

OFFICIAL WHITEPAPER



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INTRODUCTION

When the first digital cryptocurrency was introduced, blockchain technology was regarded as uncharted territory. No one foresaw that Bitcoin would revolutionize the economic market or challenge the world's financial institutions. However, as it develops, we can witness how its technology allows cryptocurrencies to bloom and gives financial institutions the opportunity to participate in a cutting-edge economy. The unprecedented rise of Bitcoin's value and usage, along with the establishment of other cryptocurrencies, such as Litecoin, Ethereum, and Ripple proves the world is ready for a new era. Furthermore, as blockchain technology evolves, the potential for continued approval and innovation is unavoidable.

Introduced in 2009, Bitcoin is the most known and valuable digital cryptocurrency in the market. Its users can easily obtain control over a currency simply by using a smartphone with an internet connection; essentially creating their own, private and confidential bank account. Apart from its store of value, Bitcoin carries a deeper meaning to its users - empowerment over assets - along with a faster and cheaper solution to transact funds worldwide without the interaction of third parties. Regardless of location, age, race or wealth, digital assets strive to provide a faster and cheaper solution globally, granting people sole control over their money in a decentralized and democratic way, against the existent financial system.

Bitcoin accomplished the remarkable feat of growing from \$0.1 in 2009 to \$19,000 in 2017. Undoubtedly a milestone for Bitcoin's pioneers and investors now rejoicing in the benefits of early adoption. Most importantly, it proved that creating a decentralized financial system with a peer-to-peer network is possible.

The blockchain technology works as a journal, registering and saving all block transactions. Each block is linked and secured by cryptography, which protects users identity when creating a unique digital wallet address. In order for a transaction to take place within the blockchain, it needs to be validated to be recorded; it is by reaching consensus to reproduce, synchronize and share data (distributed ledger) that users can transact funds through a peer-to-peer network without third parties interference.

Cheese is an innovative decentralized cryptocurrency with integrated blockchain technology that heeds the needs of its users, investors, and business owners. It was designed to cater the fundamental everyday need of transacting money while keeping accounts and activities confidential. A process which is only possible due to its peer-to-peer encrypted technology.



CHEESE VISION AND MISSION

Cheese strives to tackle the shortcomings of traditional transfer methods. Our vision is to establish a trustworthy, confidential, and efficient worldwide financial transaction platform; a safe haven for all users to interact and transfer digital assets at will, without a single concern, their activities are monitored. Therefore, we are determinant to set an environment where privacy is held in high regard and reciprocated with trust and respect.



KEY TECHNOLOGIES

Blockchain technology is the cornerstone of cryptocurrency. Experts claim it will bring an industrial revolution. Not only does it serves as a decentralized ledger (registry) system, but its enhanced security, simplicity in design, is not expensive to run. Furthermore, its technology enables accurate and safe transactions due to its peer-to-peer encryption. The integration of blockchain technologies results in data storage which is unbreakable and unstoppable and cannot be modified. The cryptography built in the blockchain not only encrypts messages on the ledger but also, validates transactions. Therefore, it is considered the safest and most private solution.

PROOF OF WORK (POW)

Proof of work (POW) aims to reach distributed consensus on the blockchain. There are some ways to achieve distributed agreement, such as Proof of Stake (POS). However, POW is considered one of the primary methods; it allows anyone to create a block on the network without permission from a centralized authority. All users must agree what block accurately represents a transaction across the blockchain. - the consensus is vital.

The actual POW begins when users attempt to solve a block to validate transactions. The mining process can be described as an intricate puzzle or mathematical problem, to which finding the exact solution to may be considered complex. But, once the correct answer validates the block, added to the blockchain, coins are awarded to miners.

Miners exert tremendous ecological and economic resources, just to calculate the proper solution for a puzzle. For instance, mining Bitcoin requires exceptional computer equipment, and letting it run nonstop; such methods involve a great deal of electricity, which will result in high energy cost and eventually harm the environment. In fact, to mine Bitcoin, a person will need above average computing power.



