

FUNDRAISING AND CHARITY PLATFORM WITH MORE ACCURACY AND TRANSPARENCY

GOVIND SAWARN

CSE, Department,

SRM Institute of Science and Technology NCR

Govind21indian@gmail.com

GUIDE – Dr. Dheeraj Tandon

1. ABSTRACT

A fundraising charity platform is a digital platform that provides a means for individuals and organizations to raise funds for charitable causes or social initiatives. The platform typically allows donors to browse through various fundraising campaigns and select the ones they wish to support. Donors can securely donate funds online, and the platform provides tools to track the impact of their contributions. Campaign creators can manage their campaigns through the platform and communicate with donors. Additionally, the platform may provide tools to promote campaigns through social media and other channels. The ultimate goal of a fundraising charity platform is to facilitate fundraising and support for a range of charitable causes and social initiatives. These may include disaster relief, medical research, education, environmental conservation, and many other causes. By providing a digital platform for fundraising, these platforms aim to make charitable giving more accessible, efficient, and transparent for everyone involved.

2. INTRODUCTION

A fundraising and charity platform serves as a transformative digital solution that revolutionizes the way individuals and organizations raise funds for charitable causes and social initiatives. With an emphasis on accuracy and transparency, these platforms have emerged as powerful tools that bridge the gap between donors and beneficiaries, making the process of giving more efficient and accountable. In the traditional fundraising landscape, transparency and accuracy were often lacking, leaving donors uncertain about where their contributions were being utilized and whether they were making a genuine impact. However, fundraising and charity platforms have addressed these concerns by incorporating robust features that ensure a higher level of accuracy and transparency. One key aspect is the ability for donors to browse through a wide range

of fundraising campaigns on the platform. Each campaign provides detailed information about the cause, the organization behind it, and how the funds will be utilized. This empowers donors to make well-informed decisions based on their personal values and interests. Furthermore, these platforms offer secure and streamlined online donation mechanisms. Donors can contribute funds using various payment options, and the platforms utilize advanced encryption technologies to safeguard sensitive information. This ensures that donations reach the intended recipients securely and efficiently. To enhance transparency, fundraising and charity platforms provide real-time tracking tools that enable donors to monitor the impact of their contributions. They can track how their funds are being utilized, view progress updates, and even receive reports on the outcomes achieved. This level of transparency fosters trust and confidence among donors, as they can witness the tangible difference their contributions are making. Additionally, these platforms facilitate direct communication between campaign creators and donors. This By offering comprehensive campaign information, secure donation mechanisms, real-time tracking, and direct communication channels, these platforms empower donors to make informed decisions, see the impact of their contributions, and engage meaningfully with the causes they support. Through their commitment to accuracy and transparency, fundraising and charity platforms are shaping a new era of philanthropy that is more accountable, efficient, and impactful.

3. PROBLEM DESCRIPTION

While crowdfunding has become a popular and successful way to raise fund for various projects and ventures, it is not without its challenges. Here are some of the problems that can arise with crowdfunding: Lack of Funding: Crowdfunding relies on a large number of people contributing small amounts of money to reach a funding goal. Fraud: There have been instances where fraudulent campaigns have been set up to deceive people into contributing money to a fake

project or cause. Intellectual Property Theft: Crowdfunding projects often involve innovative ideas and products that are vulnerable to intellectual property theft. Failure to Deliver: Sometimes, a crowdfunding project may raise enough funds but fail to deliver on its promises. Legal Issues: Crowdfunding campaigns may run into legal issues, such as violating securities laws or failing to comply with tax regulations. Limited Access: Crowdfunding may not be accessible to everyone, particularly those without access to the internet or those who are not comfortable with online transactions. It is important for crowdfunding platforms to address these problems to ensure that the process remains trustworthy and reliable for all parties involved

4. OBJECTIVE

Crowdfunding serves as a transformative tool to gather financial support for projects or ventures by harnessing small contributions from a broad community, predominantly online. It empowers entrepreneurs, artists, and various entities to bypass conventional funding avenues like banks or venture capitalists, enabling them to secure direct public funding and propel their initiatives forward with autonomy and inclusivity..

