Block Chain - Based Crowd Funding Using Ethereum

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Abstract - *Crowd funding has changed the way startup or any social working organisation used to raise funds for its operation in the society. Crowdfunding have innovated to the way start ups have to raise fund by roaming around banks or investors now they just have online their idea on social media or website they start raising funds. But due to false fund raisers or illegal investor have lower the trust of government and social workers in the society . Blockchain, emerge in few year of time which guarantee fraud free transaction between investor and fund raiser. Many block chain based crowd funding have already start raising funds in term of crypto currency successfully. Our study based on crowd funding platform which use decentralize, Fast and secure transaction by using arbitrary nodes in the pool.*

Key Words: **BlockChain,Crowdfunding,Decentralize, Ethereum**

1.INTRODUCTION

Crowdfunding (CF) is a general phrase that mean obtaining funds, typically in small amounts, from a vast population known as the crowd in order to support a business initiative, cause, loan, or other financial necessity via the designated platform. In the present Covid-19 pandemic crisis, practically every country faces the same challenge in dealing with this problem, particularly in terms of the cash required. Many techniques have been implemented by the government in order to manage government money in order to combat the Covid-19 epidemic. This situation induced community for donations to assist the government in combating the Covid-19.

Of fact, raising funds is a difficult procedure since it involves confidence between many parties, including funders, middlemen, or organisations that serve as a location to hold temporary cash. Trust is the key capital for fundraising organisations which built credibility of investors to commit their monies to fund recipients.

Many non-profit invest for help, as in the case of the Covid-19 pandemic. This important factor for investor which is TRUST it convince investor to provide money to the organisation. Not to mention a non-profit organisation that leverages technology for sending money with trust and simplicity.

This research based on the processes that help investor for fundraising with the help of blockchain technology. This will automat fundraising process without worry of fraud or wrong place allocation of fund. By using smart contract technologies. This technique can be employed in the communications and medical industries.
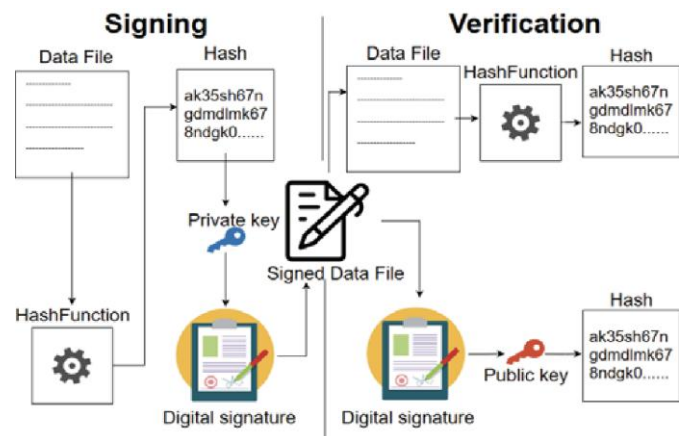
By using block chain technology it raises confidence and trust of investor along with recipient of fund can validate the fund source by insuring in legalities of fund itself.

The technique used in this study, according to the statement above, is library research. To give references for this study, it draws on sources from international and national periodicals, as well as other similar works.

1.1 System Design Crowdfunding Flow Process (Traditional)

Each fundraising group must have its own set of rules and methods. The entity inside the organisation, on the other hand, is inextricably linked to the four primary entities: the donor, fundraiser, depository fund (Bank), and fund receiver. The following is a broad description of the connection between entities in a fundraising organisation:
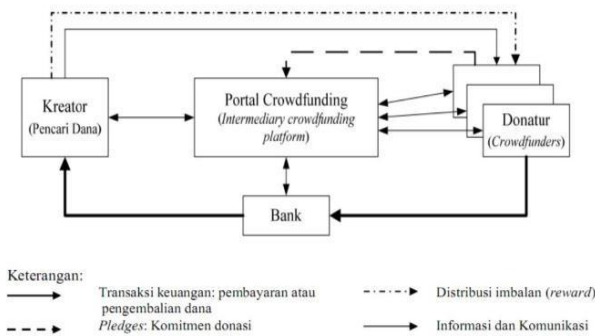
Fig. 1 : Crowd Funding Mechanism

Crowd funding mechanism made of three process:

1.1.1 All-or-Nothing (AoN)

This AoN scheme is a crowdfunding process scheme that implements if fundraising does not reach the target, then the funds will be returned to the funders. The following is an illustration for the AoN crowdfunding process scheme :
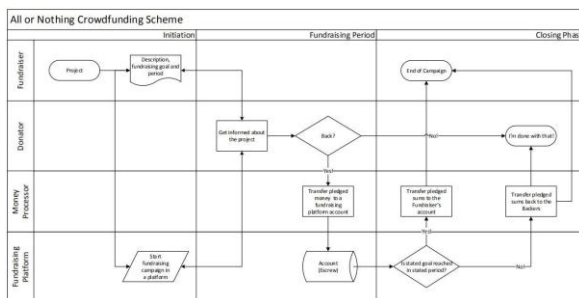

