Crowd funding Using Block chain Technology

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Abstract: Crowd funding is an emerging financial system that has garnered recognition for its innovative and disruptive nature. It represent an alternative way of funding for the projects through campaigns compare to traditional fundraising. We are able to provide a secure and safest crowdfunding platform. Our objective is to offer user-friendly forms for campaign creation, donation and request approval through which both campaign creators and donors can easily create and fund the campaigns. The benefactor can keep tabs on the funds transacted. The technology will keep accounts of whole logs and cache as block. The methodology of d-Apps to crowd-investing, which aims to eliminate the various risks associated with traditional crowd funding methods.

Index Terms: Crowdfunding, Fund chain, Blockchain, Transparency, Chuffed.com, StartEngine.com, d-Apps.

I. INTRODUCTION

The blockchain functions as an immutable digital record that captures every transaction, utilizing a decentralized network where each node stores all the records. Ethereum facilitates the execution of applications known as Smart Contracts on the blockchain. These Smart Contracts operate within the Ethereum Virtual Machine. Crowdfunding offers a convenient means of securing funding for innovative project proposals. However, existing crowdfunding platforms often impose high fees and face occasional instances of fraudulent activities. By implementing a blockchain-based crowdfunding approach, these issues can be mitigated. Making Peer-to-Peer smart contracts in crowdfunding removing the conventional transaction fees and platform charges related with financers. Crowdfunding, in general, entails the participation of three primary entities: Contributors, Crowdfunding Platforms, and Project Managers. Some popular crowdfunding platform are Chuffed.com, StartEngine.com for the startup. The dApps built on the Ethereum blockchain ensures that all information related to campaigns, contributions, and transactions is stored on a secure network, visible for all users. This eliminates the need for central servers, making the process more efficient and reducing the possibility of fraud. Creating a campaign takes just a few minutes, and anyone can easily share their project and invite supporters on the network to contribute. The use of smart contracts further strengthens the integrity of the system, making it a truly innovative solution in the world of crowdfunding.
II.MOTIVATION

- Our goal is to provide a platform where start-ups, small businesses, and creative innovators can secure the financial backing they need to bring their ideas to life.
- Crowdfunding, as a financial solution, stands out for its swiftness in raising capital without the burden of upfront fees. It offers a speedy way to funding that is accessible to a large spectrum.
- Crowdfunding serves as an invaluable means of financing, particularly for businesses that lack access to traditional bank loans or are navigating through a turbulent economic landscape.
- The increasing prominence of crowdfunding as a versatile financing source for entrepreneurs has ignited our passion for this concept. This motivation led us to embark on a project dedicated to this topic.
- Our project is designed to cater to various objectives. It is inspired by the multifaceted nature of crowdfunding, which encompasses capital generation, business idea validation, brand enhancement, and the educational empowerment of the newer generation on the advantages of alternative funding mechanisms.

III.METHODOLOGY

For the design, we will using multiple frameworks and tools –

1. Next.JS: Next.js is a web development react framework that enables functionalities such as server-side rendering and generating static websites for React-based web applications.
2. Solidity: It is the programming language for implementing Ethereum-based Smart Contracts.
3. Web3: Web3.js is a collection of libraries that allow you to interact with a local or remote Ethereum node using HTTP, IPC, or WebSocket.
4. Ethereum Smart Contract: It is the collection of functions and data creating a homologous network thereby executing and verifying the code.
5. React.js: React.js is a JavaScript library for making user interfaces that allows to create efficient, and reusable UI for web applications.

Languages we will be using are - HTML, CSS, JAVASCRIPT

IV.ARCHITECTURE/FRAMEWORK
V. CHARACTERISTICS

Decentralized Trust:
Crowdfunding through blockchain is characterized by its decentralized nature. It relies on a network of distributed nodes to verify and record transactions. This decentralization fosters trust as no single entity has control over the entire system.

Enhanced Security:
Blockchain employs cryptographic ways to secure deals. This means that benefactions are stored securely and can’t be obstructed with or manipulated, icing the safety of backers' investments.

Global Accessibility:
Crowdfunding via blockchain is accessible to a global audience. Anyone with a secure network can participate, making it more inclusive and expanding opportunities for project creators.

Reduced Intermediaries:
Blockchain eliminates the need for traditional intermediaries, such as banks or payment processors. This reduces transaction fees and speeds up the fundraising process.

Transparency and Immutability:
All transactions on the blockchain are transparent and immutable. This means that once a contribution is recorded on the blockchain, it cannot be altered, providing a transparent and auditable ledger.

Tokenization:
Some blockchain-based crowdfunding platforms use tokens or digital assets to represent contributions. These tokens can be traded, providing backers with potential liquidity even before a project is completed.

Community Engagement:
Blockchain crowdfunding often fosters a sense of community and collaboration among backers and project creators. It encourages a direct relationship between those seeking funds and those providing them.

VI. CONCLUSION

Blockchain technology is revolutionizing crowdfunding. It promotes an interface between originators, funders, and consumers. Thanks to smart contracts, benefactors can contribute safely through their favorite systems. Consumers can support any creator and buy digital products. Blockchain grounded crowdfunding ensures further transparent deals in a decentralized manner. With the elaboration of blockchain, our proposed work have a bright future and a large compass for enhancement and elaboration. In the future, the proposed exploration work can progress further in an easier and safer way for all ideas that are achieved through the proposed crowdfunding operation.
VII. REFERENCES

1. Learning Solidity Language: https://cryptozombies.io/