PROOF OF STAKE (POS)

Proof of Stake (POS) is an algorithm and another method to reach distributed consensus in the blockchain. POS occurs when the user stakes a number of coins in the wallet. The coins staked will serve to verify blocks transactions; the higher the stake, the bigger the chances to solve a block. Cryptographic calculations in POS are less complicated for computers to solve. A person only needs to own a percentage of all unit available to be able to stake. Therefore, a user who is willing to stake more, has greater chances of solving blocks.

Cheese provides avant-garde features such as Proof of Stake (POS) currency. Additionally, its guaranteed low energy consumption, lightweight wallet, and easy to use features, is a dependable way for Cheese to meet its user's needs, as community members take advantage of decentralization, transparency, and anonymity, the currency resources.

COMPARISON BETWEEN POW AND POS

As stated earlier the most significant difference between POW and POS is narrowed down to two central aspects:

ECOLOGICAL RESOURCES

POW needs a tremendous amount of energy, due to its increasing difficulty to mine coins, comparing to POS which requires standard computer equipment, is eco-friendly and avoids massive energy consumption. Moreover, POS needs no real-world energy or resources to be wasted.

ECONOMICAL RESOURCES

Miners who are heavily involved in POW purchase expensive equipment, but the hardware gets outdated fast, due to the ever-growing mining sector competition. According to Vitalik Buterin Ethereum coin co-founder " to secure a blockchain, it is estimated that both Bitcoin and Ethereum burn over \$1 million worth of electricity and hardware costs per day as part of their consensus mechanism,". Experts claim POW encourages miner monopolies, typhoons with unlimited economic resources have an advantage in POW method. For instance, based on a survey done by (blockchain.info/pools) in 2017, the top ten mining pools control about 83.1% of Bitcoin mining power, which leaves little space for users to compete in the Bitcoin mining market. One of the reasons why POS can be a better option.

The monopolies within mining increase the odds a 51% attack being carried out. For example, a network with 100 nodes can only suffer an attack if an individual network's control is over 51% to implement an offense or manipulate a hardfork; aside from a raw computing power being needed, which implies a massive amount of energy consumption. However, in POS if a user attempts to perform an offense, he needs to control at least, 51% of all the digital currency available, making it extremely expensive.



BLOCKS AND BLOCK CREATION

Cheese is based on POS/POW algorithm, which means, POW creation of blocks is done by providing proof, the active network node needs to hold a certain amount of coins; allowing the user's participation in the process, can only be ensured, if the node is operational and a user maintains a number of coins.

The selection process to the next block creator is made through random formulas which take into account, the stake amount and the lowest hash value. A system that avoids the currency's centralization and restricts the network's wealthiest members from increasing their capital significantly – equity.

NODES

Cheese POS algorithm does not need a significant amount of energy consumption for hashing blocks. The Cheese nodes are lightweight and implement Simplified Payment Verification (SPV) mode, which enables users to download the necessary part of the blockchain to their node, rather than downloading an entire.

TRANSACTION: FEES AND PROCESSING TIME

The average time processing a transaction in Pos algorithm cryptocurrency is much faster (approximately two times faster) than POW algorithm; the block's creation is much more efficient, each new block is created after three minutes. Cheese significant decrease in transactions fees is only achieved due to the lack of physical mining of coins in POS algorithm and reasonable currency distribution between all the active users in the network.



KEY DESIGN FEATURES

Aside from implementing and functioning on POS algorithm Cheese has Lightning Network protocols attributes, which makes it easy to use; additionally, it offers several features such as pool mining, lightweight wallets, masternode and much more. Cheese aims to provide quality and a convenient product for all users.

AGILITY AND COST-EFFICIENCY

As stated earlier, Cheese is based on POS algorithm to offer all users a method with more efficient and environment-friendly resources that do not require an high-end equipment such as, an Application-Specific Integrated Circuit (ASIC) to mine cryptocurrencies. In fact, an ASIC average lifespan is one year which will urge the user to purchase a new one after a year of usage; depleting the user not only of energy consumption but, financially as well.

