



PUNDI

SUPPORTED



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1. Introduction

Satoshi Nakamoto's seminal Bitcoin white paper proposed a revolutionary new digital currency. But it was based on its predecessor Hashcash and the proof-of-work concept was originally proposed by Dwork and Naor in 1992¹ as a means of combatting junk email.

1.1. The success of Bitcoin

So why did Bitcoin achieve such explosive economic value while its predecessors were mostly of academic interest only?

1.2. Real Implementation

More than just a white paper, "Satoshi" released the open source reference implementation in 2009. Because Bitcoin itself was more than just a white paper, but an actual working system, it was able to capture the imagination of developers and leverage the paradigm of open source software development to quickly iterate and improve into a global-class financial infrastructure.

1.3. Open Governance

More importantly, Bitcoin is an open system that allows for evolution through forking and as such provides an assurance of its long term trustworthiness. If stakeholders ever get upset with the direction of Bitcoin, they can and already have produced forks that users and miners can migrate to if they see fit.

1.4. The Problems of Bitcoin

The biggest problem with Bitcoin at the moment is that it has not broken out into mainstream adoption. One study pegs the number of active cryptocurrency users to between 2.9 and 5.8 million².

This paper proposes a solution for adding a billion users to the cryptocurrency movement by adding two key elements missing in order to provide significant adoption by mainstream users.

The next billion users have not yet entered cryptocurrency for two main reasons:

1.5. Too complicated

Cryptocurrency suffers from complexity for the average user. Managing private keys, public keys, blockchain concepts—it's all vastly out of the reach of the

¹ http://www.wisdom.weizmann.ac.il/~naor/PAPERS/pvp_abs.html

² <https://www.jbs.cam.ac.uk/faculty-research/centres/alternative-finance/publications/global-cryptocurrency/#.WezKKRNSzBI>

average user. In some cases the next Billion users may even barely be able to operate a smartphone.

1.6. Not Relevant

Today, the only thing you can buy with a cryptocurrency are other cryptocurrencies. The vast majority of people have no involvement with this process and no interest. Until the average user can use cryptocurrency to buy a bag of rice or a loaf of bread, the relevancy of cryptocurrency will be restricted to a small audience.

1.7. The Solution

This paper presents Pundi X, a platform for consumerizing cryptocurrencies by enabling their use in retail Point of Sale (POS) through a mobile app and contactless payment card.

Following in the footsteps of Bitcoin, Pundi X has the same properties of Real Implementation, Open Governance and Incentivization that allows for the rapid global expansion of the solution.

1.8. Real Implementation

Pundi X is a complete end-to-end solution for contactless and mobile retail point-of-sale (POS) including a full-stack reference implementation of all the components. It includes a mobile application, a contactless smart card and point-of-sale (POS) terminals that are already in deployment. All of these components will be made widely available through open source and open specifications.

1.9. Open Governance

By releasing the full-stack reference implementations as open source and open specifications, we can enable ubiquitous distribution worldwide of the Pundi X protocols and ensure the rapid expansion of the value of the Pundi X Network.

1.10. Incentivization

The Pundi X network incentivizes participation through providing free hardware to retail stores in the initial target geography of Indonesia. Users are incentivized to participate in the Pundi X network through accessibility and ease of use and the convenience of mobile payment.

With a solution that decreases complexity and adds relevance of cryptocurrencies to end users, we will see rapid mainstream adoption of cryptocurrencies and the merging of the crypto-economy (current estimated value in October 2017 of 170B) with the much larger mainstream economy (estimated value 214T).

Note: Please refer English whitepaper as the main source

2. Vision

The Next Billion Crypto Users

Pundi X will help to generate demand for new and old, as well as big and small cryptocurrencies. No other online cryptocurrency exchange can bring in new cryptocurrency users from this segment and in the same number, thanks to our powerful focus on attracting the consumer market.

From 9 million to 100 million

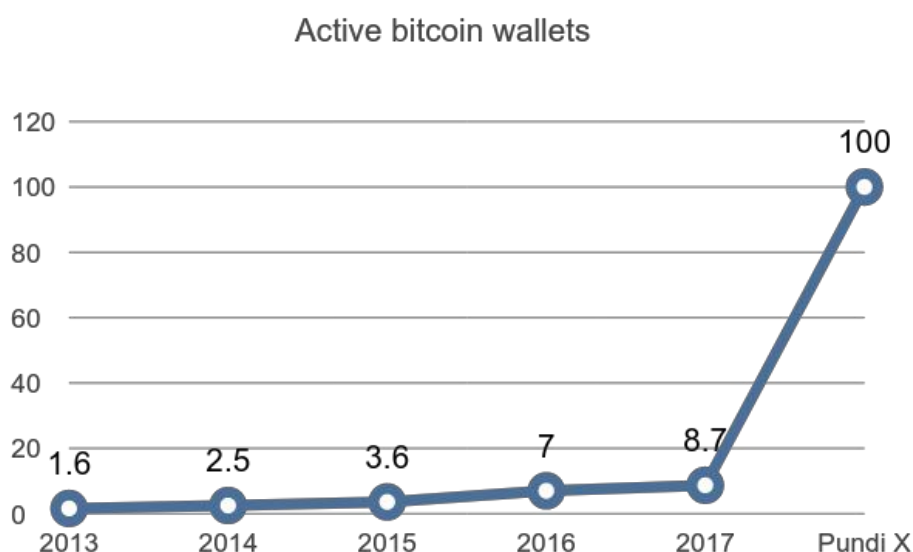
With future growth in mind, let's look at some relevant statistics as of October 2017:

- Bitcoin price is approximately USD 6,000
- Bitcoin market capitalization is approximately USD 100 billion
- Trading frequency is 250,000 times
- Trade volume is USD 900 million.

With trading volume accounting for 1.1% of total volume, the reason bitcoin had such respectable numbers is because there may be as many as 5.8 and 11.5 million - an average of 8.7 million - active wallets. However, the global bitcoin wallet ownership numbers do not even reach 2% of the population of South East Asia.

Source : bitcoin.com blockchain.info

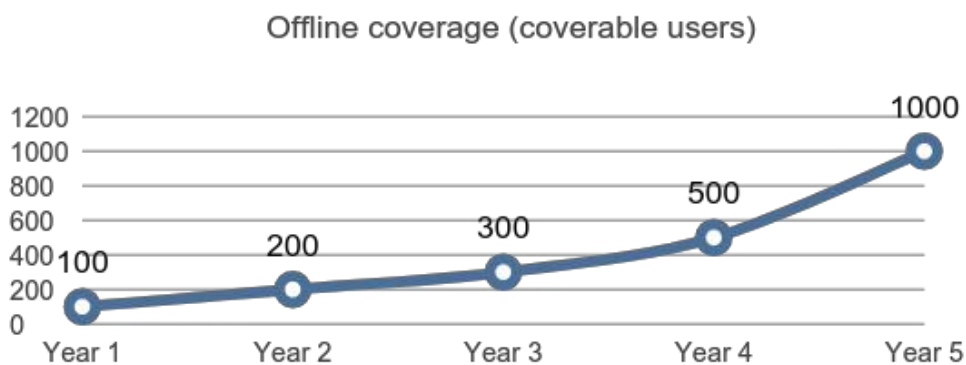
Just take a few seconds to absorb this information ... what if we could introduce another 10 million, even 100 million users ... what kind of impact would this have on the cryptocurrency landscape?



