

Doing Kingdom Business

Technical Notes

Seesaw Reward Balance System

Whitepaper

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Introduction

Cryptocurrencies have emerged as the latest brave market in the trading world. These trading markets are relatively young and thus full exploitation has not yet been achieved. The fact that some coins like Bitcoin can rise by 10% in a single day signifies the need for other stable coins to join the market. The tender age cryptocurrency in the trading world has prevented the established trading houses and only left the young companies to invest. Some years back, the market capitalization for cryptocurrency stood at \$80 bn and still growing. This further signifies the availability of opportunities for young traders to venture in the market and make profit.

Kingdom Logic

The majority of crypto currencies that make use of masternodes, split their block reward per block equally between the mining and masternode distribution mechanisms. The intended fairness of this reward distribution can be subverted by the growth of masternodes held by large investors without limits leading to potential centralization of the budgeting system much like having a majority shareholder in a company. The additional benefits of masternodes can lead to less number of users conducting Proof of Stake (PoS) mining activities and thus lowering the security of the PoS network.

Masternodes do provide a valuable service and should be rewarded for that service, but our aim here is not to reward them way beyond the extra value they provide. For we believe that doing so disproportionately benefits masternode owners above and beyond other users of the system and ultimately leads to a greater degree of centralization.

KDMC Overview

Private Instant Verified Transaction, KDMC, is a privacy focused decentralized open source cryptocurrency launching in Mar 26th 2018. KDMC runs on Blackcoin PoS 2.0[1] protocol and is based on Bitcoin core 0.10.x code base. It utilizes a network of masternodes[2] for an openly visible decentralized governance and increased transaction privacy.

The main goal of KDMC is to achieve near instant private transactions and a governance that helps sustain the network for the benefit of all of the users involved. While we are well on our way to achieving this, some of the features are under development and should appear in the near future.

KDMC has an open task and development environment and a highly accessible development team utilizing multiple social networking channels, including social media. The development team is welcoming of anyone and everyone to join its cause, regardless of technical expertise. We encourage people to just go ahead and do things rather than having lots of gatekeepers or a hierarchical structure where permissions are required to move forward.

For more specific details on KDMC, please visit kingdomcoininc.com

What is Kingdom Coin?

Kingdom coins is a new (PoS) cryptocurrency which is focused in helping churches, ministries, outreach programs and non-profit organizations become financially solvent while helping spread a message of hope and generosity. Through our masternodes, which will only be available initially to these types of organizations, and the various other mechanisms we have put in place in order to positively affect this community, we will in fact help create an "economy" specific to the Kingdom community which will bring encouragement and prosperity for years to come.

Why Kingdom Coin?

Kingdom coin inc introduces a unique platforms yet simple enough for anyone to educate themselves, create financial streams of income and duplicate by sharing with friends and families using crptocurrency through the blockchain technology.

There has not been a cryptocurrency yet with an idea so bold and with the technology to realize and provide the masses, which is perhaps the largest community group around the world, to accept and use cryptocurrency in their business ventures, whether it be buying, selling or education until now.

PROOF OF STAKE 2.0 OVERVIEW

To achieve consensus; Proof of Stake 2.0 (PoS) requires nodes running a wallet software proving that it has coins in the blockchain in order to verify a block of transactions. The participating nodes receive an amount of blocks proportional to their stake per set period as a form of reward.

This means that with lots of participating nodes (with roughly even amounts of coins) the network becomes very secure due to the increased difficulty of owning a majority of coins in the network.

MASTERNODES OVERVIEW

Masternodes are nodes running the same wallet software on the same blockchain to provide extra services to the network. These services include coin mixing for increased privacy of transactions, instant transactions and a decentralized governance that provides a decentralized budgeting system with immutable proposal and voting systems.

For providing such services, masternodes are also paid a certain portion of reward for each block. This can serve as a passive income to the masternode owners minus their running cost.

MAIN FEATURE OVERVIEW

To promote an even ratio between staking nodes and masternodes in the network, the KDMC team has developed a variable Seesaw Reward Balance System that dynamically adjusts its block reward size between masternodes and staking nodes.

Each KDMC PoS block reward is split with 10% dedicated to the budgeting system and 90% dedicated to both the masternodes and stake mining reward. The reward portion is further split dynamically via the Seesaw Reward Balance System between masternodes and staking nodes. The logic is simple in its roots. The higher the masternode count, the smaller the reward portion of each PoS block that will be paid out to the masternodes and the larger the reward portion for staking nodes. Conversely, when the masternode count falls, the masternode reward portion is increased and the staking node reward portion decreased.

The PoS block reward starts with a ratio of 9 to 1 towards masternodes when the amount of coins locked to masternodes is lower than 1% of the total coin supply.

