POWERING THE KARMACONOMY

KARMASHIP GREY PAPER

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I. FORWARD

The goal of this paper is to give a brief explanation into the technical aspects behind Karmaship and what ideally in the end we aim to achieve with this new technology. This is not an official white paper by any means nor is anything in here concrete or set in stone. This is purely for current development of the Karmaship blockchain and to be used by the Karmaship team as well as any interested public or potential team members seeking more information about the projects. As development matures, aspects of this document will change and grow per the needs of the development teams, with the end goal focused on creating the first successful dApp for the emerging Karmaship distributed ecosystem.

II. PREFACE

As an open-source project, Karmaship fully embraces the ethos of transparent and free technology for all. With this spirit in mind, there are some projects that must be acknowledged up front for their role in the evolution of the Karmaship platform. First and foremost, Karmaship thanks the entire NEM (New Economy Model) team for developing NEM and all the innovations that come with it. With its Proof Of Importance protocol and innovative use of Supernodes, NEM has served as an essential framework for the initial development of Karmaship [1].

Additionally, Karmaship would like to thank the Burst development team for their development of the Proof Of Capacity mining algorithm, which is an amazing advancement for improving decentralization in Proof Of Work [2].

Finally, Karmaship would like to thank the QORA project for its early innovations in blockchain including smart contracts (that preceded Ethereum) and the first atomic cross chain transfers. We are extremely happy to be currently working with many of these pioneers on the new Karmaship blockchain. This is the beauty of open source, all great ideas are shared and everyone wins. Karmaship hopes to take part in this great heritage with its own innovations, giving back to the open-source community and the world at large.

VISION

WHAT PROBLEMS DOES KARMASHIP AIM TO SOLVE?

- **The growing centralization and massive energy waste in major cryptocurrencies and public blockchains**
- **Lack of daily adoption of cryptocurrency technology for commerce or trade, ie: no one spends their coins except to buy other coins or save as stock in the project**
- **Limited wealth creation opportunity in current world economic models**
- **Lack of communal incentives for economic growth in current economic models**
- **Wasteful middlemen and useless gatekeepers in current methods of commerce & trade**

The rapid growth of blockchain and cryptocurrency technology over the last 3 years has been astounding, with hundreds of new coins and tokens added to the ecosystem each year, an explosion in public financing through ICO's and a total market cap growing into the hundreds of billions. However, a glaring fact still remains...With all the investment interest and capital coming in, how many individuals are actually using this technology on a daily basis for the betterment of their lives? As of now it's fair to say less than 1%. [1] This is a problem.

Furthermore, with the current consensus and mining mechanisms used by leading cryptocurrencies like Bitcoin and Ethereum we have increasing threats of centralization through the rising conglomeration of mining consortiums and the market manipulation of large whale investors. Newer top 10 blockchain projects like Cardano and EOS strive to fix this problem with updated consensus technologies and more decentralized governance but even their technology is still based on consensus mechanisms that can be centralized or co opted by major coin holders. [2] This is also a problem.

Finally, it is well known that historically mankind has faced the problem of massive economic imbalance where control of the world's wealth is in the hands of the few, recently titled 'the 1%'. This inequality stems from a number of factors including lack of liquidity or access to capital for the masses, financial gatekeepers who increase costs while reducing efficiency, and financial institutions and governments who profit and rule off debt-based systems. As the world becomes more digitized and 'online', trends show that this homogenization and centralization is only going to get worse.[3] This is a major problem.

Karmaship aims to create an entirely new type of shared economy that solves these issues of adoption and centralization through its cutting-edge new protocol and ecosystem that connects real-world interaction and experience to the blockchain. Karmaship plans to implement this within a specific cultural event space to start, fostering a core community that can use the technology and prosper from it without the need to buy it or hold it, thus propelling the project forward through actual adoption, not just speculative investment.

WHAT DOES KARMASHIP AIM TO BE?

The aim of this project is to create a new ecosystem for the economic development of an "open-source everything" society, where experiences are used to generate and back the exchange of value, not machines or centrally controlled agencies. The Karmaship team aims to create a truly decentralized, universal peer-to-peer (P2P) community-based blockchain protocol and ecosystem that incentivizes good community behavior through karmic Proof Of Experience. This ecosystem, called Karmaship will reside on the Karmaship blockchain, a decentralized and open-source protocol designed specifically for this new experience-based fair economy - or Karmaconomy.

The goal of Karmaship is to propel community growth and wealth creation on the blockchain through a positive feedback mechanism based on cooperative interactions and experiences. Because experiences must be created by an individual or group, this means a human must expend energy to manifest them and, to be considered an experience, other humans must expend energy to witness, attend or consume them. We aim to harness this energy to power a new decentralized economy that is self-expanding and perpetually evolving.

Come take a ride on the Karmaship.

II. THE KARMACONOMY

AN EXPERIENCE-BASED SHARED ECONOMY

Ex·pe·ri·ence *(noun)* - practical knowledge, skill, or practice derived from direct observation of or participation in events or in a particular activity

In an effort to find a more fair, decentralized and sustainable economic model for humanity, Karmaship proposes an economy based around the intrinsic value of shared experiences, where the interaction between individuals are transactions represented in the form of cryptocurrency and blockchain tokenization. In this new experience-based economy, positive interactions & experiences in the real-world have economic merit and are what drive the market vs the current capitalistic economy model which is controlled by supply and demand and access to capital.   Creators and Experiencers will both profit from these interactions and in turn continually propel the economy forward as they build up their experience level.

Because the Karmaconomy relies on personal interaction and real-world engagement, it stimulates community activity and financial inclusion. It serves as a powerful foe to the ever-increasing technocracy that divides & dehumanizes mankind. With a truly decentralized blockchain design, cutting-edge mesh networking, a custom decentralized exchange, DAO governance and the Proof Of Experience protocol, Karmaship aims to launch mankind into a new era of economic harmony and growth.

A SUSTAINABLE & SECURE DECENTRALIZED PLATFORM

What good is a new economy if it isn't secure or sustainable? To date, mankind has yet to develop an economic system that is fool proof or truly lasting. Historically, money has always been centralized and thus open to points of attack [3]. This is why the Karmaconomy is being built on its own custom, open-source public blockchain.

In a truly decentralized system there is no single point of attack because anyone can be the owner of the agreed upon truth. The only way to maliciously breach this security net is through an overwhelming takeover of force. The best blockchains defend against this by being the most

fairly distributed, as it ensures no centralization can occur and thus no overpowering of consensus. The more widely distributed, the stronger the defense. This is the most important aspect of network security because, if done right, it allows for the blockchain and thus the entire ecosystem to sustain itself in perpetuity.   Karmaship believes that the use of validating real-world experiences between humans to keep consensus, or what we call Proof Of Experience, will be the most secure consensus protocol to date.

KARMICS (KMX)

Much like a role playing game, users in the Karmaconomy seek to generate Karma Experience (or what we call KEX which we will explain in full detail shortly) for their activity and participation in Experiences.   The benefit of this is that with the more KEX a user accumulates, the more opportunity they have to earn Karmics (KMX). Like Bitcoin, KMX can be used as digital cash, allowing for easy, fast and immutable transactions between individuals and groups. Later in this paper the initial distribution strategy for KMX will be explained in full detail. Karmaship will never ICO or include its coin on a centralized exchange. This is paramount for actual organic adoption and the development of a fair, non-manipulated currency.

