Project title: DecentraMarket

Project type: Option 2. Web3 startup proposal

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1. Service Overview

DecentraMarket aims to create a secure and efficient decentralized marketplace for second-hand trading by leveraging blockchain and Web3 technology. This platform seeks to overcome the limitations of traditional second-hand markets using Web3 technology.

Below are the features of DecentraMarket:

Utilizing Blockchain and Web3 Technology: DecentraMarket enhances trust, security, and user experience by employing Ethereum smart contracts, ERC-20 tokens, non-fungible tokens (NFTs), InterPlanetary File System (IPFS), and decentralized identity (DID) technology.

Decentralized Trading Platform: Users can easily trade second-hand items through the DecentraMarket platform. Blockchain technology ensures transaction transparency, and an Escrow Service guarantees the security of transactions.

In addition to these unique DecentraMarket services, the platform also possesses the advantages of traditional second-hand trading platforms, such as an AI-based recommendation system, support for various product categories, and providing customized services by analyzing users' needs and preferences.

DecentraMarket offers better security, trust, and transparency to users based on blockchain and Web3 technology, providing a powerful solution to the problems encountered in traditional second-hand markets. Moving forward, DecentraMarket aims to lead the innovation of the second-hand market by leveraging blockchain and Web3 technology, further enhancing users' trading experience.

2. Market Analysis

In recent years, the secondhand market has been growing rapidly. The domestic used goods market size is estimated to be around 24 trillion KRW (based on 2021), which is a 6-fold increase from the 4 trillion KRW in 2008, showing a very high growth rate in the industry. This figure requires a growth rate of about 15% per year. However, compared to the overall consumer market, the secondhand market is still relatively small. Additionally, as the penetration rate of online platforms continues to increase, it is predicted that the platform-based used goods market will achieve a high growth rate of around 15-20% in the future.

There are various reasons for the development of the secondhand market. First, the convenience of transactions has improved due to the penetration of online platforms such as Carrot Market, Lightning Market, and Used Country. Also, the change in perception and increasing preference for secondhand transactions among the MZ generation, who are the main consumers, are leading to continuous structural growth. Currently, two out of three consumers have experienced a secondhand transaction within the last year, and 67% of the total view secondhand transactions positively.

However, despite this growth, many consumers are calling for improvements in secondhand trading platforms. According to the Korea Internet Promotion Agency, a total of 2,790 consumer complaints related to used goods trading platforms have been filed at the 1372 Consumer Counseling Center over the past three years (2019-2021). When analyzing consumer complaints experienced by type while using secondhand trading platforms, 32.4% (903 people) were most dissatisfied with the "difference in product information from what was initially stated," followed by "refusal of refund related to order cancellation (13.5%, 376 people)" and "non-delivery or unilateral contract cancellation after purchase (11.5%, 322 people)."

In conclusion, we believe that the secondhand market is a promising market with significant growth potential while also offering many areas for improvement. DecentraMarket can address the product information issues pointed out in existing secondhand transactions by protecting ownership and providing credibility through NFTs. Furthermore, the issues of refund refusal and non-delivery can be resolved by implementing an Escrow Service using Ethereum smart contract technology. With these solutions to existing secondhand trading platform issues, DecentraMarket will be a competitive player in the growing online secondhand trading platform market.

3. Competitors

Since DecentraMarket's revenue structure is based on fees generated from secondhand transactions, platforms like Danggeun Market and Bunjang Market can be considered as competitors. DecentraMarket can address the shortcomings of each platform.

Danggeun Market is a mobile platform that mediates secondhand transactions through face-to-face transactions by exposing locally-based items. With 17 million monthly active users, the platform is building a revenue model consisting of local advertising revenue utilizing the generated traffic. Although it does not charge fees for face-to-face transactions, there is the inconvenience of people having to arrange a meeting place and coordinate schedules and locations in advance. Also, it is difficult to find better items compared to shipping transactions since only nearby items can be traded. DecentraMarket can resolve these issues by enabling automated transaction processing through smart contracts and securely authenticating and managing users' identities using DID. This allows for safe P2P (peer-to-peer) transactions without the need for face-to-face meetings.

Bunjang Market is Korea's first mobile secondhand trading platform, specializing in brand and category-centric transactions. Unlike Danggeun Market, it focuses on non-face-to-face and long-distance transactions using parcel delivery services. Bunjang Market has built its revenue model by providing solutions such as secure payments and packaging services, charging fees based on solution usage. This amounts to 3.5% of the transaction value, which can be burdensome for consumers. DecentraMarket guarantees safe transactions by implementing an escrow service without intermediaries through smart contracts and decentralized identity (DID) technology. Therefore, transactions can be conducted at a lower brokerage fee compared to Bunjang Market.

DecentraMarket addresses the limitations of traditional secondhand trading platforms, ensuring safe, affordable, and convenient secondhand transactions.

4. Technology Stack and Transaction Security

DecentraMarket is a platform for secondhand trade, ensuring transaction safety and transparency through the application of various Web3 technologies. By leveraging tools such as Escrow Service, DecentraToken, NFT, IPFS, and DID, DecentraMarket provides a secure and transparent transaction environment for its users.

