PITISCOIN™

WHITE PAPER

ABSTRACT

The surge in the growth of digital currencies has been exponential with Bitcoin leading the masses. Each coin is competing against each other in a race of adoption that would mean sustainability. And blockchain technology is the driving force behind all of it, paving the way to support the significant digital transformation from finance, to healthcare and the music industry, even politics. The core concept that drives its adoption is an open distributed ledger that holds a complete historical record of every transaction that promises integrity in its verification process within a peer-to-peer network. Pitis is leveraging on this technology to become a valuable currency that can be used as a complement to real money. Backed by technology that proves to be immutable and incorruptible, Pitis will be a brand new currency that is trusted everywhere.

Table of Contents

Introduction

Since the birth of Internet in the early 1950s, libertarian cryptographers have been dedicating themselves in realising the idea of digital money - convenient and untraceable, beyond the control of government and banks. Cryptocurrency was a term first described in 1998 by Wei Dai [1] on the cypherpunks mailing list, suggesting the idea of a new form of money that is created, controlled and managed by cryptography, instead of a central authority. In 2009, a white paper on a peer-to-peer cashless system was published by Satoshi Nakamoto. He proposed an electronic payment system that was based on cryptographic proof instead of trust [2]. It also eliminates the need of a third party to oversee a transaction between two parties.

At the time, the public's confidence on the US government and financial institutions was at an all time low as a result of the 2007-2008 Global Financial Crisis [3]. Bitcoin offered an alternative to the people who had lost faith in the system. The idea of a transaction system that liberated itself from the control of financiers and government was downright appealing.

In his white paper, Satoshi Nakamoto explained the process of creating and completing transactions. The goal of Bitcoin is to create a decentralized environment where transactions occur without third party interference. In order to achieve that, two issues needed to be addressed: 1) transactions have to be verified to ensure that double-spending did not occur, and 2) an incentive program so that the network remains healthy and robust. Bitcoin addresses both issues through the use of a proof-of- work system1 to verify the transactions that flood the network. The system is made up of nodes, essentially computers, that work together to reach a consensus regarding a transaction.

By convention, Satoshi Nakamoto created the first block of the block chain; called "Genesis Block" that contains a single transaction, which generated 50 cryptocurrency called Bitcoin, to the benefit of the creator of the block [4]. As an incentive for the nodes to work for the network, Bitcoin introduced a reward system for the working nodes, called "miners". Miners are paid a fraction of the amount of new Bitcoins created through the process, as well as the transaction fees to compensate for the electricity expended.

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1 Proof-of-work is essentially a mathematical competition, whereby the first node that solves the puzzle will receive a reward in the form of the created coins.

It is important to note that the Bitcoin ecosystem is a representation of the underlying economic theory of self-interest [5]. Adam Smith, who is considered the father of modern economics, expanded on this subject in his magnum opus, "The Wealth of Nations". In the book, he posits that humans act rationally and thus, would typically act in their own self-interest. Consequently, when parties act, or interact, based on self-interest, unintended benefits are produced.

The whole process in the Bitcoin system ensures that the network serves everyone's interests. The user, in wanting to be free of third party control, utilises the Bitcoin network as a transaction system, whereas the miners who motivated by profit, keeps the whole system operational and healthy. It is this ecosystem that Pitis envision for its community. A system where government plays a small role, or none at all, and liberated from the need to rely on third party intermediaries while carrying out transactions.

Background

In a whole economic system, transactions are considered the building blocks. In a market, buyers and sellers make transactions for the same thing - essentially any exchange of money for goods and services. A simple and straightforward transaction would likely involve two parties witnessing and verifying the exchange process. In a more complicated system, we rely on third party intermediaries such as banks and credit cards providers to oversee and validate transactions. Bitcoin, and by extension blockchain technology, eschew the need for third party reliance.

Bitcoin is considered as the first successful application of blockchain technology. Blockchain technology is a distributed database that is shared - and continually reconciled - in the network. The data is recorded in a public ledger and every node - computer connected to the blockchain network - are privy to the information of every transaction ever completed [4]. In order for a transaction to be completed, it has to be validated and relayed back by nodes, which are anonymous. This attribute ensures that the system remains transparent and remains decentralized. The blockchain ledger is not stored in any single location and virtually incorruptible by hackers as it will require a large amount of computing power to alter any unit of information on the blockchain.

It is important to note that though Bitcoin is monopolizing the cryptocurrency market at the moment, other cryptocurrencies termed as "altcoins" are created almost every day. Altcoins are gaining acceptance and market value at a rapid pace. To put some perspective into the market value of cryptocurrencies, at the time of writing2, the total market capitalization3 of all cryptocurrencies is just over USD$100 billion with Bitcoin leading the market at USD$45 billion. One unit of Bitcoin now is worth more than USD$2700, a jump of nearly 2000% since its conception. Ether, a known competing altcoin of Bitcoin has a market capitalization of just over USD$20 billion and is valued at $220. And Bitcoin Cash, a cryptocurrency that separated from Bitcoin4, is growing at an unbelievable rate with a market capitalization of USD$8 billion within one day of conception, making it the third biggest cryptocurrency in the market.

