MOTION

Moving Ideas Forward

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1.Mission Statement:

The goal of *Motion*(XMN): To create a pathway for unrealized projects to use smart contract deployment and blockchain technology as tools for crowdfunding venture projects.

With Motion, patrons will be able to easily distribute their funds amongst Motion supported crowdfunding projects, allowing them to deal directly and safely with project teams. Locking down funds in smart contracts that will only release upon the satisfactory completion of the project's goals, therefore eliminating the need for a third party. The end result being a customizable, transparent, and secure crowdfunding platform with a better fee structure.

2.The Current Crowdfunding Climate

2.1 Why change is needed

There are currently three major institutionalized problems within the crowdfunding ecosystem:

- Vague multi-party contractual agreements
- Third party fees
- Security risks

These problems create a crowdfunding landscape that is unnecessarily convoluted and wasteful of pledged funds.

2.2 The contractual relationship

Currently, any party seeking to set up a crowdfunding project enters into a lengthy contractual agreement with a centralized company who will host the crowdfunding effort. These contracts typically require that you know your customer, declare tax information and assign a bank account. Additionally, by using the typical crowdfunding platform, parties agree to abide by any changing terms and conditions and, in most instances, waive many rights they may otherwise have.

2.3 Today's UN-intuitive contract creation

Current crowdfunding platforms encourage you to 'Tell your story' and create ambiguous contractual goals. Ignoring the clarity of a contractual relationship between the patron and the venture project, thus creating unnecessary dubiousness with regards to fulfillment of the obligations. All of which translates into an unsatisfactory user experience. When creating a crowdfunding project, creators should have clear and easy options for constructing a customized contractual relationship with their backers.

2.4 The exploitation of creators and patrons

Using any of today's crowdfunding platforms will cost the creator (and the patrons) up to 10% of the proceeds, and even more in hidden fees. This structure reflects a broken and ill-suited crowdfunding model. ***If the sole purpose of crowdfunding is the enablement of project creators to receive funds from backers, then the collection of fees by third parties from the raised funds sits at odds with the very purpose of crowdfunding itself.*** We believe that any crowdfunding platform that can remove these fees will give the backers some peace-of-mind knowing that 100% of their contribution will go into the project directly.

3.Motions' Solution

Crowdfunding campaigns driven directly through Motion have the tools to set up smart contracts between the project creator and the backers. Smart contract utilization solves the coordination problems between parties in complex, bilateral contracts. More importantly, it provides a formulaic language that quantifies the terms of project completion into more objective standards. Simply put, when a goal is completed, the funds will be released to the creator, and governance is handled in a decentralized manner via masternode holders.

3.1 Motions' Smart Contract Platform

A smart contract on the blockchain is a secure computer base protocol thats helps with assisting, verifying and enforcing a contract that has been negotiated over a software platform. Smart Contracts are confirmed with every block on the blockchain, reinforcing the negotiated contract. These transactions on the blockchain are then traceable and can be confirmed by any party.

Many businesses use an intermediary to do their B2B and international contracts. Traditionally, using this process can take hours or usually days, and sometimes, at a loss of assets. Smart Contracts ensure a safe, effective and timely manner of managing contracts from anywhere in the world.

Through the Motion platform, smart contracts between investor and creator will be tracked on the blockchain to ensure people can keep track of the XMN they have spent. Motion ensures there is no middleman to profit from the exchange between peers looking to make a transaction or investment.

