

Sturan: Equity Crowdfunding Blockchain

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Legal Disclaimer

The Commodity Futures Trading Supervisory Agency (Bappebti) sets regulations on crypto assets. In 2020, Bappebti stipulated regulation number 7 of 2020, the substance of which stipulates a type of crypto asset[1]. In this case, crypto cannot be used as legal tender in Indonesia, but crypto can be traded on the futures market.

Supervision related to buying and selling crypto in Indonesia is under bappebti, bappebti supervision is also not only about crypto but centralized exchanges or CEX are also under bappebti supervision. Therefore, because crypto is illegal if used as a medium of exchange, this project aims to make crypto a means of ownership of a business, or also a means of guaranteeing business capital loans. A business ownership tool or loan collateral tool is more suitable for this project, the profit sharing given to the funders will also be in the form of crypto.

Crypto supervision in Indonesia is not only limited to bappebti, but starting in 2025 crypto will be supervised by OJK (Financial Services Authority) this info the author took from the official website of the Indonesian Ministry of Trade in this way buying and selling crypto carried out in Indonesia will be safer because of the government's share.

Abstracts.

The obstacle experienced by business people is financial capital, maybe they have an idea to make something but not necessarily they have the funds to make their business. We are here as a solution to this problem by providing added value in the form of two-way benefits.

Investor safety from cyber fraud is a big threat for investors, especially in the blockchain space, because it cannot be denied that there are still many scams that occur in the blockchain world. In addition, the confidentiality of investors is also our priority. We strive to create a friendly ecosystem for all parties.

Keywords: equity crowdfunding, blockchain, crypto, business.

1. Introduction

Technology at the national and international scope has increased rapidly in this era. This causes all forms of business and non-business activities to migrate massively to the field of digital technology or what is commonly referred to as digitalization. Digitalization has a major effect on a country's economic activities, many small businesses have also entered the digital world, such as opening online stores on e-commerce platforms or others [2]. This can provide great benefits for business people, ranging from attention benefits to financial benefits.

The move from non-digital to digital also requires a lot of preparation, including human capital to financial capital. Many business people who have limited capital are forced to not be able to take part in digitalization, but in this era, digitalization is very important to increase sales. With this digitalization, business people can sell their goods or services to foreign countries.

Equity crowdfunding is one way to get capital[3]. This means that business owners only need a mature business idea which can later be posted on a platform that provides equity crowdfunding services. With the ease of this service does not mean it will be easier to get capital from donors, donors will also look in more detail at the business that will be built by business owners. However, equity crowdfunding only benefits the business owner financially. We provide a solution to create an equity crowdfunding platform. The system that will be developed is slightly different from the equity crowdfunding system in general, the uniqueness that the author will highlight is using

blockchain, because there is a symbiotic mutualism in business development by implementing smart contracts on the blockchain [4]. The author uses blockchain as the basis of the technology used because business owners and fund donors will be recorded on the blockchain so that there can be no manipulation of profit sharing or other fraud.

2. Profit sharing system

The profit sharing mechanism applied is that business owners who list equity crowdfunding must meet several criteria, broadly speaking, the first criterion is that the business owner must provide a complete proposal for the business to be built, secondly the business owner must include how many targets must be achieved, and the funders will be able to provide funds to business owners and the funders will be able to see what percentage of crypto they provide to the equity crowdfunding. Ownership will be represented by nft, if the total crypto that the funder provides can cover 4% of the target that must be collected, then the funder is entitled to receive a profit of 4% at the time of profit sharing (in the form of crypto).

The crypto that the funder gives to the business owner will be locked in a contract. Opening equity crowdfunding can only be opened once by the business owner this is done to increase the integrity of the proposed business and maintain contractual agreements. If the required funds have not been collected 100% by the end of the fundraising period, the equity crowdfunding will be automatically closed and the funds that were originally collected will be returned automatically to the funder's wallet, which means that the project fails in the funding phase.

3. Ongoing project security monitoring

After the collection of funds and the closing of the equity crowdfunding period, monitoring will continue, this monitoring aims to provide confidence and security to investors from the funds provided to business owners. This platform will provide services for business owners to disseminate data on the

income and profits they receive from their business transparently, this data can be seen by investors.

4. Incentives

Profits will be given to investors in the form of sturan (STRN). The proceeds of the profit sharing will go into each investor's wallet after the business owner sends them. This incentive is given to investors with the right address.

