


WHITEPAPER

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ABSTRACT

The current state of cryptocurrency is concerning. Presently, there are over 2,000 cryptocurrencies traded on over 15000 markets with a peaked total market cap of more than \$800 billion in early 2018. But the development of prices and marketers behavior has been giving more than enough reasons for a new direction. Especially MasterNode networks and new projects are more than questionable, when 85% of new launching projects happen to be a washout. In addition, proof of work based cryptocurrencies offer more risk on attacks against their blockchains due to high computational power available with large amounts of hashpower, such as ASIC mining farms.

This is a massive security issue inside what should be a safe network. Whether its happening to a new mover or an established player, network security is not taken care of enough or simply underestimated. Given that cryptocurrency can be high risk, has extreme volatility, and can be difficult to buy and store safely, an effective and diverse portfolio of coins (cryptocurrencies) can be a complex problem. The most recent case is ZenCash' 51% attack resulting in a loss of 55,000,000 USD! Furthermore, these cryptocurrencies seem to be failing when it comes to general acceptance and usability, because these projects have failed to identify and address the main issues present in making mass adoption of digital assets possible.

This is not only bad for the projects reputation and development but especially for investors and long term hodlers, which leads us to the main question:




Is mining really the main engine of our future ecosystems and do we want to keep organizing the same looking wallets over and over again instead of only one?

In this whitepaper we will discuss the current status quo and give a first introduction to our project by giving insight to key features and a detailed look into the technological architecture of the XSTK blockchain as well as laying out some of our plans for the near and distant future.

DISCLAIMER

PLEASE READ THIS DISCLAIMER SECTION CAREFULLY.

All technical aspects in this document define main features of the XStake project and its main products StakeZ and NodeZ as well as insight in current and future developments of the XStake Ecosystem. This whitepaper is for information purposes only and is not a statement of future intentions. The products and innovations set out in this whitepaper are currently under development and are not currently in deployment. XStake makes no warranties or representations as to the successful development or implementation of such technologies and innovations, or achievement of any other activities noted in this paper, and disclaims any warranties implied by law or otherwise, to the extent permitted by law. No information in this white paper should be considered to be business, legal, financial, or tax advice. You should be aware that you may be required to bear the financial risk of any purchase of XSTK Coin for an indefinite period of time. If you are in doubt you should always consult legal or financial or other professional advisor(s).






INTRODUCING XSTAKE

XStake is the world's first Multi-Cryptocurrency Wallet which is able to stake different coins inside a single wallet. XStake is here to create a state of the art ecosystem that aims to resolve and improve the capabilities of coin staking to broaden the ecosystem and to make crypto assets more accessible and secure for the average user around the world. Our team aims to provide users with a cryptocurrency and a platform that provides features such as easy and secure staking, a fast, private, and innovative blockchain using masternodes, security algorithms and provide real usability for the XSTK currency by creating a network of services that is fueled by XSTK as method of payment.

The team behind XStake is dedicated to bring a cutting edge blockchain application not only user friendly but also eco friendly running on Proof-of-Stake mechanism only. XStake has it's own strategically developed payment system, inspired by professionals focused on constant development to meet all needs of staking and masternode enthusiasts with ambitious and challenging goals to provide a new state of the art platform.

The XSTK blockchain rewards stakers and masternodes, which ensures a fully decentralized system while providing network services like PrivateSend, InstantSend and a governance system amongst masternode owners. Staking Nodes will get 50% - Masternodes receive 50% of the block rewards for providing high bandwidth, 24/7 connections and basic requirements for further XSTK features such as Atomic Swaps and more. Furthermore the masternodes will host and manage the decentralized ecosystem and enable Atomic Swaps between different blockchains in the near future, including the use of the Lightning Network in the near future.





KEY TECHNOLOGIES AND FEATURES

The technology we are implementing can be applied and disrupt a broad range of industries and allows differing degrees of access to your assets. In our case the owner of XSTK will be able to use 3rd parties and perform actions with their coins (staking) inside StakeZ.


The XSTK Blockchain

- a state of the art cryptocurrency that allows a peer-to-peer payments and is deployed on its dedicated XSTK blockchain based technology
- secure and private transactions with mega fast transaction times
- payment for XStake services like StakeZ and NodeZ

StakeZ

- withdraw and deposit coins from anywhere in the world
- manage your stakes and masternodes inside a single wallet
- available wherever you need it - incl. desktop, mobile and web client
- TPOS allows you to stake XSTK Coins even in a cold wallet (offline)
- Atomic Swaps - Exchange between your favourite cryptocurrencies in no time!

NodeZ

- easy-click Mastenode Client - we host your masternodes and take care of everything within the node - **funded by XSTK** Coins.
 - monitor all of your masternodes - In order to make sure your masternodes are working properly, you will be notified via email if something goes wrong.
 - governance voting system for masternode owners, to help us develop and concept proposals made by and for the community
- 

ROADMAP






TECHNICAL ARCHITECTURE OF XSTK BLOCKCHAIN

The XSTK blockchain is designed to be used for daily transactional activities happening within the XStake financial ecosystem, including staking and hosting masternode services but also be used as a peer to peer exchange gateway for atomic swaps and to store of value of investors securely, and efficiently at reduced costs using TPOS.