Because the Karmaconomy will be using KMX to transact on a daily basis, the coin must be easily accessible and fast with near zero fees while maintaining 0% inflation to spur commerce. With deflationary coins like Bitcoin and Litecoin, users are more apt to hold on to the coin as a long term investment. The goal of Karmaship is to motivate community activity and growth in the Karmaconomy which means the coin needs to be spent. This is why KMX is both mined and 'Gathered' based on the amount of KEX a user has accumulated and will have an infinite supply set at 1 KMX equaling 1 million in fiat. In the same way that Satoshi Nakamoto envisioned Bitcoin 'Satoshis' equaling a penny each, Karmaship will do the same. This will happen once the initial 2-3 year coin distribution phase called the Karmada is finished and the chain is hard forked to complete decentralization.

THE KARMASHIP PLATFORM

The Karmaship platform will work on top of the Karmaship blockchain and be the central ecosystem for the new Karmaconomy. While the initial focus market will be the lifestyle event space, the core technology will be beneficial to any experiencial market with opportunity to disrupt everything from live events of any kind to instructional classes, movie premiers, video gaming, shopping, amusement parks and so much more. Really, anything that can be deemed an 'experience' can be used with the Karmaship platform!

Much like a role playing video game, Karmaship is being designed to manage each user's evolution within the Karmaconomy while simultaneously connecting everyone in the ecosystem. Users will be able to 'level up' as they gain Karma Experience, earning badges of honor displayed next to their alias and gaining additional access and roles within the Karmaconomy. The fun factor for this is infinite as users race to be the most experienced while being rewarded with economic incentives.

The vision for decentralized social engagement within Karmaship is powerful and expansive. The platform is being built with social interaction as one of the forefront priorities, implementing new technologies and a revolutionary new decentralized blockchain infrastructure to ensure privacy and security while at the same time allowing for the freedom to share and transact in an open and honest way. Most importantly though, Karmaship is being engineered to be highly entertaining and fun to use.

The driving factor of social media platforms like Facebook and Instagram is the endorphin rush of social engagement. Receiving likes and comments for posts as a sign of social acceptance has become a daily reality in the new social media-driven world we live in. While often empowering and enlightening, this system has also been criticized by its own founders as a caustic addiction that can degrade its users and denigrate the culture. Karmaship aims to reach higher by using the core tenants of the Karmaconomy as its backbone for social engagement. By setting value to positive social engagement, Karmaship strives to bring the culture back into positive real world interactions. Social media is here to stay, lets take it higher!

KARMAMESH

Besides the creation of an all-new blockchain, Karmaship is also creating and integrating an all-new mesh networking system directly into the platform called Karmamesh. Like any traditional mesh network, this will allow individuals to connect on their own localized P2P network through the Karmaship platform. This is crucial for both decentralization and system functionality as it will provide networking access at events and businesses that may traditionally have limited access to the internet or cellular networks. Not only will this allow for Karmaship to reach more places throughout the developing world but it will be instrumental in the decentralized nature of the Proof Of Experience protocol. We will discuss this much more throughout this paper.

THE SHARED EXPERIENCE ECOSYSTEM

Since the entire Karmaconomy is based on experiences, there needs to be a vehicle and defined rules in which these experiences are created and engaged with. This is where Karmaship comes into action.

First, within Karmaship, there are 2 designations of individuals: **Experiencers** and **Creators**.

EXPERIENCERS

Each Karmaship account is limited to 1 public address and its coinciding public profile Experiencer alias. Each Experiencer alias is unique and is used to perform all Experiencer functions within the blockchain ecosystem. The state associated with each account includes the following items:

- Account balance (in KMX)
- Number of gathered blocks
- Current number of Karma Experience (KEX)
- Current Experience Level
- Current Open Experience tickets (multisig accounts)
- Current Node status (online or connected to delegated node)
- Friend Address Book
- PoCX Mining Attributes Time Of Inception and Block Generation Count
- PoCX Mining Plot Encryption Key

Experiencers can buy into or access free Experiences and receive KEX tokens through the new protocol, Proof Of Experience. There is no limit into how many Experiences a user can buy into however there are limits pertaining to how many times they can buy into one specific Experience. This is to protect the ecosystem against ticket fraud or event manipulation. Karmaship may implement some sort of referral system down the road where any Experiencer who refers a new user who ends up buying into an Experience gets a KMX percentage.

An Experiencer is defined by their public profile ID and alias so everyone is an Experiencer but not everyone is a Creator. Karmaship allows for only one identity per wallet, thus promoting the use of a single profile within the ecosystem. While users can setup multiple wallets they are not incentivized to spread out their Karma Experience so if interested in benefiting in the Karmaconomy will be focused on building their singular wallet profile. This profile of course can be used across multiple wallets and devices. By maintaining this approach, an ecosystem

based around trusted actors is more approachable, since identity will matter, even if it is an alias. All Experiencers can take part in consensus through Gathering and Delegated Gathering as well as Experience Mining. (We will cover this more in Section III). Furthermore, the Karmaship community will incorporate a number of social mandates and operations that will further the Karmaconomy infrastructure and growth.

CREATORS

Creators are any user who has created an Experience on the blockchain. We will get into Experiences shortly but basically Creators are defined by the Experience issued to the community. The only gateway into creating an Experience is cost in KMX. Creators cannot buy into their own Experience.

KEX

The goal with KEX is to both qualify and quantify the value of the Experience in a way that will properly reward the correct amount of 'Experience points' for the Experiencer. In essence, KEX are the tokenized representation of the Experience itself. The more KEX an Experiencer receives the greater valuation of that particular Experience. KEX is purely used for the Proof Of Experience protocol and can't be sold or traded because it is locked with a private key. Once processed as a transaction on the blockchain it is used to compute the most up to date PoX value of the Experiencer and then added to their total KEX value which defines their current Experience Level.

Depending on the type of validated Experience, a certain amount of KEX is delivered to the Experiencer's account on the blockchain. The amount of KEX earned is decided upon a number of factors related to the Experience. As stated above, Ticket Experiences hold more weight in the Karmaconomy so will receive the majority of KEX. Open Experiences will receive a simple amount of KEX based on the amount of KMX spent. This ratio is still being finalized but it will result in much less KEX than with a Ticket Experience in order to counter any gaming or manipulation by large KMX holders.

TEQ AND SUPERNODES

As users accrue KEX, they increase their Total Experience Quantity (or TEQ) which is what factors into the Proof Of Experience calculations (more on this in Section III).   This TEQ score is always increasing and extremely important as it serves as the basis for all users' Experience weight within the Karmaconomy. Also, this plays an important role in the ability for users to achieve Supernode status. Any user with a TEQ score of 10 million or more can apply for a

Supernode which will allow them to act as a primary voting entity and provide important stability and Gathering functionality to the network. Furthermore, Supernodes earn substantial rewards in KMX for their service. In this way, unlike other blockchain systems that allow Supernodes to be purchased with coin, Supernodes are earned and owned by the most trusted and experienced actors within the ecosystem, thus providing a much more democratic and fair economic system.

EXPERIENCE ASSETS

Within the Karmaconomy there are 3 main types of Experiences. When an Experiencer decides to provide an Experience to the Karmaconomy, they must create an Experience Asset within the Karmaship platform and give it a unique name. Depending on the type of Experience, there are certain requirements in the form of KMX to publish. Once the Experience is launched, the Experiencer turns into a Creator.