Safe Transactions via Escrow Service

DecentraMarket utilizes Ethereum smart contract technology to implement an Escrow Service. This service temporarily holds the funds until the transaction is completed and, upon successful delivery of the item, releases the payment to the seller. This method significantly enhances the security of the transaction.

Issuing DecentraToken

DecentraMarket uses an ERC-20 based DecentraToken for transactions. This token, used for product purchases, fee payments, and incentives, offers users the ability to safely exchange DecentraTokens with other tokens via a decentralized asset trading protocol (DEX) on Uniswap.

Boosting Ownership Protection and Trust with NFT

DecentraMarket applies NFT technology to record unique product information and ownership on the blockchain. This clear record of product origin, ownership history, and guaranteed value and ownership transfer during transactions significantly improves the trustworthiness of the platform and overcomes the limitations of traditional secondhand trading platforms.

Transparent and Secure Data Storage with IPFS

DecentraMarket relies on IPFS to securely store data without the need for a central server.

When sellers upload transaction information such as product images and descriptions on IPFS, it ensures data integrity and security. This method has several advantages including reduced data storage costs, faster data transfer and access speeds, and the protection of data integrity, security, and user privacy.

Promoting Trustworthy Transactions via DID (Decentralized Identity)

DecentraMarket employs DID for secure authentication and management of user identities. This feature not only protects user privacy but also provides reliable authentication, reducing the potential for fraud and other dishonest activities. Additionally, it lowers the cost of maintaining and managing centralized authentication systems.

In summary, DecentraMarket leverages the Web3 technology stack to heighten the safety, transparency, and trustworthiness of secondhand trading platforms. By incorporating these technologies, users can securely confirm ownership, protect data, and conduct reliable transactions. This results in a superior service that vastly improves the user experience over traditional secondhand trading platforms.

The transaction flow for users using the service is as follows:

1. When a buyer commits to a purchase, the payment is temporarily held in an escrow account, managed by a smart contract.

2. The seller then dispatches the product to the buyer. Once the buyer receives and approves of the product, they notify the smart contract of their acceptance.

3. After confirmation, the smart contract transfers the payment from the escrow account to the seller. A transaction fee is then allocated to DecentraMarket.

4. If a discrepancy occurs, such as receiving damaged goods or encountering technical issues, the buyer and seller can initiate a dispute resolution process through the smart contract.

5. All transaction data is securely stored via IPFS, guaranteeing data integrity.

6. Users are able to verify each other's identities through the DID system, which fosters trust in transactions. In addition, DecentraTokens and other digital assets used in the transaction can be safely traded through the DEX.

5. Revenue Structure

DecentraMarket's revenue structure and business model are based on transaction fees from second-hand trades. To achieve this, DecentraMarket utilizes its technology stack to streamline the transaction process and provide a safe environment for users to conduct transactions.

Blockchain technology plays a crucial role in implementing this fee-based business model. Blockchain securely stores transaction data and increases the transparency of the transaction process, thereby enhancing users' trust. Additionally, by leveraging smart contracts, automated transaction processing is possible, simplifying the process of charging and distributing fees.

In this way, DecentraMarket uses blockchain and Web3 technology to enable P2P (peer-to-peer) transactions, reducing operating costs by eliminating intermediaries traditionally involved in second-hand trade platforms. DecentraMarket also addresses the safety issues of P2P transactions without third-party verification by utilizing smart contracts and decentralized identity (DID) technology, ensuring secure and transparent transactions. This approach allows users to experience more convenient and safe second-hand trading at lower fees.

Furthermore, the platform's native token, DecentraToken, also impacts the revenue structure. Users can pay transaction fees using DecentraToken, allowing the platform to collect these fees. Moreover, DecentraToken provides access to premium features, discounts, and rewards within the platform, generating additional revenue from users.

By combining these elements, DecentraMarket offers users a more affordable, convenient, and secure second-hand trading experience compared to traditional platforms while generating revenue through transaction fees and promoting the use of its unique DecentraToken.

6. Market Entry and Growth Strategy

DecentraMarket's market entry and growth strategy aims for continuous growth and expansion from the initial market entry. As an early market entry strategy, we will build a community of people interested in a specific field through NFTs to increase awareness of the platform and secure initial users. To achieve this, various marketing activities are conducted, such as social media marketing, collaborations with experts and influencers, events, and promotions.

The continuous growth and expansion strategy involves building diverse partnerships to support entry into new markets and continuously improving the platform's usability and features. To accomplish this, collaborations with global partners are established to localize for new markets and develop new features that cater to users' needs.

Additional features that are considered for implementation include an AI-based recommendation system, virtual space product experiences, and transaction analysis and reporting. These features enhance user convenience, increase product trustworthiness to aid purchase decisions, and help share market knowledge.

DecentraMarket pursues continuous growth and expansion from the initial market entry based on these strategies. By leveraging the innovative use of blockchain and Web3 technologies, DecentraMarket will provide differentiated value in the secondhand trading market and offer a safe and transparent trading experience to users worldwide.