LOW ENERGY CONSUMPTION

According to a recent public survey, POW based cryptocurrencies consume up to 14.818 TW/h electricity a year, which is the equivalent to the total energy consumption in the entire country of Slovenia. All results state POW cryptocurrencies demand a significant energy consumption, contrary to POS based currencies, such as Cheese.

WALLETS

Cheese offers a desktop wallet which supports Windows, Linux, and MacOS. Our wallets do not demand an ample space on the PC. Apart from being convenient, friendly, and easy in the cryptocurrency daily's use.

In fact, what distinguishes the Cheese wallet from other is the remarkably small amount of space required for installation, compared to Bitcoin Core. The lightweight features make it even more suitable to be used anywhere and anytime.



DISTRIBUTION AND ACQUISITION

FIRST PHASE: In the early stages, Cheese acquisition is through mining, and at block 5000 the POS stage begins. We believe in making Cheese available to everyone and promoting an organic growth; an ICO will not be implemented, to ensure every interested party or stakeholder are entitled to a fair chance to obtain Cheese.

SECOND PHASE: Cheese will be listed on several exchanges which enabling all users to sell their Cheese at the market value or trade it for Bitcoin (BTC), Litecoin (LTC), how they see fit. Currently, Cheese team is working closely to list it on more exchanges, and bring in potential investors. Moreover, the development team in Cheese is continuously diligent to ensure the best outcome for all stakeholders, miners, exchanges, and the overall community. As Cheese grows, we will be able to widen our partnerships with new merchants and mainstream service providers.

FIXED SUPPLY

Cheese fixed max supply is 3.5 billion which makes it eligible to be mined over several years. The long-term distribution and mining, enable future generations to maximize their participation in the Cheese community. Despite the fact that Cheese, is still in the initial phase, we predict its market stable expansion in the upcoming years.

An accurately measured amount of coins will contribute to sustaining the asset's inflation level to a more substantial global participation and organic growth rate, due to its cost-effectiveness. Furthermore, we envision a steady price activity, while coping with its growing demand.

USABILITY

Cheese provides international funds transfers with confirmations in a matter of seconds, along with full financial confidentiality, which permits the user not to deal with any third-party or regulations that can access your transactions.

CHEESE MASTERNODE



FEATURES

Cheese Masternode was designed with excellence in mind, to compete with other cryptocurrencies in the market. What distinguishes Cheese Masternode from the rest is its ability to divide the block reward between the mining and Masternode distribution mechanisms through its POS algorithm. Meaning, 75% block rewards are channeled to the Masternode, while 25% is directed to staking nodes. The main reason for creating a Masternode with these features is to assure all users profits are shared among the community equally and to encourage everyone to keep running POS.

CHEESE MASTERNODE SPECIFICATIONS

Coin Name	Cheese
Coin Abbreviation	Cheese
Coin Type	POW/POS – POW ends at block 20,000,000
POS Hashing Algorithm	Scrypt
Hashing Algorithm	Scrypt
Max Supply	3.5 Billion
Block Time	3 Minutes
Maturity	24 Hours

Block Rewards Distribution



1–5	Pre-mine
6–300	0 CHEESE
300-7,500	500 CHEESE
7,500–50,000	250 CHEESE
50,000-100,000	125 CHEESE
100,000–250,000	62 CHEESE
250,000-500,000	31 CHEESE
500,000-1,000,000	15 CHEESE
1,000,000-2,000,000	10 CHEESE
2,000,000-4,000,000	8 CHEESE
4,000,000-8,000,000	4 CHEESE
8,000,000-16,000,000	2 CHEESE
16,000,000–20,000,000	1 CHEESE

POW FINISH

DPOS STARTS AT BLOCK 5,000

REWARD	
5,000-50,000	2,000 CHEESE
50,000-100,000	1,500 CHEESE
100,000-200,000	1000 CHEESE
200,000-400,000	500 CHEESE
400,000-800,000	250 CHEESE
800,000-1,600,000	125 CHEESE
1,600,000-INF	75 CHEESE