100 million users in 3 years

Pundi X is concentrating initial traction efforts on South East Asia. Half of all South East Asians live in Indonesia. We have local team with a deep understanding of the Indonesian market - plus we have track record, connections and products to match the local market's needs.

We will spend the next two years building an extensive coverage of convenience stores, shopping malls, retail shops, chain outlets, cafe, restaurants and other outlets. We will use *Pundi* apps to coverage an even greater number of smaller sellers. Our goal is for users to be able to buy and spend cryptocurrency within a five minutes walk of any location in Jakarta.



With our initial outreach in Indonesia, we intend to expand into Thailand, Malaysia, Singapore, Japan and other regional markets simultaneously. Our plan is to cover South East Asia within three years. At the same time we will explore other parts of Asia, the Americas and Europe using our open source and open specification for adoption of our protocol. In this way we can achieve our objectives in sales of cryptocurrency; usage of cryptocurrency; and growth of cryptocurrency.

100 million to 1 billion in 5 years

Pundi X Platform will be provided as open source and the hardware reference implementation specifications will be provided under Creative Commons. The *Pundi X* solution will therefore be readily deployable across the world in regions outside of Indonesia. With these international deployments, *Pundi X* will be able to reach the 1 Billion user mark.

3. Mission

3.1. The next billion

Cryptocurrencies, while capturing the imagination of 8 million people has almost no meaning or value to most of the world.

Pundi X seeks to bring cryptocurrency to the next Billion users.

3.2. Benefits

By achieving this goal, Pundi X will help increase the value of cryptocurrency for all users.

4. Problem

4.1 Complexity

One of the hardest problems in crypto is how to radically reduce the complexity of handling cryptocurrency. Pundi X solves this problem through several end users layers including a mobile wallet and a contactless smart card.

4.1.1.The Mobile Wallet

The mobile wallet is a helpful component because it solves the handling of private and public keys. Instead of managing a long and complicated blockchain public key, it may be preferable for end users to simply maintain a password-based system that is much more familiar. Increasingly mobile devices can be secured by fingerprint or face recognition, so even the password may become too complex for many users and in fact a point where the complexity can help create a security risk.

4.1.2.The Smart Card

The second layer that reduces even more complexity is the use of a smart card. The card can be used with or without the mobile app, and one member of the family could use the mobile app to charge up multiple cards that can be used by other members of the family.

By empowering users with a contactless smart card, this enables users to avoid even the complexity of navigating a smartphone app.

4.1.3.The Pundi Platform

The Pundi Platform is the final round-up in solving the complexity issue. As a both software and hardware, the full stack implementation allows the merchants to integrate their existing POS device by connecting with the Pundi Platform and accept payment in lieu of purchase/sale of cryptocurrencies and sale of daily goods & services. The hardware allows the use of the Smart Card and any Mobile Wallet, whereby addressing the inter-operability complexity.

4.2 Relevance

As mentioned before, the fact that most cryptocurrencies can only be used to buy other cryptocurrencies reduces the relevance of them to almost zero for most people. Thus the problem can be reduced to this: how can cryptocurrency be converted to fiat currencies for use in a “normal” everyday retail store to buy just about everything? And how can fiat currencies be used to buy cryptos just about anywhere?

4.2.1.Crypto to fiat

The standard way in crypto banking to solve the problem of Crypto to fiat for consumers is the “Bitcoin Debit Card”. This leverages the VISA and MasterCard networks and enables users to access as many as 43 million Point of Sale (PoS) terminals around the world.

One of the problems that has cropped up in this space recently is that VISA and MasterCard have both blocked the access to their networks for crypto debit cards. So for many geographies, another solution will be needed.

4.2.2.Crypto to crypto to fiat

Pundi X offers support to point-of-sale devices through a full stack reference implementation of a contactless NFC mechanism that transacts directly with the cryptocurrency blockchain.

The Point of Sale (POS) devices can become active on the Pundi X network through multiple means including:

- 1) The full Pundi X reference implementation stack. Pundi X is giving the full hardware reference implementation to retail environments as their primary POS device in Indonesia.
- 2) SDK –another easier approach is for existing POS device manufacturers to use the open source PundiX library to support crypto to crypto to fiat transfers.
- 3) Mobile app—one of the easiest ways for a Point of Sale to include this payment protocol is simply to download the mobile app onto a compatible

device, Some retail environments may even choose to use an Android phone or an iPhone (like the Apple Store) for customer checkout. Another approach would be to use an android or IOS tablet device with the software.

The existence of any of these solutions allows the point of sale to sell anything for cryptocurrency without the use of the VISA or Mastercard service by going directly to the cryptocurrency blockchain to record transactions.

After these transactions are recorded, the Pundi X device or API reports back to Pundi to ensure that the merchants and retailers are paid back in fiat.

4.2.3.Fiat to Crypto

How do Pundi X users buy cryptocurrencies? Three primary ways:

- 1) The mobile wallet can allow users to directly purchase cryptocurrencies
- 2) Mobile to card—users can transfer cryptocurrency from the mobile app to cards. An example of where this might be useful is if a member of the household has minor technical skills, they can set up crypto backed debit cards for the rest of the family and they don't even need to worry about working a phone app.
- 3) POS to card: for the simplest use case and for users who don't even have smartphones, the Pundi X system enables the POS, whether it be the full hardware reference implementation, the mobile app or a tablet powered by the mobile app to directly be charged by a cryptocurrency.

5. Solution

Pundi X aims to bring in the next billion crypto users as it allows users to buy cryptocurrency anywhere and anytime. This will make PundiX the world's largest decentralized, offline cryptocurrency *sales network*. It is 'decentralized' because the ecosystem and transaction records live on the blockchain. It is 'offline' because our entry point is via Point-of-Sale (POS) devices installed in physical outlets.

Pundi X allows for three customer use cases. It enables users to:

- 1) Buy or Sell cryptocurrencies through a Point-of-Sale (PoS) device
- 2) Buy anything using cryptocurrency through the Pundi X POS device (retail point-of-sale)
- 3) Pay peer-to-peer using mobile (like PayPal)

Pundi X consists of:

- **Pundi X Mobile App** - a smartphone app used to do the following things:
 - buy BTC, ETH, LTC, XEM, PXS and cryptocurrency using cash or card
 - sell BTC, ETH, LTC, XEM, PXS and cryptocurrency for cash
 - top up fiat money in a digital wallet
 - buy utilities and services, e.g. electricity using cryptocurrency *
- **PundiX card** - will be the physical multi-currency wallet for fiat and cryptocurrencies available for purchase and sale via the PundiX platform. The PundiX card also facilitates payments via cryptocurrencies held in the card through NFC and contactless technology.
- **Pundi X Platform** - a reference implementation stack including software and hardware that performs the full Point of Sale (POS) device function. Our reference implementation hardware is already in deployment in convenience stores and retailers, and we will further distribute the platform through open source licensing and distribution of the SDKS and open APIs.

Effectively, PundiX will become:

1. World's largest offline cryptocurrency sales network by connecting existing POS devices and PundiX devices to the PundiX Platform
2. Your very own Crypto debit card - Pundi X card
3. An Offline Crypto exchange allowing for more liquidity in cryptocurrencies

*The Pundi X business scope outlined above may be modified according to local laws and regulations, at the sole discretion of the management team.



6. Pundi X Mobile App

Existing Pundi-Pundi apps are expected to promote the rapid growth of Pundi X. Since February 2017, Pundi-Pundi has over 100,000 downloads, achieving 20,000 monthly active users (MAUs). Today, over 500 retail outlets, restaurants and cafes accept our Pay-By-QR apps. Users are concentrated in Indonesia's capital city of Jakarta with an eventual roll out planned across the whole of South East Asia. Pundi-Pundi is available on the iOS AppStore and on Google Play.

