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The World's #1 Quadru investment
cryptocurrency that has Digitalized Gold, and
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By Charles Metz
www.nixec.com
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ABSTRACT

Although blockchain technology is still in the initial stages of development, its transparent mechanisms and open concepts show tremendous vitality.

Nixec seeks to link the present to the future, through the exploration and implementation of blockchain technology. The advent of the blockchain technology has introduced the world of decentralization and is challenging our preconceived perspectives of the current social, political, and economic systems, most notably, the central banking system. The rapid advancement of this technology has begun to blend world borders and statute, providing glimpses of an improved, alternative future. Yet, the technology is still at its infancy and is confronted with limitations in terms of performance, ease of use, and service quality. This paper outlines our vision and philosophy of the NIXEC and details on the supporting proprietary technologies that have been in development over the past few years. More importantly, we discuss actual implementation of Search engine, social media, trade platform and AI card system that are already in the NIXEC Network. This demonstrates our progress beyond the initial concept stage and validates our team's strong execution ability; a major factor that differentiates Nixec from the majority of blockchain projects today.

Mainstream adoption of blockchain systems has been limited due to unsolved questions of scalability, Privacy, and interoperability. In this paper, we will outline a proposed design for the Nixec Network; as a 3rd generation blockchain system designed to address these challenges.

Core to our hypothesis is the idea that many blockchains will be created to solve unique business challenges, within unique industries. As such, Nixec is designed to support custom blockchain architectures, while providing a trustless mechanism for cross-chain interoperability. At the root of this system is the world's first dedicated public enterprise blockchain, Nixec; a state of the art blockchain that introduces a new paradigm of security, and fair, representative crypto-economic incentives. Nixec connects and exchanges value between different blockchain ledgers in a distributed manner. It uses the latest cryptographic theories to build a non-proprietary cross-chain protocol and a distributed ledger that records both cross-chain and intra-chain transactions. Any blockchain network, whether a public, private or consortium chain, can integrate with Nixec to establish connections between different ledgers and perform low cost inter-ledger asset transfers.

Nixec is focusing on the digital transfer of value with our underlying technology can be evolved to support new use cases through innovation. In the case of Nixec, we enable businesses and enterprise Developers to harness an intuitive blockchain platform and developer ecosystem to rapidly develop and Deploy decentralized applications that utilize distributed ledger technology instead of traditional database architectures. Nixec has majorly deployed blockchain innovations through Search engine, trade platforms, and social media and AI card systems to evidently put to use latest blockchain technology. Nixec is built to simplify and accelerate the development and deployment of distributed applications on the Blockchain and to as well address scalability. Nixec platform that primarily focuses on scalability issues using Proof-of Stake consensus algorithm that generates blocks in every 3 seconds and removes the transaction fees to invigorate DAPPs.

INTRODUCTION

Scalability, privacy, and interoperability challenges have limited the massive adoption of Blockchain technology, to overcome these obstacles, Nixec Platform is built from the start for enterprise distributed application development. A suite of APIs, in almost all of today's popular programming languages, will allow developers to intuitively interact with the NixecBlockchain network without having to know the complex details of Blockchain technology. Developers that are familiar with using RESTful APIs to interact with today's traditional databases will feel right at home developing apps that instead use the NixecBlockchain to access and store information. Uniquely, our idea being created to address challenges in crypto network and general Blockchain by the development of a networked, federated Blockchain to integrate these separate spokes. That integrated Blockchain network is Nixec. Effectively DApps are deployed in search engine, social media, trade platforms with stop orders and AI card system by NIXEC CO.

Nixec's open, decentralized platform and distributed storage technology, will allow creators of digital content to cut out middlemen such as the Apple Store and Google Play Store. Content producers will thus be able to obtain funds directly from consumers. Currently, a lot of user data and traffic is controlled by a few corporations like Google, Facebook, Amazon, & Snapchat. Nixec attempts to mitigate this control by placing ownership of the data back into the owner's hands, making it more secure and private.

Nixecnetwork protocols specify standards for the external components. While the actual functionality and internal components of each connecting network might vary by vendor and intended purpose, these core functionalities should be implemented. On Nixec, decentralized applications will be built to integrate data and logic from any Blockchain connected to Nixec. Nixec tokens are the fuel used to power these applications. Measured based on the complexity of an application, and the computational resources required to run it, there is a cost to running every Nixec-native software application to generate revenue that is ROI for initial investors. Every transaction sent on Nixec carries a small fee, payable in Nixec tokens. These fees are determined by the current network resource availability, as well as the source and destination of the transaction. The transaction's originator will be responsible for paying for transaction fees. The transaction fees will be pooled and distributed to participants and investors in Nixec's consensus process.

