WAGMI: NFT Marketplace

PROJECT REPORT

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Bachelor of Technology in

Computer Science & Engineering

(Session 2022-2023)

Under the supervision of

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CANDIDATE'S DECLARATION

It is hereby certified that the work which is being presented in the B. Tech Mini Project Report entitled **"WAGMI : NFT Marketplace"** in partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology** and submitted in the **Department of Computer Science & Engineering** of **BHARATI VIDYAPEETH'S COLLEGE OF ENGINEERING, New Delhi (Affiliated to Guru Gobind Singh Indraprastha University, Delhi)** is an authentic record of our own work carried out during a period from **January to June 2023** under the guidance of **Ms. Shilpa Gupta, Assistant Professor.**

The matter presented in the B. Tech Mini Project Report has not been submitted by us for the award of any other degree of this or any other Institute.

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ABSTRACT

This report introduces the concept of a Non-Fungible Token (NFT) marketplace, which is a platform that enables cross-chain buying, selling, and trading of unique digital assets represented by NFTs. The report also discusses the current state of the digital economy and how the need for a cross-chain NFT marketplace is booming [1].

It outlines the key features of an NFT marketplace, including the ability to create and sell NFTs, search and browse the marketplace, transact with other users, and manage digital assets in a secure and transparent manner. The report also discusses the role of blockchain technology in ensuring the authenticity and ownership of NFTs. It examines the potential benefits of NFT marketplaces, including the ability for creators to monetize their digital creations, for collectors to own and invest in unique digital assets, and for users to participate in a new and growing digital economy. The report also highlights some of the challenges and risks associated with NFT marketplaces, such as the potential for fraud, regulation, and market volatility.

It presents the concept of a cross-chain NFT marketplace, facilitating the trade of unique digital assets. It highlights key features, benefits for creators and collectors, and the role of blockchain in ensuring authenticity. The report acknowledges challenges such as fraud and regulation and concludes by emphasizing the potential of NFT marketplaces to reshape digital ownership, calling for continuous innovation and collaboration.

Finally, the report concludes with a discussion of the NFT marketplace potential to revolutionize the way we think about digital ownership and value. The report argues that the NFT marketplace represents a significant opportunity for creators, collectors, and investors to participate in a new and exciting digital economy.

INTRODUCTION

A Non-Fungible Token (NFT) marketplace is a digital platform that allows creators and collectors to buy, sell, and trade unique digital assets represented by NFTs. NFTs are digital tokens that use blockchain technology to certify the authenticity and ownership of a specific digital asset, such as artwork, music, videos, and other types of digital content. In an NFT marketplace, creators can list their digital creations for sale and collectors can browse and purchase unique and authenticated digital assets. NFT marketplaces typically operate as online platforms where buyers and sellers can create accounts, list their NFTs for sale, and transact with each other using cryptocurrency as a form of payment[1].

The use of blockchain technology ensures that each NFT is unique and cannot be replicated or duplicated. This makes NFTs a valuable asset for collectors and provides creators with a way to monetize their digital creations. NFT marketplaces have become increasingly popular in recent years, as the demand for unique digital assets continues to grow[3]. These marketplaces provide a platform for creators to showcase their work to a wider audience, and for collectors to invest in and own unique digital assets. As the digital economy continues to expand, NFT marketplaces are poised to become an important part of the digital art and collectibles markets.

2.1 NFT

NFTs are unique digital tokens representing ownership of specific digital assets. They are created and recorded on blockchain networks, ensuring secure and transparent transactions. NFTs allow creators to monetize their digital content and offer collectors the opportunity to own and trade unique assets. NFTs have gained attention for their potential to revolutionize digital ownership and the monetization of digital content. They provide provable scarcity and provenance for digital items, attracting both creators and collectors[4]. The value of an NFT can vary based on factors such as rarity, creator reputation, and demand. Overall, NFTs offer a new and innovative approach to owning and trading digital assets, with the potential to transform various industries.