3.2 Smart Contracts and Accountability

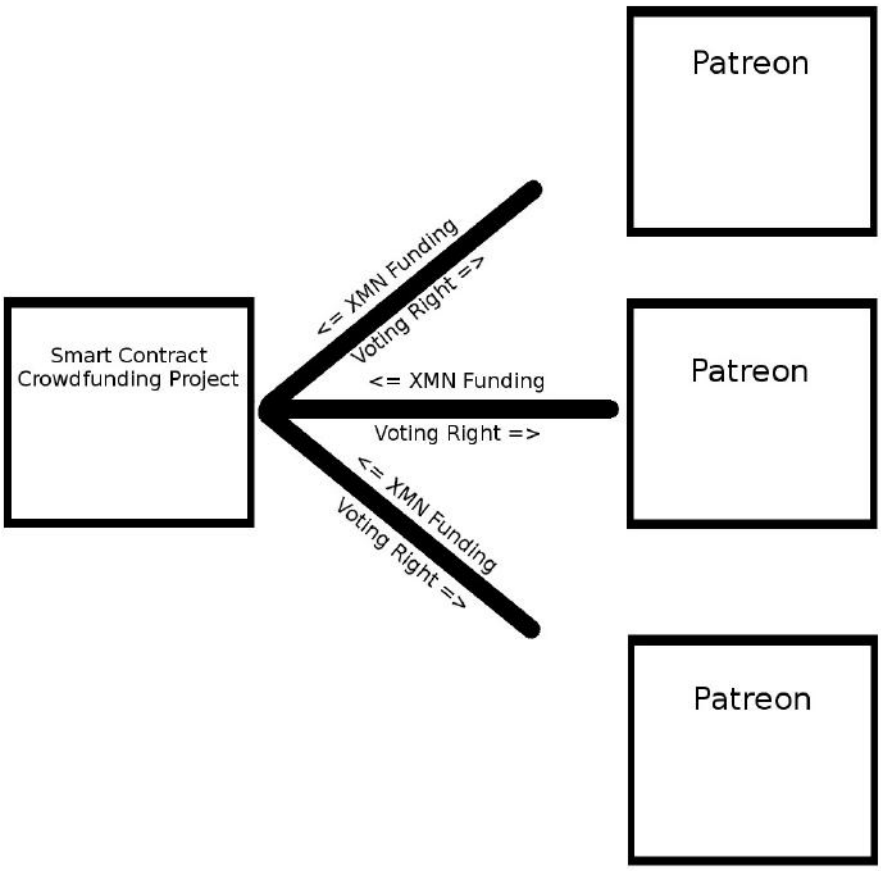
In order for crowdfunding projects to be launched within the Motion ecosystem, project creators will require access to the smart contract creation tool. While official development of this tool is scheduled for Q4 2018, the underlying mechanics are established herein.

Project creators will be able to launch the tool and are given a series of if/then questions. These questions will determine the parameters for the project. Our vision is for each contract to have four milestone goals. With each milestone completion, a portion of the funds can then be unlocked until paid in full.

Here are some examples of the questions that will be asked:

1. What is the funding goal, and should funding be allowed to exceed this goal?
2. What is the timeframe for this goal to be achieved?
3. What, if any, obligations does the creator have to backers(such as backer goals)?
4. When will the creator receive payment of funds(I.e. Half upon reaching funding goal / Half upon completion of obligations)?
5. Do obligations require verification from backer of completion prior to release of funds?

Through use of the smart contract creation tool, a simple, term focused contract will be available to solicit funding from backers. Backers will be able to, at a glance, see timeframes and goals, as well as the risk level when backing a project. This incentivizes project creators to build out timeframes fully as these conditions will be directly linked to release of funds. Additionally, projects which place backer verification protocols will provide additional peace of mind to those funding them.



3.3 Masternode Project Voting

To better grade and market the projects, we have a plan to give platform voting rights to the masternode operators. This will allow for each masternode operator to vote once per every 24 hours by just signing from their web/desktop wallet for the project of their choice. This then reflects in the ranking score of the listed projects and the top rated can be featured.

3.4 Masternode Arbitration

With any contractual relationship there is a risk of non-completion or inadequate performance. In order to encourage the satisfactory completion of crowdfunding goals, creators or backers may elect to include masternode arbitration ‘insurance’. If implemented, any masternodes from the community, which agrees to arbitrate, may be assigned into the crowdfunding as an arbitrator. These masternodes are then called upon to vote should the backers or the creators dispute whether an obligation is sufficiently met to call for a release of funds. The participating masternode owners would be provided evidence from both sides, and then, would be asked to provide a determination as to whether the crowdfunding obligations were met, and whether the funds should be released. Masternode holders would be able publicly list their fee for providing such services and the community would be able to rate any arbitrating masternodes performance.