We have also rolled out the *Scanbersama*, *Pundi Booster* and *Pundi Toko*, apps.

- *Scbersama* is Indonesia's universal QR payment SDK (Software Developer Kit) which enables any app to integrate with *Scanbersama* solutions using a single line of code. After integration these apps can be used to make payments at participating merchants. *Scanbersama* is available in SDK for our B2C clients for integration by app owners.

- *Pundi Booster* is an app selling virtual goods or services. Merchants that have *Pundi Booster* can sell mobile talk time and enable utility bill payment via the app. *Pundi Booster* is available on Google Play.

- *Pundi Toko* is the merchant management app for *Pundi-Pundi* and is available for download on Google Play.

- More information is available at www.pundi-pundi.com and www.scanbersama.com.
- You can download our apps on Google Play and iOS App Store.

7. Pundi X Card

The *Pundi X* card is the physical multi-currency (fiat and cryptocurrencies) wallet or a Crypto Debit card which can be loaded with cryptocurrencies via the POS devices which are connected to the PundiX platform. The PundiX card also facilitates payments via cryptocurrencies held in the card through NFC and contactless technology.

With the future being Crypto, this physical debit card/wallet has a key use case in the event of theft of the mobile phone or loss of battery or no service coverage. The PundiX card will allow the easy onboarding of the next billion crypto users, who can get accustomed to using cryptocurrencies. We also envisage several channels (Crypto Banks, Crypto Exchanges, POS device manufacturers, etc.) through which the PundiX card can potentially become a regular feature.

8. Pundi X Platform

Starting with Indonesia, the largest country in South East Asia, our team aims to provide retail outlets, restaurants and convenience stores with *Pundi X* Point-of-Sales

(POS) devices so that customers can use the cryptocurrency held in their accounts



to make daily purchases such as sugar and rice.*

In this way, *Pundi X* POS devices become the latest participants in the global blockchain and consumers benefit because they can use cash, credit card or a digital wallet to buy anything.

* These purchases using *Pundi X* are carried out by first selling a fraction of a unit of cryptocurrency and buying the local fiat currency (Dollar, Rupiah etc.) and then local currency is used to buy products or services. For example, if a pack of sugar costs 1 US Dollar, users will sell approximately 0.00025 BTCs (Bitcoins) for 1 dollar and then use fiat currency to buy the pack of sugar. (Rates are calculated in real time; the fiat currency selected is the local currency.)

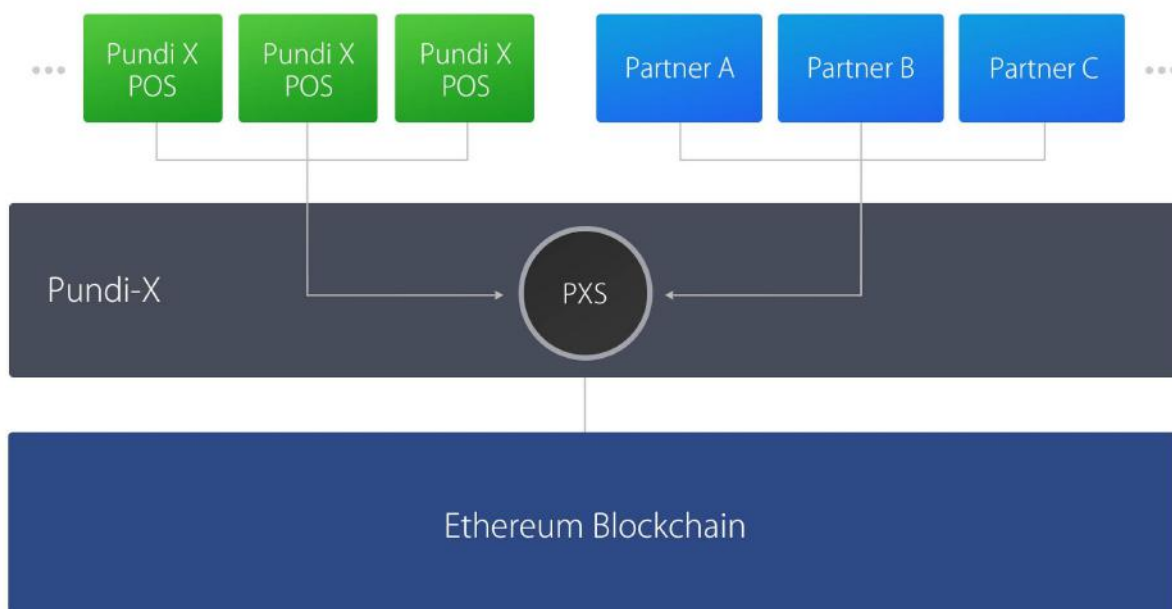
8.1. What is Pundi X Platform?

The *Pundi X* POS is a smart device that is built to distribute cryptocurrency and is connected to the blockchain, so that each transaction is recorded. Consumers use *Pundi X* POS to buy physical goods using cryptocurrency *

A software-only *Pundi X* POS is designed to run on Android and IOS tablets and is a special purpose version of the consumer mobile wallet app.

Since each *Pundi X* POS device is connected to the web, software and feature updates can be performed remotely. For example, an update may introduce new blockchain features; schedule the sale of new ERC20 tokens; or arrange for a new cryptocurrency to be issued through an ICO.

* These purchases using *Pundi X* are carried out by first selling a fraction of a unit of cryptocurrency and buying the local fiat currency first before using local fiat currency to purchase items.

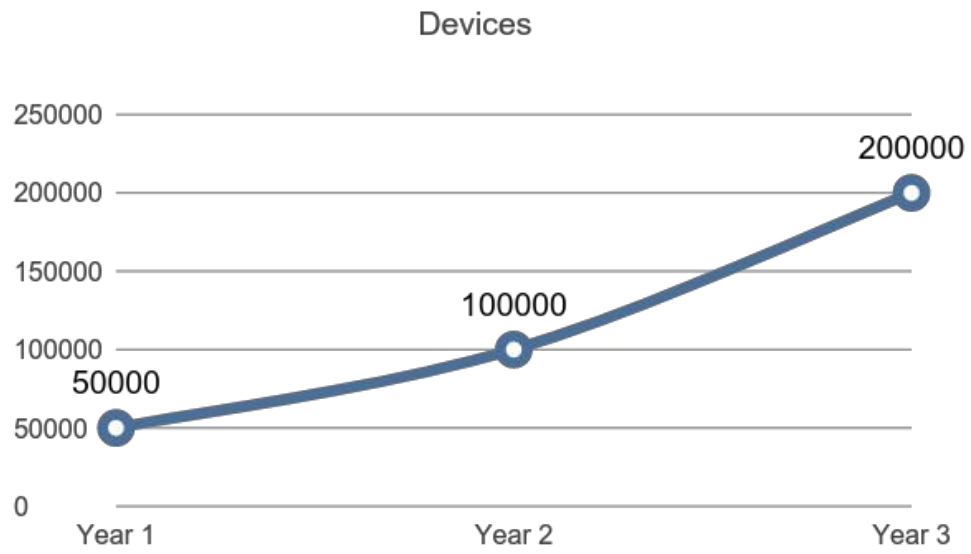


8.2. Targeted growth: 100,000 devices in 3 years

If the upcoming ICO reaches 35,000,000 tokens, our target for an installed base of *Pundi X POS* devices is 100,000 over 3 years. Since these devices constitute a big part of our cost, the amount raised during the ICO will determine device roll out numbers. For example, if we double the amount raised, our network will reach 220,000 *Pundi X POS* devices in three years, and so forth. For more detailed explanation please check Chapter 15.2.