2.2 Blockchain technology

Blockchain technology enables decentralized and transparent data storage and sharing. Its key components include a consensus protocol, hash cryptography, immutable ledger, distributed networking, and mining. The consensus protocol ensures authorized transaction validation, while hash cryptography provides secure

verification. The immutable ledger prevents tampering and ensures data integrity. Distributed networking allows transparent data distribution, and mining secures the network and incentivizes participants[2]. Blockchain enables data sharing within and across facilities, healthcare networks, and borders, benefiting researchers, partners, and insurers[5]. It ensures accurate and reliable data sharing across locations, revolutionizing data management and facilitating secure exchanges in various sectors.
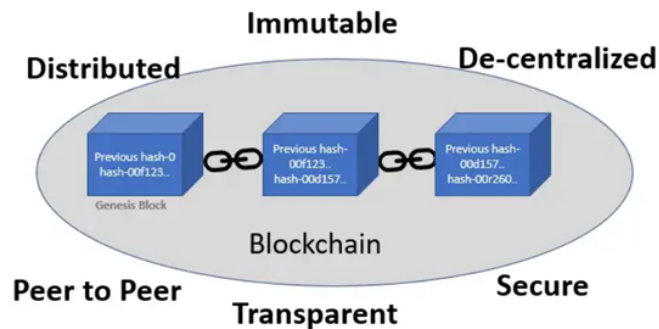

Figure. 1

How transactions are created in a blockchain

Blockchain technology utilizes a distributed ledger network to verify and validate transactions, ensuring a secure and immutable system. Transactions undergo a series of steps for completion. Initially, the transaction request is made by a network node and broadcasted to peer nodes. The SHA256 algorithm creates a unique hash, which forms an unbreakable chain of linked transactions[9]. Attempts to modify transactions are validated by network nodes or smart contracts through consensus. The immutable ledger only allows appending of new transactions, ensuring security and decentralization. Confirmed transactions include cryptocurrencies, contracts, and healthcare records. Verified transactions are added to a new block in the blockchain, which contains index, timestamp, data, previous hash, and current block hash. This secure block is appended to the chain, completing the transaction.

2.3 Smart contracts

Smart contracts were introduced by Szabo to facilitate faster and verifiable execution of digital agreements. Ethereum further advanced smart contracts in blockchain technology. They utilize scripting languages and consensus procedures to ensure consistent and complex operations. Smart contracts enable trustless and fair transactions without intermediaries, serving as a foundation for various applications. State-transition mechanisms ensure transparent execution and

consistent state placement across nodes[8]. Many NFT systems rely on smart contract-based blockchain platforms for orderly executions.

2.4 Market Size

The market size of an NFT marketplace has grown rapidly in recent years. In 2020, the NFT market reached a total value of $338 million, representing a growth rate of over 400%. The first quarter of 2021 alone saw NFT transactions exceeding $2 billion. The market size of an NFT marketplace can vary based on factors like user adoption, competition, and regulatory developments.

2.5 Transactions

In an NFT marketplace, transactions involve buying, selling, and trading NFTs. Buyers browse and purchase NFTs by sending cryptocurrency to the seller's wallet. Sellers list their NFTs, receive payment, and transfer ownership to buyers. Traders can exchange NFTs of similar value or pay the difference for a trade. Auctions may be available for bidding on NFTs. Blockchain technology ensures secure ownership transfer of unique NFTs with digital signatures stored on the blockchain.

Problems with existing Platforms:

- **High network fees:** Most of the current platforms impose a very high network fee and charge commissions which ends up inflating the price paid by the user. In countries like India this becomes a very big barrier of entry for a common user.
- **Absence of Multi-token support:** Popular platforms like OpenSea do not have multi-token support due to which the user experience becomes restrictive.
- **Absence of Analytics:** Current Platforms do not provide analytics and charts of user transaction and general market trends. In a market like India where even the average user likes to get as much info as possible before investing; the lack of analytics becomes a very unpleasant conundrum.
- **No cross chain support**: The current platforms like open sea and rarable do not provide cross-chain, making the user abstain to the parameters provided by the developers.