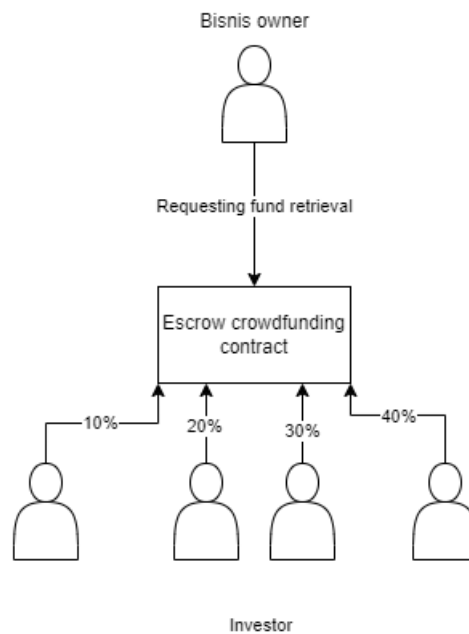


Figure 1

5. Business application mechanism

Before a business enters the funding phase, the business idea owner must submit a proposal to open equity crowdfunding to sturan labs, sturan labs is the body that will handle a proposal to open equity crowdfunding. Not all ventures will be able to enter the funding phase due to security reasons and the comfort of the venture funders.

Some of the phases you will go through are as follows:

5.1 Proposal submission

At this stage the proposal will be submitted to the sturan labs and other delegates, sturan labs and delegates will check whether the proposal is eligible

to receive funding or not, the proposal must be complete and describe well what you want to make.

5.2 Verification

Verification is a further stage from the proposal submission stage, at this stage proposals that have passed the proposal submission stage will be verified. Verification will be divided into several stages, as follows

- a. Knowing the team behind the venture.
- b. Business authenticity.
- c. Continuous monitoring.

After passing through the following sub-stages, in this phase also the business owner will provide an agreement with the sturan labs and delegates, the rules will contain how much target funds must be raised, how long the equity crowdfunding period runs etc.

5.3 Opening of equity crowdfunding

In this phase, the business is entitled to receive funds from the funders in accordance with the agreement that has been made in the previous phase. The funds provided by investors do not go into the user's wallet 100% but will be held in a pool so that when the equity crowdfunding target is not reached, the user can receive his STR back.

6. Sturan

Sturan is the main token that will be used in the ecosystem, this token will be built on the solana blockchain. The reason the author is building on the solana blockchain is because the author believes solana is one of the blockchains that has a high transaction speed rate[5]. STRN itself will be created as much as 100,000,000 STRN, this supply will be allocated for several purposes.

- a. Team & developer (20%) - 20,000,000 STRN
- b. Community & public sales (45%) - 45,000,000 STRN
- c. Private sale (18%) - 18,000,000 STRN
- d. Lockdown (7%) - 7,000,000 STRN

e. Burn (10%) - 10,000,000 STRN

The sturan has its own locking and burn mechanism.

7.1 Locking and unlocking stage:

At this stage, the token will be opened to the public gradually in order to stabilize the circulation of tokens circulating on the network. Tokens will be opened to the public every 2 years and in that year touch 10,000 STRN transactions.

7.2 Burn stage:

Tokens will be burned from the public to reduce the existing supply with the aim of making the tokens more limited. Burning is divided into 3 types:

1. Tokens will be burned when the tokens are officially released to the public, with 35% of the total token supply burned.
2. Burned tokens are tokens that are unlocked from the lock. As many as 60% of the tokens were burned during the gradual unlocking.

7.3 Projected unlocking & burning:

p1 = Percentage of the number of tokens unlocked	tu = Total unlock tokens
p2 = Percentage of the number of tokens to be burned	h1 = Token yield to be released
tb = Total burn	tr = Total release

Calculation mechanism

$$p1 * tu = h1$$

$$h1 * p2 = tb$$

$$h1 - tb = tr$$

2 years and first 10,000 transactions

$$0.05 * 7,000,000 = 350,000 * 0.98 = 343,000 \text{ STRN burn } 350,000 - 343,000$$

= 7,000 STRN release to the public.

1 year and 10,000 second transactions

$0.05 * 6,650,000 = 332,500 * 0.98 = 325,850$ STRN burned and 6,650 STRN released to the public.

7. Ecosystem

7.1 Lock Token

Lock tokens will function as written in section 7.3 unlocking & burning projections. The author does not want when the token is unlocked from the lock the token price immediately plunges down because the price of STRN will be very influential for equity crowdfunding that runs, the higher the price of STRN the less the target that must be met by business owners when in the equity crowdfunding phase. STRN supply is limited to 100,000,000 STRN only, the unlocking & burning mechanism can affect the price of STRN, therefore the author made this mechanism with careful thought.

