WHITE PAPER

NPCoin

Table of Content   *Page No.*

Executive Summary

NPCoin is a peer-to-peer (P2P) cryptocurrency designed with the target to serve the utility and remittance market in Southeast Asian Region. There are 10 countries in the Southeast Asian comprising of Indonesia, Malaysia, Singapore, Thailand, Philippines, Brunei, Vietnam, Laos, Myanmar and Cambodia. This is a developing region with growing population, it is indeed an important labour resources supply countries to the world market.

The utility payment culture in this region are in transition from traditional cash payments over the counters to online banking transfer. Every household has numerous of utilities bills to settle every months, ranging from electricity, water, sewerage, cable TV, internet, mobile telecommunication bills and etc. Residents and visitors around the world also need a convenient way to reload to local phone and data lines. These involve huge monetary and big data transaction every day.

We see the needs for an utility coin as payment medium to ease these monthly routine. NPCoin is designed with crypto blockchain technology to serve the role with enhance security and efficiency, as compared to other conventional payment methods.

NPCoin uses a hybrid design of Proof-of-Work (PoW) mining and Proof-of-Stake (PoS) minting. All coins were premined using PoW method while PoS take charge for the coin distribution and block validation. The hybrid system complement each others for more security, reduce electricity consumption, need no special hardware, create no energy wastage and is environmental friendly.

NPCoin can be traded and transact among the peer-to-peer network conveniently. NPCoins allow non-tech savvy individual to enjoy the conveniences and benefits of cryptocurrency. We foresee value appreciation of NPCoins with the growing popularity and demands from more users in any geographical location in near future.

2.0   Overview on Cryptocurrencies

A cryptocurrency is a digital asset or digital currency designed to work as a medium of exchange using cryptography to secure the transactions and to control the creation of additional units of the currency. It uses peer-to-peer* (P2P) technology to operate with no central authority.

Cryptocurrency is gaining its popularity and importance as a substitute mode of payments against fiat currencies*. Value can be transacted between participants on a decentralised computer networks, with relatively minor transaction fees as compare to conventional wired transferring methods, is secure, time efficient, and protect privacy.

Bitcoin was created by Satoshi Nakamoto in 2008, and became the first decentralized cryptocurrency in 2009, it set the benchmark for digital currencies.

Bitcoin and most of the cryptocurrencies use Proof-of-Work (PoW) protocols to solve difficult algorithms as the backbone of mining and security model. Acquisition of external hardware is essential for effective mining and huge consumption of electricity is needed. These create energy wastage and involve huge operational costs.

Another method is the Proof-of-Stake (PoS) protocol, which is based on coin age to generate node via a hashing scheme that do not consume much energy. Security level of network is not dependent on energy consumption in long term thus providing an energy efficient and more cost competitive P2P cryptocurrency.

3.0   About NPCoin

3.1   Cashless Community

NPCoin is designed for the convenience, cost effective and time efficient usage among the peer-to-peer community.

Traditionally, utility payment hubs operate either using fiat money or point system. It is a one way flow of the payment channel and you need local fiat currency for transaction. It is limit by geographical barrier and incur substantial fees for cross borders payment.

NPCoin has ready payment hub for utilities payments, peers can pay their routine bills and/or reload telco airtime by using NPCoin directly. The value of NPCoin will convert into local currency and thus eliminate the hassle of third party money changer and currency exchange.

In current virtual point system, merchants or users might have difficulties in identifying the real points in circulation and thus its normally being centralize controlled and can only be used once. It cannot be widely transferred from one merchant to another because no trustworthy public checking system to preserve its dignity.

In contrast, once a merchant accepts NPCoin from a customer, the merchant can still use NPCoin at other merchants. Even if the merchants is not interested in any use case offered by NPCoin, he can still sell at crypto exchange and get value of of the sales.

NPCoin's objective is to encourage and assisting the conventional utility payment users to transform and/or upgrade to a cashless community. The world is going green and cryptocurrency has provide a smart, secure and convenience option for your daily usage.

3.2 Hybrid design of Proof-of-Work (PoW) and Proof-of-Stake (PoS)

NPCoin uses a hybrid design of PoW and PoS protocol. PoW initiate the coin generation and POS take charge for the coin distribution and transaction validation to achieve the distributed consensus.

PoW is a validation system based on work of some kind occurred. NPCoin uses SHA-256 Algorithm, which is the same as Bitcoin, to initiate the processor block and premined 100% from PoW hardware mining.

One serious threat to new and young PoW coins is the 51% network attack* due to the low mining hashrate and high block production at the early stage. 51% attack will further lead to double spend and is damaging to the whole eco-system.