Our plan is to address the global market by implementing an agent-partnership model for markets where we cannot roll out our device immediately. Although our focus remains to roll out our full stack hardware solution, our aim of upgrading the current infrastructure (existing POS devices) globally will allow us to grow faster.

Looking beyond South East Asia, we will be forming these agent-partnership models with the goal of introducing *Pundi X POS* devices in many other parts of the world within the next twelve months.



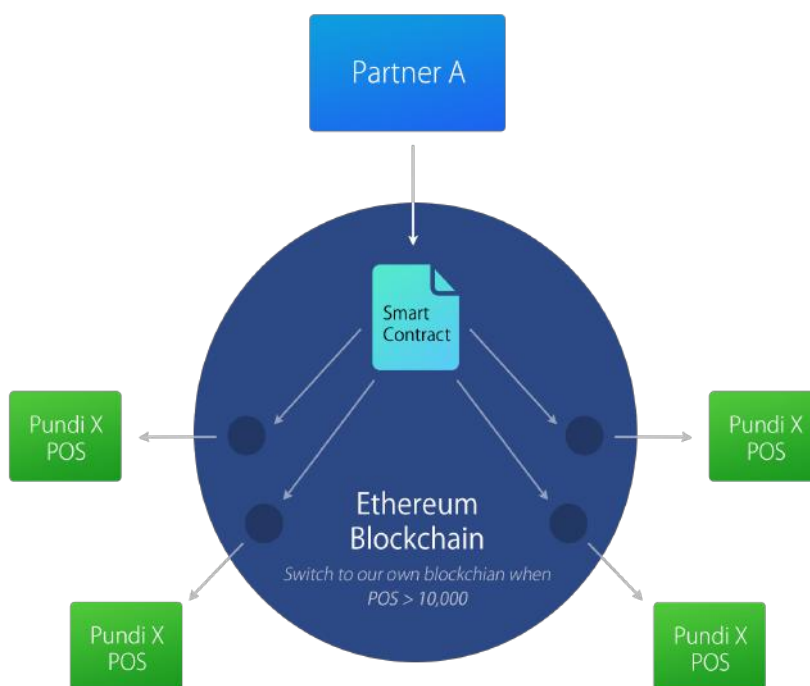
9. Pundi X Blockchain

Every *Pundi X* POS device is connected to the Ethereum and NEM blockchain via *XPlugins*. As a result, each physical outlet is part of the Ethereum and NEM blockchain and developers from all over the world can connect with the *Pundi X* network of devices and physical outlets.

9.1 Pundi X Management Platform

The *Pundi X Platform* is a visual management system consisting of *Pundi X* POS devices and other existing POS devices. Every common man can login to the *Pundi X Platform* to buy or sell cryptocurrencies using the PundiX card and the Pundi-Pundi wallet App. All transactions that are executed by the *PundiX* devices are recorded in the blockchain for easy access and tracking.

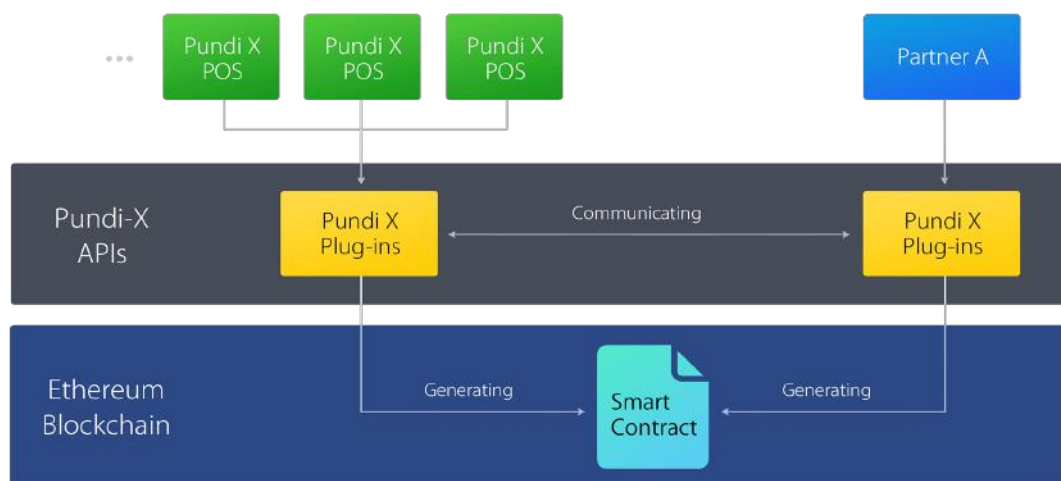
9.2. Connecting stores with Pundi X



The target for *Pundi X* is to enable every POS device & retail store to be part of the blockchain ecosystem. With the *Pundi X Platform*, we now have a cost-effective approach to achieving this goal. Each device is connected to the blockchain using PundiX Platform API - *XPlugins* via two layers: the *communication layer* and the PUNDIXICO

blockchain layer. The *communication layer* delivers a ‘buy’ request and uses the *blockchain layer* to make a record of the sale. This information is then stored permanently in the blockchain. As a result, POS manufacturers all over the world can now collaborate with *Pundi X*.

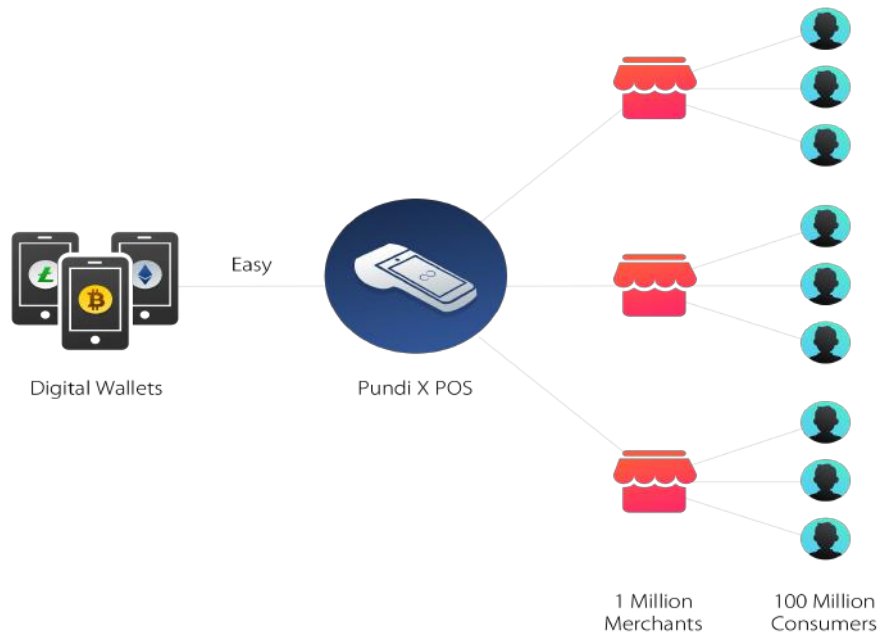
9.3. Selling cryptocurrency stores everywhere



We allow developers as well as cryptocurrency traders and holders to sell their cryptocurrency via our sales network. Major Cryptocurrency and ERC20 tokens can be accepted and sold on Pundi X POS and developers can use XPlugins to connect to digital wallets, creating smart contract requests that can be supported by Pundi X devices. The system automatically generates a smart contract in the Ethereum blockchain after receiving orders from XPlugins.