TICKET EXPERIENCE

The first type of Experience in the Karmaconomy is a Ticket Experience. Within this, a Creator will set a defined date and time as well as max attendance capacity and initial price to attend the Experience. Based on price and max capacity, a sliding fee in KMX will be required to publish the Experience. By adding cost, this helps ensure each Experience is real since it has a cost to create. The larger the Experience, the higher the cost with a base price of 0.0001 KMX for the smallest Ticket Experience. Creators can choose to create free Ticket Experiences as well at this base price however depending on the max capacity, this cost can go up.

When an Ticket Experience asset is created and launched by a Creator, a unique ticket asset is created that is either publicly or privately available on the Experience marketplace. This marketplace is accessible to all Experiencers where, based on the ticket value set forth by the Creator, they can buy into the Experience ticket asset with KMX. As Experiencers buy, the value of the new asset ticket can go up or down based on supply and demand (or the Creator can choose to keep the cost 'flat'.) This traditional free market system is essential to the growth opportunity for Creators but is also balanced by the fact that KMX is used as the purchasing currency. Since KMX is gained through Proof Of Experience and fair mining protocols open to all, it allows for even and equal access to these Experiences in a way not currently available in traditional fiat-based or other alternative capitalistic markets.

Any time an Experiencer buys into a Ticket Experience asset they receive the asset's associated ticket which has specific value based on the Experience market or price set by the

Creator. This asset can be traded or sold by the Experiencer but since each Experiencer is limited to only one purchase into any single Experience they will only be able to trade or sell once. Besides avoiding various forms of system gaming, this policy aims to make scalping and other forms of ticket price manipulation more difficult to perform.

Examples of Ticket Experiences would be events like concerts, sporting events, business conferences & festivals where Experiencers would be purchasing into the event beforehand. This could also work for virtual experiences that cap out attendees like online classes or video game tournaments. We will discuss shortly how Ticket Experiences are validated with the Proof of Experience protocol.

OPEN EXPERIENCE

An Open Experience is created in the same way as a Ticket Experience except for the difference in max attendance, date and time declaration. With an Open Experience there is no need to set the number of attendees and the event can be open for perpetuity. Also, no ticket is created. Instead a specific QR code is created where KMX can be sent to in exchange for access to the experience in real time. This can also be used for accepting donations.

Examples of Open Experiences are almost infinite as any person or place offering an experience can use this. Furthermore, Open Experiences can be used within Ticket Experiences, adding value to an event or interaction. An example of this would be at a county fair. To access the fair, one would need to purchase a ticket through a Ticket Experience but once the user is inside the fair, they can engage with other vendors, events & individuals providing Open Experiences. This allows for spur of the moment interaction in the Karmaconomy. In the next few sections we will discuss how these Open Experiences interface with Proof Of Experience.

VIP EXPERIENCE

As Experiencers gain KEX and level up their Experience Level they will begin to gain more trust and value solely based off their experience weight. They provide increasing value to the ecosystem because of their historical precedence as use cases for the Karmaconomy as well as their economic status as major KMX benefactors. On the social side, since they will most likely have large Experiencer networks, they have additional value as major influencers within the ecosystem. With this in mind, VIP Experiences can be created which allow only those Experiencers with a certain level of KEX to participate. The Creator can set this level with a base default level of 1000 KEX.   Furthermore, the cost in KMX to create a VIP Experience is much lower for Creators.

While VIP Experiences won't be used much at the start of the Karmaconomy, they will become a major catalyst for users to increase KEX values down the road. The benefit for Creators is that this type of Experience will allow them to attract high value actors within the ecosystem, generating numerous opportunities to profit and promote their experience. The benefits for Experiencers is vast including zero cost in KMX to validate the Experience and earn free KEX, a highly trusted social networking experience and access to the type of VIP experience typically relegated to the wealthy or elites of society. With the Karmaconomy VIP Experience, it is the most active and engaging people that will become the elite, not the wealthy or famous.

VALIDATING TICKET EXPERIENCES WITH MULTISIG & KARMAMESH

The core engine running the Karmaconomy is the Proof Of Experience protocol. Because it is the mechanism that maintains consensus while simultaneously driving the economy forward, it is crucial that the Experiences it uses as proof are validated appropriately on the blockchain. Furthermore, with the 3 different types of Experiences as explained in the previous section, Karmaship sets a degree of importance of one over the others.

With Ticket Experiences, there is a premeditated effort by both Creators and Experiencers to engage and interact, with real-world energy use and temporal commitment needed for initiation of the experience. Like Proof Of Work, this takes time and energy. In contrast, Open Experiences (like a street performer or online video) are more spur of the moment and often quite easy to access and engage with. Many take little to no time or energy. Because of this, Ticket Experiences are given more weight for the Karmaconomy and thus validated in a specific, secure way. VIP Experiences are unique in that they are already working with highly trusted actors but also don't require KMX to validate so they fit within the middle of this spectrum.

Karmaship uses two different decentralized modalities for verifying real-world experiences on the blockchain.   First, Karmaship uses multisignature blockchain technology to independently verify the entrance of any Experiencer into a Ticket Experience. This is done by making Creators multisig accounts. Whenever a new Experience Ticket is purchased it is also wrapped within a multisig transaction that is initially signed by the Creator or group of Creators. Upon this initial signature, a unique Ticket Experience QR code is created which will be scanned by a cosignatory multisig account holder called a 'Ticket Agent' which acts as a third party arbiter to counter system gaming. The second and more powerful way to verify is through Karmamesh which uses mesh networking connections within the physical environment to independently validate presence based off other local trusted connected nodes' validation.
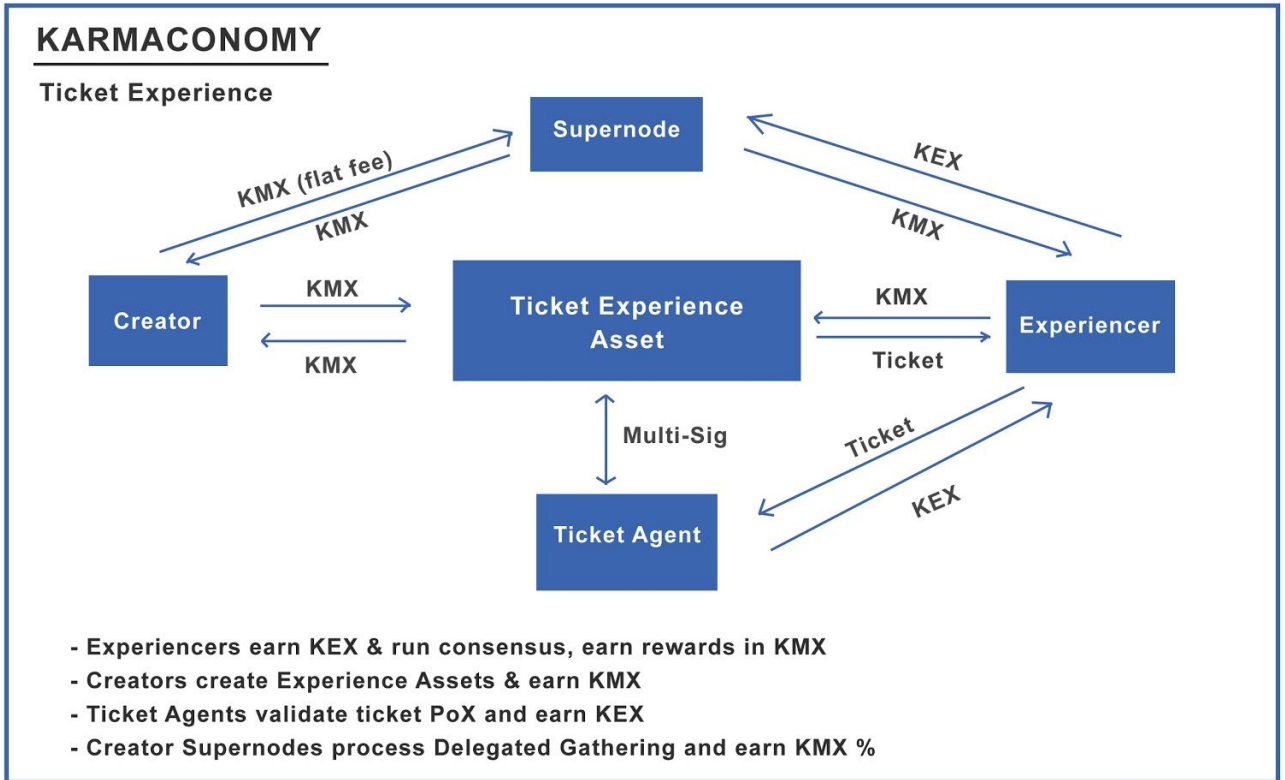
KARMA TICKET AGENTS