LITERATURE SURVEY

S. Ferretti et.al.[1] they analysed the Ethereum blockchain using the complex networks modelling framework. Accounts acting on the blockchain were represented as nodes, while the interactions among these accounts, recorded on the blockchain, were treated as links in the network. Using this representation, it is possible to derive interesting mathematical characteristics that improve the understanding of the actual interactions happening in the blockchain. Not only, by looking at the history of the blockchain, it is possible to verify if radical changes in the blockchain evolution happened.

Zibin Zheng et.al. [2] concluded that The blockchain is highly appraised and endorsed for its decentralised infrastructure and peer-to-peer nature. However, many researches about the blockchain are shielded by Bitcoin. But blockchain could be applied to a variety of fields far beyond Bitcoin. Blockchain has shown its potential for transforming the traditional industry with its key characteristics: decentralisation, persistency, anonymity and auditability. They analysed and compared these protocols in different respects. They also investigated typical blockchain applications. Furthermore, they list some challenges and problems that would hinder blockchain development and summarise some existing approaches for solving these problems.

Aadarsh Mani et.al.[3] NFTs might be the newest entry in potentially disruptive technologies that uses blockchain framework but it is already quite mature for practical use. While its fate as an integral part of the creative media market is already set in stone, it will have many applications in other fields too. It is our speculation that as it matures, it will be rapidly accepted by the community and its growth will even outshine cryptocurrencies in the long run. As the world inches toward renewable sources of energy, the only disadvantage of NFTs being not good for the environment will disappear.

Qi Wang et.al.[4] concluded that Non-Fungible Token (NFT) is an emerging technology prevailing in the blockchain market. In their report, They explored the state-of-the-art NFT solutions which may re-shape the market of digital/virtual assets going forward. They firstly analysed the technical components and provided the design models and properties. Then, they evaluated the security of current NFTs systems and further discussed the opportunities and potential applications that adopted the NFT concept.

Wajiha Rehman et.al[5] reported these use cases for NFT's such as Digital Art, Fashion Luxury, Licences and Certifications, Boosting Gaming Potential and Domain Names.

Ashish sharma et.al.[6] concluded that blockchain technology has witnessed widespread adoption and holds immense appeal. Its peer-to-peer nature and accessibility to stakeholders make data manipulation difficult, instilling consumer confidence. However, the extent of future adoption remains uncertain due to the complexity of the technology. Initially created as a currency platform, blockchain has gained popularity across various industries, including finance, healthcare, education, and city planning. Overall, blockchain has the potential to enhance existing industries and revolutionize systems through an improved, transparent ledger system.

Yli-Huumo et.al.[7] presented a methodical audit that examined 41 peer-reviewed articles published until 2015. Notably, 80 percent of these articles focused on blockchain's use for Bitcoin. Despite this, the audit chose to emphasize technical issues like security, performance, and scalability. The research primarily centered on privacy, security, and limitations of blockchain, without identifying any use cases for decentralizing digitally created assets.

Pantas et.al.[8], Blockchain is the backbone of Bitcoin, offering distributed ledger functionality and security. It presents an attractive solution for financial and non-financial business problems, generating significant interest and numerous start-ups. The adoption definitely faces strong headwinds as described before. The large Financial institutions like Visa, Mastercard, Banks, NASDAQ, etc., are investing in exploring application of current business models on Blockchain. To conclude, they envisioned BlockChain to go through slow adoption due to the risks associated.

Congressional Research Service (CRS)[9] summarised that Cryptocurrency wallets can be divided into three types. Custodial wallets are "hosted" or maintained by third-party institutions, facilitate buying, selling, and trading of digital assets offchain. Non-custodial wallets, not hosted by third parties, enable direct access and signing of assets on blockchains. Loss of private keys leads to irreversible loss of cryptocurrency. Cold-storage wallets, offline hardware devices, provide enhanced security against hacking while allowing internet connectivity for transactions.