Applications deployed on Nixec will utilize resources from the Nixec Virtual Machine (NVM). The NVM provides the infrastructure for one of the primary functionalities of the connecting Blockchain, allowing the abstraction between the Blockchain and application-specific logic and paving the way to powerful inter-chain applications. Applications built on Nixec will be able to receive inputs from and provide outputs to all participating Blockchains, this enables truly decentralized applications. Nixec tokens will be consumed to use the resources of the NVM. At the core of the Nixec network, the Nixec token is used to incentivize participation, fuel applications, securely achieve consensus, and connect an innumerable

number of Blockchains. Participants have opportunities to engage in various aspects of Nixec because its impossible to achieve this goal without a robust economic model that aligns interests and puts the technology into the hands of contributors around the world. This foundational technology will enable the redesign of industries and societies, while reinforcing the roles of value-added contributors and challenging the roles of outdated intermediaries. Nixec is a vision of a connected future, where shared public infrastructure and enterprise infrastructure are seamlessly integrated and indistinguishable to the end user.

SCALABILITY & RELIABILITY

The Nixec network's massive scalability and reliability through resiliency makes it a perfect fit for enterprise and business customers to run Tier 1 applications vital to their day to day business needs. Through decentralized mesh networking, Nixec nodes connect to each other relaying blocks around the globe. Every functional node contains an entire copy of the NixecBlockchain at all times, increasing the performance of potential distributed applications since they can choose to interact with the closest or fastest node. This scalability in a global sense can drastically improve application performance and response time while ensuring the information on the Blockchain can be accessed nearly anywhere the application is running. The global scale of the Nixec network also provides enterprise-level reliability through resiliency. Nodes are able to join and leave the network at will, whether it be by choice or due to downtime, without harming the network. Applications that are communicating with a node that leaves the network will simply begin communicating with another node that also has a full copy of the Blockchain. No matter which node the application is interacting with, the result of storing or accessing information will always be the same.

SECURITY & IMMUTABILITY

The Blockchain technology at the foundation of the Nixec network affords distributed applications running on the network inherent security advantages. Due to the decentralized nature of the public Nixec network and the proof-of-stake consensus model where users of the Nixec network are incentivized to run a Nixec node and secure the network, successful attacks on the network by bad actors are nearly impossible. The greater the number of wallets currently staking tokens, the more secure the network is from attacks. On private Nixec networks where there are not a large number of users securing the network via staking, Nixec tokens are staked by trusted parties that set up the private network. This allows private Nixec networks to be as trustworthy as the trusted parties in charge of operating them, while retaining the many other inherent benefits of Blockchain technology on the network.

Unlike traditional database architectures, distributed applications storing and accessing information on the NixecBlockchain can be certain that that information has not be changed since it was stored. This allows for distinct advantages in use cases in records management, auditing, and lifecycle verification. Information is always stored on the Blockchain via additions, rather than modifying existing data.

Distributed applications can choose to view the latest version of information via accessing the information at the highest block height for which it exists, or viewing every single transaction in which the information resides.

At Nixec we understand that protecting our users' investments is of utmost importance and therefore we have established security as one of our primary concerns. We aim to provide the latest security features available as well as some of our own unique systems/practices. We offer the following security features to each and every user of Nixec:

TWO-FACTOR AUTHENTICATION OR 2FA

This is an added layer of security beyond the usual username and password. It's a type of key which is neither public nor shared and the 2FA key is delivered to the account owner as an OTP (One Time Password). The 2FA key can only be delivered to the registered email account. Advanced verification software Nixec uses advanced verification software that maintains and monitors the integrity of the account.

WITHDRAWAL PROTECTION.

Our platform is equipped with latest technological advances which makes the withdrawal process completely protected from unauthorized accesses.

COLD STORAGE

90% of deposited funds are kept in cold storage, as an additional layer of protection to our users, so that they will not be accessible to unauthorized third parties in the unlikely event of a hack or breach of the trading platform.

TRADING PLATFORM

The language used for the development process is Google Go. Google Go is a new and advanced open source programming language specifically designed for distributed, multicore and networked systems. Google Go offers nearly unlimited scalability options i.e. the number of LOCs or number of developers working on it. Google Go offers the ability to convert a quick compilation into an executable from a single system while maintaining the concurrency at the language level. Apart from Google Go, python and C++ also contribute in development of the trading platform. Our advanced trading platform goes above and beyond the limitations of the existing technology and gives it a comprehensive boost. Nixec's trading platform will revolutionize the Cryptocurrency world and it is our intention to become the global leader in Cryptocurrency trading.