Ticket Agents perform an important role in both securing and servicing the experience economy and are rewarded for processing each ticket. First, these cosignatory accounts serve as an additional layer of security against subversive Creators and Experiencers gaming the system. To become a Ticket Agent a user must have a certain amount of experience and vested KMX. Secondly, they act as a ticket agent at events, creating a new decentralized position within the Karmaconomy. Creators must rely on the network of experienced users to process tickets, thus perpetuating the shared experience economy. Because no Experiencer will have enough experience points to begin the Karmaconomy, the initial Genesis Event and subsequent airdrop events during the Karmada phase will negate the need for ticket agents with the use of paper tickets and other 2FA mechanisms at these initial events. (This will be explained in more detail in Section VIII.) This will also be how the initial trusted actors are created.

When a ticket QR code is scanned the Ticket Agent signs off on the multisig transaction, completing the Proof of Experience and adding a specific quantity of KEX to the user's account on the blockchain. This can only be signed off on and added to the blockchain if the original corresponding multisig transaction from the initial purchase is on the blockchain as well, thus making it 'multisig'.   As a reward, the Karma Ticket Agent receives a small fraction of the KEX for being a part of the multisig validation experience.

With Karmamesh, the system can validate physical presence at the event based upon other trusted Ticket Agents on the localized network. Ticket Agents are important for the early deployment of the Karmaconomy due to the lack of initial experienced and trusted actors on the network. As the Karmacomony grows and expands, Karmamesh will evolve to a point where Ticket Agents will no longer be needed as enough trusted Experiencers will populate the ecosystem and allow for complete automation of validation.

Below is a chart showing how Ticket Experience validation and rewards works.

KARMACONOMY

Ticket Experience

- Experiencers earn KEX & run consensus, earn rewards in KMX
- Creators create Experience Assets & earn KMX
- Ticket Agents validate ticket PoX and earn KEX
- Creator Supernodes process Delegated Gathering and earn KMX %

TICKET EXPERIENCE KEX COMPUTATION

Ticket Experience KEX amount factors are not finalized yet but here are the current variables used in computing total amount:

1. Cost in KMX of Experience ticket
2. Quantity of Experiencers purchased within Experience asset
3. Cumulative Quality of Experiencers who have purchased into the Experience asset (calculated by their PoX score)
4. Percent of change in value of Experience ticket vs initial purchase, negative or positive.
5. Quantity of Previous Experiences created by same Creator

VALIDATING OPEN EXPERIENCES WITH KMX

Unlike Ticket Experiences that require pre-meditated purchase and specific access to an Experience, Open Experiences are much more loose in scope and thus carry less experience weight in the Karmaconomy. In order for Open Experiences to be effective, Creators and Experiencers necessitate quick and easy engagement, thus validation must be simple and straightforward. When an Open Experience is published in the Karmaship platform, a specific QR code is created where Experiencers can send payment to in the form of KMX. Any time payment is received, the Experience is validated and a small amount of KEX is awarded to the Experiencer. The KEX reward is minimal enough to counter gaming as the cost in KMX to increase KEX in this manner is substantial and counterproductive. Furthermore, because KEX isn't the only factor taken into the calculation for final KMX reward, other countermeasures help with avoiding any gaming in this way. (More of this is discussed in Section III below)
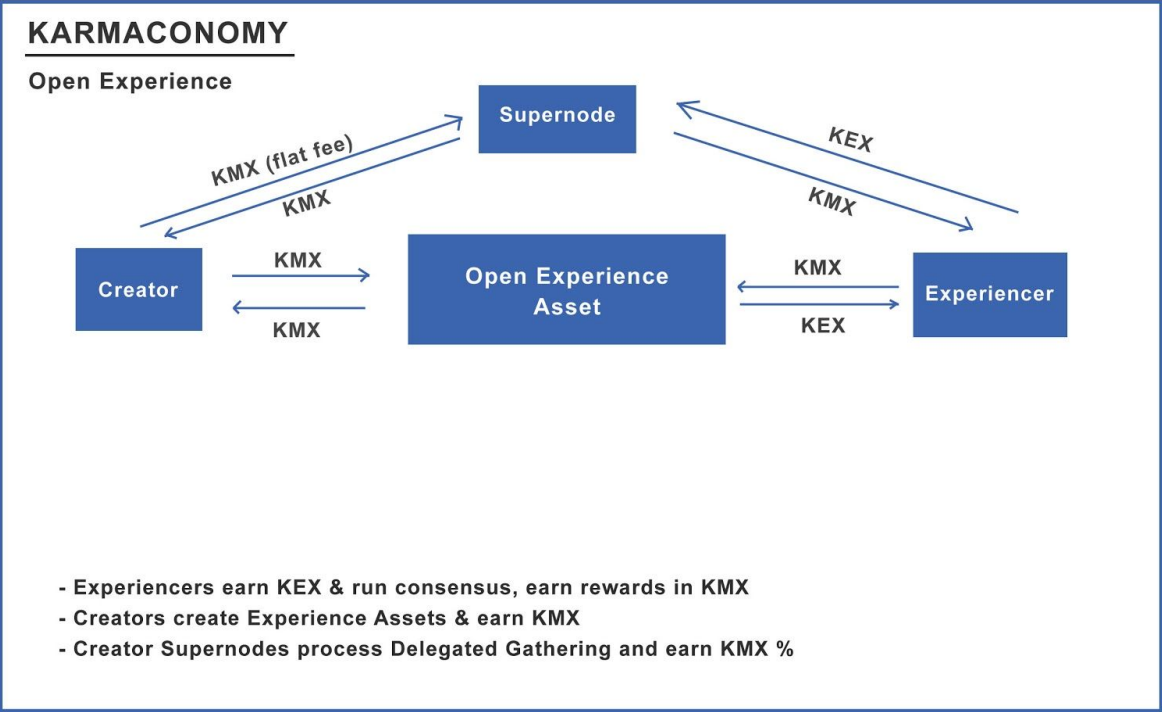
VALIDATING VIP EXPERIENCES

VIP Experiences are unique in that they already require a certain amount of KEX to participate so already include a high trust factor for the ecosystem. Validating is simple. Much like an Open Experience, Experiencers with qualifying KEX amounts can show up to the Experience and be validating by sending any donation of KMX of their choosing to the QR code of the

Creator. As long as they meet the KEX requirement, the transaction will clear and validate. They will receive KEX as well. This amount is still being figured out.