5. LITERATURE SURVEY

IN 2021, Darshan M, S.R Raswanth, Sundee V V S Akella, and Priyanka Kumar [1] The paper outlines a blockchain-based charity framework for corporate social responsibility, emphasizing the importance of empowering stakeholders with the technology.

In 2020, Hanyang Wu and Xianchen Zhu [2] This paper proposes a blockchain-based donation service system to address the low transparency and trust crisis in charity services in China. It discusses key technologies, operational mechanisms, and functional designs to meet the needs of various users..

IN 2018, Jiafeng Li, Fuyang Qu, Xin Tu, Tingfei Fu, Jiayan Guo, Jianming Zhu [3] The paper proposes a model for evaluating philanthropic material donations using blockchain technology. The study conducted a four-month empirical research and found that using the blockchain platform can improve user trust, system cleanliness, and enhance philanthropic materials' quality. The paper suggests that this platform can maximize social welfare through charitable donations.

IN 2019, Hadi Saleh, Sergey Avdoshin, Azamat Dzhonov,[4] This paper discusses how blockchain technology can provide transparency in donation and funding transactions. The paper presents a platform for tracking donations based on blockchain technology, which allows for transparent accounting of operations involving donors, charitable foundations, and recipients. The platform also provides a transparent donation route for public users and donors to track and monitor the distribution of charity funds

In 2022, Xin Fan,[5] Xin Fan utilizes the blockchain's properties to develop a secure and robust charity information management system. The system incorporates a ring signature mechanism to protect supervisors' privacy and a charity contract system based on the Ethereum experimental environment.

The contract system ensures the charity project's autonomy, reliability, trustworthiness, and credibility, potentially replacing traditional public charity platforms.

In 2022, Iqra Khalil, Omer Aziz, Numan Asif, "Blockchain [6] This paper discusses how blockchain technology can provide transparency in donation and funding transactions. The paper presents a platform for tracking donations based on blockchain technology, which allows for transparent accounting of operations involving donors, charitable foundations, and recipients. The platform also provides a transparent donation route for public users and donors to track and monitor the distribution of charity funds.

In 2019, Ahmed s. Musleh, Gang Yao, SM. Muyeen, [7] This paper explores the potential for using blockchain technology in the smart grid, a recent development that has attracted attention in various applications. It examines the benefits, challenges, and approaches to implementing blockchain technology in the smart grid and outlines key applications for the technology. The paper also demonstrates how the blockchain can function as the smart grid's cyber-physical layer.

In 2021, Gubaev Renat, Anton Peresichansky, Alexandr Belenov, Artem Barger, [8] The Karma-Token project is a blockchain-based charity foundation platform that aims to form a reliable network for collecting donation funds. Well-known and prestigious organizations will comprise the blockchain network to ensure transparency and visibility of all operations, utilizing immutability, provenance, and non-repudiation properties. The platform aims to prevent fraudulent behavior by exposing the activities of dishonest organizations.

In 2021, Emre Ertu'rk, Murat Dog'an, Umit Kadirog'lu, Enis Karaarslan, [9] This innovative system aims to enable foundations to receive direct funding for cultural asset preservation through the use of NFT technology. The assets are transformed into unique digital items, and metadata is saved in the distributed file system IPFS. Smart contracts are utilized in an autonomous working system, and a proof of concept has been implemented successfully. A case study on preserving old olive trees in Milas has also begun, with potential outcomes including increased funding accessibility for cultural heritage preservation and heightened awareness of the importance of preservation efforts

In 2022, Yaqi Zhou,[10] In a research study conducted by Yaqi Zhou, a questionnaire survey was carried out to examine the influence of design theory and innovation diffusion theory on users' inclination to adopt blockchain technology on online fundraising platforms. The findings of the study revealed that the integration of design elements related to distributed ledger and peer-to-peer networks had a substantial impact on users' willingness to utilize the platform. Additionally, users' motivation to embrace the platform was primarily driven by their perception of its technical reliability