4.The Motion Network

The Motion(XMN) network combines two powerful tools to provide a secure and decentralized network:

- The ASIC resistant algorithm, X16r.
- A robust masternode network that promotes a fair, long-term, governance amongst the network participants.

4.1 Overview

The Motion network, like many other blockchain networks, is a peer-to-peer (P2P) network in which full nodes (masternodes), partial nodes and miners work together to ensure the security and stability of the blockchain.

- Full nodes (masternodes) store the complete blockchain ledger locally. A particularly resource intensive task considering full nodes would have to store every transaction that has ever occurred.
- Partial nodes(wallets) don't necessarily store the complete ledger, they use a simplified payment verification (SPV) mode which only requires them to maintain a part of the blockchain. Partial nodes connect to full node clients and use bloom filters to ensure that they only download transactions which are necessary for their operation.
- Miners support the network by verifying individual transactions and creating new blocks.

4.2 Masternode Network

The masternode network is a network of full nodes. These nodes individually maintain a copy of the entire blockchain and all past transactions. These nodes allow peers on the network to receive updates and maintain the integrity of the network. The masternodes provide a level of service to the network that is absolutely essential.

To operate a Motion masternode, an amount of 1,000 Motion(XMN) is to be held by the operator continuously in a Motion wallet . This amount is never forfeit. Instead, it can be seen as a bond to prevent a Sybil attack, and masternode operators earn XMN rewards for providing this service. To ensure a stable network, masternodes must not go offline for more than one hour. If the masternode goes offline for more than one hour, the masternode will lose its current place in the block reward queue, and thus, the operator must restart the masternode, resulting in a delay of reward payments.

4.3 Advanced Motion Transactions

In order to build a blockchain that can be adopted by the public, two main features are essential; transaction speed and privacy. Bitcoin's slow block time can lead to extremely long transaction times. Additionally, Bitcoin's only method of transaction privacy is based on obscurity. In other words, once multiple wallets' users have been identified, any transaction between the users are no longer private. Motion implements two features in order to ensure instant transactions and privacy.

4.4 InstantSend Feature

In order for Motion to be widely used, transactions need to be as fast as swiping a credit card. Motion uses a method called InstantSend. Every time a miner finds a block, the miner will get assigned a “winning” hash. This hash will then be used to select 10 pseudo-random masternodes, and delegate them to be the InstantSend Authority. These masternodes will then monitor the network for InstantSend transactions, and upon finding any, they will lock them up in the network as pending transactions. The InstantSend Authority masternodes will then broadcast this message to the other masternodes in the network. Any additional transactions broadcast that use the same inputs but attempt to send to a different address are rejected, preventing double spending. Within one second after the transaction has been made, both the sender and receiver will observe the transaction with five confirmations.

4.5 PrivateSend Feature

One of the most essential aspects of cryptocurrency is privacy. A user or entity should be able to make transactions and be sure that they are untraceable and private. To ensure privacy, Motion will adopt a feature called PrivateSend. PrivateSend is a novel, decentralized coin-mixing service that creates an on-demand system of removing the history from coins on the network. When multiple parties submit their XMN for PrivateSend, they will be queued by the masternode network. Once three users are in the queue, the process begins. PrivateSend begins by breaking your transaction inputs down into standard denominations (0.01 XMN, 0.1 XMN, 1 XMN, and 10 XMN). Your wallet will send a request to a masternode, which will then mix up your inputs with the two other users, and instruct all three wallets to pay the now-transformed input back to themselves. The process is repeated a number of times with each denomination. Each time this process is repeated, it’s called a round, and the funds become exponentially harder to trace. The probability of a single transaction being traceable after PrivateSend has been applied is highly unlikely, and can be calculated as shown below:

$$100\left(\frac{a}{m}\right)^{r}$$

The variables in the equation are defined below:

a	Number of attacker masternodes
m	Total number of active masternodes
r	Number of rounds