III. THE PROOF OF EXPERIENCE PROTOCOL

As stated earlier, the security of the Karmaconomy lies upon a truly sustainable, decentralized blockchain backbone. The central driving force behind Karmaship & the Karmaconomy is the Proof Of Experience (PoX) protocol. Without this, centralization would be required to achieve the rewards and consensus mechanisms needed to connect real-world experience validation to a virtual marketplace and shared economy on the blockchain.

What Proof Of Experience does is allow for the blockchain alone to validate and reward actors for engaging in an experience in person. Furthermore, Delegated Proof of Experience allows for scalability and a more robust network by allowing Supernodes to do the heavy lifting while Experiencers still provide the decentralized consensus based on their experience score. Karmamesh bolsters PoX through the use of mesh networking technology and its ability to apply physical location through a local trusted network.

In order to fully understand why we have developed PoX and what it actually is, it is important to first go over the other major consensus protocols currently in play within the mainstream public blockchain ecosystem.

PROOF OF WORK

By using the validation of an experience, PoX attempts to solve a lot of the issues established distributed consensus mechanisms currently face. Proof of Work, as created by Bitcoin founder Satoshi Nakamoto, was the first way in which the public ledger consensus could be maintained by relying on the computational processing power of machines, called 'miners' [4]. A brilliant design of its time, it held on to the concept that the energy expense needed to out-perform 51% of the network's miners would deter any type of attack. For the most part, as in the case of Bitcoin, this has worked but at a great expense. The mining cost has had its repercussions including environmental impact and centralization via mining consortiums who now hold most of the 'hash power' which determines consensus. Still, even with these issues, PoW continues to be a dominant and reliable form of consensus and has been tweaked and altered over the years to make it more fair and less energy dependent.

PROOF OF STAKE

Around 2013, blockchain 2.0 came about with the emergence of Proof Of Stake, a new protocol that factored in the quantity of currency 'staked' by full nodes to generate new blocks and maintain consensus [5]. The theory here was that those who hold a lot of coin have it in their best interest to maintain true consensus and keep the chain honest since they have the most at stake. Furthermore, it would typically require someone with over 51% ownership of the entire currency to fork the chain or double spend so as long as the economy is distributed it is safe [6]. However, like its PoW successor, PoS also has issues with centralization as it tends to reward the upper percent who own most of the coin and it has a number of security issues (like the nothing at stake problem) that in some ways make it more risky than its predecessor, PoW. A lot of fabulous research has been done on this with many new variations on PoS coming out.

We highly recommend reading this paper on the Ethereum Github which covers all aspects of Proof Of Stake:

https://github.com/ethereum/wiki/wiki/Proof-of-Stake-FAQ#what-would-the-equivalent-of-a-51-attack-against-casper-look-like

PROOF OF IMPORTANCE

Proof of Importance (PoI), as developed and used by the NEM blockchain in 2015, was an evolution of PoS to factor in a more holistic picture of who the useful users on the network are for maintaining consensus [1]. Besides quantity of coin, PoI also factors in the amount of coin spent by the user and a 'trust score' as determined by a separate purpose-designed system to factor in how much weight a node has to harvest blocks. PoI is unique in that it rewards users that actually spend the coin. It also provides additional security with its trust factors and answers many of the issues that come with PoS's nothing at stake problem. We will be using aspects of PoI within the Proof Of Experience protocol to strengthen these very things.

THE KARMA-CONSENSUS: PROOF OF EXPERIENCE (PoX)

We believe that Proof Of Experience will solve many of the environmental, security and centralization issues of both PoW & PoS. Through a complex algorithm that factors in the user's current KEX quantity, node trust score and Proof Of Importance, PoX plays the biggest factor into how the Karmex blockchain maintains consensus.   Every time a user validates the

Experience they accessed or purchased in the Experience market, they receive a matching amount of KEX. As mentioned above, the amount of KEX can vary depending on a number of factors regarding the size and weight of the specific experience. This is all computed within the algorithm and then applied to the Experiencers' profile blockchain address. As the amount of KEX increases, the greater the weight of the Experiencer on the chain, thus increasing their probability to both Gather and Mine KMX. In this way, PoX forms the basis for heuristic evaluation of the most experienced and qualified accounts in the Karmaconomy.

CUMULATIVE KEX AMOUNT - TEQ

Every time a new PoX mined block is Gathered, all current cumulative KEX amounts are added to the Total Experience Quantity or (TEQ) of the Experiencer account and then burned. TEQ is responsible for 60% of total PoX score.

TRUST SCORE

Karmaship will implement a P2P reputation system made popular by the NEM network which is similar to the EigenTrust++ algorithm [7].   Through this reputation system, the network can assign a trust value to each user. This will count as 20% of the overall PoX score calculation. This Trust score alone has faults because malicious nodes could collude and report low trust values for honest nodes and high trust values for dishonest nodes.   However, thanks to PoX validation at Experiences, malicious nodes would be lacking any real KEX unless acting through an actual malicious actor at the Experience. Due to the nature of the Experience validation which requires physical presence or real-time activation, there is little incentive to expend the energy needed to game the validation through live human actors. However, in case of malicious actors working within the ecosystem, incentive or not, the trust score system acts as a secondary level of security

For more detailed info on NEM's Trust Score please see their technical brief here: https://nem.io/NEM_techRef.pdf

PROOF OF IMPORTANCE

As mentioned above, aspects of PoI are used within PoX to both increase consensus fairness and overall network security while adding a component of transaction stimulus to the Karmaconomy. One of the main factors in PoI is the amount of coin spent by the user account. The benefit of this is that it rewards using the KMX currency for things besides buying into

Experiences. Because Karmaship aims to be its own fully enclosed economy with KMX as its transactional currency, this is an important stimulus for the growth of the economy.

NEM requires 10,000 vested XEM to qualify for PoI. This is done to secure the economy from spam nodes while driving economic growth through purchase of its coin. Like most Proof Of Stake blockchain networks, the biggest criticism of this vested interest is that it maintains a degree of centralization by rewarding those with large caches of coin. Karmaship counters this with its KEX token which can only be gained through validated Experiences.

PoI will count as 20% of the overall PoX score.

CALCULATING FINAL EXPERIENCE SCORES

The Experience score is calculated as follows:

100% Score = 60% TEQ (cumulative amount of KEX) + 20% Trust Score + 20% PoI score

Calculated together, the cumulative Experience points, overall network trust score and evaluation of activity through spending KMX form the basis for total evaluation of the overall 'experience weight' of accounts in the Karmaconomy. The end goal here is to validate that real human actors are the ones deciding the consensus. This takes out a lot of the potential for automated hacks and attacks by bots and fake wallets. Also, since experience cannot be arbitrarily manipulated or gamed thanks to Karmamesh and Ticket Agents, experience scores are useful for more than just consensus. Because they all sum to unity, they represent a finite quantity that forms the overall trust factor for the community at large which is, in effect trustless in nature. This allows for anonymous actors to safely and securely interact and transact with each other without fear of spam or malicious bots as it is very difficult to create multiple pseudonymous identities.

CONSENSUS HARDENING WITH PoCX

Besides the standard PoX consensus mechanism built into the Karmex blockchain, Karmaship will also engage miners doing a form of PoW called PoCX to add more security, decentralization and interest into the Karmaconomy. Creating a hybrid of the evolved PoW protocol made popular by Burst called Proof Of Capacity (PoC) [2], Karmaship plans to implement one of the most fair and energy-efficient mining algorithms the world has yet to see. Using PoX & PoI as an added security feature, PoCX will allow for those users with experience and transactions to mine the most blocks and create new KMX for the growth of the economy. PoCX is so lightweight and energy efficient it can be done with something as simple as a Raspberry Pi.