MASTERNODE COIN	250,000 CHEESE
MINIMUM STAKING AGE	24 Hours
MAXIMUM STAKING AGE	Unlimited
MASTERNODE REWARD	75% Block Reward
	+ all transaction fees contained in the block peer validated network uptime



MARKETING

TARGET MARKET

Cheese aims to enable its community to outreach economic freedom while retaining full authority over their financial affairs without a centralized power. Therefore, our project is for every individual that seeks to be among the pioneers in the digital currency world, and who firmly believes centralized financial institutions are nothing more than a regressive concept against the current emerging economy.

Our team aspires to bring forth a digital asset that can be accessed and operated globally at any given time and place. For this reason, we believe all can benefit due to Cheese simplicity, specifications, and its reasonable value. For instance, our users can transfer funds to their beneficiaries (friends, family, and loved ones) with exceptionally minimal transaction fees, compared to the current money transferring agencies such as Western Union, or Paypal.

CHEESE MARKETING & COMMUNICATION

We firmly believe Cheese success is achieved through the transparency and integrity established among the community, and for this reason, we always try to create a two-way communication throughout our various communication channels. The community feedback is crucial for the present and future innovation of Cheese. For this reason, we actively seek the community interaction via:

CHEESE WEBSITE	https://cheesecoin.tk
FACEBOOK	https://www.facebook.com/Cheesecoin
TWITTER	https://twitter.com/cheesecoin
DISCORD	https://discordapp.com/invite/XcHJmBw
TELEGRAM	https://t.me/joinchat/Gp2sRhJjE0qexvSGWDK1dQ
BITCOINTALK	https://bitcointalk.org/index.php?topic=2302196.0

Cheese team plans on establishing more platforms and strengthen their presence online to reach a broader audience.



BLOCK EXPLORER LINK

In our Cheese explorer page, you will be able to view/browse real-time transactions and history, and the balance in each respective wallet address. Please follow the link below to access the block explorer page:

http://explorer.cheesecoin.tk/



Since November of last year (2017) Cheese team achieved:

The release of official Cheese website The release of official Cheese explorer The release of official Cheese faucet The release of Cheese "My Wallet" feature Cheese code refactoring The introduction of Super Block and Happy block.

Cheese team is aiming for the First Quarter (Q1) of 2018 to achieve:

More exchange listing (at least One per Quarter) Cheese official White Paper Cheese Crowdfunding portal Community Innovation Contest.

Cheese team is aiming for the Second Quarter (Q2) of 2018 to achieve:

More exchange listing (at least One per Quarter) Gaming website Cheese merchandise Community Innovation Contest



Cheese team is aiming for the Third Quarter (Q3) of 2018 to achieve:

More exchange listing (at least One per Quarter) Release of Android wallet Community Innovation Contest



Cheese team is aiming for the Fourth Quarter (Q4) of 2018 to achieve:

More exchange listing (at least One per Quarter) Release of Android wallet Community Innovation Contest



CONCLUSIONS

This White Paper intends to provide to its users, community and potential investors/partners a comprehensive and detailed information about Cheese key technologies, features, and benefits it brings to the digital currencies world.

Moreover, Cheese advocates the value of POS instead of POW to reach distributed consensus in the blockchain, from an ecological and economic perspective. Consequently, POS do not requires massive energy consumption, nor purchasing hefty mining tools.

Cheese offers the latest technologies about cost-efficiency and user-friendliness. The users can experience it with Cheese POS algorithm, and our wallet that only requires a small amount of space in the PC.

In conclusion, Cheese is an innovative cryptocurrency, continuously looking for ways to improve itself, while sharing it with the community and the whole wide world. Cheese consists of young minds that solemnly believe in the financial freedom and privacy concept, reason why its team is working hard to make it a reality possible for all its users.

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