



COMMUNOMY: A COMMUNITY DRIVEN ECONOMY

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Abstract

In the realm of traditional finance, the concept of financial freedom is often associated with retirement, a stage typically reserved for the later years of life. However, by reimagining this perspective and endeavoring to establish a degree of financial freedom in the early stages of life, individuals can gain the freedom of choice and opportunity. This paradigm shift has the potential to not only enhance personal well-being but also address broader socio-economic challenges such as low rates of higher education literacy, poverty, and wealth-based discrimination.

To achieve financial freedom at an earlier stage of life, it is crucial to create an ecosystem driven by communities that harnesses the power of Decentralized Finance (DeFi) for wealth generation. One such platform that enables this vision is Communomy. By leveraging the capabilities of blockchain technology, Communomy ensures transparency, security, and integrity in the management of community-raised funds. This empowers individuals to uplift their standard of living and, in turn, benefits the larger community.

Through the adoption of Communomy and the principles of DeFi, individuals can participate in wealth generation activities while maintaining control over their financial assets. The utilization of smart contracts and decentralized applications (DApps) further enhances the efficiency and autonomy of financial transactions within the ecosystem. This approach fosters a sense of ownership and collective responsibility, leading to sustainable socio-economic growth.

By integrating the concepts of early financial freedom and the utilization of blockchain technology and DeFi, we can create a future where individuals have the opportunity to achieve financial independence at an earlier stage in their lives. This not only contributes to their personal development but also addresses socio-economic disparities, creating a more inclusive and prosperous society. The empowerment of individuals through financial autonomy sets the stage for holistic growth and well-being, both at an individual level and for the wider community.

Keywords: Financial freedom, Decentralized Finance, Blockchain, Sustainable Socio-Economic Growth.

Introduction

Blockchain technology has revolutionized various industries, including agriculture, supply chain management, and entertainment. However, its impact on the finance sector has been particularly transformative, thanks to the rise of cryptocurrencies like Bitcoin, Ethereum, Cardano, and BitcoinCash. These digital currencies provide alternatives to traditional fiat currencies, which suffer from diminishing purchasing power due to government policies, foreign exchange market fluctuations, and flaws within the traditional banking system. The advent of cryptocurrencies has introduced concepts such as decentralized money and programmable money, completely reshaping the financial landscape and unlocking new opportunities for individuals that were previously inaccessible within traditional finance.

This research paper aims to explore the transformative impact of blockchain technology and cryptocurrencies on the finance sector, with a specific focus on community-driven projects that prioritize early-stage financial freedom. By examining the core principles of decentralization and programmable money, we will highlight how these projects empower individuals to achieve financial



independence at an earlier stage in life. Through the analysis of community-driven blockchain initiatives, we will uncover how these projects are disrupting traditional finance, fostering financial inclusion, and creating opportunities for wealth generation.

These community-driven blockchain projects challenge the conventional notion of financial freedom being reserved for retirement years by bringing it within reach at an earlier stage in life. By leveraging the power of decentralized finance, individuals can participate in wealth-generating activities that were previously inaccessible through traditional financial systems. Through transparent governance models and innovative incentive mechanisms, these projects promote the ideals of financial autonomy, community empowerment, and collective prosperity.

By understanding the dynamics and implications of community-driven blockchain projects, this research paper aims to shed light on their potential to create a more inclusive and equitable financial landscape. By unlocking the doors of early-stage financial freedom, these projects have the capacity to address socio-economic challenges such as low education literacy, poverty, and wealth-based discrimination. Ultimately, this research will provide insights and guidance for individuals, communities, and policymakers interested in harnessing the power of blockchain technology to achieve financial freedom and improve socio-economic well-being from an early stage in life.

Related Work

The research paper titled "Blockchain Disruption and Decentralized Finance: The Rise of Decentralized Business Models" explores the impact of blockchain technology on traditional business models, specifically in the context of decentralized finance (DeFi). The study investigates how blockchain's decentralized nature and smart contract capabilities enable the development of innovative financial applications, challenging traditional intermediaries and reshaping the financial landscape. The paper emphasizes the potential of blockchain to disrupt various sectors, such as banking, insurance, and lending, by enabling peer-to-peer transactions, reducing costs, and enhancing transparency and security.

The research paper "Decentralizing Finance Using Decentralized Blockchain Oracles" focuses on the role of decentralized blockchain oracles in enabling and expanding the capabilities of decentralized finance. Oracles serve as bridges between the blockchain and the external world by providing reliable and tamper-proof data inputs. The study explores how these oracles play a crucial role in facilitating real-world data integration, allowing smart contracts to interact with external data sources, and enabling complex financial transactions on the blockchain. The paper highlights the potential of decentralized oracles to enhance the efficiency and reliability of DeFi applications, addressing issues related to trust and data integrity.