Nixec is developed on the notion that current trading platforms are lacking in user support and services. Where current trading platforms have proven to be inadequate, Nixec promises to fill in their gaps and deliver a comprehensive trading platform where users can grow their investments. We aim to treat all of our users as part of the Nixec team. We offer benefits and returns, above and beyond any other exchange currently available, in hopes of building mutually beneficial investment opportunities for the entire Nixec community.

CONSTRAINTS

Unfortunately, they have been running into a few core constraints intrinsic to the original design tradeoffs of Bitcoin;

1. **Speed** – because of the design of the decentralized, proof-of-work consensus method used by Bitcoin and other crypto currencies, difficulty requirements are adjusted to maintain roughly 10 minute confirmation times. For coins that wish greater security, multiple confirmations may be required. A common requirement is to wait for 6 confirmations, which can lead to wait times over an hour, this is to be a thing of past with Nixec coin.

2. **Cost** – the default transaction cost is around .01 mBTC. The exchange price of Bitcoin has for all this long been volatile throughout its history. If the price of BTC rises, then the cost of transactions can go up. This can prove to be a serious cost to all investors that need to manage very large numbers of transactions. Additionally, many factors including constraints on block size and reward halving could act to increase transaction fees, for this reason Nixec coin is here.

3. **Blockchain Bloat** – with the Bitcoin Blockchain size limit of 1 MB per block, transaction throughput is capped at 6-7 transactions per second. Any application that wants to write and store information using the Blockchain will add to the traffic. This problem has become politically charged as various parties seek to increase the block size limit.

4. **High volatility**. Despite what skeptics are saying, cryptocurrencies will likely remain a lucrative investment choice through the foreseeable future. Sure, extreme volatility remains a cause for concern. The wild fluctuations popular crypto coins like bitcoin go through almost every day render them practically useless for day-to-day use. No wonder it is one of the biggest factors keeping many would-be investors on the fence! Nixec coin is here to address this by;

i) Deployment of Stop orders are a lot less complicated than most investment guides make them sound. Nixec exchange offer this service to their regular customers. Basically, a stop-order tells the exchange to offer a pre-specified amount of digital currency for sale or buy if its price dips below a certain level.

ii) Wouldn't it be great if you had the freedom to use your "Nixec" to make payments anytime, anywhere — maybe even at your neighborhood store? Unfortunately, crypto volatility is among the

biggest stumbling block preventing you from using cryptocurrencies for everyday purchases. Only if there was a way to circumvent this complication! Well, guess what — there's one solution and it's called Nixecard! Powered by a sophisticated home-grown AI system, Nixec card is one of world's few ever intelligent card. Not only does it allow real-time conversion of Nixec coins to a fiat currency of your choice, but it also uses the computing Powered by a sophisticated home-grown AI system, Nixec card is one of the few intelligent smart card. Not only does it allow real-time conversion of crypto coins to a fiat currency of your choice, but it also uses the computing prowess of its native AI system to fight volatility prowess of its native AI system to fight volatility.

Nixec card calculates the returns of all crypto coins in the user's portfolio and zeroes in on the one that promises the highest return. All these calculations are taken care of within the metaphoric blink of an eye. So, as you can see, there are various ways to mitigate or reduce the risks from crypto volatility. However, when it comes to removing volatility while simultaneously making your crypto investments available for everyday use, Nixec is the platform you want to trust.

Nixec is designed to address these four core constraints by creating a protocol that provide functions and features beyond currency transactions. Nixec constructs a standard, effective, andsecure foundation for Applications to run faster, cheaper, and without bloating Bitcoin. Blockchain technology has a vast number of use cases in the business and enterprise space. From distributed applications managing the secure records of financial transactions in an immutable ledger that can be traced for audit purposes, to cloud-scale applications managing the secure access and storage of the explosion of information generated by millions of internet-of-things devices. The NixecBlockchain network has the ability to drive business value through revolutionizing the way that enterprises develop and deploy applications in nearly every industry.

ICO PURPOSE

The purpose of the NixecCoin ICO is to raise sufficient funds for long-term development and propagation of Nixec. Funds will be used to open offices in countries like Ireland, China, USA, and any necessary locations where strategic advantages and proximity to partners would be realized. Additional focus will be given to forming strategic relations with partners who can offer Nixecoins to their client base to promote general adoption. Operations Development will be created to build a culture of compliance, working directly with regulatory agencies for the future of NixecCoin. Research funds will be allocated to participate in initiatives like the Inter-ledger Protocol and general Blockchain technology to create more instant and less costly transactions for Nixec users.