PoCX is conceptually proof of capacity mining of the blockchain. By proving your wallet is in consensus with all trusted clusters (Supernodes) which serve the entire blockchain to help load balance the entire network, it requires miners to hold the chain and be a node, making the network more robust. This will also help clusters defeat any warp time across the network due to latency as new clusters bond to a Julian Date that will measure ping vs code and sync as an atomic automation.

A plot will be created for a wallet and the wallet will encrypt the plot at the specified block of inception. There is no pool mining yet the encryption is like setting your wallet as a reward recipient in Burst. The miner will always need to refer to this encryption on the chain which acts as an encryption zipper to open their plot and submit a timeline for their mining at any specific block in the future. If the miner can't hit the 10 minute timeline they won't be able to submit Karma Time. This encryption also holds their starting point to show how long they have been mining, it will be used as a variable.

All miners will need to have downloaded the entire blockchain which will contain Nonces that equal 10 minutes or the network timeline consensus, then they can submit Karma Time which would be how long it would take them to find a block over 10 minutes. The miners submit in this 10 minute round and the best Karma Time on the network is taken at 10 minutes exactly. This also turns the blockchain into an Atomic clock and calendar for helping smart contracts execute.

A plot will have free Nonces that are available to be sent to the chain if the wallet should win a block. As the wallet finds a block it gives the Nonce and now is short one Nonce which will not allow a winning wallet to mine the next block since it can not hit the 10 minute timeline. Now the network can not be forked by an individual or team of miners.

As its Nonce is confirmed it will be allowed to make another Nonce only to sync to the next block and then submit again. This next submission will have a very high Karma Time since it had just found a block. This is another variable to be combined into the PoCX expression. All of these factors will be within a wallet address and not encrypted so that Supernodes could also do the math and confirm that this wallet was online submitting and held the best timeline compared to all other miners on the network at that specific time. Again a miner can only submit if they hold all of the Nonces that equal 10 minutes which are embedded in the blockchain.

Block rewards can follow any type of coinbase payment and could mimic Bitcoin to now give miners the "Experience" of Mining Bitcoin. Many people never had the chance to mine Bitcoin and now Karmaship may endear itself to people as a chance since they can get their miner synced before others and get in line. It will be compared to very high difficulty with millions of people mining simultaneously. There are only so many blocks to win per day, but as people may turn off their miners or internet outages, there will always be other variables introduced that may benefit those who keep their miners online constantly.

IV. KARMASHIP BLOCKS & BLOCKCHAIN

The central backbone to every cryptocurrency is a public ledger called the blockchain which links blocks together. Each Karmaship block can hold up to 4000 transactions and stacks on top of each other in an immutable way that is unforkable after every 10 minutes. Karmaship calls the first block in the chain the genesis experience block.

Each block consists of the following:

1. The block number
2. The block time stamp
3. The public key of the gatherer or miner
4. The signatures of the block data
5. The previous block hash
6. The current nonce for PoCX mining
7. The generation hash
8. The block height
9. The list of transactions

EXPERIENCE GATHERING REWARDS - KARMA STAKING

Experience Gathering acts as one of 2 main consensus mechanisms on the Karmaship blockchain. Based on their PoX score, Experiencer nodes are rewarded for hosting the entire blockchain through gathering. The chosen account to gather all the current transactions into the next block gets a block reward generated by the PoCX mining. This incentivizes them to add as many transactions to the block as possible.

Any account with a PoX score greater than 0 is eligible to gather.   To check if an account is allowed to create a new block at a specific network time, the following variables are calculated:

h = H (generation hash of previous block, public key of account)
t = time in seconds since last block
e = 8999999999 x (experience score of account)
d = difficulty for new block

The target block time is 15 secs or 4 blocks per minute.

DELEGATED EXPERIENCE GATHERING & SUPERNODES

While any Experiencer running a full node on their device can take part in consensus and earn rewards via Gathering, any user with an experience score can still take part in consensus through Delegated Experience Gathering. With this, Supernodes are used as the 'always-on' supercharged node hosting the blockchain. Experiencers with at least a 42 KEX can delegate their experience to one of these nodes and use them to gather transactions. This allows for mobile users to still take part in consensus and earn rewards on a lite wallet.

The cost for Supernodes is currently 500K KEX and the hardware requirements are specific. Supernodes do not take part in consensus but are important for many reasons as they serve as the processing backbone for the network, allowing for regular users to enjoy all the benefits of the Karmaconomy without the hassle of hosting the blockchain. Supernodes must be running 24 hours a day at a specific base processing speed and earn percentage reward for each block created.

V. THE KARMASHIP NETWORK

The Karmaship network is a peer-to-peer trustless network of anonymous nodes that are validated and continually evaluated via the Proof Of Experience protocol. In order to strengthen network security and scalability, it employs a number of different specialized nodes to verify transactions, run consensus and perform other important tasks for the Karmaconomy. Each node type has different rewards settings and on-chain responsibilities.

EXPERIENCER NODES

Any KMX holder running a wallet with the full blockchain who has earned enough KEX to qualify as an Experiencer. Experiencer nodes compete to earn the most experience points (via Proof Of Experience) so they can Gather the most KMX. These nodes play a crucial role in decentralization and network stability, especially leading up to and after large events when a great majority is back home running their full Experiencer Node on their desktop.

Any other users who does not wish to host the blockchain on his system can still delegate their KEX to a Supernode and Gather through Delegated Gathering. By running the KarmaLite Wallet on their phone or computer they can connect to a local Supernode and get their place in line for Gathering rewards in KMX.

Experiencer Nodes also act as the central nervous system for the entire experience-based network. They are incentivized to attend experiences and transact KMX, propelling the Karmaconomy forward.

EVENT SUPERNODES

Karmaship understands that certain event organizers would like to gain higher returns of KMX in exchange for their heavy investment into the ecosystem. In light of this, we will be creating the Event Supernode. This node will require 50K KEX and specific hardware to run, creating a robust backbone of support for the network, especially for when large scale events are in remote areas where Experiencer Nodes won't be as active. In exchange for this cost and service, Supernodes will act as central hubs for Delegated Gathering, where they will receive a set percentage of payouts from each new block created via Gathering. Event organizers can also choose to market and highlight these hardware nodes with artistic designs and make them a visual 'totem' for the Karmaconomy at their experiences.

In exchange for the ability to do Delegated Gathering, there will be a 60 day delay before the node can be broken. Furthermore, the creation of a supernode will result in a permanent locking of the KEX used to establish the node. This means that after the creation of the Supernode, it will take an extended amount of time to make back the initial deposit once the event is over. These two innovations will prevent the opportunistic dumping of high token volumes when price targets are reached. This feature will essentially limit Supernodes to those who believe in the project and are willing to support it with their continual service of network security.

KARMA TICKET AGENT SERVICENODES

Providing the important task of validating user experience, Karma Ticket Agents must run a simple app on their mobile device to act as a servicenode for the network. Their only task is to validate the multisig transaction and send to the blockchain for Proof of Experience. In doing this they receive rewards in the form of KEX and thus a lot of experience points for gathering or mining.

ATM SERVICENODES

Essentially static running nodes at events or places of business, these provide a number of systemic tasks including possible validation of Proof Of Experience (if no Karma Ticket Agent is avail) as well as increasing liquidity at events through atomic swaps of other major cryptocurrencies including Bitcoin, Litecoin and Ethereum. ATM Servicenodes receive small fees for providing their services and allow for third party developers to engage and assist in the network.