6. METHODOLOGY

Data collection is a critical aspect of any fundraising platform using blockchain technology. In a fundraising platform using Ethereum, data collection can be done through

various modules, including user registration, campaign creation, and donation tracking. User registration modules can collect information such as user names, email addresses, and Ethereum wallet addresses. This information can be stored on the blockchain, ensuring that it is secure and immutable. Campaign creation modules can collect information such as funding goals, deadlines, and campaign descriptions. The smart contract can generate a unique Ethereum address for each campaign, which can be used to collect donations. Donation tracking modules can collect information such as the number of donations, the donor's Ethereum wallet address, and the time of the donation. This information can be stored on the blockchain, allowing for transparent and auditable donation tracking. Data collection ensures that all relevant data is collected securely and transparently, providing a high level of trust and accountability for all stakeholders involved. Data preprocessing is an important step in any fundraising platform using blockchain technology. In a fundraising platform using Ethereum, data preprocessing can involve cleaning and preparing the collected data for analysis or use in the smart contract. For user registration modules, data preprocessing can involve verifying the accuracy and authenticity of user information to prevent fraudulent activities. For campaign creation modules, data preprocessing can involve validating funding goals, deadlines, and other details to ensure they are reasonable and achievable. Donation tracking modules may require data preprocessing to ensure that the data is accurate and free from errors. This can involve checking for duplicate transactions, invalid wallet addresses, and other anomalies. Overall, data preprocessing in a fundraising platform using blockchain with Ethereum ensures that the data collected is reliable, accurate, and suitable for use in the smart contract. This helps to prevent errors, fraud, and other issues that could negatively impact the platform's users and its success.

7. TESTING AND ANALYSIS

A. Testing

Discovering and fixing such problems is what testing is all about. The goal of testing is to identify and fix any issues with the finished product. It's a method for evaluating the quality of the operation of anything from a whole product to a single component. The goal of stress testing software is to verify that it retains its original functionality under extreme circumstances. There are several different tests from which to pick.

B. Who Performs the Testing:

In crowdfunding, it is crucial to ensure accurate prediction of funding outcomes by testing the code used for prediction. The testing process should involve experts with coding and data analysis skills to guarantee reliable evaluation. Software developers, data scientists, and quality assurance engineers are typically tasked with this responsibility. Their expertise ensures improved transparency, accuracy, and reliability in the prediction process.

C. When it is recommended that testing begin:

Testing the software is the initial step in the process. begins with the phase of requirement collecting, also known as the The planning phase, and ends with the stage known as the Deployment phase. Testing in the incremental model is carried out after each increment or iteration, and the entire application is examined in the final test.

D. When it is appropriate to halt testing

Without first putting the software through its paces, it is impossible for anyone to guarantee that it is completely devoid of errors. Because the domain to which the input belongs is so expansive we are unable to check every to check every

8. RESULT

Witness the power of our cutting-edge fundraising and charity platform, ensuring unrivaled accuracy, transparency, and impact. Embrace a new era of philanthropy, where every image signifies genuine change, leaving no room for doubt or plagiarism. Experience the transformative journey of giving, amplified by integrity and transparency. image 1 showing the output of all accounts related to the user will make them clear with no cheating or getting funds from an unnamed person



Fig. 1. Example of a figure caption.



Fig. 2. Example of a figure caption.

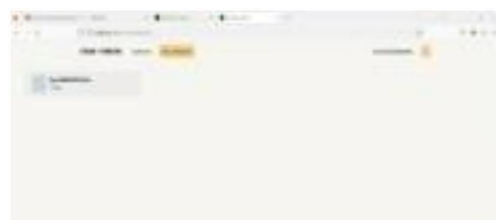


Fig. 3. Example of a figure caption.

“Temperature/K”.