TOKEN

Tokens on a Blockchain network incentivize network users to secure and operate the network. In a public Blockchain network, bad actors can attempt to attack or disrupt the network for their own gain. In an effort to secure the network against such attacks, the network must have a method of finding

consensus. Traditional networks such as Bitcoin use an energy and computation-heavy method of finding consensus known as proof-of-work. Users are rewarded with bitcoins for using their computational power to verify new blocks for the block chain and consensus is found when the majority of the computational power on the network agrees, preventing attacks. In contrast, many newer Blockchain networks, along with Nixec use a proof-of-stake consensus model. Proof-of-stake works by using the network users' tokens as votes towards consensus to verify new blocks and secure the network. Users with more tokens get more votes since they have more tokens to lose if an attack on the network is successful. In order to incentivize users to stake their tokens in this model, users are given a reward for staking their tokens and verifying new blocks. Whether proof-of-work or proof-of-stake, tokens play an essential role in the operation of a public Blockchain network's consensus model. Tokens must have some value to incentivize users to participate in securing the network. The Nixec token, allows Nixec users to exchange Nixec with other Nixec users while encouraging users via token rewards to stake and help secure the network.

TOKEN SALE DETAILS

CONTRIBUTIONS

The Nixec token generation event will be accepting Ethereum (ETH) contributions. Other tokens will need to be converted to ETH. A link will be provided on the Nixec website to the Shapeshift exchange to facilitate transfer. Founding Token Allocation Tokens will be directly allocated to founding company owned accounts, and not to individuals. More Information Visit the Nixec network website and sign up for our newsletter and social channels for updated information as soon as it becomes available.

SALE STRUCTURE

PRIVATE SALE (Simple Agreement for Future Tokens) SAFT details.

Tokens Issued 4,900,000 NIX

Funds Raised USD 4,705,021.07

PUBLIC SALE

Fundraised	To Be Addressed after the ICO
Funds to be raised	USD 28,230,126.42
ICO Start Date	Thur 24.05.2018

TOKEN STRUCTURE AND DISTRIBUTION

At the launch of the first public sale, Nixec tokens will be issued based on the following allocation: Tokens for public sale will be created at five times the tokens sold in private and pre-sale.

60%	Public Sale
20%	Founding Organization and Partners
10%	Private Sale
10%	Nixec Foundation
100%	Total

- ❖ Nixec tokens remaining, after the public sale close are redistributed proportionally back to token holders who contributed to the Token Release Schedule contract.

STRATEGIC PARTNERS

An important factor in Nixec's pending success is its strategic partnerships. A portion of ICO funding is allocated to developing these relationships. The current state of Nixec's partners is a very good sign of the potential of the project. These partnerships will allow Nixec to gain momentum with user acquisition as well as position the company favorably both strategically and geographically.

PROOF OF STAKE

With pure Proof of Stake Nixecoin distribute the coins to the interested parties in fair manner. For example, it is informative to observe the hardships that a coin runs into as it handles the initial distribution of its built-in coin asset. With PoA [(Proof-of-Authority) PoA is a consensus mechanism for Blockchain in which consensus is achieved by referring to a list of validators (referred to as authorities when they are linked to physical entities). Validators are a group of accounts/nodes that are allowed to participate in the consensus; they validate the transactions and blocks.]]. We have the benefit of the PoW aspect that is incorporated into the system, which can be used for handling the initial distribution of the coins. However, if the PoA protocol specifies that the block reward subsidy is divided about equally between the miner and the N lucky stakeholders, starting from the genesis block, then this is likely to enable the rich to get richer in an unfair manner. Nixec uses a pure PoW protocol until the first block reward halving after 4 years, and only then a full PoA scheme is rolled out. Another alternative is to always give the entire reward subsidy to the PoW miner who solved the block, and share the transaction

fees between this miner and the N lucky stakeholders. This may imply that users will have to pay nontrivial transaction fees starting from the genesis block, in order to incentivize stakeholders to run full online nodes. However, it is reasonable to expect that the fees paid to stakeholders would not be excessive. This should mean that the added incentive to hoard will be small, i.e. the fees can be a nice added bonus if the stakeholder wishes to save the coins anyway, but if s/he has alternative uses for the wealth then these fees will not be enough to make him/her hold. The apportionment can be specified according to certain constants. The portion that goes to the N th stakeholder should be relatively big, unless perhaps if all the N lucky stakeholders must maintain the UTXO set (see Section 3.2.2). E.g., with $N = 3$ the protocol can dictate that 12 of the reward goes to the miner, 14 goes to the 3rd stakeholder, and 18 goes to each of the two other stakeholders. The apportionment can also be dynamic, in accordance with Section.

