

NFT Marketplace using Blockchain

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Abstract: *The This paper discusses the potential positive impact of blockchain technology and Non-Fungible Tokens (NFTs) on the business environment. NFTs are digital representations of real-world objects that can be traded online using cryptocurrency. Unlike fungible tokens, NFTs have unique digital signatures that make them impossible to exchange for another NFT. NFTs can offer artists and content creators the opportunity to obtain financial remuneration for their work, without relying on galleries. Additionally, NFTs have the feature of royalties where a certain amount is credited to the original creator of a particular NFT every time the said NFT is sold. Although blockchain technology is relatively new, it has the potential to revolutionize the art and content creation industry by providing a platform to mint and trade NFTs. This paper suggests that the NFT marketplace could be at the core of various use-cases for NFTs*

Keywords: Blockchain, Non-Fungible Token, Smart Contract, ERC Standards

REFERENCES

- [1] M. di Angelo and G. Salzer, "Tokens, Types, and Standards: Identification and Utilization in Ethereum," 2020 IEEE International Conference on Decentralized Applications and Infrastructures (DAPPS), 2020, pp. 1-10, doi: 10.1109/DAPPS49028.2020.00001.
- [2] H. R. Andrian, N. B. Kurniawan and Suhardi, "Blockchain Technology and Implementation: A Systematic Literature Review," 2018 International Conference on Information Technology Systems and Innovation (ICITSI), 2018, pp. 370-374, doi: 10.1109/ICITSI.2018.8695939.
- [3] Lennart Ante, "The non-fungible token (NFT) market and its relationship with Bitcoin and Ethereum". Blockchain Research Labs, BRL Working Paper Series No. 20, June 06, 2021.
- [4] Ferdinand Regner, André Schweizer, Nils Urbach. "NFTs in Practice – Non-Fungible Tokens as Core Component of a Blockchain-based Event Ticketing Application", ResearchGate, December 2019.
- [5] Lennart Ante, "The non-fungible token (NFT) market and its relationship with Bitcoin and Ethereum". Blockchain Research Labs, BRL Working Paper Series No. 20, June 06, 2021.
- [6] P. Tasatanattakool and C. Techapanupreeda, "Blockchain: Challenges and applications," 2018 International Conference on Information Networking (ICOIN), 2018, pp. 473-475, doi: 10.1109/ICOIN.2018.8343163.
- [7] Ethereum Introduction. Available online: <http://ethdocs.org/en/latest/introduction/index.html> (accessed on 31 October 2018).
- [8] Thomas Kitsantas, Athanasios Vazakidis and Evangelos Chytis. "A Review of Blockchain Technology and Its Applications in the Business Environment". International Conference on Enterprise, Systems, Accounting, Logistics & Management At: Chania, Crete, Greece, July 2019.
- [9] Russell, K.A.; David, B.; Oliynykov, R. Ouroboros: A Provably Secure Proof-of-Stake Blockchain Protocol. In Proceedings of the Advances in Cryptology—CRYPTO 2017, Santa Barbara, CA, USA, 20–24 August 2017; pp. 357–388.
- [10] Mazieres, D. The Stellar Consensus Protocol: A Federated Model for Internet-Level Consensus. 2016. Available online: <https://www.stellar.org/papers/stellar-consensus-protocol.pdf>
- [11] David, S.; Noah, Y.; Arthur, B. The Ripple Protocol Consensus Algorithm, Ripple Labs Inc., 2014. Available online: https://ripple.com/files/ripple_consensus_whitepaper.pdf (accessed on 31 October 2018)