

CROWD-FUNDING USING BLOCKCHAIN TECHNOLOGY

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Abstract - Crowd funding is an online money-raising strategy that began as a way for the public to donate small amounts of money to help creative people finance their projects. Through crowd funding, individuals are able to invest in entrepreneurial start-ups through an intermediary, such as a broker-dealer. The problem with the current sites is they don't provide the Donor Guarantee Policy and they don't have control over the money they donated. This paper is to propose crowd funding using blockchain technology. Through this, we can provide a safe, secure and transparent way for crowd funding.

This work of this paper is to provide interactive forms for campaign creation, donation and request approval through which both campaign creators and donors can easily create and fund the campaigns. The Donor can able to track the money that they were sent. The Blockchain will record all the transaction and store as a block. Crowd funding is not a charity, fees charged, risk of failure etc. Here comes the role of blockchain to nullify the potential risks of the conventional method of fundraising. A decentralized approach to crowd funding allows us to eliminate all the potential risks faced by the conventional approach of Crowdfunding is an online fundraising method that originated as a way for individuals to contribute small amounts of money to support creative projects. However, existing crowdfunding platforms often lack transparency and control for donors, and they may not offer robust guarantees or protections.

This paper proposes leveraging blockchain technology to enhance crowdfunding by providing a secure, transparent, and efficient platform. Blockchain technology can provide a decentralized and immutable ledger to record all transactions, ensuring transparency and accountability. With blockchain, donors can track their donations, and campaign creators can easily create and manage their campaigns. The use of smart contracts can automate the process of approving donation requests, reducing the risk of fraud or mismanagement.

Key Words: Crowd funding, Campaign, Smart Contracts, Request-Approval, Consensus Segmentation, Digital Wallet.

1. INTRODUCTION

Crowd funding can be defined as raising funds for a project or a campaign by a group of people instead of using established entities like Bank providers or Loan providers. In simple words, it is a method of collecting many small contributions, by means of an online funding platform, which will help to finance or capitalize a popular enterprise.

Crowdfunding action mainly involves three parties, mainly Contributors, Crowd funding Platform and Project Managers. Some popular crowd funding platforms include kickstarter.com, Indiegogo.com and mystartr.com.

The main best and useful benefit of crowd funding is that it can raise the amount of money needed in a very short interval of time. This is due to the fact that many people today use the Internet and social media platforms which means that via these channels the project founder can reach out to the public within a short period of time.

Nowadays, with the rapid development in network technology, the crowd funding platform is a typical representative of the Internet financing.

In recent years, crowd funding has become more perfect and widespread and is gradually becoming the supplement and enhancement of many financial traditional methods. The data scale generated by crowd funding grows very rapidly, but the benefits generated based on that data do not keep pace with that growth rate.

Aim of our project is to develop a website or a platform which will allow one to promote their project on our page to help reach a wider base. Which will also help one to fetch funds easier than any bank.

The main benefit of crowd funding is that it can raise the amount of money needed in a very short amount of time with great ease.

This is due to the fact that many people today use the Internet and social media networks, which means that through these channels the project founder can reach out to the public/users within a short amount of time. It also creates a gateway for fund providers to contribute to the financing of a very promising project started by an innovative creator who actually lacks sufficient resources for reifying.

A successful crowdfunding campaign can also help allow a business to build a customer and an investor base that ensures future success. Opportunities to interact directly with your customers, who are also your investors which will give the ability to get feedback from your customers while you develop and test the product created by you. Crowdfunding is when a “crowd” funds a project, or a business, rather than one or two major investors. So there are total four different types of crowdfunding : Rewards, Donation, Debt and Equity.

These platforms allow anyone to start fundraisers to raise money for causes or life events that they can't otherwise afford to. Crowdfunding can also provide a better lifeline for those who are struggling financially.

2. LITERATURE SURVEY

2.1 Javier Ramos has cited in their publication that crowdfunding provides finance in sectors of activity where finance is difficult to obtain and allows entrepreneurs to test the acceptance of their products in a short period of time. Different strategic options to increase the “right participation” through their platform's purpose and mission statements.