4.6 Smart Contract Addition

In order to provide a trustless solution to holding funds in the crowdfunding platform, Motion is planning to implement the use of smart contracts through the use of RSK. This will allow for the Motion Platform to utilize escrow like contracts to hold and unlock XMN funds as project goals are completed, while patrons of the projects also hold a voting right in the use of, and unlocking of the funds provided.

4.7 Funding and Premine

The Motion development team premined 4.8% of XMN in advance of the launch. These funds are used to supply the development team with enough capital to purchase listings on popular exchanges, mining pools, provide bounties and for marketing. These funds may also be used to fund the development of any software related to the project, including but not limited, to the eventual crowdfunding platform. 30,000 XMN was held for the pre-sale for the first 30 masternodes, securing the network and funding was used to list XMN Motion to it’s first exchange.

5.The Motion Platform Interfaces

The importance of a user friendly and sustainable interface is paramount for the mass adoption of XMN. For this, the developers of XMN try to keep a balance between a complex system and a software that can be utilized by the average computer user.

5.1 Motion Desktop Wallet

A desktop wallet has been developed for Windows, macOS, and Linux/Unix environments. The XMN wallet is a platform that the users of cryptocurrencies will be used to. On top of the ability to perform the typical tasks of sending and receiving coins, storing addresses, tracking your transaction confirmations, wallet encryption, and wallet backups, you will also have a masternode monitoring feature and a command line console. It is downloadable via the XMN website www.motionproject.org.

The future of the XMN desktop wallet will allow users to scroll through crowdfunding projects, look at an overview and donate/fund the enterprise. The user will then have their funded project visible, so they can keep up-to-date with the progress.

5.2 Mobile App Wallet

The initial mobile app wallet will allow users to keep track of their XMN funds, while being able to create receiving addresses and send to another users account.

The future of the XMN mobile app wallet will allow users to scroll through crowdfunding projects, look at an overview and donate/fund the enterprise. The user will then have their funded project visible, so they can keep up-to-date with the progress.

5.2 Motion Web Wallet

The initial Web wallet will allow users to keep track of their XMN funds, while being able to send XMN to another users account.

The future of the XMN Web wallet will allow users to scroll through crowdfunding projects, look at an overview and donate/fund the enterprise. The user will then have their funded project visible, so they can keep up-to-date with the progress.

5.3 The One-Click Miner

It’s important to the Motion development team that people of all skill level have the opportunity to participate in all aspects of the Motion endeavor. That being said, a One-Click miner application has been developed for

those who want to participate in mining but would prefer to have a simple graphical interface rather than having to deal with command line miner utilities. It is downloadable via the XMN website www.motionproject.org.

5.4 The Masternode Installer

It is paramount that participation from all skill levels is possible. We have developed a simple masternode installer so that the barrier for getting involved in the project as a masternode operator is as low as possible. Once you have accumulated 1000 XMN in your XMN wallet, you can download our installer, follow the directions, and begin receiving rewards. It is downloadable via the XMN website www.motionproject.org.

6.Development Roadmap

2018

Q2

The focus of Q2 is to implement the initial phase of Motion.

This includes:

- MotionCore
- MotionCore Wallet-qt v1.0.0
- Whitepaper v1.0
- New website
- Domain www.motionproject.org
- Coinmarketcap Listing
- Blockfolio Listing
- Masternode 1-click setup
- Mining 1-click setup
- Initial Exchange Listings
- Discord, Twitter, Bitcointalk & Facebook
- Initial Pool Listings

Q3

After the successful testing and launch of Motion, the team will continue to make improvements to the XMN network and focus on:

- Whitepaper v2.0
- Continued Exchange Listings
- Mobile Wallet IOS & Android development
- Marketing
- Motion Platform Planning and Development

Q4

For the last phase of the year, Motion will dedicate their time to a mobile platform that will allow users to store and transfer their assets.