9.4. Making payments using a digital wallet

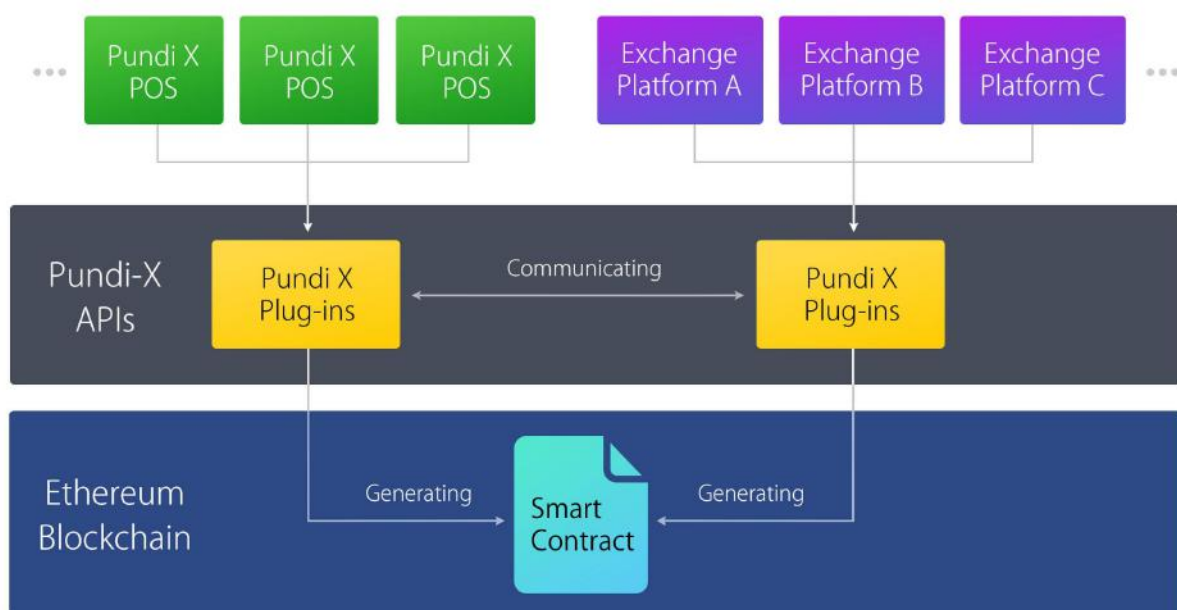
All ERC20 tokens can be used to make payments at *Pundi X* POS device locations. Developers can use digital wallets to connect to the *Pundi X* API and create a smart contract for any individual merchant. Developers can even set different transaction fees for different countries. Once a merchant approves a smart contract, the newly accepted cryptocurrency can be sold in a retail outlet enabling the purchase of everyday goods.



9.5. Connecting to other Cryptocurrency Exchanges

Pundi X POS devices connect to different online cryptocurrency exchanges. Since each online cryptocurrency exchange has a different bid-ask spread and price level, users and merchants decide for themselves which platform best suits their individual needs.

Users can choose their preferred cryptocurrency on various exchanges, and the market will help determine which platform offers the best combination of price and service.



10. Pundi X Token (PXS)

PXS is the token used for *Pundi X*. Token purchaser, crypto traders, crypto developers and trading platform. They can also use PXS as “gas” to fuel transactions in the *Pundi X* ecosystem. For example, people who want to use the *Pundi X sales network* will have to buy PXS. As the *Pundi X* ecosystem grows, so will the demand for PXS and the earliest token purchaser will stand to benefit most.

10.1. Supporting digital wallets on Pundi X

The *Pundi-Pundi* digital wallet app supports the *Pundi X* Wallet API; hence all *Pundi X* features will be carried across to the *Pundi-Pundi* app. For example, using the *Pundi X* Platform you can also buy on *Pundi-Pundi*.

In the future the *Pundi X* Wallet API will be connected to a wide range of digital wallet apps. Many of our business partners’ digital wallet apps are in the process of integrating the APIs. All of these digital wallet apps will enjoy the benefit of access to the broad *Pundi X* ecosystem, including the ability to buy cryptocurrency directly within the app.



11. Progress to Date

Pundi X has been launched by the Pundi team which has already developed highly successful digital wallet apps for South East Asian markets that have grown rapidly to become some of Indonesia's largest Pay-by-QR applications (think **Alipay**).

Pundi X is aiming to become cryptocurrency's largest offline *sales network* - (think **Walmart** or **7-Eleven**) providing the first comprehensive online-to-offline cryptocurrency sales solution that includes:

- a decentralized *sales network*
- a multi-currency (fiat and crypto) wallet
- a decentralized trading platform
- a decentralized ICO platform

Pundi-Pundi is already one of Indonesia's largest QR payment application (think **Alipay**).

12. Roadmap

12.1. Pundi X Platform

We are currently identifying several channel partners to promote the *Pundi X Platform* and *PundiX Card*. In this instance, we have identified the following verticals:

1. Existing POS Device Manufacturers – both hardware and tablet based (ex. Verifone, mSwipe, Kounta, InHouse, etc.)
2. POS Software Developers
3. Crypto Exchanges (ex. Kraken, Bitrex, etc.)
4. Crypto Cards (ex. TenX)
5. Crypto Banks

12.2. Pundi X Banking

Approximately 73% of the population of South East Asia does not have a bank account. In addition, tracking user credit ratings presents a major challenge without a workable credit rating system and so bank loan approval presents many difficulties.

Consequently, *Pundi X* will collaborate with local financial institutions to create an effective credit rating system by addressing the biggest challenges of privacy and decentralized control by using blockchain technologies.

12.2.1.Challenges of storing credit data

Privacy is always a concern when it comes to storing data in the blockchain. Also, the cost and performance of storage are both important considerations: If all the credit rating data generated by users was stored on the Ethereum blockchain today, the system might not be able to handle all the necessary data processing.