Michael D. Murray et.al. [10] Focusing solely on the artistic value and aesthetics of NFT artwork overlooks the essence of this medium. NFTs hold historical significance and connections to key figures in the crypto community, making them more easily tradable with cryptocurrency than other luxury items. The ownership status and associated prestige contribute significantly to the high valuation of NFTs in the collectibles market. In the metaverse, NFTs are envisioned as a medium of exchange, event tickets, entry passes, and tools for artistic expression, enhancing the alternative reality experience. The exploitation of digital creations' value raises questions about copyright in this context.

RESEARCH METHODOLOGY

In this section, the proposed approach for NFT Trading using a dedicated one stop marketplace, is introduced. Consequently, the blockchain-based system architecture is proposed. Various methods and configurations for the block transaction in the network are deployed. In the proposed system, a user after connecting their digital wallet can access all the NFTs held in that account in one place.

4.1 System architecture

The blockchain based architecture is described in this section. There are two participants in the proposed system: seller and buyer. In this system, various assets or smart contracts are defined, including, but not limited to: CreateMarketItem, CreateMarketSale, FetchMarketitem for the Marketplace contract and approve, mintNFT, renounceOwnership, safeTransferFrom, setApprovalForAll, and transferOwnersip for the NFT minting contract.
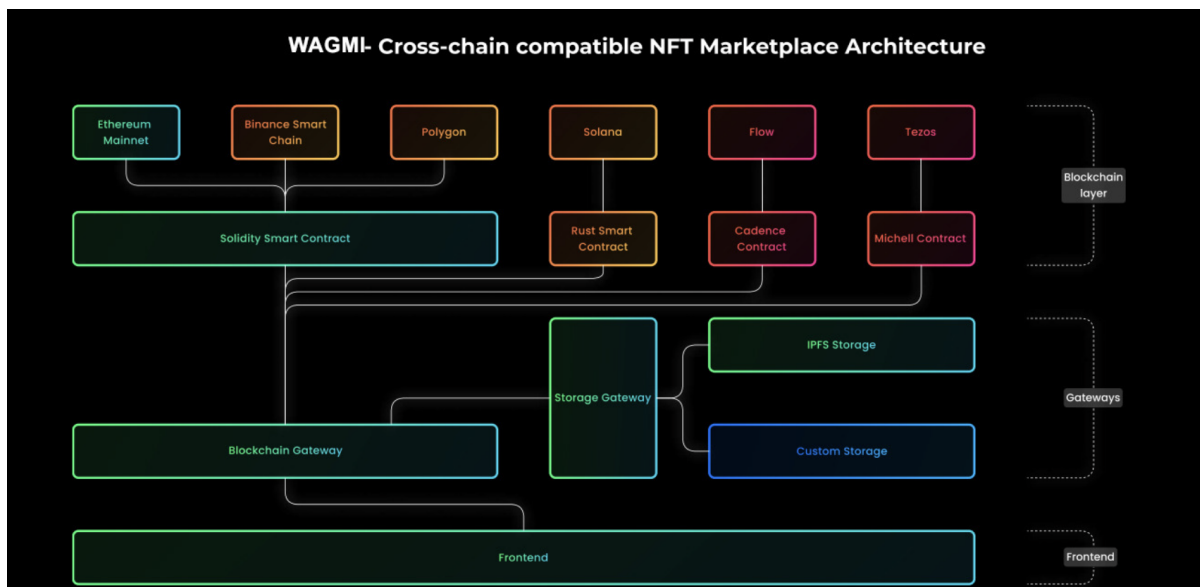

Figure. 2

Moralis API is used to fetch the NFTs the wallet already holds and their transactions.The system workflow is simple to use. Participants register through the client application or SDK, signing approval for the marketplace contract. Then, when approved they can access all the marketplace features for their assets. All transactions are distributed over the hyperledger fabric blockchain network.