NPCoin opted for 100% premine to safeguard from this mining power attacks. The eco-system in NPCoin is then being maintained by PoS method. The aim is to preserve a safer network, because attack has become more expensive, every attack is associated with own stake of NPCoins: if a hacker would like to buy 51% of the total number of coins, the market will react by fast price appreciation. Thus this is a lost-lost scenario and non profit making.

PoS means a form of proof of ownership (stake) of the currency. Coin age consumed by a transaction can be considered a form of PoS. Coin age is simply defined as currency amount times holding period (number of coins X number of days hold). These concepts were first introduced by Mr. Sunny King in October 2011, to counter the energy wastage issue entailed from PoW method.

Proof of stake is a different way to validate transactions based and achieve the distributed consensus. It is still an algorithm, and the purpose is the same of the proof of work, but the process to reach the goal is quite different. With Proof of Stake, the new block is chosen depending on its stake and holding time.

In PoW, miners compete among hashrate to confirm transactions and to secure the network to earn block rewards. In PoS, all the digital currencies are previously created at the beginning, and their number never changes, this means that in the PoS system there is no block reward. Validators (same as miners in PoW) play the role to validate the transactions and earn transaction fees.

Every validator must own a stake in the network. Staking involves depositing and holding an amount of NPCoin in the system, so as to have a chance of being selected to validate blocks of transactions, and get rewarded for doing so.

In NPCoin, coins are premined and being distributed to the Peer members in accordance to the minting package they subscribed.

Each minting package is equipped with a virtual processor and an Index block, which specifies the total number of NPCoins stake owner is going to obtain in an unknown minting timeframe determined by the blocks submission. Once the total number of NPCoins have been completely filled up, the Basic Index block is deemed as expired and will be obsoleted.

This PoS minting block enable stake owner of NPCoins to mint NPCoins based on the consumed coin age. In every block, the minting index will indicate the total quantity of NPcoins that will be distributed to that block. For example, in a minting block with 200% minting index, 1 NPCoin input will become 2 units of NPCoin upon maturity, in an uncertain time frame depends on the hash target.

The hash target is the target per unit coin age to receive another coin, i.e. the time frame require to distribute a coin into the minting block. The hash target difficulties will be increasing overtime when more coins are in circulation.

Every coin submitted to minting block will reduce the circulating supply from the Total Supply, thus maintaining the ecosystem of Demand and Supply.

3.3   The Block Chain

The blockchain is the digital ledger in which transactions made in cryptocurrency are recorded chronologically and publicly, and can be processed by decentralised computers. This decentralised ledger keeps a record of each transaction that occurs across a fully distributed peer-to-peer network, either public or private.

Blockchain system is governing the transaction administration through mathematical algorithms which convert the information in an encrypted block, and only readable with the correct key. All transactions data and blocks information are maintained in blockchain.

NPCoin uses SHA-256 Algorithm, which is the same as Bitcoin, to initiate the processor block and premined 100% from PoW method. Thereafter the network distribution consensus is maintained by coin holders, via PoS validation protocal and eco-minting process. The NPCoin network consumes far less energy, and rewards users in more sustainable ways.

3.3   Asset Details

The total number of NPCoin is finite to preserve its precious value and benefits. The asset details of NPCoin is as follows: -

Coin Name : NPCoin
Ticker : NPC
Total Supply : 150,000,000
Pre-mined Quantity : 150,000,000
Coin Distribution:
Eco-Minting Project - 30%
Use Case Partners - 55%
Reserved for Overhead, Marketing and Crypto Project Stability - 15%
Category : Platform, Cryptocurrency

NPCoin has undergone an offline P2P Initial Coin Offering exercise in 2017 for 6 months duration. 6,000,000 NPC (4% of total supply) were sold during ICO with unit rate of USD0.50 - USD1.00 among the P2P community trading and exchanges transaction. After ICO, NPCoin can be traded freely in public exchanges, and for daily usage as utility coin among its P2P community.

3.5   Management Team

NPCoin crypto project is managed by IT Transfer Sdn Bhd. IT Transfer is a project consultancy firm and project development are done by contractors.   The top management details of IT Transfer are as follows: -

Mr, Edward Tan, *Founder / CEO*
Founder of NPCoin project and incharge for direction and strategic planning. Task as Chief Executive Officer to oversee the overall project.

Mr, Adi Hasarli, *COO*
Chief Operating Officer oversees the day to day operations, strategies implementation, coordination and task accomplishment towards fulfillment of organization vision and mission.

Ms, Lim WL, *CFO*
Carry out the work behind the scenes as Head of Finance and devise a strategy for the future of the NPCoin Project.

4.0   Conclusion

We believe in the blockchain technology and support the idea of cryptocurrency as mode of borderless payment medium. NPCoin is ready with various facilities to serve its community members as a functional coin for utilities payments. We welcome everyone who value the same to join us, we shall seed and nurture NPCoins together and enjoy the fruitful return in future.

....Thank You.....