- Beta Mobile Wallet IOS & Android release
- Marketing campaigns to list in top exchanges
- Payment plugin solutions for using Motion
- Whitepaper Final

2019

Q1

Through the end of Q4 2018 and Q1 2019, Motion will start to develop their smart contract platform.

- Smart Contract Testnet
- Review and addition of goals
- Advertising for Startup Applicants & Patreons

Q2

- Smart Contract desktop wallet

Q3

- Smart Contract App Wallet

7.Technical Specifications

7.1 ASIC resistant hashing and long term planning

While Bitcoin and Dash have revolutionized the financial industry, they have lost their integrity as a decentralized cryptocurrency due to the creation of Application-Specific Integrated Circuit (ASIC) mining equipment. These machines allow a mere few people or institutions to control the majority of the network, defying the original goal of decentralization. Motion aims to solve this problem by using an ASIC resistant algorithm to give the general public equal footing and to stop any person or entity from performing a 51% attack.

Motion's current proof of work (PoW) hashing algorithm is X16R, which intends to solve the issues ASICs can cause on long term governance by constantly disrupting the ordering of the hashing algorithms. The X16R hashing algorithm is made up of 16 separate hashing algorithms that operate in a chain fashion. The ordering depends on the last 8 bytes of the hash of the previous block.

The 16 hashing algorithms are as follows:

0 → blake	**8** → shavite
1 → bmw	**9** → simd
2 → groestl	**A** → echo
3 → jh	**B** → hamsi
4 → keccak	**C** → fugue
5 → skein	**D** → shabal
6 → luffa	**E** → whirlpool
7 → cubehash	**F** → sha512

While currently it is believed there are no ASICs built for the X16R hashing algorithm, that does not mean such ASICs will not be built in the future once it becomes perceived profitable to do so. To proactively combat this, Motion plans to have a system put in place regarding the necessity of implementation to changing algorithms. X16r as it stands allows for any of the 16 used Algorithms to be changed, in the case that an ASIC is developed Motion will change one Algorithm for a memory intensive Algorithm then repeat if the manufacture changes the ASIC to accommodate the fork, until the Manufacture has to give up. We believe this plan actively dissuades bad actors from building ASICs focused on Motion.

It is important to note that ASIC chips are able to be developed for any algorithm but that it comes at a scale, flexibility/efficiency. An example of this was in the recent ASIC developed for Ethash, while the miner is efficient in mining the algorithm; it has been subject to criticism as miners have shown that GPU builds still out

perform it at a better cost and ROI. This has a lot to do with how memory intensive Ethash is, as the chip maker has to make the ASIC more flexible than efficient.

References:
https://blog.sia.tech/the-state-of-cryptocurrency-mining-538004a37f9b
https://www.finder.com.au/ethereum-asic-miner-unveiled-is-almost-certainly-useless

7.2 LWMA difficulty algorithm

The Linearly Weighted Moving Average (LWMA) difficulty algorithm is currently one of the best algorithms. This is because it has the lowest standard deviation during constant hash rate, allowing it to be very stable all the while maintaining the fastest response to hashrate changes.
The LWMA algorithm estimates the current hashrate in order to set the difficulty. The block time is maintained by dividing the harmonic mean of the difficulty by the linearly weighted moving average of the block times as shown below:

$$d = harmonicMean(D) \times t / movingAvg(T)$$

The variables in the equation are defined below:

d	Next difficulty
D	Past difficulties
t	Target block time
T	Past block times

Reference:

https://github.com/zawy12/difficulty-algorithms/issues/3

7.3 Block Rewards

To support the network, both miners and masternodes are required. In order to incentivise investors to support the XMN network. The block rewards will be divided between the miners and the masternode operators with a ratio of 1:1. Block times will be 2 minutes, with a block reward of 20 XMN per block. While the ratio between mining and masternodes will change over time, the reward of 20 XMN will continue until block 1.314.000. See the table below for block rewards in relation to block height.