With Nixec's consensus system, we now consider the most popular alternate proposal, proof-of-stake as with the advent of modern cryptography, the idea that information can be physically real and valuable has moved from the dingy halls of philosophy departments to the concrete world of business. We are all familiar with the economic activity enabled by secure communication: negotiations, contracts, transactions, sales and commands can be sent on the public Internet with no fear of forgery or interception. We are also familiar with the financial consequences when secret data is lost or stolen. Since the advent of cryptographic currency in January 2009, this notion of valuable information has been made concrete. It is possible to hold and exchange a fungible store of value, using public communication media, with cryptographic rather than physical security preventing fraud or theft. Rather than saying "this encryption key is worth \$10,000 because that's what it will cost us if its encrypted data is exposed" one can say "this key is worth \$10,000 but can be broken up, sending only \$20 of it to another party while keeping the rest". With this context, proof-of-stake is a simple idea. A proof of stake is a cryptographic proof of ownership. With Nixecoin, it is possible for a proof-of-stake to not only prove ownership of a precise amount of currency, but also prove that this currency satisfies some property (say, it is locked and un-spendable until a contract is satisfied). In particular, Nixecoin is a scarce and experimental cryptocurrency that can be considered a proof of vested interest in the project's success. By proving stake which is time-locked, it can be used to prove interest in the project's continued (and sustainable) existence. That is, proof-of-stake is the idea that is used in Nixecoin, rather than physical arguments such as the Landauer limit, to demonstrate that some computation is costly.

FORK METHODOLOGY

For Nixec coin, UTXOs of two cryptocurrencies are combined into one Blockchain, since zk-SNARKs and JoinSplit transactions are fundamentally part of this new Blockchain. One can liken the solving of a Blockchain to a chain-growth polymerization mechanism: when the next block is solved, the Blockchain grows, just as a polymer grows upon the reactive addition of monomer to the polymer chain end. However, while longer polymer chains are generally desirable as they impart increased toughness on the resulting plastic, increasing the Blockchain size results in increased storage consumption as well as

significantly longer node sync times. Fortunately, this snapshot will only need to retrieve the address state from Nixec coin network at a single point in time, which will be carried to the new chain. Additionally, the Nixec coin Private clients will support Blockchain pruning and SPV techniques in order to reduce the burden of the Blockchain on user devices. A significant issue that Nixec fork must handle is a so-called “replay attack,” in which a post-fork transaction on the original Blockchain is made valid on the new Blockchain. Nixec coin fork has replay protection that ensures legitimacy and independence from the original Blockchain. To safeguard against replay attacks, Nixec coin will feature two-way replay protection. This is a studied problem, and we are using the industry standard approach which will be incorporated in a two-way manner as stated. This is already implemented, and we are using the industry standard approach, which is well-studied and has registered success.

PROOF-OF-WORK.

Nixec coin will utilize the highly-regarded EquihashPoW algorithm, which was developed by Alex Biryukov and Dmitry Khovratovich at the University of Luxembourg as an asymmetric proof-of-work (PoW) mechanism. In a network users send each other digital tokens. A decentralized ledger gathers all the transactions into blocks. Unlike other ASIC-resistant PoW algorithms, Equihash is based on the “Birthday Problem” and the enhanced Wagner algorithm utilized to solve it. Furthermore, Equihash features “memory hardness” whereby a steep computational penalty is associated with a reduction in memory usage and speed. This feature increases the ASIC resistivity of Equihash due to the cost of implementing more memory into ASICs to make them competitive with GPUs or even CPUs. The authors of the original paper discuss that while memory hardness does not protect against botnet-based CPU mining, the large amount of memory consumption would be extreme, such that the user base of infected PCs would notice a significant difference in performance and take necessary actions to remove the infection.