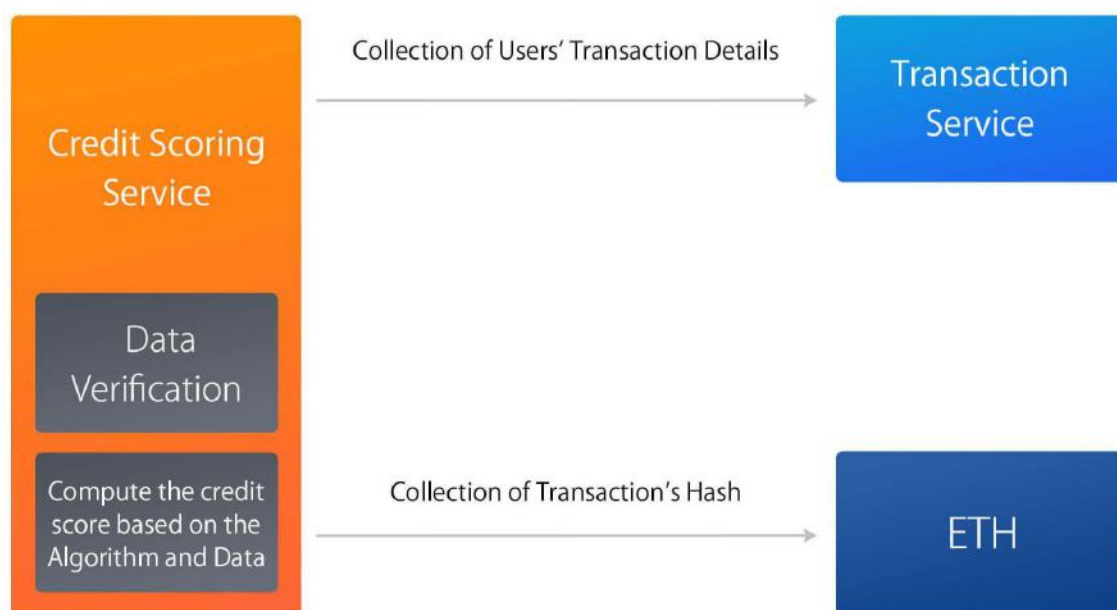
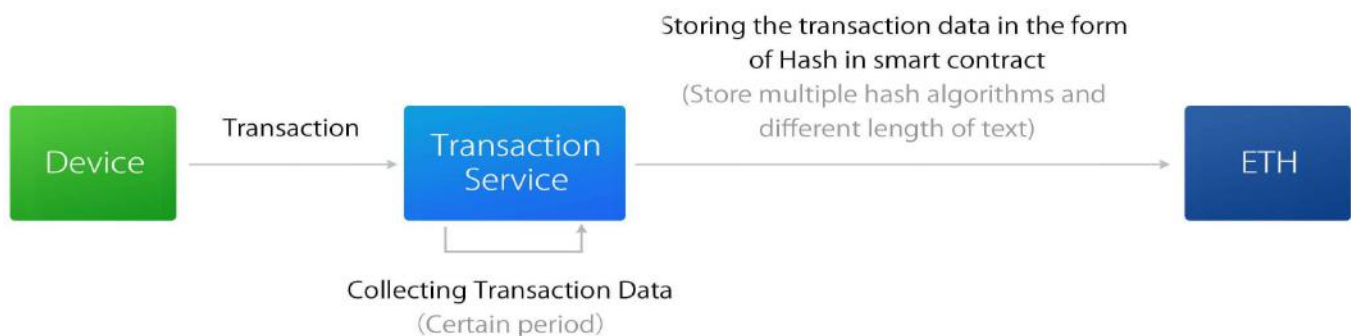
12.2.2.Pundi X solution

To solve this challenge, *Pundi X* has an API suite that connects to the Ethereum blockchain and stores user data in the blockchain in the form of a hash calculation. The aim is to store all data indefinitely - including utility bills history.

Our approach is to store the hash results in the Ethereum blockchain instead of all the credit data. The hash data can then be retrieved and validated in order to check the full set of data stored outside of the blockchain.

By accessing the open database and calculating the results into a hash, *Pundi X* partners can match their results with the hash that is stored in the Ethereum blockchain: if both results match then identity and data-integrity is validated.

By avoiding storing all data in the Ethereum blockchain, we have developed a cost-effective method that also effectively addresses privacy issues. Today, no user data is stored in the Ethereum blockchain, only hashes. Financial institutions can now retrieve credit rating data effectively and perform further calculations on their own servers, while avoiding impinging on client privacy.

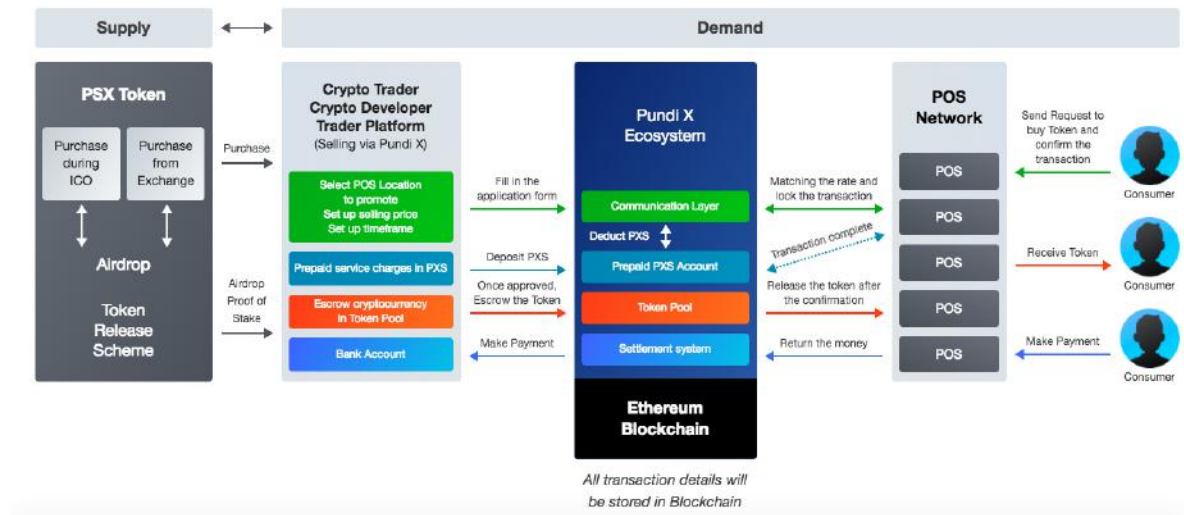


12.2.3.Pundi X advantages

Due to its successful growth, *Pundi X* has a wealth of transactions and other data that is mapped to a wallet or blockchain address, while *Pundi-Pundi* has a great deal of user data such as names, occupation and credit card information. Together, *Pundi X* and *Pundi-Pundi* hold a huge data pool from which anonymized information can be extracted responsibly in order create huge value. This is something that other startups companies are not in a position to achieve.

12.2.4.The workflow of Pundi X

PXS Token Flow



13. Token Release

In this ICO, *Pundi X* will be issuing ERC20 compliant tokens with the ticker “PXS”.

13.1. PXS 3-year release program

We accept Ethereum (ETH) during the ICO and the basic exchange rate between ETH and PXS is $1 \text{ ETH} = 1666.67 \text{ PXS}$ ³ *subject to holding for Three (3) years (36 months) and fulfill the KYC requirement*. However, purchaser will only receive 500 PXS (30%) at the moment, the rest of the 1166.67 PXS (70%) will be entitled only if the Purchaser holds for 3 years (36 months). We will release the rest of the 70% of the PXS token on a monthly basis. Therefore, purchaser who does not hold PXS for 36 months shall be penalized getting lesser PXS token.

In short, the Total receiving token is 1 ETH: 1666.67 PXS; The Initial receiving token is 500 PXS, and the Locked token is 1166.67 Token subject to terms and conditions.

13.2. Selling PXS on our platform

PXS is a key component of the *Pundi X* ecosystem. Any company or individual that wants to connect to the *Pundi X* sales network will have to pay a transaction fee in PXS. Hence anyone that wants to do business in the network will have to buy PXS from the market.

13.3. The PXS discounts

As a token holder, when you shop at any outlet that supports *Pundi X* payments, you will get an additional discount. Whether you are in Bali, Phuket, Bangkok, or anywhere else in the world, you will receive significant benefits according to your status as a Gold, Platinum, Diamond or Black card holder:

- Black Card (*Ranked 1 - 50*); 5% discount for 10 years ;
- Diamond Card (*Ranked 51 - 150*); 5% discount for 5 years ;
- Platinum card (*Ranked 151 - 300*); 5% discount for 3 years;
- Gold card (*Ranked > 300; Contributed >10 ETH*); 5% discount for 1 year.