After committing the transaction into the blockchain network, the updated transactions are distributed over the network; this ensures that every transaction

over the network is distributed to every participant in the system and that each transaction cannot be modified or deleted by unauthorized users. Transactions are only added to the previous hash with a timestamp, so the network is fully secure.

4.2 User Journey

User journey of an NFT marketplace, register on the platform and then upload digital assets, such as artwork or music. The marketplace moderates the assets to ensure compliance with guidelines. Approved assets are listed for browsing and discovery. Interested buyers can place bids or purchase assets at a fixed price. Once a transaction is completed, a unique NFT representing ownership is created and transferred to the buyer's digital wallet. The marketplace maintains transaction history for verification. Sellers can also participate in the secondary market by reselling their NFTs. Finally, sellers have the option to withdraw earnings and convert them into fiat currency or other cryptocurrencies.
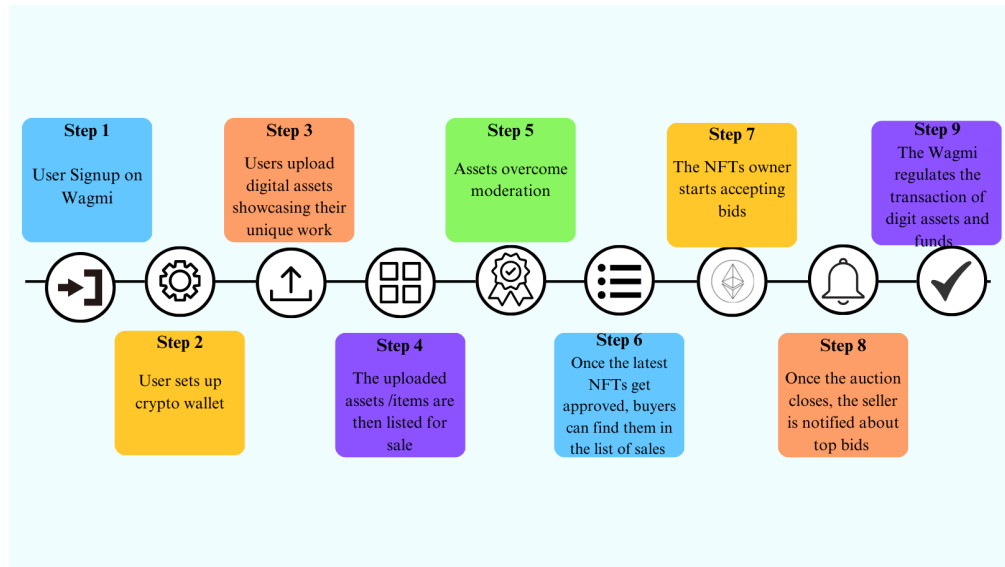
Figure. 3

4.3 Proposed algorithms

Algorithm 1: Algorithm for Creating Market Items.

This algorithm deals with approving the token for the marketplace to enable trading on it. The marketplace requests access from the user to list the NFT for the user specified amount.

1. **Input:** The function takes three parameters: **nftContract** (address of the NFT contract), **tokenId** (ID of the token being listed), and **price** (listing price).

2. **Validation:** Verify that the price is greater than zero. If not, throw an error message.
3. **Generate Item ID:** Use a counter or incrementing variable to generate a unique **itemId** for the market item. In this case, it seems to be using an **_itemIds** counter that increments each time a new item is created.
4. **Create MarketItem Struct:** Define a new **MarketItem** struct with the following properties:
   ○ **itemId:** The unique identifier for the market item.
   ○ **nftContract:** The address of the NFT contract.
   ○ **tokenId:** The ID of the token being listed.
   ○ **seller:** The address of the seller (the person initiating the listing).
   ○ **owner:** The address of the owner (initially set to address(0)).
   ○ **price:** The listing price for the item.
   ○ **sold:** A boolean indicating whether the item has been sold (initially set to false).
5. **Assign MarketItem to Mapping:** Add the newly created **MarketItem** struct to the **idToMarketItem** mapping using the **itemId** as the key.
6. **Transfer NFT Ownership:** Call the **transferFrom** function of the **nftContract** to transfer ownership of the NFT token from the **msg.sender** (the seller) to the address of the marketplace contract (**address(this)**). This step ensures that the NFT is held in escrow until it is sold.

```solidity
function createMarketItem(
    address nftContract, uint256 tokenId, uint256 price
) public payable nonReentrant {
    require(price > 0, "Price must be greater than 0");

    _itemIds.increment();
    uint256 itemId = _itemIds.current();

    idToMarketItem[itemId] = MarketItem(
        itemId,
        nftContract,
        tokenId,
        payable(msg.sender),
        payable(address(0)),
        price,
        false
    );

    IERC721(nftContract).transferFrom(msg.sender, address(this), tokenId);

    emit MarketItemCreated(
        itemId,
        nftContract,
        tokenId,
        msg.sender,
        address(0),
        price,
        false
    );
}
```