Fig -2: AoN crowdfunding process scheme

1.1.2 Keep-It-All (KIA)

Not much different from the AoN scheme, this scheme applies rules if data collection is not achieved then the funds will be returned in accordance with the policies of fundraising. This scheme (Fig-3) can be described as follows:
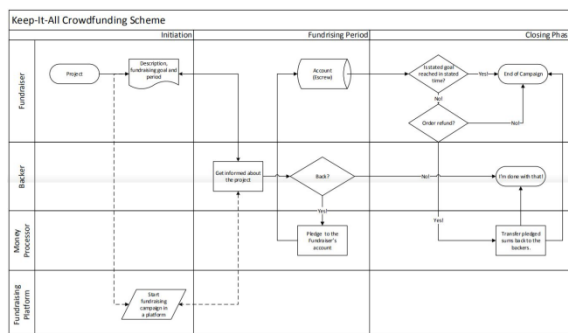

Fig-3: Scheme for CrowFunding

1.1.3 Stretched Goals Scheme(SGS)

In this scheme, there is a development of the fundraising goal is expanded and bound by the statement can add some predetermined additional values to products and services, if the fundraising goal is achieved, then the fundraised can take all the actions needed to add that value. The model od this scheme (Fig-4) can be described as follows:
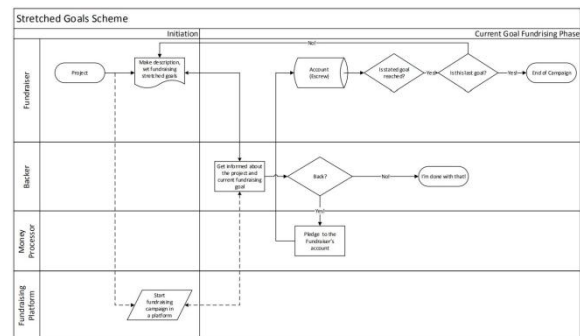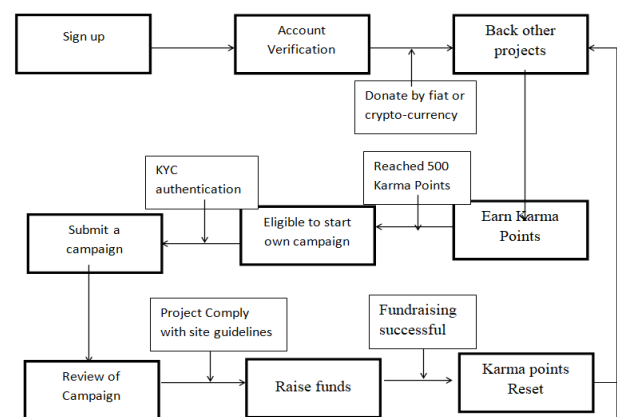

Fig-4: SGS Process

Above are three main process of crowd funding fund generations mechanisms, which are fundraising registration, investor registration, process of fundraising process:

2. Registration - Fundraiser

Before submitting a proposal to a fundraising platform, of course fundraisers must register to a fundraising platform service providers of course, each service provider has its own rules who can submit proposals to find funds in their organisations. In general, the fundraiser registration process only involves two entities, the fundraiser and the service provider of fundraising platform itself. The fundraiser will register to service provider of fundraising platform. In this case, the data from the fundraiser is kept inside operator database and accessed by specific clients

who are with the restrictions that apply to the fundraising platform operator. Only the service provider can access the fundraiser's transaction or history data.

2.1 Donation

Investor first Register the financing procedure for assisting fundraisers begins with investor undertaking surveys of numerous proposals produced by fundraisers.

If the Investor receives a proposal that aligned to his preferences, then he proceeds with the process of donating monies either through the fundraising organisation or directly to the fundraiser. Fundraising groups may generally make it simpler for funders to transmit contributions to them. With today's technology, funds may be sent through electronic money, virtual accounts, and bank transfers, as well as through traders who work with these fundraising groups. In this scenario, easier or more alternatives for transferring funds have a direct impact on the desire of the funder to make transactions back to the fundraising organisation.

Not all fundraising organisations can interface with the companies listed above, but the entities engaged in the process include funders, startup, and banks for transaction. Archive transactions stored in database of a fundraising platform of operator.

2.3 Disbursement

The final key use case is fund transistor . Of course, each fundraising organisation has its own terms and conditions for disbursing funds. The process takes time as they have to go through the verification and validity. Investor may absolutely withdraw contributions more easily from organisations that already uses web portal or mobile applications.
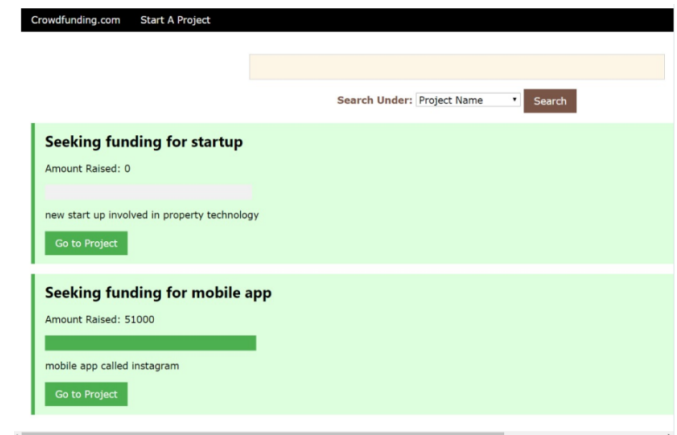
3. CONCLUSIONS

At last we can say that blockchain can be useful for fast and secure fund transfer in fund generation platform for society

so following are achievements of blockchain are

- Tokenization
- Having the ability to serve high demand
- Having the ability to retain all the positives of the standard Crowdfunding Platforms

Implementation

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