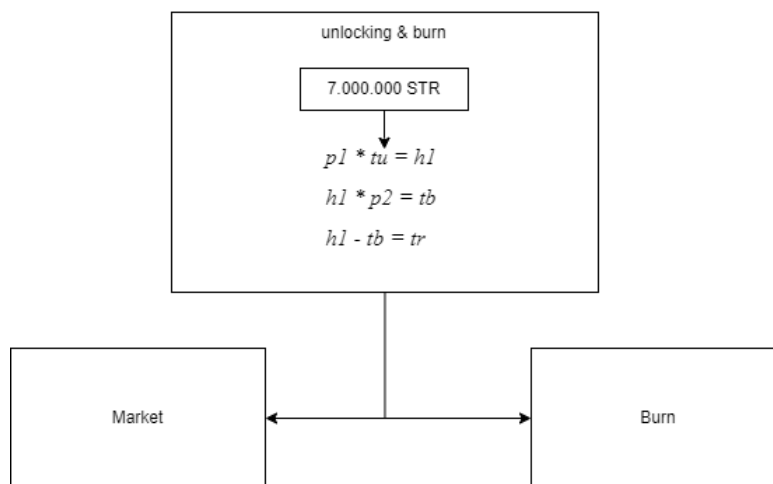


Figure 3

7.2 Escrow funding Contract

This contract is a vital contract in the STURAN ecosystem that will serve as the opening of equity crowdfunding and receipt of accumulated profits. This ecosystem will be developed in such a way as to facilitate both parties between business owners and investors. In this contract, eligible addresses will be recorded on the contract. The benefits that can be obtained by

investors are not only from the sale or purchase of crypto tokens, but also by accumulating STRN tokens, we are only a facilitator between business owners and investors. This can be a convenience for all fields not only from the business side, because sometimes physical business investment requires large funds, so we are here as a solution. The problem that will be encountered is "what if the funds are given and the business owner just disappears?", the answer to the problem is that the funds given by investors to business owners cannot be taken all directly. The existence of this escrow can help prevent that from happening, the business owner must ask the investors for approval to take the funds, if the investors agree then the funds can be taken with the agreed nominal.

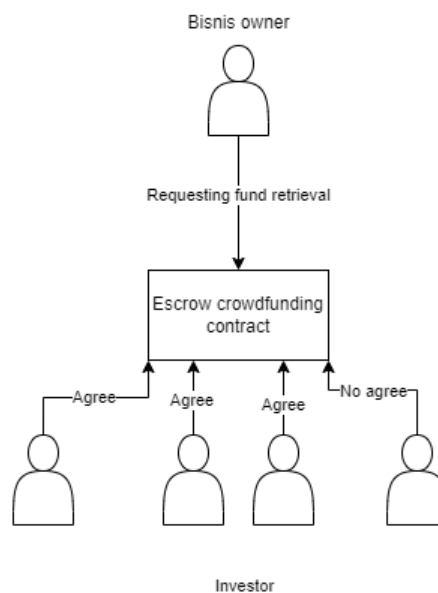


Figure 4

7.3 Nft

Nft or non-fungible token acts as a token of ownership of a digital asset [6]. In the STRN system, the sign of business ownership is recorded in this nft, the mechanism is as follows:

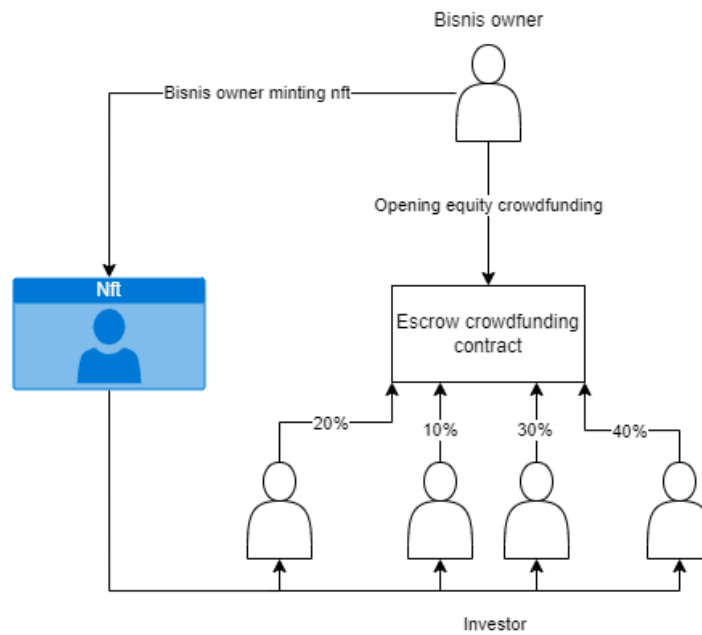


Figure 5

If one investor sells his nft, his business ownership rights move to the next nft owner. Nft does not have an initial price, the nft issued by the system will record the percentage of profit sharing revenue, the nft price will depend on the agreement of the seller and buyer. Nft can be traded in SOL units.