THE KARMAMESH NETWORK

Karmaship believes that the future success of distributed networks will rely on the ability of the community to independently connect without the need of a ISP or telecommunications company providing the connection. Through mesh networking, we can achieve that thanks to low energy bluetooth technology [8]. The development of this network will play a massive role in the success of Karmaship in the long run as it will allow for more remote communities and events to utilize the Karmaconomy, even without typical internet connectivity.

Besides bringing the freedom of independent network functionality, Karmamesh will strengthen the overall blockchain security for PoX. In a mesh network, we can verify physical presence due to the nature of the weak bluetooth signal and thus can use this data to further validate the experience of a user. Karmaship plans on updating the PoX algorithm to include the mesh networking data once the network has been fully tested and implemented.

VI. THE FUTURE OF KARMASHIP

The Karmaship platform will act as the flagship product for the Karmaship blockchain but its future really lies on the growth and stability of the community embracing it. As a fully open-source public blockchain utility, Karmaship will be open to any developers interested in using the Proof Of Experience system for their own application needs. There will be a public git

accessible to all and multiple avenues of support and communication including Discord and Telegram channels.

As the community and user base grows, Karmaship will look towards embracing additional new technologies to support the growth of the platform and the ecosystem at large including virtual and augmented reality, offline transaction processing, clean energy integration and so much more. The ability to take Proof Of Experience to more virtual and digital worlds is a goal as well as pushing cutting-edge clean energy technologies for the mining side.

VII. TEAM & PARTNERSHIPS

THE KARMASHIP TEAM

Organically developed over the last few years by a group of passionate artists and open-source advocates in search for a better economic system, the Karmaship team became a reality with the initial conceptualization of Proof Of Experience by Karmaship co-founders alfa warrior, T3QuilAMocKINGbird & Tron. From there, a dev team of like-minded developers in the open-source community has been growing and working together to make this project a reality, with personal donations of time and money put in by all. The official Karmaship Discord and Telegram channels are great places to join the conversation, open to anyone interested in propelling the growth of the project Currently, a list of developers is available on the Karmaship website, https://karmaship.io.

PARTNERSHIPS

Karmaship has aligned with other like-minded projects to expand the Karmaconomy into other platforms and decentralized ecosystems as well as better Karmaship's own technological advancement. While these projects are all open-source and thus their code available to the Karmaship team, it is the people behind these projects that matter the most. Karmaship is happy to be partnered with these people!

QORA

QORA has a small, die hard community of devs that are some of the most talented blockchain technicians and thinkers out there. They are currently close to releasing an entirely new QORA

chain and coin, with a hard fork planned for this Fall. Gen 2 QORA will feature a seperate data chain layer with unique functionality allowing it to function as a decentralized data server for websites and other dApps using QORA's transactional main chain.

Karmaship is working with the QORA team to integrate this functionality into Karmaship so Experiencers and Creators can create their own dApps and websites on the Karmaship platform. This will also potentially allow for integrations of decentralized VR and AR, mesh networking and other hardware innovations such as wristband wallets and portable Supernode machines. QORA will also help with building the Karmaship DEX, allowing for atomic cross chain swaps of KMX with their coin and other major coins like Bitcoin and Litecoin.

OUTSIDE IN MOVEMENT

Outside In Movement is an artist collective and event production company that embraces alternative thinking in culture, science, health and society in general. Created by Karmaship founders Tron and alfa warrior, it is the creative and artistic Yin to the technological Yang of Karmaship. Outside In is focused on developing a community of artists and creatives that can express themselves as a collective whole while still maintaining their individual identity. Much like the subculture of Burning Man and other hyper-conscious movements, Outside In embraces counterculture and artistic expression for the overall good of humanity and the planet.

With these intentions and direction in mind, blockchain technology and the integration of the Karmaconomy is a perfect fit for the Outside In Movement. This partnership is crucial for the launch of Karmaship as it provides the initial real-world platform for this new technology and economic system to be realized and used. Outside In Movement is fully committed to produce a number of events using the Karmaship platform including their Outside In Equinox Festival which is where Karmaship launched and the Outside In Experience which will be more geared towards blockchain advocacy and exploration.

Visit their website at https://www.outsideinmovement.com

VIII. THE KARMADA: FUNDING & LAUNCHING THE KARMACONOMY IN A SECURE, SAFE WAY

In today's cryptocurrency market, there is an unfortunate negative stigma surrounding the launch of new technologies thanks to the ICO boom and its inherent flaws. While we support

the philosophy behind the concept, we are also aware of the realities and corruptive nature of this fundraising process. In light of this and thanks to the nature of the Karmaconomy, Karmaship is taking a different route to fund and launch the new economy.

INITIAL PRIVATE FUNDING

As a testament to the developers' belief in Karmaship, they are funding the initial project scope themselves. In exchange for this, each founder has been given a Supernode to both forge the initial blockchain blocks and give them extra KMX dividends over their Gathering accounts. Because Supernodes are created with KEX and because there is no way to dump coin on a centralized exchange the risk of founder coin manipulation is non-existent. Like the initial Gatherers who are slowly earning coin, founders and developers must stay for the long haul to reap any liquidity out of the system.

LAUNCHING THE KARMACONOMY - THE KARMADA

Karmaship understands that one of the biggest issues with most startup cryptocurrencies or ICOs at this time is that once the coin is launched, it is quickly manipulated by whales in the ecosystem who for the most part have no real dedication to the project or the community behind it. Instead, the coin is purely used an asset to trade and manipulate the market for profit. Because of this, Karmaship understands that it must jumpstart the Karmaconomy in an alternate cultural space like Burning Man where it can grow and become strong without outside manipulation.

The launch strategy for KMX bases a lot of its design on the Burning Man model, in which a decentralized and yet connected community can successfully function in a self sufficient and prosperous manner outside the bounds of regular institutional society. Within this type of 'cashless' subculture, a cryptocurrency based on shared experiences that aims to be the most decentralized and self-evolving could be very attractive and functional to its community. This is why we plan on focusing the initial Karmaship launch within the conscious music festival culture as a way to accomplish this strategy. Examples of events that fall within this realm are Lightning In A Bottle, Envision Festival, Lucidity & our partner's recent festival, Outside In Equinox. The Karmada idea is simple: distribute initial coin to a trusted set of genesis experiencers who can use it in their own closed system, protected from outsider opportunists and attackers.

Within the Karmada, Karmaship offers the 'Bitcoin Experience'. This simply means that coin economics and certain blockchain dynamics match Bitcoin with the idea of giving early adopters the same kind of experience early Bitcoin miners had back in 2011-2012.

Here are the Karmada specs:

Language: JAVA
Block Time: 30secs
Trans Per Block: 4000
Coin: Karmics (KMX) / Experience Token: Karma Experience (KEX)
Max Supply: 21mil KMX / 21mil KEX
Circulating Supply (on genesis block): 0 KMX / 21 Mil KEX (17 Mil AirDrop 4 Mil Supernode)
Coinbase: Emulates Bitcoin block reward 10 minutes averaged maxed at 50 starting 5 levels deep ending at 50 doubled for 1 Year
Starting Gathering Block Reward: All Gatherers — 0.15 KMX (equally distributed shares per block)
Supernodes Block Reward: 0.026 KMX (equally distributed shares per block)
Cost For Supernode: 50,000 KEX
Initial Airdrop: 42 KEX per user
KMX Internal 1 to 1 PEG To BTC

By offering the Bitcoin Experience, the Karmada makes it easy for newcomers and crypto veterans alike to conceptualize the internal value of KMX. While we state that 1 KMX equals 1 BTC, it is up to the community to create that consensus. Kamaship plans to drop a total of 17 million KEX at airdrop events across the world with the idea that once around 400K Gatherers are on the chain we will have enough consensus to move off the Karmada and towards fully open decentralization.