8. SECURITY

The PoA protocol vests some of the power that generates the blocks in the hands of the Nixec Coin holders. With PoA, an attacker needs to control very large amounts of stake in addition to PoWhashpower if s/he wishes to double-spend by preparing his/her branch in secret before broadcasting it to the network. Furthermore, by letting a lucky stakeholder determine which transactions should be included in the block, PoA provides security against attackers who would try to extort or destroy the network by denying transactions. Other forms of protection from this attack appear to be quite murky. For example, there can be a protocol rule that requires at least M amount of BDD in each block, but this would imply: (1) M has to be a significant amount, otherwise the attacker could create blocks with transactions in which s/he always just transfers small amounts of coins among his/her own addresses, therefore (2) if it is a slow day and you wish to send some small amount of coins, you might have to wait for a long time until M BDD is reached, in other words we would lose the predictability of 10 minute blocks, and more importantly (3) if the Nixec coin’s economy grows to e.g. 1000M BDD in each block on average, then the attacker could carry out his/her attack by creating blocks with only M BDD in them. Alternatively, the protocol rule can weigh more favorably branches with more

BDD, meaning that a branch with less PoW height but more BDD weight than another branch may still win. However, this introduces the attack vector in which an attacker waits patiently until s/he accumulates a large amount of BDD, and then exploits this rule to double-spend by outcompeting the average BDD of the Nixec's honest network. Let us demonstrate how the use of N lottery winners in the protocol amplifies the power of Nixec's honest stakeholders, which in turn diminishes the effectiveness of PoW-dominated attacks. Assumption 1. The function that takes a block and derives from it values that are used as inputs is a random oracle.

Claim 1. If Assumption 1 holds, an attacker with x fraction of the online stake needs to have more than $(\frac{1}{x}-1)^N$ times the hashpower of the honest miners in order to gain an advantage over the network.

Proof. Let $E_1 = \{\text{the } N \text{ lucky stakeholder that the block derives are under the attacker's control}\}$ and $E_2 = \{\text{the } N \text{ lucky stakeholder that the block derives are honest}\}$. We condition on the event $E_3 = \{\text{the } N \text{ lucky stakeholder that the block derives are online}\}$, and note that $\Pr[E_1 | E_3] = x^N$ is the probability that N online stakeholder that a mined block derives are under the attacker's control, and that $\Pr[E_2 | E_3] = (1-x)^N$ is the probability that N online stakeholder that a mined block derives are honest.

This means that on average the attacker will generate a block after $(\frac{1}{x})^N$ nonce attempts that meet the current difficulty target and derive N online stakeholders,

while the honest network needs $(\frac{1}{1-x})^N$ such attempts on average. Therefore,

if the attacker is fast enough so that s/he could compute $(\frac{1}{x})^N / (\frac{1}{1-x})^N = (\frac{1}{x}-1)^N$ nonce attempts per one nonce attempt of the honest Nixec network, then s/he can generate the blocks at the same average speed as the rest of the network.

Claim 2. If Assumption 1 holds and p fraction of the honest stake is online,

an attacker with y fraction of the total stake needs more than $(\frac{1}{y}-1)^N \cdot p^N$ times the hashpower of the honest miners in order to gain advantage over the network. Proof. Similarly to Claim 1, this follows because the speedup factor that the attacker needs is $((1-y) \cdot p)^N / y^N = ((\frac{1}{y}-1) \cdot p)^N$, where $((1-y) \cdot p)^N$ is the probability that N derived stakeholders are both online and honest, and y^N is the probability that N derived stakeholders are controlled by the attacker which is practically impossible. Remark.

We disregard the small potential advantage that a dedicated attacker may have over the honest network in cases s/he has local access to all of his/her stake (and PoW hashpower), which implies that s/he avoids the need to broadcast empty block headers and thus experience network lag. For example, if we assume a rather pessimistic average propagation time of 15 seconds,

with 10 minute blocks we would adjust the speedup factor that the attacker needs by $(\frac{600-15-15}{600}) = 0.95$. The first 15 seconds compensate for propagating the empty block header, assuming that the miners keep trying to re-solve the block and never sit idle, so only one solved header should be factored in. The other 15 seconds compensate for broadcasting the finalized wrapped block, as the network nodes still work on