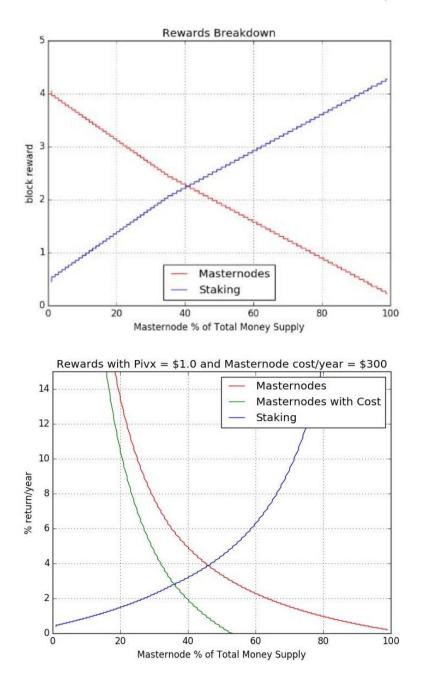
But as the number of coins locked to masternodes go above 41.5% of the total KDMC coin supply, the block reward amount will shift with more than 50% of the block reward going to staking nodes.

This has the effect of making it less attractive to provision more masternodes as it has the potential to significantly lower its profitability compared to staking that has less upkeep cost. This threshold was selected as it would allow a strong network of profitable masternodes while creating incentive for approx. 60% of the total coin supply to be available for staking to secure the network and to maintain liquidity.

Another intended benefit and goal of the Seesaw Reward Balance System is to ensure that it is more profitable for users running masternodes than it would be to stake the equal number of coins, under the normal circumstances of being below the equilibrium threshold. The reason behind this is due to the extra cost, risk and time associated with maintaining the masternodes are greater than staking alone.

SEE SAW EFFECT

Following graph shows the block reward amount (Y axis) for the masternodes (RED) and staking nodes (BLUE) against the percentage of total coin supply locked by masternodes (X axis) starting from block 648,000 (mid-May 2017) where each block rewards is fixed at 5 PIV. Following graph shows the their theoretical annual percentage return starting from block 648,000 where each block is fixed at 5 PIV with an interval of 60 seconds. (1440 blocks a day)



The RED line represents the return of masternodes when there is zero upkeep cost per masternode and GREEN line is the logical masternode return curve on a hypothetical scenario where there is an annual upkeep cost of \$300 per masternode with the price of each KDMC at \$1 USD.

CODE LOGIC WALKTHROUGH

The logic is intended to be simple as possible while being effective. This is to ensure its stability and to be able to easily determine its outcome and improve its logic if the need arises.

```
if (mNodeCoins <= (nMoneySupply * .01) && mNodeCoins > 0) {
ret = blockValue * .90;
}
```

The blockValue is the total number of coins per block. This value is multiplied by the variable ratio that is determined by the percentage of the masternode coins, (mNodeCoins) in relation to the total coin supply (nMoneySupply). The result ret value is the number of coins for the masternodes portion of the reward.

Above example shows the very first logic used to determine the highest masternode portion payout. You can see that if mNodecoins is less than or equal to 1% of the coin supply (nMoneySupply) and also greater than 0, the return block reward value for the masternode will be 90% of the PoS block (ret = blockValue * .90).

This logic continues for each increase in set percentages all the way until mNodeCoins is less than or equal to 99% of the coin supply.

```
else if (mNodeCoins <= (nMoneySupply * .99)
&& mNodeCoins > (nMoneySupply *.987)) {
ret = blockValue * .05;
}
```

Any mNodeCoins value that is beyond 99% of the total coin supply will return a fixed value equal to 1% of the blockValue. The expectation is that it should never come to this point but the logic is complete to cover all possible outcome.

```
else {
ret = blockValue * .01;
}
```

This Seesaw Reward Balance System algorithm initially started out with only 16 percentage steps; it has since been improved and now implements a total of 105 percentage steps to the variable seesaw algorithm that allows for a far more granular step amount.

SUMMARY

The Seesaw Reward Balance System that KDMC utilizes, provides numerous benefits over reward split methods used by the majority of masternode featuring Proof of Stake crypto-currencies.

1. It can indirectly affect the total count of masternodes in the network by varying its reward size to alter its profitability versus staking.

2. Promotes staking by increasing its reward payment portion when masternode count is high and thus maintaining a high level of network security.

3. Profitability of masternode is kept higher than staking as long as the masternode count remains below the equilibrium threshold. (Approx. 40% of coin supply)

4. Allows all coins owners to get rewarded for holding coins rather than just the masternode owners, hence resulting in a fairer and less centralized system.

Masternodes building blocks

Kingdom Masternode community is to manage and run the proposals that helps in stabilizing and increasing the value of a currency if the governance system is introduced. In Masternodes, the proposals can be made by any person unlike other coins who charge a proposal fee and this makes Masternode a favorite among investors. After proposals are submitted, a vote is made by master node holders and proposal is voted in.

Masternode coins are improved by people's creativity

The Masternode system utilizes people's competitiveness and creativity to get ideas of improving the coin. The best ideas are generated from proposals submitted by coin holders. These ideas improve the currency value which in turn increase the block reward. The value of the Yield depends on:

- The coin value during the trading session.
- Payout frequency
- The cost of hosting the node.
- The cost of the coins.