Algorithm 2: Algorithm for NFTMinting.

This algorithm deals with creating a new token on the blockchain network. It takes the tokenURI and the caller address to mint the token in their wallet.

1. **Input:** The function takes two parameters: **recipient** (address of the recipient who will own the newly minted NFT) and **tokenURI** (a string representing the metadata or token URI for the NFT).
2. **Increment Token ID:** Use a counter or incrementing variable, **_tokenIds**, to generate a unique token ID for the new NFT. Increment the counter to get the new item ID.
3. **Mint NFT:** Call the **_mint** function to mint a new NFT. Pass the **recipient** address and the **newItemId** as arguments to assign ownership of the NFT to the recipient.
4. **Set Token URI:** Call the **_setTokenURI** function to set the token URI or metadata for the newly minted NFT. Pass the **newItemId** and **tokenURI** as arguments to associate the metadata with the NFT.
5. **Return New Item ID:** Return the **newItemId** to indicate the successful minting of the NFT.

```solidity
contract messageNFT is ERC721URIStorage, Ownable {
    using Counters for Counters.Counter;
    Counters.Counter private _tokenIds;

    constructor() ERC721("Moralis Mage", "MM") {}

    function mintNFT(address recipient, string memory tokenURI)
        public
        onlyOwner
        returns (uint256)
    {
        _tokenIds.increment();

        uint256 newItemId = _tokenIds.current();
        _mint(recipient, newItemId);
        _setTokenURI(newItemId, tokenURI);

        return newItemId;
    }
}
```

Algorithm 3: Algorithm for Creating Market Sale.

1. **Input:** The function takes two parameters: **nftContract** (address of the NFT contract) and **itemId** (the unique identifier for the market item).
2. **Retrieve Price and Token ID:** Retrieve the **price** and **tokenId** of the market item with the given **itemId** from the **idToMarketItem** mapping.

3. **Check Price and Sale Status:** Verify that the **msg.value** (amount sent with the transaction) matches the **price** of the market item. If not, throw an error message. Additionally, check that the item has not been previously sold (**sold != true**). If it has, throw an error message.
4. **Transfer Payment:** Transfer the **msg.value** (sent by the buyer) to the **seller** of the market item using the **transfer** function. This step completes the payment for the purchase.
5. **Transfer NFT Ownership:** Call the **transferFrom** function of the **nftContract** to transfer the ownership of the NFT from the marketplace contract (**address(this)**) to the **msg.sender** (the buyer).
6. **Update Ownership and Sale Status:** Update the **owner** of the market item to the **msg.sender** (buyer), marking them as the new owner. Increment the **_itemsSold** counter to track the number of items sold. Set the **sold** flag for the market item to **true** to indicate that it has been sold.

```solidity
function createMarketSale(
    address nftContract,
    uint256 itemId
) public payable nonReentrant {
    uint256 price = idToMarketItem[itemId].price;
    uint256 tokenId = idToMarketItem[itemId].tokenId;
    bool sold = idToMarketItem[itemId].sold;
    require(msg.value == price, "Please submit the asking price in order to complete the purchase");
    require(sold != true, "This Sale has already finished");

    idToMarketItem[itemId].seller.transfer(msg.value);
    IERC721(nftContract).transferFrom(address(this), msg.sender, tokenId);
    idToMarketItem[itemId].owner = payable(msg.sender);
    _itemsSold.increment();
    idToMarketItem[itemId].sold = true;
}
```