2.2 Ethan Mollick has cited in their publication that founders of this project make efforts to fulfill their obligations to funders, though many projects are delayed. So, the size of the project predicts delays, as overfunded projects being particularly vulnerable to delay, are likely due to the increased complexity and expectations which are associated with large projects.

2.3 Huasheng Zhu and Zach Zhizhong Zhou have cited in their publication that Equity crowdfunding via the Internet is a new channel of raising money for startups. As it features low barriers to entry, low cost, and high speed, which encourages innovation. In the recent years, in China equity crowdfunding has experienced some developments. However, there are some problems that remain unsolved in practice.

2.4 Taha Bouhsine has cited in their publication that they have used development methodology called as Iterations and Increments, as well as Kanban board model to divide

and organize projects into small tasks for the design purpose.

3. MODULE DESCRIPTION

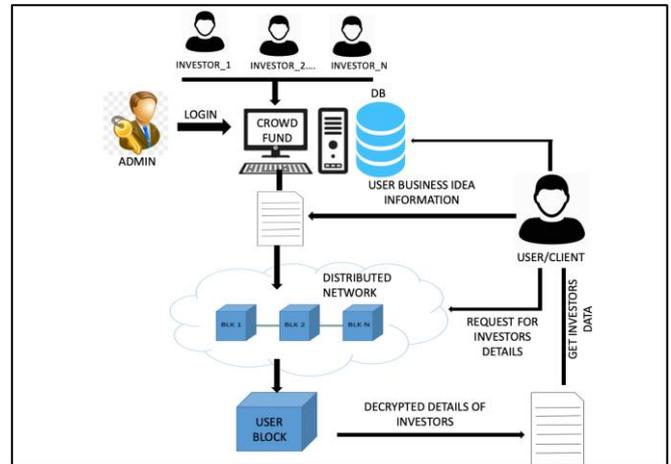


Fig 3.1 System Architecture

Project Concept and Planning:

Define your project, its objectives, funding requirements, and the value you intend to provide to contributors. Plan the campaign's duration, funding goals, and rewards or incentives for supporters.

Select the Right Blockchain Platform:

Choose a blockchain platform that aligns with your project's requirements. Popular options include Ethereum, Binance Smart Chain, or specialized crowd-funding platforms like Kickstarter using blockchain.

Create a Digital Wallet:

Set up a digital wallet to store the cryptocurrency contributions you receive. Ensure it is secure and properly configured to receive various types of digital assets.

Implement Smart Contracts:

Develop or employ smart contracts on the chosen blockchain that automate the funding process. These contracts will specify how funds are managed, held in escrow, and released to the project upon reaching certain milestones or targets.

Legal Compliance:

Research and understand the regulatory requirements related to crowd-funding in your jurisdiction. Ensure that your campaign complies with relevant securities laws and other regulations. Consider consulting with legal experts if needed.

Marketing and Promotion:

Promote your crowd-funding campaign to a wide audience using various channels, including social media, email marketing, and dedicated crowd-funding platforms. Create a compelling narrative and presentation to attract contributors.

Create a Landing Page or Platform:

Develop a user-friendly landing page or use an existing blockchain-based crowd-funding platform. Provide detailed information about your project, its goals, and the rewards or incentives you're offering to contributors.

Set Funding Milestones:

Define clear milestones in your smart contract that trigger the release of funds as the campaign progresses. Ensure these milestones are verifiable and aligned with project development.

Accept Cryptocurrency Contributions:

Enable contributors to send cryptocurrency contributions to your campaign's wallet. Ensure that you provide clear instructions on how to participate, including wallet addresses and contribution limits.

Engage with Your Community:

Maintain active communication with your contributors through regular updates, answering questions, and engaging with your community. Transparency and accountability are crucial.

3. PROJECT METHODOLOGY

Crowdfunding is a method of raising capital through the collective effort of a large number of individuals, typically via online platforms. The methodology behind crowdfunding typically involves several key steps.

Firstly, the project initiator or entrepreneur creates a detailed pitch or campaign outlining their idea, product, or project, along with its purpose, goals, and potential impact. This pitch is crucial as it serves as the initial point of engagement with potential backers.