Together, these research papers shed light on the disruptive potential of blockchain technology and its application in the realm of decentralized finance. By eliminating the need for intermediaries and leveraging smart contracts, blockchain enables the creation of decentralized business models that challenge traditional financial systems. The research highlights the benefits of transparency, security, and reduced costs that decentralized finance offers to individuals and businesses alike. Furthermore, the role of decentralized blockchain oracles in providing trusted data inputs paves the way for more sophisticated and reliable DeFi applications. The findings from these papers contribute to the understanding of the transformative nature of blockchain technology and its implications for the future of finance.

Problem Statement

This study seeks to design and develop a user-friendly and comprehensible platform that enables communities to engage with decentralized finance (DeFi) applications. The platform aims to facilitate wealth generation over time in an evaluated risk environment, leveraging decentralized finance



principles. Additionally, the study aims to explore the potential of crowdfunding to support the future endeavors of the next generation.

Motivation

In today's fast-paced world, many individuals struggle to manage their finances effectively, leading to financial and mental distress in unexpected situations. However, by adopting a proactive approach to financial planning and management, individuals can attain a sense of financial freedom that significantly impacts their outlook on life and decision-making abilities. To address this need, we aim to develop a user-friendly and accessible platform that harnesses the power of blockchain and decentralized finance. By simplifying these technologies, we seek to create an evolutionary platform that empowers individuals to build stronger financial communities and secure better futures for themselves and the next generation.

Through our platform, individuals will have the opportunity to experience the benefits of financial freedom. By breaking down complex financial concepts and offering a rewarding user experience, we aim to remove barriers and enable widespread adoption. Leveraging blockchain technology and decentralized finance principles will enhance transparency, security, and accessibility, ensuring that everyone can participate in creating a brighter financial future. By conducting this research and realizing our vision, we aim to empower individuals to take control of their financial well-being, foster supportive communities, and foster positive financial scenarios for a more prosperous future for all.

Existing Systems

The concept of banking has a long history, dating back centuries and initially catering to emperors and wealthy individuals. However, the modern banking system as we know it today can be traced back to 1776 when Adam Smith, often referred to as the father of economics, proposed the theory of an economy based on financial institutions. Initially, banking was controlled by private entities and influential individuals. However, lessons learned from various financial crises and tragedies highlighted the risks of allowing private entities to have excessive control over a country's financial system, leading to the establishment of entities like the Federal Reserve to regulate and prevent misconduct by private institutions.

One of the fundamental issues with traditional finance is its inability to adapt to the changing world. It continues to grapple with problems such as fraud, corruption, and mismanagement, which have plagued the system since its inception. Notable examples of traditional finance failures include the Asian Crisis of 1997, the global recession of 2008, and the ongoing crisis of 2022. These failures can be attributed to either poor government policies or unethical practices within private institutions.

Traditional finance operates on the principle of centralization, earning it the label of Centralized Finance. The centralized structure of traditional finance, such as the Indian banking system's hierarchy with the Reserve Bank of India at its core, brings certain benefits, such as centralized control over a country's finances and the ability to restrict access to suspicious entities. However, when viewed from a different perspective, this centralized structure can become a tool for dubious individuals in power to oppress specific groups or can be undermined by corruption within the central authority, leading to the collapse of the system and the failure to serve the general public effectively.

These are just a few examples of the darker side of traditional finance, emphasizing the need for revolutionary changes in the banking sector and the broader realm of finance. It is evident that a new approach is required to address the shortcomings of traditional finance and build a more resilient and inclusive financial system that serves the needs of individuals and the economy as a whole.



Proposed Methodology

The proposed research will focus on developing a blockchain-based platform, named Communomy, with a specific emphasis on long-term asset holdings and wealth generation through decentralized financial activities. The platform will incorporate various strategies such as lending and yield farming, utilizing major crypto-assets like Ethereum and USDT for wealth accumulation over time. Key features of the platform will include transparency, accessibility, security, permissionless access, and trustlessness.

Among the available blockchain options that provide development environments, Ethereum has been chosen as the most suitable choice for Communomy due to its established reputation, extensive developer community, and user-friendly development environment. Ethereum offers the necessary security and transparency required by the platform's end users.

The selection of a lending platform is crucial, considering the volatile nature of the crypto market and the long-term focus of Communomy. The chosen lending platform must exhibit sustainability, security, and competitive returns on investment (ROI) to provide users with attractive rates. Similarly, other wealth generation opportunities like yield farming and liquidity provision will be integrated into the system, subject to the same criteria used for selecting the lending partner.