4.4 Deployment phase

The blockchain-based marketplace contract is deployed on the testnet using hardhat. Hardhat is a development environment for Ethereum software. It consists of different components for editing, compiling, debugging and deploying your smart contracts and dApps, all of which work together to create a complete development environment.

The frontend of the website was built using ReactJS with web3js incorporated to connect React clients with the blockchain smart contract.

RESULT AND ANALYSIS

Marketplace: our web-based marketplace allows users to upload, publish, and sell their minted NFTs. The marketplace will use smart contracts to control NFTs auctions and transactions.

- **Buy** : Users can choose to buy the listed NFTs on the marketplace by paying the amount it is listed for and the bought NFT will be transferred to their digital wallet after the transaction has gone through.
- **Sell**: Users will be able to sell the NFTs they own in their digital wallet on the marketplace after approving the token to the marketplace contract and creating a listing for it. When sold, users can withdraw the amount it is sold for, in their digital wallet.
- **List**: Users can choose to list their owned token for a particular amount or create an auction with a reserve, to sell on the marketplace.
- **Delist**: Users will be able to delete their previous listing if they want to.
- **Update listing:** Users can also update the amount the NFT is listed for.
- **Analytics**: Users can view analytics and charts of the latest trends and their own transactions.
- **One click creation**: Users can create NFTs by just one click.
- **Additional benefits:** economic principles of supply and demand become automatically integrated into the system, allowing the community to determine the fair price of user-generated assets.

Marketplace Contract Deployment

Deployment of the complete NFTmarketplace contract took 1019109 wei gas which cost just 0.0025 MATIC at 2.5 gwei on the polygon network.

⑦ Transaction Hash:	0xbd8bfe406f1c89e6e110dacaa99d2b98fe7b8bc47fa51faff58ec3e77d1c136b
⑦ Status:	✅ Success
⑦ Block:	37040298 3244 Block Confirmations
⑦ Timestamp:	⏰ 1 hr 55 mins ago (Jun-19-2023 03:07:50 PM +UTC)
⑦ From:	0xe1c4bd5bbaacb764c7476934b335afc1aaf6ef5a
⑦ To:	[Contract 0x30387f390867040a1a1ff26a95ae3eec82548e43 Created] ✅
⑦ Value:	0 MATIC ($0.00)
⑦ Transaction Fee:	0.002547772515286635 MATIC ($0.00)
⑦ Gas Price:	0.000000002500000015 MATIC (2.500000015 Gwei)
⑦ Gas Limit & Usage by Txn:	1,019,109	1,019,109 (100%)
⑦ Gas Fees:	Base: 0.000000015 Gwei	Max: 2.50000003 Gwei	Max Priority: 2.5 Gwei
⑦ Burnt & Txn Savings Fees:	🔥 Burnt: 0.000000000015286635 MATIC) ⚒ Txn Savings: 0.000000000015286635 MATIC

NFT Mint

Minting an NFT through the contract will cost the user 191553 wei gas which costs 0.00012 Matic at 1 gwei on the Polygon network.

