

Survey on Crowdfunding Platforms Using Smart Contracts

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Abstract- In a normal banking system, the transactions are prone to hacks, double spending, high rates etc. The concept of blockchain puts a stop to these drawbacks. Blockchain is a distributed, unchangeable ledger that makes recording transactions and managing assets in a corporate network much easier. Crowd funding is a method of raising funds that runs independently of any government and is used by individuals, corporations, and charities. It is a method of raising funds by asking a huge number of people for a modest amount of money from each of them. Crowd funding has many advantages, but it also has a significant danger of fraud, as well as several other possible risks, such as money loss, investment lock-in and lack of transparency. In this paper we discuss various crowdfunding platforms that run for charity purposes.

Keywords- Blockchain, Smart Contract, Crowdfunding.

I. INTRODUCTION

Only around half of all crowdfunding projects meet their financing targets. [1] This is because to difficulties such as trust, transparency, accounting issues, duplicate spending, and exorbitant transaction costs that plague the sector. To address these difficulties, a blockchain-based charity based crowdfunding platform is being created. Unlike traditional crowdfunding platforms, the decentralised crowdfunding site is managed by a distributed network of computers.

As a result, a hacker's ability to alter or corrupt the platform's data and documents is almost impossible. It aids in the development of trust between the crowdfunding site and the contributors. [2]

Blockchain is a public ledger that allows everyone to see how money moves, but no one can tamper with the records or redirect the money, which solves the problem of transparency. Accounting can be controlled via smart contracts. The investor and the crowdfunding platform, in essence, establish a contract. The contract is then converted into a smart contract.

As a result, the donor can rest assured that the terms of the contract will not be changed at the platform's discretion. The payment of incentives will also be automated thanks to smart contracts. This will help to build trust even more. The use of blockchain can eliminate third intermediaries, lowering transaction costs. It also reduces manual tasks like data aggregation and amendment, which streamlines reporting and auditing procedures. The application of blockchain technology to charitable causes can help humanise the technology and make it more accessible to the general population.

II. LITERATURE SURVEY

1. Crowdfunding Platforms:

1.1 KETTO: Ketto is India's first peer-to-peer crowdfunding platform primarily based totally on donations. [3] It's an Indian net crowdfunding web page in which anyone, everywhere within the country, might also additionally enhance cash for reasons starting from hospital treatment to catastrophe assistance. Individuals, entrepreneurs, and NGOs can enhance budget to gain private goals, pay clinical bills, make a movie, or aid their preferred neighborhood sports activities crew or gymkhana. Ketto permits customers to create their very own on line fundraising marketing campaign web page via which they could enhance cash for charity, private projects, and clinical costs. NGOs/charity companions undergo a verification method which verifies the authenticity and validity in their submitted files earlier than account activation.

1.2 MILAAP: Milaap is an online crowdfunding platform that enables anyone across India to raise funds for healthcare, education, sports, disaster relief and other personal causes, with great ease. [4] It started as a platform to fund rural projects and micro entrepreneurs widely utilized by Indians to raise funds from friends, family, and a wider social network for medical needs, loved ones and charity. Milaap is soon becoming the go-to platform for funding cancer treatment, transplants, and other critical emergencies.

1.3 GOFUNDME: GoFundMe [5] is a for-profit crowd funding platform based in the United States that allows people to collect money for a variety of events ranging from birthday parties and graduations to life-changing events such as accidents and diseases. It enables users

to construct a website for the purpose of raising funds. Members can describe their fundraising cause and the amount they aim to raise during this step, as well as add images or videos. GoFundMe allows users to share their project with others via integrated social network links and email once the website has been setup. People can then donate to a user's cause via the website with a debit or credit card, and the funds can be tracked. Donors are also able to write comments on the website. There is no charge if the user does not receive any donations.

1.4 Crowdera- Crowdera is a global, fee-free online fundraising platform for organisations and social innovators who serve individuals and communities. [6] Crowdera enables fundraisers to boost their overall funding and effect by increasing meaningful engagement, spreading their messaging, and expanding their donor base. Transaction fees are waived, and funding is flexible.

1.5 Impact Guru- [7] Impact Guru is India's premier online crowdfunding tool, allowing NGOs and people to support their activities, as well as medical expenditures, artistic endeavours, and personal projects. You can also donate to a cause you believe in or select from a list of vetted causes. We analyse data for fraud patterns and promptly detect violations of our Terms of Service using advanced algorithms.

2. Charity Platform Using Blockchain [11]

2.1 World Food Program — Syrian Refugees, Jordan

The World Food Program (WFP) [8] is testing blockchain to make cash transfers more efficient, transparent, and secure. In Jordanian refugee camps, the World Food Programme developed and implemented a more resilient blockchain infrastructure. More than 100,000 people living in camps have used the blockchain-based Building Blocks system to redeem their cash-for food aid as of October 2018.

2.2 Alice Funding Platform - St Mungo's, United Kingdom

Alice.si [9] is built on Ethereum's blockchain. The ".si" stands for "social impact." Using Alice, charities can raise donations based on the transparency of their impact. Once a donation appeal has been launched on Alice, the charity commits to delivering specific outcomes and receives payment only when those outcomes are verified and validated by an independent third party.

2.3 Bitgive - Chandolo Primary School Water Project, Kenya

BitGive [10] has been accepting bitcoin for crowdfunding charitable projects since 2013. Donors can donate bitcoin directly to BitGive or to specific projects on their donation platform, GiveTrack. Successful projects include the Chandolo Primary School Water Project in Kenya that raised BTC 1.2 (approx. US\$15,000) in January 2018 to build a rainwater catchment tank, latrines and training.

III. COMPARATIVE ANALYSIS

Factors	Conventional	Blockchain
Registration/login fee	Ranges from inr 0 to inr 6000; some are non-refundable	No platform fees
Transaction fee	Depends on banking platform used	Depends on network and crypto currency used
Security	Prone to threats, easy to hack	Less threats, not easy to hack
Transparency	No	Yes
Transaction Platforms	GoCardless, Lemonway, paypal, Credit/debit card transactions	Metamask, Phantom, Binance Pay ,Bitpay etc..
Flow of Authority	Centralized	Decentralized
Data Mutability	Mutable	Immutable
Validation of client and donar	No validation	No validation
Ease of approval	Within 48 hours	Within 2 hours
Listing of project	Need to satisfy certain conditions	No restriictions

IV. CONCLUSION

In this paper we discussed various crowdfunding platforms and charity platforms using blockchain. A Crowdfunding based charity application using Blockchain technology can effectively and securely handle the relationship between fundraisers, platforms and the investors.

They are relatively inexpensive and uncomplicated in nature. They bring solutions to issues related to security, investor abuse, and illegal transactions. Blockchain technology endorses transparency in records, supports decentralization, encourages trust and provides a low-cost alternative. [14] We also compared between conventional crowdfunding Smart Systems and Inventive platform and blockchain crowdfunding platform. Since blockchain is an

emerging technology it has its own limitations which limits the usage of this technology in various platforms

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