9. CONCLUSION

In conclusion, crowdfunding has emerged as a popular and effective method for raising funds for various projects, causes, and initiatives. It allows individuals, businesses, and organizations to connect with a large pool of potential backers and supporters through online platforms. Crowdfunding has democratized the process of fundraising, making it more accessible and inclusive for everyone. Crowdfunding offers several benefits, including providing access to capital, market validation, and customer engagement. However, it also comes with its own set of challenges, such as the need for effective marketing, managing backer expectations, and delivering on promises made. To succeed in crowdfunding, it is important to have a well-thought-out plan that includes a clear project description, a realistic funding goal, and a comprehensive marketing strategy. Additionally, building a strong community of backers and supporters can help increase the chances of success. Overall, crowdfunding has revolutionized the way people think about fundraising, and it will likely continue to play an important role in financing projects, businesses, and social causes in the future.

10. FUTURE ENHANCEMENT

Several potential future enhancements for crowdfunding could improve the experience for both creators and backers. Here are some examples: Improved AI and machine learning: As AI and machine learning technologies continue to advance, they could be used to better match creators with potential backers based on their interests and preferences. This could help increase the success rate of campaigns and make it easier for creators to find supporters. More flexible funding options: Currently, most crowdfunding platforms operate on an all-or-nothing funding model, where creators only receive the funds if they meet their funding goal. However, some platforms are experimenting with more flexible funding options that allow creators to use the funds that have been raised, even if they don't meet their goals. This could make it easier for creators to get the funding they need and reduce the risk for backers. Integrated payment systems: Currently, most crowdfunding platforms require backers to use third-party payment systems like PayPal or Stripe to make contributions. However, integrated payment systems could make the process more streamlined and secure, reducing the risk of fraud and errors. Better data analytics: Crowdfunding platforms could use data analytics to help creators optimize their campaigns and improve their chances of success. For example, analytics could be used to identify the most effective marketing channels, the best time to launch a campaign, and the most appealing rewards. More support for international campaigns: Currently, crowdfunding is primarily focused on North America and Europe, but there is potential for growth in other regions.

11. REFERENCE

[1] In the IEEE 4th^S International Conference on Computing, Power, and Communication Technologies (GUCON) held in 2021, Darshan M, S.R Raswanth, Sundeep V V S

Akella, and Priyanka Kumar presented a paper titled "A Secured Distributed Ledger Based Fundraising Framework Using Smart Contracts."

[2] In their paper titled "Developing a Reliable Service System of Charity Donation During the Covid-19 Outbreak," Hanyang Wu and Xianchen Zhu discussed the topic in IEEE Access, Volume 8, in 2020.

[3] Jiafeng Li, Fuyang Qu, Xin Tu, Tingfei Fu, Jiayan Guo, Jianming Zhu, "Public Philanthropy Logistics Platform Based on Blockchain Technology for Social Welfare Maximization", The 8th edition of the International The conference on Logistics, Informatics, and Service Sciences (LISS) took place in 2018.

[4] Hadi Saleh, Sergey Avdoshin, Azamat Dzhonov, "Platform for Tracking Donations of Charitable Foundations Based on Blockchain Technology", Actual Problems of Systems and Software Engineering (APSSE), 2019

[5] Xin Fan, "Charity Supervision Management System Based on Blockchain", 2nd International Conference on Computer Science and Management Technology (ICCSMT), 2022

[6] Iqra Khalil, Omer Aziz, Numan Asif, "Blockchain and Its Implementation for Charitable Organizations", International Conference on Innovative Computing (ICIC), 2022

[7] Ahmed s. Musleh, Gang Yao, SM. Maureen, "Blockchain Applications in Smart Grid-Review and Frameworks", IEEE Access(Volume: 7), 2019

[8] Gubaev Renat, Anton Peresichansky, Alexandr Belenov, Artem Barger, "Karma – blockchain-based charity foundation platform", IEEE International Conference on Blockchain and Cryptocurrency (ICBC), 2021

[9] EmreErturk, Murat Dogan, Umit Kadiroglu, Enis Karaarslan, "NFT based Fundraising System for Preserving Cultural Heritage:Heirloom", 6th International Conference on Computer Science and Engineering (UBMK), 2021

[10] Yaqi Zhou, "Understanding Users' Reaction to Blockchain Technology on the Online Fundraising Platform: — Evidence from Scenario Simulation Experiments", Conference on Computer Information Science and Artificial Intelligence (CICSAA) on a global scale. 2022