In addition to the technological aspects, a user-friendly interface will be a key consideration in designing the platform. It should provide a simple and intuitive experience for users to navigate seamlessly. The platform will also facilitate the formation of communities, allowing users to connect with existing communities or add other users to their friends' list. Each user will have a unique identification referred to as a "BID," which will enable tracking of user data and transactions within the system.

The combination of community-driven support/funding and decentralized finance empowers individuals to achieve early financial freedom. By leveraging the collective strength and resources of a community, individuals can access financial support and opportunities while bypassing traditional institutions. Decentralized finance provides transparent and accessible financial services, enabling individuals to grow their wealth and take control of their financial future. Together, these approaches offer a powerful pathway to create financially free individuals at an early stage of life.

Through this proposed methodology, the research aims to develop a robust and user-centric blockchain platform, Communomy, that enables long-term wealth generation while ensuring security, sustainability, and ease of use for its users.

Mathematical formulation

The formula calculates the minting of tokens (t) based on the initial deposited amount (E), taking into account factors such as the token issuance rate/genesis price (g). It provides a method to determine the number of tokens that will be generated as a result of the initial deposit, facilitating the token distribution process in a decentralized system. The interest accumulated over the period of time will reflect in the exchange rate of the minted token

$$t = \frac{E}{g}$$

The formula calculates the potential annual earnings (Eg), allowing individuals to estimate the amount they can earn over a one-year period based on certain parameters such as average interest rates (avgIr) and total minted token holdings (t)

$$Eg = t * \frac{\text{avgIr}}{100}$$



The formula calculates the interest earned (Ie) on a principal amount based on the holding of minted tokens (t), exchange rate at the time of calculation (exRate) and the genesis price (g) at which tokens are minted.

$$Ie = t * (exRate - g)$$

The formula calculates the total redeemable amount (R), which includes both the initial principal amount and the accumulated interest earned over a specific period of time. By applying this formula, individuals or institutions can determine the final value of their investment or deposit, considering the interest rate and the duration of the investment. This provides a valuable tool for financial planning and decision-making, allowing individuals to project their returns and make informed choices regarding their investments.

$$R = t * exRate$$

Future Scope

Given the numerous issues experienced by centralized systems, such as corruption and the concentration of power, individuals are actively seeking alternative investment tools. Cryptocurrency has gained immense popularity across all age groups, presenting itself as a viable alternative. The rise of Decentralized Finance (DeFi) has further expanded investment opportunities within the cryptocurrency space, enabling users to participate in market making activities that were previously inaccessible through traditional finance.

By leveraging the power of Blockchain and DeFi, a platform can facilitate the growth of communities by providing users with the opportunity to engage in market making and earn interest. This concept not only benefits individuals but also fosters community support in securing a prosperous future for the next generation. The inherent potential for mass adoption and community-driven growth makes this platform highly promising.

In the future, the integration of multiple blockchains could enable the platform to evolve into a multi-chain ecosystem, catering to communities across different blockchain networks. Additionally, incorporating features such as personalized crowdfunding campaigns for individuals or small businesses can further enhance the platform's utility and appeal.

From a business standpoint, if the platform continues to grow and becomes one of the largest market makers, it could potentially contribute to the security of various blockchain networks, particularly those based on the Proof of Stake (PoS) consensus mechanism. This would not only solidify the platform's position but also strengthen the underlying blockchain ecosystem as a whole.

Conclusion

In conclusion, our research has explored the concept of community-driven funding and the power of decentralized finance in creating financially free individuals at an early stage of life. By harnessing the potential of blockchain technology and decentralized finance, we have identified the opportunity to empower individuals to achieve financial freedom through community-driven support and funding.

Through the development of an accessible and user-friendly platform, individuals can participate in decentralized finance activities, such as lending and market-making, to generate wealth and secure their financial future. The transparency, security, and accessibility offered by blockchain technology ensure the integrity of the platform and enhance user trust.

Furthermore, the community-driven approach fosters collaboration and support among individuals, enabling them to pool resources, share knowledge, and create better financial scenarios for future



generations. This not only promotes financial independence but also contributes to the overall growth and well-being of the community.

As we envision the future scope of this research, we anticipate the integration of multiple blockchains to create a diverse and inclusive platform that caters to the needs of various communities. Additionally, the incorporation of personalized crowdfunding campaigns and the expansion of wealth generation opportunities will further enhance the utility and adoption of the platform.

Overall, our findings highlight the potential of community-driven funding and decentralized finance in empowering individuals to attain financial freedom at an early stage of life. By leveraging the benefits of blockchain technology, we can shape a more inclusive and equitable financial landscape that benefits individuals, communities, and society as a whole.

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