Reward	Block Height	Circulating Supply	Duration
1	0	500	17 hours
20	500	10,512,500	2 years
10	526,100	15,768,500	2 years
5	1,051,700	18,396,500	2 years
2.5	1,577,300	19,710,500	2 years
1.25	2,102,900	21,024,500	4 years
0	3,154,100	21,024,500	∞

A pre-mine of 1,051,200 XMN is not included in the above table.

This will give a total supply after 10 years of 22,075,700 XMN.

The block rewards will be distributed between masternodes and miners at a 60⁄40 ratio. This means that masternodes will receive 60% of the block reward as compared to miners, who will earn 40%. Masternodes are paid in a round-robin fashion. The hash of each proof-of-work block is used to create the pseudo random list of masternodes in the order in which they will get paid. This is to avoid any possibility of manipulation. Only one masternode is paid per block creation. The masternode reward is limited by the number of active masternodes at the time the list is generated. Calculating the daily income of an operator with $\boldsymbol{n}$ masternodes can be done as shown below:

$$S = \frac{n}{t} \times r \times b \times p$$

The variables in the equation are defined below:

S	Total daily income of operator
n	Number of masternodes owned
t	Total number of active masternodes
r	Current block reward
b	Daily average blocks created
p	Percent of masternode payment

For example: You are a user and an investor in Motion and you have 2,000 XMN. If you locked the coins, and setup a full node, you own 2 full masternodes. If this takes place by block 1,000 with 100 active masternodes, S can now be calculated using theses variables.

n	2
t	100
r	20
b	720
p	60%

And this operator's daily income would be estimated:

$$S = \frac{2}{100} \times 20 \times 720 \times 60\% = 172.8/day$$

To make the setup easier and more straight forward, the Motion developers have a simple masternode setup tool which makes the setup process of a Masternode both easier and faster. We believe that in order to reach to the general public, we need to DE-mystify the technologies and make them easier to use while encouraging the areas a community member can excel in. Some people are not tech savy, but are great in business. This shouldn't keep them back from establishing a Masternode to offer arbitration in Motion platform. Some people are not tech savy, but great in marketing. This should not keep them back from establishing a Masternode to vote in Motion Platform.

8. Conclusion

Motion's blockchain aims to revolutionize the crowdfunding world by integrating and improving the technology behind smart contracts. This will enable companies and organizations to create ecosystems that, not only support their processes, but help them become more efficient and secure. The Motion blockchain introduces transparency and immutability to businesses, organizations, entrepreneurs and their patrons. This encourages accountability amongst parties. However, as with any major technology adoption, the Motion blockchain and smart contracts still require a lot of work to reach this full potential, and the Motion team is focused on tackling all the obstacles that will be faced along the way. Motion's goals can be summarized with three words;

Moving Ideas Forward!

9.Legalities

9.1 Disclaimer

Motion (XMN) coin is a digital asset, bearing value by itself based on its underlying assets and assignable rights. The Motion Team has created the asset for the purpose of use within the Motion Platform and as such it is not intended by creators of Motion, for Motion (XMN) to have any value outside of the Motion Platform. Therefore, is not suggested by The Motion Creators, that XMN be used or purchased for speculative purposes. Creation of coins through PoW (proof of work) or received as a reward through the running of masternodes is done with the understanding that coins operate within the Motion Platform. Motion (XMN) should in no way be construed as a security or held with a primary purpose of investment. Motion (XMN) and the Motion Platform is dedicated to remaining an open source project.

9.2 Terms and Conditions

The sole purpose of this whitepaper is informative. It should in no way or time be considered a solicitation to an investment. It does not constitute, nor should it be considered an offering of a security. Additionally, no information herein should be construed as investment advice. Motion's XMN coin purpose is a utility coin which is useable within the Motion Platform. The presence of XMN on any trading platform or exchange occurs solely to provide ease of access to the Motion Platform. Motion does not provide any warranty to the accuracy or completeness of this whitepaper, as the project is open source and has ongoing developments.