Next, the crowdfunding platform provides the infrastructure for hosting the campaign and facilitates interactions between the project initiator and backers. This includes setting up a webpage for the campaign, processing payments securely, and providing tools for communication and updates.

Marketing and promotion play a significant role in crowdfunding methodology. Project initiators often leverage social media, email marketing, press releases, and other channels to spread the word about their campaign and attract backers. Engaging storytelling, compelling visuals, and clear incentives for backers are essential elements of successful marketing strategies.

During the campaign period, backers pledge funds in exchange for rewards or equity, depending on the type of crowdfunding model being used (e.g., reward-based,

donation-based, equity-based). Backers may also share the campaign with their networks, helping to broaden its reach.

Throughout the campaign, project initiators must maintain transparency and communicate regularly with backers, providing updates on progress, challenges, and milestones achieved. This fosters trust and keeps backers engaged throughout the funding process.

After the campaign concludes, funds are collected from backers, and the project initiator is responsible for fulfilling any promises made, such as delivering rewards or executing the project as outlined in the campaign. Successful crowdfunding campaigns often involve ongoing engagement with backers even after funding goals are met, as they can serve as advocates and potential customers or supporters in the future.

4. GUI/WORKING MODULES

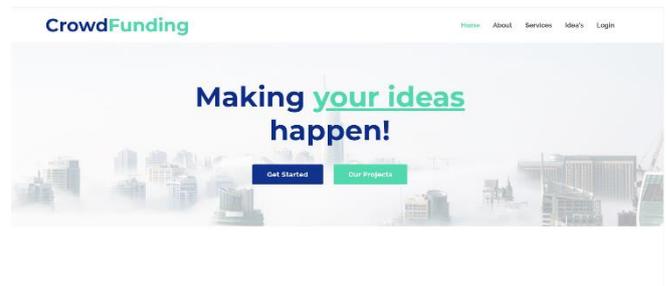


Fig4.1 : Home Page

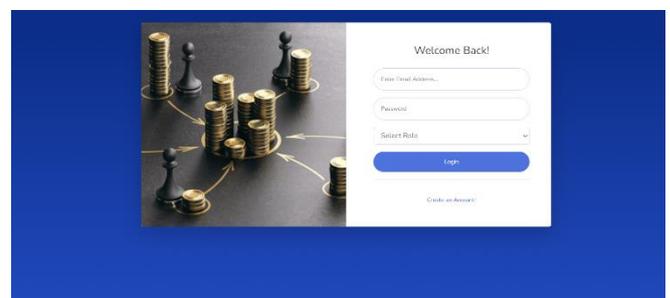


Fig4.2 : Login Page

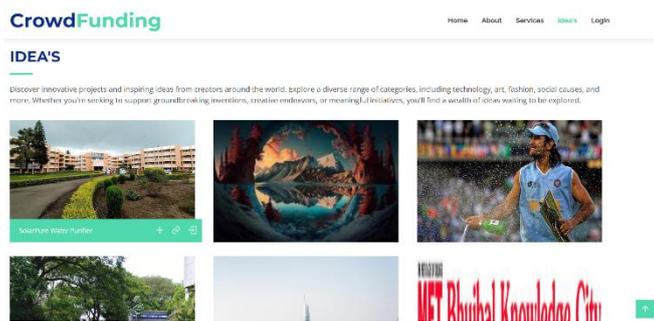


Fig4.3 : Project Ideas



Fig4.4: Project Info

5. CONCLUSIONS

Online crowdfunding help and enables people to raise funds for their project. Interested people in this project can donate by making an online transaction. The donated money in this project goes to the project manager, which he/she uses to complete the project or to make a product.

Blockchain in crowdfunding is relatively a new concept to the community or entire world. The world is still adjusting to Blockchain and Cryptocurrencies which will take couple of years more for Ethereum based Dapps to become popular and to be recognized by the community/world. In such situation, Blockchain based crowdfunding application is a very tough concept to be understood by everyone.

Crowdfunding platform based on Blockchain is proposed to provide more transparent transactions in a decentralized structure or way.

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