* Each PXS token holder can only enjoy the special privilege based on one card type. Time limits starts from card issuance date.

³ The exchange rate might be varied from different discount rate.
PUNDIX ICO

14. Compliance

14.1. Legal compliance

Pundi X Labs Private Limited is registered in the Isle of Man. We adhere to the Isle of Man's Financial Service Authority rule by complying with the Virtual Currency Business's Sector Specific AML/CFT Guidance Notes; 2012 Digital Data Protection Act; 2006 Companies Act 1996 Transfer of Securities Act and 2009 Anti Money Laundering Guideline Notes; Know Your Customer Best Practice Guidance Notes; and other relevant regulations.

14.2. Policy compliance

We are a member of the *Fintech Indonesia Association* which maintains official communication channels with Indonesia's *Central Bank* (BI) and *Financial Service Authority* (OJK).



15. ICO

15.1. ICO details

Notes:

- We accept ETH for PXS
- Ratio of 1 ETH = 500 PXS
- This ICO is not an IPO (Initial Public Offering)
- Pre-ICO: Token purchaser can visit the *Pundi X* website before the ICO to pre-register with their email address. Token purchaser will enjoy extra benefit based on the pledged amount.
- PXS amount: If this ICO does not generate 35,000,000 PXS tokens in sales, the company reserves the right to use the remaining tokens for a second ICO. The token price for any second ICO would be greater than in this round. The management reserves the right to terminate this ICO and, if this decision is taken, all ETH fund will be returned to the original token purchaser.

15.2. ICO hard cap

Our hard cap will be 35 million US dollars. Regardless of how the price or cryptocurrency changes, our target will be the same. The number of *Pundi X* POS device distributed will be based on the number of tokens we are able to raise from this ICO.

| Total ETH raised | Number of POS machine | Remarks |
|------------------|-----------------------|---|
| 70,000 | 100,000 | The Marginal Cost of the device will reduce significantly as the number goes up |
| 100,000 | 150,000 | |

The greater amount of funds raised from the ICO, the more *Pundi X* POS's production, installation, operation and marketing costs can be reduced. The device numbers will also create a network effect where more people will use *Pundi X* POS to buy and trade cryptocurrency, and more sellers will sell goods and services on our *sales network*.

15.3. PXS release scheme

We accept Ethereum (ETH) during the ICO and the basic exchange rate between ETH and PXS is $1 \text{ ETH} = 1666.67 \text{ PXS}$ ⁴ *subject to holding for Three (3) years (36 months) and fulfill the KYC requirement*. However, purchaser will only receive 500 PXS (30%) at the moment, the rest of the 1166.67 PXS (70%) will be entitled only if the Purchaser holds for 3 years (36 months). We will release the rest of the 70% of the PXS token on a monthly basis. Therefore, purchaser who does not hold PXS for 36 months shall be penalized getting lesser PXS token.

In short, the Total Receiving token is 1 ETH: 1666.67 PXS; The Initial receiving token is 500 PXS (30%), and the Locked token is 1166.67 PXS(70%) is subject to terms and conditions.

For simplicity, we will only show $1 \text{ ETH} = 500 \text{ PXS}$ on our official website.

For this round, ICO token purchaser will hold 20% of the total PXS token supply; while the founders, management, company, advisors and ICO marketing expenses will together hold another 10%. (For details please see 11.6). The remaining 70% of the tokens will be released based on Proof-of-Stake to all token holders including the founders, management, company, advisors and marketing campaign.

The system will release the rest of the PXS tokens based on the percentage of the PXS tokens that a holder possesses immediately after the first month of the ICO campaign. The entire release scheme will last for 3 years.

The system will determine the PXS tokens amount after the ICO, and based on that we will be able to determine the precise PXS tokens released each month. Users can login to our website to check the monthly PXS tokens released. The system will release the tokens from the token pool.

When the entire remaining tokens are released, the PXS tokens will reach almost 100%, and the outstanding minuscule percentage will be distributed in the final month. We will announce the detailed PXS release scheme and the exact release percentage each month after the ICO.

So how do we calculate?

If 35,000,000 tokens are created from this ICO, Alice contributes 1 ETH, which she shall be entitled of 1666.67 PXS. She will receive 500 PXS by the time she pledges, the rest of the 1166.67 PXS token will be released in the next 36 months. On the first day of the 6th month after the ICO she will have over 763 PXS (500+263), on the first day of the 10th month she will have 1013 PXS (500+513), on the first day of the 16th month she will have 1268 PXS (500+768) ; On the first day of the 24th month she will have 1500 PXS (500+1000); On the first day of the 36th month she will have

⁴ The exchange rate might be varied from different discount rate.

1666.67 PXS (500+1166.67). During this period Alice will need to execute the smart contract and fill in the KYC form as stipulated to unlock the tokens.

* due to the fact that we will only be able to calculate the exact token distribution after the ICO. The smart contract token distribution will be generated after the ICO to determine the exactly monthly distribution amount. ICO token holders can visit our website for more details or query the smart contract directly.

15.4. Release scheme implementation

From the 1st to 10th of every month, token holders can execute the smart contract in any ERC20 supported wallet to know the exact PXS tokens from the previous month. They will also be able to claim the bonus tokens based on the monthly basis. Execution steps are as below:

- A. *User executes smart contract in an ERC20 wallet and fill in the KYC form in official website;*
- B. *Release scheme starts on the second month after receiving PXS, user can choose to execute the smart contract from any of the 2nd till the 7th month, in order to receive the release tokens from the previous 1st till the 6th month;*
- C. *Smart contract determines the number of tokens in an address from the previous month (final day at 23:59), if the smart contract detects that user have not claimed the release tokens for several months, it will then determines the unclaimed released tokens of each month (final day at 23:59), and returns all released tokens;*
- D. *Tokens unclaimed more than six months will be forfeited. Each time a smart contract is executed, the maximum release tokens are for a maximum of six months;*
- E. *Calculation: determine the month(s) of PXS token counts of each month (final day at 23:59) of an address, multiply by the month(s) to determine the release token numbers;*
- F. *On the last day of each month, Pundi X will activate a smart contract to determine unclaimed bonus tokens over six months, unclaimed bonus tokens will be announced and kept for further usage;*
- G. *All times are GMT+8.*

Note: The Release scheme will kick start from 1st December 2017. Token holders join after 30th November 2017 23:59 shall only entitled to 35 months release distribution

15.5. Fund usage

| | R&D | Offline promotion & installations | Operations | Others |
|-----------------|----------------|--|-------------------|---------------|
| < 20 mil tokens | 30% | 50% | 10% | 10% |
| < 30 mil tokens | 21% | 63% | 8% | 8% |
| > 30 mil tokens | 18% | 68% | 7% | 7% |

15.6. Reserved PXS

Based on the number of tokens created during the ICO, we will create an additional portion for our founders, management, company, advisors and for payment for ICO marketing expenses.

Assume in this ICO 'A' amount of PXS is created, the percentage of tokens will be distributed for the additional portions are:

- 'A' x 25% to the founders and management;
- 'A' x 20% to the company, reserved for current and future employees;
- 'A' x 5% to the advisors and ICO marketing expenses.
- Reserved tokens will be unlocked at a rate of 10% each month.

Calculation:

For example after the conclusion of the ICO, if we have created 35,000,000 Tokens, the

reserved tokens created on top of the tokens from the ICO are indicated below:

- 8,750,000 tokens for founders and management;
- 7,000,000 tokens for company, reserved for current and future employees;
- 1,750,000 tokens for advisors and ICO marketing expenses.