The Motion platform exists to allow parties to easily create contractual relations with one another for crowdfunding purposes. Motion itself is not an entity and therefore is not a financial intermediary involved in any such transaction. All exchange of coins for services occur directly between parties and thus, the Motion platform is not required to obtain any authorization for anti-money laundering purposes.

Purchasers of Motion(XMN) coin and users of the Motion platform do so with the full knowledge that regulatory or compliance requirements may change and Motion cannot be held liable for any direct or indirect loss or damage caused by such regulatory changes.

Upon the launch of the Motion platform, users will see a current Terms of Service as crafted by the community. Anyone deemed by the community to attempt fraud, illegal activity, or any action outside of community determined terms of service may be blocked from access to the Motion platform. The community is self-governed and Motion is not liable for the resulting consequences of such a determination.

9.3 Representations and Warranties

By mining, accessing, or purchasing XMN, or the motion platform, the user agrees to the above and represents and warrants that:

- They have fully read the terms and conditions located herein and found in the Motion platform and that they agree fully to the contents.
- They will not use the Motion(XMN) coin for any illegal activity, including but not limited to: money laundering, fraud, or in financing or furtherance of illegal activity conducted by another party.
- They have a sufficient understanding of the functional nature of the Motion(XMN) coin and its use as well as the smart contract and blockchain based systems it is built upon.

10.Definitions

PoW - Proof of Work (PoW) as the name states is the validation of the work that happened and proving it is correct. In our case, it would be the miner who performs the validating or PoW.

Reference:
https://medium.com/@karthik.seshu/cryptocurrency-proof-of-work-vs-proof-of-stake-e1eee1420b10

PoS - Proof of Stake (PoS) is an alternate way of verifying and validating the transaction or block. This will pick the Validator (Equivalent of “miner” in the PoW) by the amount of stake (coins) a validator has and the respective age of the stake. Alternatively, and in our case, the masternode performs a service for the platform, and rewards are then paid out to the operator. It is required that the masternode operator has at least 1000 XMN stored in their wallet in order to maintain a functioning masternode.

Reference: https://medium.com/@karthik.seshu/cryptocurrency-proof-of-work-vs-proof-of-stake-e1eee1420b10

Masternodes - Much like mining or PoW, masternodes are a system of consensus and validation for transactions on the blockchain using PoS. Masternodes are a way of confirming and approving transactions. They also decrease circulating supply of the coin, which helps to stabilize the exchange rate and may help to prevent ‘pump’ and dumps’. The more masternodes on a network, the smoother it runs and the more stable the coins value will be.
The Motion network of masternodes requires a collateral of 1000 XMN to be locked in a wallet to generate a masternode key which can then be used in software hosted on a virtual private server (VPS) or any system with a static IP address. This collateral must mature for a minimum of 12 hours before it will become active on the network. Each masternode will be paid a reward in order of blocks found. As the number of masternodes increase, the longer it will take for each individual masternode to find and confirm a block. The masternode must stay active and not go offline for more than a 1 hour period or it will cease to be active on the network and will need to mature again.
If the collateral that is held within the masternode wallet is withdrawn at any point in time, the masternode will cease earning a block reward.

Reference:
https://www.investopedia.com/terms/m/master-node-cryptocurrency.asp

Mining - Motion is designed with the X16r algorithm to support both cpu and gpu mining, to ensure the decentralized nature of mining. Many coins have become further centralized by specialised ASIC mining equipment which restricts gpus and cpus from being profitable from mining. Mining XMN will be fixed at 40% of block reward ongoing.