Genesis Events

To launch the initial Karmada, the Karmaship team along with Outside In Movement hosted the first "Genesis Event" on Sept. 23rd at Outside In Equinox where all attendees who chose to accept the 42 KEX airdrop at the Mothernode on site were able to then delegate and Gather KMX. This Genesis Event launched the Karmada which will be bringing more experience airdrops to festivals across the globe. These genesis events allow for the initial economy to take off in the hands of those individuals who care about its growth as well as allow for the initial community to expand and grow as Karmaship is developed in full. The goal here is to foster an organic growth model for a healthy distribution of the economy. A schedule of upcoming Genesis Events will be available on the Karmaship website soon.

KARMASHIP DEX AND KARMAFUND

Karmaship plans to build its own DEX (decentralized exchange) directly into its dApp, allowing users to freely exchange between major cryptocurrencies like Bitcoin and Ethereum for KMX. By keeping the coin out of the hands of day traders and bots, the Karmaship team hopes to create a more stable coin for daily transactions. The ability to get KMX out through the DEX will be determined by KEX, thus ensuring only the most experienced users can take KMX out of the economy. This is designed to prevent market manipulation. Once KEX is vested in the DEX it is decreased from the Gathering weight of the users, so KMX rewards go down.

The DEX is already in development but will not be available for some time. However, Karmaship is excited to announce the launch of its decentralized crowdfunding dApp called Karmafund. This will be the first way users can convert their KMX into actual money via crowdfunding Bitcoin. Users will be limited in the amount of Bitcoin they can raise by their KMX total balance and only users with KEX can launch a Karmafund campaign. All Bitcoin earned will be matched with their KMX holdings. This creates an incentive for people to invest in projects on Karmaship. They can essentially hedge their investment with the equal KMX they receive in turn and then, once they receive KEX at an event, turn around and crowdfund their own project for Bitcoin.

IX. ROADMAP

2018 Q3

- Project Planning
- Core developer team finalized / consultants added
- Branding finalized and teaser Karmaship website launched
- Community Engagement in new Discord and Telegram channels
- QORA fork, starter chain development and testnet
- Closed Alpha test of mobile KarmaLite wallet
- Official Karmaship Website Launch
- Official Grey Paper release
- Beta launch of KarmaLite web wallet
- Genesis Event & Airdrop of minted coin for Karmada / Supernode creation

2018 Q4

- Closed alpha test of basic Karmaship desktop wallet 1.0
- Development of Cross Chain Atomic Swap with Bitcoin for Karmafund & DEX
- Community Development
  - Community developer outreach
  - Public Git Release
  - Community & industry conferences
- Beta release of Karmaship mobile native wallet 1.0
- Karmamesh development begins
- Additional Public Airdrop Events

2019 Q1 & Q2

- Karmaconomy.org website launched
- Official White Paper release
- Karmafund on-chain alpha & beta testing
- Karmamesh on-chain alpha & beta testing
- Karmaship Mobile Wallet update w/ Karmamesh & Karmafund integrated
- Security auditing / testing
- Karmaship ATM development begins
- Increase in Karmada Airdrops
- Karmaship desktop version alpha

2019 Q3 & Q4

- Karmaship desktop beta release
- Improved UI for Karmafund & Karmamesh
- DEX Development
- ATM release
- Community Partnerships / Bounty Programs
  - Artist creations for Supernode hardware decoration
  - Branding / merchandising

- ○ Event Producers
  - ○ Artist and Entertainer Sponsorships
- Proof of Experience algo finalization
- Karmaconomy Foundation first election

2020 Q1 - Q4

- White Paper 2.0 Release
- DEX alpha and beta release
- Karmaship hard fork and KEX transfer
- Virtual Reality integration and deployment
- Mobile wristband wallet technology development
- Platform tweaking
- DAO governance development through Karmaconomy.org

X. CASE STUDY

The following is an example case study of how the Karmaconomy would work in the real-world.

Equinox Music And Technology Festival

This event is a three to four thousand person weekend-long camping music and technology festival where attendees purchase entrance using the Karmaship platform. The event organizers were lucky enough to be a part of the initial Karmaship Genesis Event airdrops so have enough coin to pay for the creation of their Experience within the platform and are marketing the event as the first large-scale Karmaconomy Experience. Attendees who have either gained coin themselves from previous airdrops or have purchased coin on the platform via a cross chain atomic swap of Bitcoin can buy into the Experience with KMX and receive their ticket and QR code for entrance.

The event organizers advertise the need for Ticket Agent volunteers and are able to hire Experiencers who have enough KEX to provide this service free of charge. Other Experiencers can volunteer to work the event in exchange for KEX which they can use for delegated

gathering while at the event, thus alleviating the need to pay cash for their services. Vendors are attracted to the event as well since they will be able to gain KEX with their vending fee, thus allowing them to take part in delegated gathering while working the event. Also, they will receive all of the benefits of accepting KMX including near-instant transactions, zero processing fees, and increased sales from Experiencers spending the new coin they have gathered while at the event.

Artists and performers will be attracted to the event for the same reason. If they choose to, they can become a Creator and offer their own Open Experiences within the festival, allowing attendees to pay them in KMX in exchange for the Experience they are offering, earning KEX. Not only will this essentially give them free money for their presence there but it will allow them to better network within the community and market themselves as they provide additional value to the overall Karmaconomy ecosystem. The event Creators can even use this as leverage to book talent without the need to pay them in traditional fiat dollars.

If the event is produced with good intention and is a success, the Karmaconomy will show it in the amount of KEX and KMX created and earned by everyone involved. After the event is over, Creators and Experiencers can choose to hold their earned KMX to attend future Experiences and gain more KEX, spend their KMX to become a Creator and offer new Experiences to earn more KMX, or atomic swap it for another cryptocurrency like Bitcoin.

XI. THE KARMACONOMY FOUNDATION

The Karmaconomy Foundation is a non-profit organization set up to manage and provide support for the public Karmex blockchain. The Foundation will be run by volunteers within the Karmaconomy and financed through donations. The goal is to turn the Foundation into a full functioning DAO run by a council of public representatives. These reps will be voted in by the community once a quarter. Polls will be taken within the Karmaship community on a monthly basis and voted on by the council. These will cover everything from bounties for Karmaship improvements and new dApp development to marketing strategies and events.

You will find the foundation website at www.karmaconomy.org.

XII. CONCLUSION

As the blockchain revolution continues to erupt across the world it is becoming more and more apparent that we still don't have a protocol established to ensure ultimate decentralization. Our

goal with Karmaship is to use the new Proof of Experience protocol to address this problem in a much more concise and deliberate way by relying on direct human interaction vs computer-controlled mechanisms. We also aim to integrate an entirely new market-driven economy based on these experiences and interactions where individuals and groups have the freedom to create and distribute wealth independent from the current capitalistic models. Ultimately, the goal is to liberate mankind from the restrictions of centralized economic control while embracing communal togetherness. In the same way communities like Burning Man establish a 'cashless' system of cooperation, Karmaship strives to create a system whereas the energy used by humans to create and share is the currency of the future. If this can be done in a way that is truly decentralized and self-perpetuating we can have a sustainable model for growth and happiness for everyone involved. The end result would be nothing short of revolutionary.

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