16. Team

16.1. Team Members

Our team is based in Jakarta, Indonesia and Shenzhen, China

- Jakarta is our management and operations centre with 15 staff
- Shenzhen is our R&D centre where 14 staff are based.



Pic 1: Jakarta team



Pic 2: Shenzhen team

16.2. Management



President Advisor: Constantin Papadimitriou (Kiki)

Kiki has 17 years' experience as Founder and CEO of two of the biggest Fintech companies in Indonesia - Infinetworks and E2Pay; He has an M.Sc Computer Science (Purdue University) and B.Sc Computer Science (University of Tulsa). Kiki is a film lover.



CEO: Zi Bin (Zac) Cheah

Zac is the former W3C Chair of HTML5 Interest Group. He was a scholarship recipient at Sweden KTH (M.Sc Computing) and Norway NTNU (M.Sc Security). Zac has spent 12 years in tech and is a sports fan from Malaysia.



CTO / COO: Huang Pu (Pitt)

Pitt is an entrepreneur who sold his first GroupOn-like company at the age of 25. He has started and sold several businesses, including a 200 person company. Pitt studied a B.Sc Engineering at Xi'An Polytechnic University. He is a gadget lover.



CFO: Danny Lim Wei Xiang

Danny is an APAC financing expert who has product design experience with Baidu and Lenovo. Danny is a Phd law scholar from Tsinghua University and hold ACMA and CGMA accounting qualifications.

17. Legal & Ownership

Pundi X Labs Private Limited is a registered private limited company in the Isle of Man, which is the legal entity that owns the *Pundi X* POS device, and also takes responsibility for PXS Tokens issuance, distribution, management, disposal of tokens and other business activities.

Wokoworks Technology HK Limited is a registered Hong Kong Company, it has several products, including but not limited to *Pundi-Pundi*, *Scanbersama*, *Pundi Booster* and *Pundi Toko*. In accordance of the Law of Hong Kong, the ownership of the products stated above belongs to Wokoworks Technology HK, and it is entitled to license third party use, distribution to others and other relevant rights.

Wokoworks Technology HK Limited has granted PT. Wokoworks Technology Indonesia the license to use the technology and products (including but not limited to *Pundi X* POS device, *Pundi-Pundi* apps, *Scanbersama* and *Pundi Booster*).

18. Jurisdiction Risks

18.1. Indonesia

Pundi X POS device, *Pundi-Pundi*, *Scanbersama*, *Pundi Booster* and others are distributed and promoted in Indonesia through Google Play and the iOS AppStore. They use *Pundi X* technologies and tokens. The Indonesian authority has stated that cryptocurrency can be bought and sold as virtual goods. However, it is not allowed to be treated as currency. We will abide by this rule.

We are in the final phrase of agreement to use an e-money license with a partnering company. According to Indonesian law, an e-money license is one of the essential licenses in the Fintech business in Indonesia, it allows the user to deposit, pay, withdraw and transfer money online. We are also actively seeking counsel from Indonesia's *Central Bank* (BI) and *Financial Service Authority* (OJK).

18.2. Malaysia

We are actively seeking advice from the National *Bank of Malaysia*, and we have officially submitted our application to participate in digital payment and financial sandbox testing.

18.3. Thailand

Thailand has allowed the trading of cryptocurrency, and the country is a host to several token and blockchain companies including *OmiseGo*. Thailand is our next target market.

19. Risks & Indemnity

The information contained in this Offering Memorandum (or white paper, hereinafter 'Memorandum') is intended only for the persons to whom it is transmitted for the purposes of evaluating *Pundi X* PXS tokens offered hereby. Prospective purchasers should not only rely on the information in this Offering Memorandum. We strongly encourage Purchasers to do their own research. No persons are authorized to give any information or make any representation in respect of the Project or the Token offered herein and any such information or representation must not be relied upon. This Offering is a private placement and is not, and under no circumstances is to be construed as, a public offering. *The Pundi X* PXS Tokens are being offered in reliance upon exemptions from the registration and disclosure requirements set forth in applicable legislation. This Offering Memorandum does not constitute an offer for sale of securities for sale, nor a solicitation for offers to buy any securities.

19.1. Anti-Money Laundering (AML)

Purchasers agree that he or she shall not participate any money laundering, illegal currency exchange and other restricted activities in any form via *Pundi X* Token and other relevant derivatives (if any). Each purchaser shall understand that he or she will be restricted from selling, exchanging and disposal the *Pundi X* Token and other relevant derivatives directly or indirectly for the purpose of Money Laundering.

19.2. Countering the Financing of Terrorism (CFT)

Purchaser agrees that he or she shall not participate in any financing, exchanging and supporting activities for the purpose of financing of terrorism via *Pundi X* Token and other relevant derivatives (if any). Purchaser shall understand that he or she will be restricted from selling, exchanging or disposing of the *Pundi X* Token and other relevant derivatives for the purpose of Financing of Terrorism.

19.3. Purchasers' Obligation

Due to legality issues, this Offering is being made to, and subscriptions will only be accepted from, persons resident or citizen not in following regions or countries, including but not limited to Mainland China, United States, Malaysia and other regions or countries that forbid ICOs. This Offering is being made pursuant to certain exemptions contained in the Isle of Man's Designated Business Act.

19.4. Statement

Due to the frequent changes in the relevant policy, law and regulation, technical, economic and other factors, the information provided in this Offering Memorandum might not be accurate, reliable and final, and may change on multiple occasions. THE

INFORMATION PROVIDED IS FOR REFERENCE ONLY. The Team shall not be responsible for the accuracy and legitimacy of the information provided. Prospective purchasers should not only rely on the information in this Offering Memorandum. We encourage Purchasers to do their own research.

In essence, this memorandum is a business proposal or business promotion documents; it shall not in any case be legally binding. The content stated in this document is just for reference, Token buyers shall take extra precautions.

19.5. Language

This document may have several language versions, if case of any dispute; we shall refer to the English version as final.

19.6. Confidentiality

This Offering Memorandum is confidential and has been prepared solely for delivery to and review by selected prospective purchasers of the Token offered hereby. Distribution of this Offering Memorandum to any person other than the person to whom it is delivered and those persons, if any, retained to advise such person with respect thereto is unauthorized, and any disclosure of any of its contents without the prior written consent of the Corporation is prohibited. This copy of the Offering Memorandum is personal to the person to whom it is delivered and does not constitute an offer to any other person or to the public generally to subscribe for or otherwise acquire any of the token offered hereby.

19.7. THIS IS A SPECULATIVE PROJECT

The offer of *Pundi X* Tokens in this Memorandum must be regarded as highly speculative due to the nature of the Corporation's business and its relatively early stage of development. Purchasers shall understand the underlying risk. The purchase of the tokens is suitable only for purchasers who are able to accept the risks inherent in the Project's business. In addition, there are a number of other risk factors that should be considered by persons proposing to purchase the *Pundi X* Token. Purchasers should consult their own professional advisors to assess the income tax, legal and other aspects of the issue.

20. Contacts

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Douglas, Isle of Man, IM2 4RW

Singapore:

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10 Anson Road #26-04
International Plaza
Singapore 079903

Jakarta:

PT. Wokoworks Technology Indonesia
Central Jakarta, Jalan Jenderal Sudirman,
Sahid Sudirman Center, 56th Floor,
Jakarta, Indonesia

Shenzhen:

Wokoworks Private Limited
Nan Shan District, Hai Tian Road,
Software Industrial Park,
Shenzhen, PRC