XSTK aims to enhance its services to consumers, sellers, and merchants. This allows a level of transparency that was previously unrealized while creating incentives for users to adopt and use the platform. It utilizes a privacy technology so that a user can choose to send funds to a recipient without any traces. Sender and recipient details are hidden and obfuscated, making it impossible to track your movements. Using a dedicated blockchain, XStake records each user's balance and stores it, until they choose to move it around. The XStake blockchain is cryptographically secure and is fully decentralized, meaning it is not owned by any party who can choose to arbitrarily change the rules.

To accomplish our features, XStake has created a multi-layered cryptographic architecture that expands the private-public key paradigm in order to provide a safe trustless proof of stake workflow.



COIN SPECIFICATION

Name	XStake
Coin Ticker	XSTK
Reward System	POS & MN
Reward Distributon	50:50
Total Supply	50 000 000
Premine	6%
Block Time	60 Seconds
Block Reward	*
Block Maturity	60 Minutes/Blocks
Staking Threshold	2 000
MasterNode Collateral	5000 XSTK

Blocks*

2 - 999	1 XSTK (POW)
1000 - 1999	1 XSTK (POS)
2000 - 9999	100 XSTK (POS + MN)
10000 - 99999	10 XSTK (POS MN)
100000 - 499999	8 XSTK (POS + MN)
500000 - 999999	6 XSTK (POS + MN)
1000000 - ∞	4 XSTK (POS + MN)

MASTERNODES

Launching a masternode is a highly technical process and generally goes way beyond the scope of non-technical user's abilities. XStake's approach to this issue is **NodeZ**, a simple solution to implement staking and masternode hosting services that allows users to launch a masternode with incredible ease and no advanced technical ability required.


Unlike normal masternodes, supporting the proof-of-work algorithm to generate new blocks, XStake masternodes are utilized for a various number of features such as verifying transactions, voting system mechanism, securing the TPOS staking process and gateway for future services like atomic swaps integrated via cross-chain support between different coins.

Xstake masternodes are dedicated hardware nodes that reside on servers around the world to ensure network decentralization and needed redundancy. Masternodes serve a critical role in adding a self-governing, service-providing layer to the network, as well as, supporting the XStake vision and mission by performing network-related functions.

To secure the long-term health and usability of the XStake blockchain, a network of at least 500 masternodes active and contributing to the network are necessary in order to launch a decent decentralized environment for our products and services. Masternode operators will have financial incentives to keep their nodes running for extended periods of time, primarily by getting paid for these services. For users who do not understand the complex mechanisms of cryptocurrency trading and still want to have a passive cryptocurrency income, owning a masternode means that they are involved and making gains even when not trading.


TRUSTLESS PROOF OF STAKE

The proof of work system used in most cryptocurrencies, is a mining and computer power-based system in which miners are required to solve difficult mathematical problems to validate and authenticate transactions on the blockchain. It was integrated because it provides complete decentralization of power and control over the distribution and implementation of major technical and economic changes in the network. If an attacker wants to hack a cryptocurrency network today, for instance, the bitcoin network, he would have to gain 51% of the computing power. This can be made possible if some of the largest mining pools join together to attack the network. While this is highly unlikely politically, technically, it is still a possibility - most recent events confirm this issue more than once . If the Proof-of-Work is based on mining and computing power, the Proof-of-Stake derives from actual holdings of the cryptocurrency. That means users that own the largest chunk of coins in the network would have the authority to make network changes and mine an equivalent portion of their funds regardless of computing power. For example: user who own 20% of all XSTK would be able to mine 20% of the XSTK transactions gaining 1/5 of the network power and has also a significant impact on the implementation of economic and technical changes within it. In a Proof-of-Work network, the majority of voting power when implementing important changes to the system is divided among miners, developers and other crucial members of the community. The computing power required to carry out the cryptographic calculations only ever increases as the difficulty increases, thus consuming greater amounts of electricity. In the long run, this would be counterproductive to the health of a cryptocurrency, as miners would have to sell substantial portions of their coins for fiat currency to foot the electricity bill, devaluing the price of the cryptocurrency.



Thus, it can be deduced that PoW networks are not financially ideal as only miners can receive block rewards and transaction fees in return for precious resources, whereas regular users do not see any ROI from holding their coins. This is where Proof of Stake (PoS) networks come in. Proof of Stake is a typical computer algorithm through which a cryptocurrency achieves their distributed consensus. It is also a better alternative to the PoW algorithm because it achieves the same distributed consensus at a lower cost and in a more energy efficient way. The transaction confirmation mechanism delegates proof of the possession over to total stake held, where transactions are confirmed by simple nodes who hold large balances, and the greater the balance the user holds, the more likely they are to receive fees and block rewards. While this significantly reduces the number of resources required to confirm transactions and effectively allows the average user to see positive ROI on balances held, this system still requires a user to maintain connectivity at all times, have a high-bandwidth connection, and for their wallets to be unlocked 24/7.