The Benefits of Investing in Masternode Coins

Investing in Masternode coins gives you the ability of not only being an investor, but part of the decision makers in shaping the coin advancement. Owning own gives a voice to an investor and makes it more than just money. This is done through submitting proposals.

The foundation of Masternodes is stable and has long term values at the core of the infrastructure. The founding investors have committed their money for a long term making it stable and increases trust among investors.

Investors get capital gains by just running the Masternode services. On top of that, investors are paid in that coin as rewards from each block found.

The availability of a stronger community guarantees the long-term sustainability of the crypto project. This in turn ensures that energy is focused on the project's long-term future instead of pump and dump cycles.

What is the incentive to run a Masternode?

Average daily Reward

(# of masternodes) # of blocks*block reward*45%

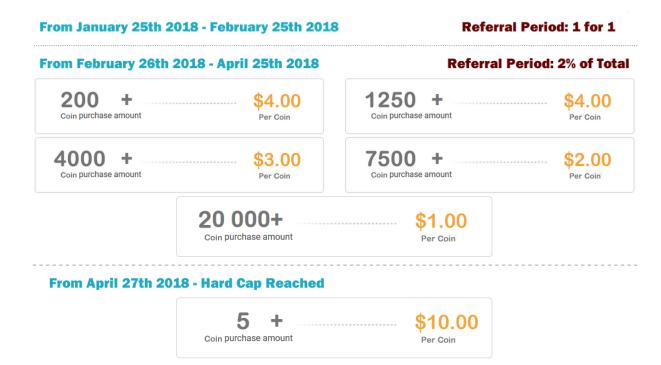
Masternodes get constant rewards (45% of the block reward) that are proportionately are allocated among peer reviewed Masternodes. Masternodes continuously check the activity of the peer node, and rewards are only given to high performing nodes having stable high speed internet connections. On top of the 45% of the block reward, a Masternode gets all public transactions fees done in a block and fees for all private transaction pools started in the block. These inducements encourage uninterrupted connectivity to sustain a high performance network.

KDMC Distribution and Block Reward Schedule

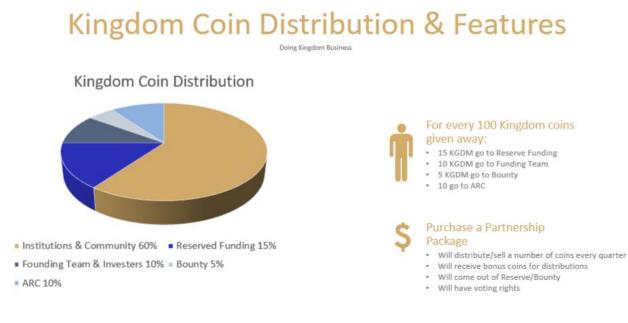
A sum of 4,500,000 KDMC will be used for initial distributing of KDMC to thousands of users across the world, coming together to join KDMC communities. These coins are generated in the genesis block and will be held in trust by the KDMC team.

Kingdom ICO Sale and Coin Distribution

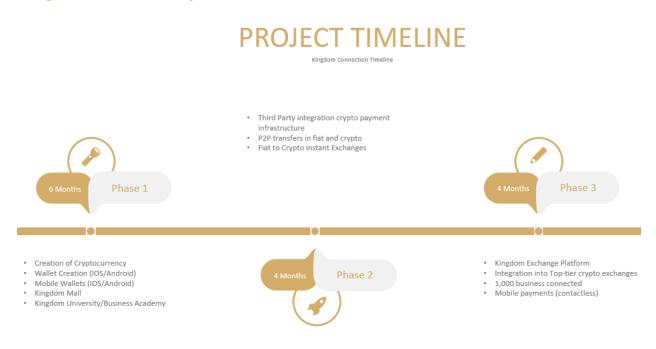
During the initial coin sale the only way to acquire KDMCs will be through donations. By donating to certain campaigns in the ARRC (American Remnant Resource Center) you will be able to access the coins. Therefore, it's important to note that 20% of all money generated during this time will be given to the charity or cause you choose in the ARRC. There is no other way to gain access to the coin but through donations.



During the ICO period a total of 60% of the funds collected will go into building and reinforcing the Kingdom infrastructure. For every 100 KDMC given away the ARRC will always receive an extra 10%. The rest will go into programs like Kingdom Connection which will look to increase its community. Look to the Kingdom Project Timeline for more details.



Kingdom Future Projects and Timeline



PROJECT TIMELINE



Conclusion

In conclusion Kingdom coin is looking to become the number 1 preferred mode of currency for the Kingdom population. Through our various programs like:

- Kingdom Mall where kingdom people can buy and sell using Kingdom coins.
- Kingdom University where people can use coins to enroll into online classes.
- Kingdom Connection where you can earn, share and receive kingdom coins by joining our community.
- Kingdom Business Academy where you can learn about how to become a successful business owner.
- The ARRC (American Remnant Resource Center) where you can contribute to local causes.

As we continue to grow we will be incorporating more and more industries to the Kingdom community, with the ultimate goal of opening a Kingdom Credit Union that will be accessible to our members across the globe.