the previous block until the new block propagates to them. In a pure PoW network, we need to compensate by a factor of $\left(\frac{600-15}{600}\right)=0.975$, so the attacker gains an advantage with >49.36% instead of >50% of the hashpower under these assumptions. If the attacker does not personally own all of the stake that is used in the attack, but instead colludes with remote stakeholders by stealth, this advantage becomes even more **negligible**. For example, if $N = 3$ and we assume that the transaction fees and limited-withdrawal key delegation incentivize $p = 50\%$ participation level of the honest stakeholders, an attacker who has 88.8% of the total hashpower and $\gamma = 20\%$ of the total stake would still not have an advantage over the honest network: $\left(1/\left(\frac{20}{100} - 1\right)\right) \cdot \left(\frac{50}{100}\right)^3 = 2^3$, meaning that the attacker needs to be more than 8 times faster than the rest of the Nixec network. If we adjust by the aforementioned 0.95 factor, the attacker will need 88.37% instead of 88.88% of the total hashpower. Let us clarify why an attacker who tries to deny transactions does not gain an additional advantage by creating empty blocks also when the hashpower and the first $N - 1$ derived stakeholders are not controlled by him/her. If a large fraction of the blocks still gets generated by other stakeholders, s/he simply forgoes his/her rewards and the network continues to function, albeit more slowly. Hence, for an effective attack, s/he should seek to create consecutive empty blocks. However, if she creates empty blocks in the honest branch as the N^{th} winner with the help of any $N - 1$ winners, she indeed weakens the usefulness of this branch, but at the same time she strengthens this branch in the race against the branch that consists of consecutive empty blocks that she is building. We note that the larger N is, the possibility for a bribe attack becomes increasingly tangible. The attacker can try to reduce her costs by differentiating between offline stakeholders and online stakeholders who participate in the attack, though this may require communication between the attacker and the bribe-takers, which entails the risk that the double-spending attack becomes public and legal actions are therefore taken thus security advantage to network. With a PoW-based Nixec Coin, the security is sustained under the assumption that the majority of the mining power that participates is honest. Similarly, the PoA network derives its soundness from the assumption that the majority of the online stake is honest. Due to the amplification via the parameter N , the security of PoA deteriorates quickly when the majority of the online stake is under the control of a malicious entity. The PoA protocol seeks to decentralize the power that synchronizes the transactions in a quite pronounced fashion. To monopolize the block creation process, an attacker needs to control a substantial fraction of the total amount of coins that have been generated thus far. We argue that in likely scenarios the cost of an attack would be much high. Furthermore, the PoA protocol is likely to accomplish other beneficial properties, namely an improved network topology, incentives for maintaining full online nodes, low transaction fees, and a more efficient energy usage making it of advantage to Nixec community.

NIXEC ARTIFICIAL INTELLIGENCE SYSTEM

Nixec Artificial intelligence system has been developed to help users to control their portfolio fluctuations. We plan to implement different features to make the system always more and more efficient. As first feature, the NAIS is able to calculate in real time the best performing cryptocurrency among the ones held in the wallet. Furthermore, we will implement advanced features. NixCard is a

revolutionary debit card that allows real time conversion from cryptocurrencies to Fiat currencies. The card holder does NOT need to convert the cryptocurrencies to Fiat before actually spending it. Cryptocurrencies are converted in real time to Fiat currency at the moment of the payment.

The target market is represented by any user wanting to spend cryptocurrencies or Fiat currencies with reduced costs. Our main focus will be cryptocurrency users that can use our intelligent system. In particular, we are very much interested in attracting crypto users that have more than one cryptocurrency in their wallet so that they can take full advantage of the Nixec features. New cryptocurrencies will keep growing their market share within the crypto industry and we will leverage this growth to penetrate the market with the Nixec Intelligence system. The intelligent system is also a great tool to improve profits margins as it suggests the fluctuations of the crypto currencies of the user's wallet and allows them to optimize profits.

The aim of Nixec card is creating a tool that allows users to have more control over these fluctuations. With an intelligent system, Nixec Card calculates automatically the best performing crypto currency in the wallet. Thanks to the intelligent system, the user can decide which crypto currency to use in performing a payment, not having to check every time the market fluctuations: Nixec card will suggest the best conversion

COMMUNITY-DRIVEN COIN

The Nixec Coin project represents a true community effort growing daily unlike many cryptocurrency projects, whether utility tokens or coins that claim to be community-driven and open source. While this is true to an extent, a core development team typically exists which controls the entire future of the project this is not the case with Nixec coin. Nixec's network transaction speed grows with activity. Nixec Coin grows via transactors, not miners / stakers, thus avoiding centralization. Nixec Coin is aiming to be the backbone of the emerging machine-to-machine (m2m) economy of the Internet-of-Things (IoT), data integrity, micro-/nano- payments, and other cases where a scalable decentralized system adds value.