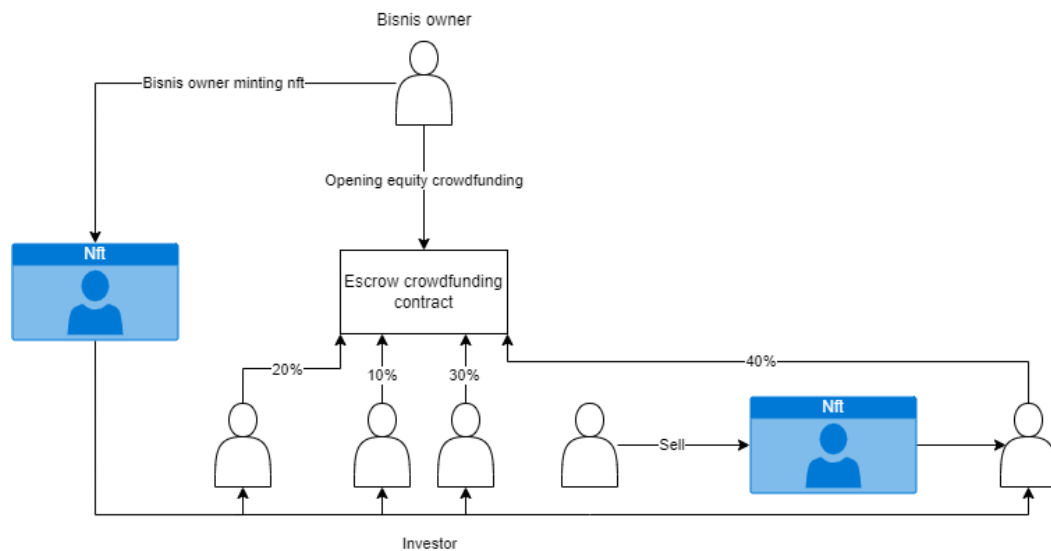


Figure 6

8. Conclusion

We have provided a solution for businesses that have constraints, and for investors who want confidentiality of their data. STRN will be the native token in this ecosystem, STRN can be used to fund business owners, vote on escrow funding contracts and can be used as a transaction tool on the solana network. Ownership of a business will be backed by a blockchain that is safe from personal data theft. The business owner or team must be known by potential investors, this is done to avoid fraud, or ponzi schemes that occur in the wider community. The sign of ownership of a business is marked with nft ownership stored on the blockchain.

9. Reference

- [1] Trade Supervisor and B. Komoditi, "BAPPEBTI CRIPTO ASSET TRADING."
- [2] . M. Bican and A. Brem, "Digital Business Model, Digital Transformation, Digital Entrepreneurship: Is there a sustainable 'digital'?"Sustainability (Switzerland), vol. 12, no. 13, 2020, doi: 10.3390/su12135239.
- [3] . Yasar, "The new investment landscape: Equity crowdfunding,"Central Bank Review, vol. 21, no. 1. 2021. doi: 10.1016/j.cbrev.2021.01.001.
- [4] . N. Khan, F. Loukil, C. Ghedira-Guegan, E. Benkhelifa, and A. Bani-Hani, "Blockchain smart contracts: Applications, challenges, and future trends,"Peer Peer Netw Appl, vol. 14, no. 5, pp. 2901-2925, Sep. 2021, doi: 10.1007/s12083-021-01127-0.
- [5] . Yakovenko, "Solana: A new architecture for a high performance blockchain v0.8.13."
- [6] .Cantu, J. Geng, and C. Rong, "NFT as a proof of Digital Ownership-reward system integrated to a Secure Distributed Computing Blockchain Framework," inProceedings of the International Conference on Cloud Computing Technology and Science, CloudCom, IEEE Computer Society, 2022, pp. 97-104. doi: 10.1109/CloudCom55334.2022.00024.