⑦ Transaction Hash:	0xe6a538ef2cdd833120fe17dd1b5119b09b59af985cfc5e81829684d0e7fb188b 🗐
⑦ Status:	✓ Success
⑦ Block:	36904664 167745 Block Confirmations
⑦ Timestamp:	⏱ 4 days 7 hrs ago (Jun-16-2023 04:00:10 AM +UTC)
⑦ From:	0xe1c4bd5bbaacb764c7476934b335afc1aaf6ef5a 🗐
⑦ Interacted With (To):	Contract 0x21d2b2a7faa15cfe50364477c360b8aa68b0eec9 ✓ 🗐
⑦ Tokens Transferred:	▸ **From** 0x0000000000000… **To** 0xe1c4bd5bbaacb… ERC-721 For Token ID [7] 🔵 Moralis Mage (MM)
⑦ Value:	0 MATIC ($0.00)
⑦ Transaction Fee:	0.000127702002298636 MATIC ($0.00)
⑦ Gas Price:	0.000000001000000018 MATIC (1.000000018 Gwei)
⑦ Gas Limit & Usage by Txn:	191,553 | 127,702 (66.67%)
⑦ Gas Fees:	Base: 0.000000018 Gwei | Max: 1.000000036 Gwei | Max Priority: 1 Gwei
⑦ Burnt & Txn Savings Fees:	🔥 Burnt: 0.000000000002298636 MATIC) ♻ Txn Savings: 0.000000000002298636 MATIC

Token approval for marketplace

Approving the token for the Marketplace will cost the user 47533 wei gas which costs 0.000047 Matic at 1.5 gwei on the Polygon network.

⑦ Transaction Hash:	0x6f983b4fe5bd311ddb9a43434268f92511ed713e6c0caec8cefbce54f841fa9f 🗐
⑦ Status:	✓ Success
⑦ Block:	37042487 29933 Block Confirmations
⑦ Timestamp:	⏱ 19 hrs 30 mins ago (Jun-19-2023 04:25:22 PM +UTC)
⑦ From:	0xe1c4bd5bbaacb764c7476934b335afc1aaf6ef5a 🗐
⑦ To:	Contract 0x21d2b2a7faa15cfe50364477c360b8aa68b0eec9 ✓ 🗐
⑦ Value:	0 MATIC ($0.00)
⑦ Transaction Fee:	0.000047533500475335 MATIC ($0.00)
⑦ Gas Price:	0.000000001500000015 MATIC (1.500000015 Gwei)
⑦ Gas Limit & Usage by Txn:	47,533 | 31,689 (66.67%)
⑦ Gas Fees:	Base: 0.000000015 Gwei | Max: 1.500000021 Gwei | Max Priority: 1.5 Gwei
⑦ Burnt & Txn Savings Fees:	🔥 Burnt: 0.000000000000475335 MATIC) ♻ Txn Savings: 0.000000000000190134 MATIC

Marketplace item creation

Listing the token on the Marketplace will cost the user 216684 wei gas which costs 0.000602 Matic at 2.91 gwei on the Polygon network.

ⓘ Transaction Hash:	0x69d65814863d8fde1ba60b9745837e78314752286ae0b511d1e201313535d8a1 ⧉
ⓘ Status:	✓ Success
ⓘ Block:	37072461 〉2 Block Confirmations
ⓘ Timestamp:	⏱ 17 secs ago (Jun-20-2023 11:56:54 AM +UTC)
ⓘ From:	0xe1c4bd5bbaacb764c7476934b335afc1aaf6ef5a ⧉
ⓘ Interacted With (To):	Contract 0x91c1f814c4bafdeaeb5265a92d04f2826218d544 ✓ ⧉
ⓘ Tokens Transferred:	▸ **From** 0xe1c4bd5bbaacb… **To** 0x91c1f814c4bafd… ERC-721 For Token ID [7] ◉ Moralis Mage (MM)
ⓘ Value:	0 MATIC ($0.00)
ⓘ Transaction Fee:	0.00060209937 MATIC ($0.00)
ⓘ Gas Price:	0.00000000291 MATIC (2.91 Gwei)
ⓘ Gas Limit & Usage by Txn:	216,684	206,907 (95.49%)
ⓘ Gas Fees:	Base: 0.000000016 Gwei	Max: 2.910000007 Gwei	Max Priority: 2.909999984 Gwei
ⓘ Burnt & Txn Savings Fees:	🔥 Burnt: 0.000000000003310512 MATIC) ⚙ Txn Savings: 0.000000000001448349 MATIC

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