Various initiatives are to be implemented so that members of the community can actively engage in helping to promote Nixec coin and increase community/ecosystem. Furthermore, Nixec coin open a "call for developers" in which anyone can apply, even those new to blockchain technology, and contribute in a meaningful way to the project. Those without prior experience are able to learn from this developer program and become proficient in blockchain technology/engineering. These two programs combined will add significance to ecosystem, expanding our daily contributing team to global members. The size of the Nixec Coin contribution team shows the project's dedication to its community-driven inspiration and is a feat that no other cryptocurrency has achieved to the best of the team's knowledge. This showcases the truly decentralized nature of Nixec's development

TRADE PLATFORM

We believe that our organization can draw large benefits from the many features that Blockchain

technology can offer. Our final objective is to create an exchange platform for business through which shareholders can receive dividends on their stocks, with a fluid and easy to use interface. Our platform management team ensures the safety and security of client funds by utilizing cold storage methodologies, our platform enables users to sell and purchase stocks utilizing bank transfers and cryptocurrencies targeting experienced professionals as well as newcomers into this field.

Instant swaps between crypto and fiat is being implemented. We will start with USD and EUR, with more to follow as we move along. Users will be granted the option of investing funds in mining pools. Mining pools work on a constant, passive earning model. Considering that the cash power of mining pools will be more or less equal.

Returns on investments from the mining of new coins will be split among investors. We have referral program that is designed to benefit both, invitation senders, and recipients. A bonus system will be implemented that will allow users to receive rewards once they recruit new users to the platform. This ensures that new users are introduced so that Nixec Exchange trading volume grows.

New traders can benefit from the expertise and knowledge base of experienced market practitioners. For traders who simply do not have any spare time to devote to market and trading research, will provide an Auto- Trade tool. This is a feature that automatically follows the actions of top traders based on current and historical performance. Auto Trade is the safest, automated trading method, and will be implemented in the Nixec trade investment fund. Paypal integration is underway and soon, it will be done. Our system provides inexperienced traders the opportunity copy and learn from the actions and decisions of more experienced traders.

Nixec trade is taking stock exchanges to the NEXT level, making it substantially easier to acquire stocks through Blockchain technology. We will provide interested parties with all of the pertinent information needed to decide on whom to follow in the industry. We want everyone to have the opportunity to become involved in the early stages of our exciting, groundbreaking project, and have the opportunity to generate profits while taking the first steps in the direction towards revolutionizing the stock market and corporate finance industry

SEARCH ENGINE

Nixec is designed to be a scalable search engine with high quality search results over a rapidly growing World Wide Web. A number of techniques are employed to improve search quality including page rank, anchor text, and proximity information. Furthermore, Nixec is a complete architecture for gathering web pages, indexing them, and performing search queries over them. Nixec search engine is a complex system and much remains to be done. Our immediate goals are to improve search efficiency and web pages scale. Some simple improvements to efficiency include query caching, smart disk allocation, and sub indices. Another area which requires much research is updates. We must have smart algorithms to decide what old web pages should be re-crawled and what new ones should be crawled. Work toward this goal has been done.

TEAM

Our team is composed of highly professional and motivated entrepreneurs with expertise in a plethora of different fields. Individually, they have founded several companies and led various projects, some successful, some fell short of reaching their target. Thanks to this and our combined experience in developing and managing businesses has allowed us to obtain invaluable knowledge regarding the ins and outs of business development from conception to conclusion.

We strongly believe that everyone and everywhere should have access to professional corporate finance tools and in a special way thanks to NIXEC, security, professional expertise and quick, headache free access to financials will become the new global standard. We are among the unheralded men and women who took up the task of researching the new technology known as the Blockchain when only very few believed in it.

We have grown in technical maturity and insight as to developing a business and providing financial service guidance and solutions utilizing our own in house Blockchain technology. We are capable of providing a boost for well-rounded people who utilize technology in order to deliver business breakthroughs, while maintaining easy access to shares and dividends from companies around the globe.

CONCLUSION

Cryptocurrency market is yet to be accepted by the masses as a tool for everyday exchanges, comparable to your standard fiat currency such as the dollar or euro. This underlying cryptocurrency infrastructure "Nixec" is built so the public benefit from its utility and the immutability of the blockchain technology positive so as transform their lives. We want to make the world's systems more honest, and we know that we can't do it alone because we believe in the potential of cryptocurrencies and that through their application, corporations (in this case NIXEC) may find an easy and efficient way of receiving financing for their projects by utilizing what is known as an ICO (Initial Coin Offering).

Nixec comes during a period of a financial revolution! Through this token sale and our passion, definitely Nixec will change the world and we want to be there when that happens by offering innovative and secure platforms, where users around the world can securely and easily exchange assets.

Disclosures & Other Information

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Contact sales@nixec.com