Reference:
https://en.bitcoin.it/wiki/Mining

Smart Contracts - Smart contracts are a way of exchanging something of value on the blockchain by removing a middleman, as well as a way to create a trust-less agreement between parties. The beautiful thing is that smart contracts can be programmed to virtually do almost any kind of contract agreement and give verifiable evidence through blockchain.
The uses of these smart contracts are almost immeasurable but, an example of the use of a smart contract can be shown in most business consumer relationships; these start with the source of the valued product. This product is then purchased by a middleman at cost price. A premium or commission is then added to its' value and then sold onto the consumer. Occasionally there are multiple middlemen, with each taking their own desired percentage. If there is no competition, the markup values can be hefty for the end-user.
By removing the middleman, the consumer can gain access to the valued product at cost price. The provider of the valued product is still selling their product, whilst the consumer saves on the commission and has a direct relationship with the provider.
That chain of transferring valued products can be cumbersome and require huge amounts of manual input from each time it changes hands. Sometimes, this manual input or ledgers can have errors, requiring further manual input to correct mistakes made.
The outcome from this process is that the ledger always ensures the transfer is legitimate and both parties are kept honest.

Reference:
https://en.wikipedia.org/wiki/Smart_contract

Ravencoin(RVN) - Ravencoin was the first to implement X16r in January 2018, since then, Motion has adopted this algorithm due to its' ability to be ASIC miner resistant. To us, the RVN community is a new, open-source project intended to see if a use case specific blockchain designed to be focused on the transfer of assets can develop technology which provides security or functional advantages for certain projects.
RVN was launched January 3rd 2018 with very little info regarding the future of the project. Since then, several community members have learned that there is an active development team on this coin.
Reference:
https://ravencoin.org/

RSK - RSK is the first open-source smart contract platform with a 2-way peg to Bitcoin that also rewards the Bitcoin miners via merge-mining, allowing them to actively participate in the Smart Contract revolution. The RSK's blockchain is secured by merge-mining, which allows you to dual mine two cryptocurrencies at the same time. This way, RSK is able to achieve the same security as Bitcoin in relation to double-speed prevention and settlement finality.
By using the RSK platform, RVN and the XMN platform, through the use of Smart Contracts, reward systems and transactions of XMN will be the way of the future. While the launch of XMN will not include this system, it is part of our framework and will likely be implemented in the future, unless better technology supersedes it.

Reference:
https://faq.rsk.co/en/main/

ASIC - An ASIC (application-specific integrated circuit) is a microchip designed for a special application, such as a particular kind of transmission protocol or a hand-held computer. You might contrast it with general integrated circuits, such as the microprocessor and the random access memory chips in your PC. ASICs are used in a wide-range of applications, including auto emission control, environmental monitoring, and personal digital assistants (PDAs). An ASIC can be pre-manufactured for a special application or it can be custom manufactured (typically using components from a "building block" library of components) for a particular customer application.

Reference:
https://whatis.techtarget.com/definition/ASIC-application-specific-integrated-circuit

Sybil Attack - The Sybil attack in computer security is an attack wherein a reputation system is subverted by forging identities in peer-to-peer networks. It is named after the subject of the book *Sybil*, a case study of a woman diagnosed with dissociative identity disorder. The name was suggested in or before 2002 by Brian Zill at Microsoft Research. The term pseudospoofing had previously been coined by L. Detweiler on the Cypherpunks mailing list and used in the literature on peer-to-peer systems for the same class of attacks prior to 2002, but this term did not gain as much influence as "Sybil attack".

Reference:
https://en.wikipedia.org/wiki/Sybil_attack

51% Attack - 51% attack refers to an attack on a blockchain – usually bitcoin's, for which such an attack is still hypothetical – by a group of miners controlling more than 50% of the network's mining hashrate, or computing power. The attackers would be able to prevent new transactions from gaining confirmations, allowing them to halt payments between some or all users. They would also be able to reverse transactions that were completed while they were in control of the network, meaning they could double-spend coins.
They would almost certainly not be able to create a create new coins or alter old blocks, so a 51% attack would probably not destroy bitcoin or another blockchain-based currency outright, even if it proved highly damaging.

Reference:
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