research gap in understanding the intricate dynamics of NFT marketplaces. This study provides an in-depth analysis of the NFT market, with a specific focus on OpenSea, one of the leading NFT marketplaces. We collected 1.3 million transactions from 269,492 unique wallet addresses to construct a network analysis, which allowed us to observe specific market trends and identify the most actively traded NFT categories. This process enabled us to visualize the complex transactional relationships within the marketplace. Utilizing key metrics such as degree centrality and betweenness centrality, we assessed the influence and connectivity of each node, identifying significant market entities and inherent community structures. Additionally, network modularity was instrumental in mapping intricate asset flows, further highlighting significant market entities and revealing the community structures within the NFT ecosystem. Our detailed descriptive analysis provides a comprehensive overview of the proportional distribution across a diverse range of NFT categories, offering insights for stakeholders in the evolving NFT market, thereby enhancing the understanding of blockchain in digital asset trading and highlighting the significance of NFTs in the digital economy.*