Trustless Proof of Stake (TPoS) essentially allows users to stake XSTK on any other masternode which is active on the XSTK blockchain. These masternodes do the staking using their high-bandwidth, continuous connectivity while not having to share any spendable balance or private keys with the node owner. Your funds are yours and safe, and will safely and securely grow over time even while you sleep. With the possession of your private key it will be just like a bank account where you can login on move your funds if required. This feature was created with the intention of allowing users to securely stake XSTK in a cold storage from hardware devices. Increasing security for both the network and the user. We believe TPoS will be the next stage of evolution in terms of guaranteeing ROI on balances, and our adoption strategy will ensure it becomes the standard across financial services worldwide and we are able to add an extra layer on top, called the delegation layer, where a user would have to send their money to the said service provider in order to grow their funds, instead, XSTK's TPoS allows users to delegate their funds themselves. This is the very essence of the free market.



ATOMIC SWAPS

Atomic swaps, or atomic cross-chain trading, is the exchange of one cryptocurrency to another cryptocurrency, without the need to trust a third-party. It allows any user to 'swap' their assets with a peer they have never met on a completely different chain, and have that swap be 100% trustless, instant, and with little to no fee involved. A relatively new piece of technology which is looking to revolutionize the way in which users transact with each other.

For example, if Alice owned 10000 XSTK but instead wanted 1 BTC, she would have to go through an exchange - a third-party! With atomic swaps, if Bob owned 1 BTC but instead wants 10000 XSTK, then Bob and Alice could make a trade.

In order to prevent scams, atomic swaps utilizes what is known as hash time-locked contracts (HTLCs). Hash time-locked contracts ensure that the atomic swap process is completely trustless by ensuring both fulfill the requirements of the trade. HTLCs require the recipient of a payment to acknowledge receiving payment prior to a deadline by generating a cryptographic proof of payment.

XSTK main goal is to be able to instantly 'Atomic Swap' any coin into XSTK without any need to perform extra steps in sending, receiving, or activation of any kind. In order for a transaction to occur between two different blockchains, it is necessary for both blockchains to share the same cryptographic hash function, such as SHA-256 - which happens to be also the main engine of many POS-based Coins. The future of atomic cross-chain trading looks bright, since there has been many successful attempts to implement atomic swaps in real life services. With continued innovation, the desire is that the technology of atomic swaps will allow us to exchange without a third party that will be convenient for the average user.

ECOSYSTEM

The XSTK ecosystem is a revolutionary tool in cryptocurrency by combining our most valuable resources to one giant application, never seen before!



Our ecosystem is build especially for crypto enthusiasts looking for a new innovative ideas and features as well as investors looking fot a secure long term investment. With **XStake** as our main company which is in control of the **XSTK** blockchain as well as our two main produtcs StakeZ and NodeZ we will give back real use and value into our cryptocurrency.

XSTK coins will be used to pay maintenance fees for masternode hosting services as well as staking capabilities of different coins inside your **StakeZ** GUI Wallet. This fee will be always less than your actual balance of **XSTK** coins, so you don't need to worry about losing any coins by accident. All masternode holders will be rewarded regularly by contributing to the network, but not only regarding block rewards, they will also get a significant share of users paments by providng a true decentralized and secure network.



We are also collaborating with key merchandisers and masternode services around the world from time to time, as it is beneficial for both the parties and helps in enhancing acceptability of the coin. Our highly experienced and professional team of developers have ensured that **XSTK** and **StakeZ/NodeZ** is here to stay for good.

Given that we do not only take care of the development end in terms of bug fixing but ensure that the promises made at our launching are kept. One of the most important aspects for a cryptocurrency is: marketing it so well that stakers and holders have a place to spend it.

Due to the rapid development of the wallet and partnership with various online services, the popularity and acceptance of XSTK will grow generously over time, which will once more influence its appreciation besides the release and development of products using the XSTK blockchain.

There will be multiple ways to get involved, as we will not only provide regular wallets for various operating systems, such as Windows, Linux, Mac. Furthermore the team plans the development more as many platforms as possible.

We know our target group and have the best strategies in place, to convince even those who are not aware of the crypto. We already have made concrete steps in this regard and our community driven services are inspired by this vision. The rest is a matter of persistence and we make it as easy as possible to get them started.





CONCLUSION

We have seen, that not only the state of crypto in general but especially their mechanisms behind the UI are at a tipping point. We need real services and real applications to make the next step in order to set a world ruled by cryptocurrencies and give financial freedom to everybody.

We are keen on making big steps to reach our goals and take over the leadership position in the world of cryptocurrencies by using our Hard-Cap from masternodes crowdsales. We will provide a safe and secure blockchain environment bringing cryptocurrency to a larger audience while maintaining a consistent value to owners and stakers - to create a unique innovative ecosystem for investors and everyday users.

We realize and accept the fact that every person and every product must improve and grow to move forward to greater heights. With multiple usecases in line, the first and most important step is to build a strong community to become and sustain a big player amongst cryptocurrencies. By implementing real world applications for real world problems we will not only provide modern features but also develop further more improvements on our XStake blockchain.