2 The information is relevant as of August 2017

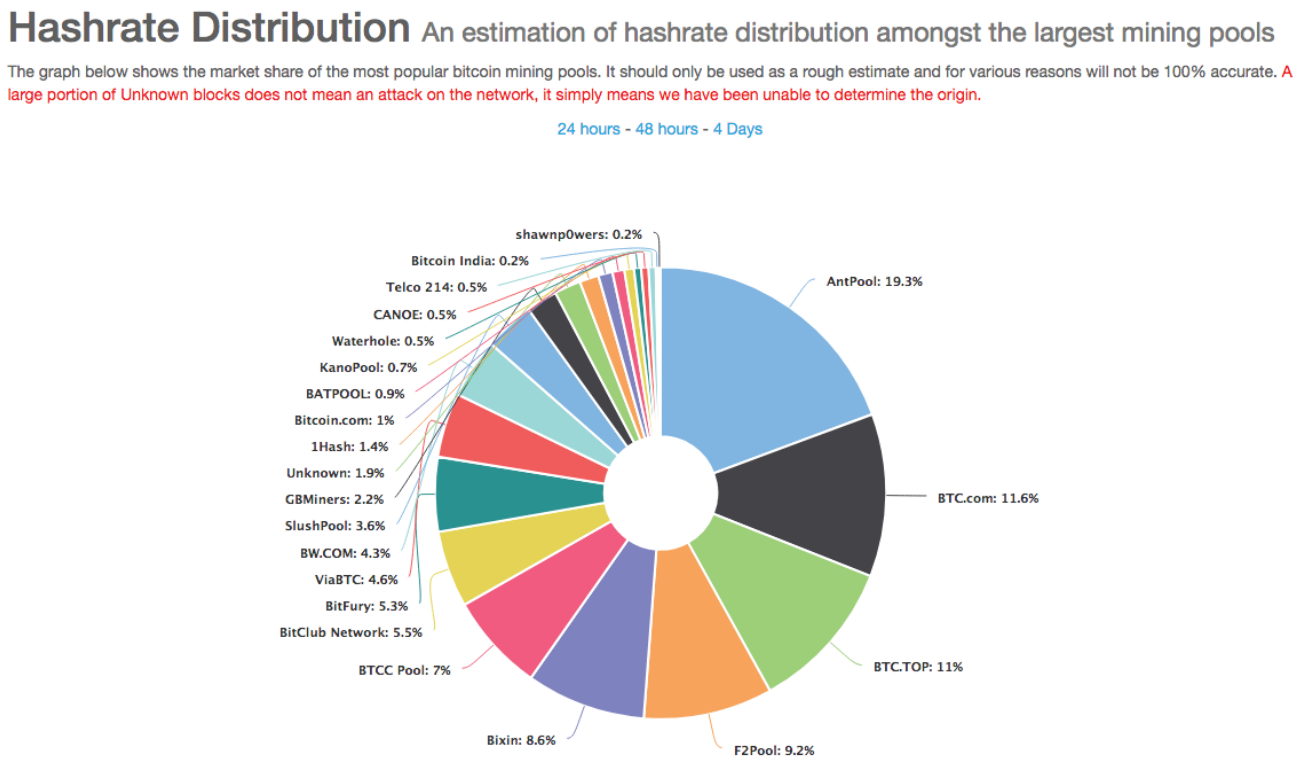
3 Market capitalization are calculated as the total units of cryptocurrency available multiplied by the current value in US Dollars.

4 Bitcoin went through a 'hard fork' that split the cryptocurrency into two. More information available from: https://bitcoinmagazine.com/tags/hard-fork/

The rapid growth of the ecosystem has put it alongside major banks, including Commonwealth Bank of Australia which has a market capitalization of USD$105 billion, the Royal Bank of Canada and Bank of China with a USD$100 billion and USD$124 billion market capitalization respectively [6]. Other businesses with similar rapid growth such as Airbnb (USD$30 billion market cap)[7], Uber (USD$70 billion market cap)[8] and Xiaomi (USD$46 billion market cap)[9] has fallen far behind. The surge in the cryptocurrency market is a positive signal considering it is still in its nascent stage. With the advancement in the blockchain technology behind all the growing cryptocurrencies, as well as the increasing adoption rate all over the world, we can extrapolate that the ecosystem will enjoy more growth in years to come.

Most importantly, the whole system is driven by a network of miners who processes transactions within it. If transactions are the building blocks of an ecosystem, nodes or miners, are the backbone that ensures perpetuity and sustainability. Referring back to Adam Smith's statement on self-interest, as long as there are incentives for the miners, they will continue to expend their effort in processing transactions in the network.

Mining cryptocurrencies can be considered as a profitable activity as long as there are coins to be mined. Adam posits that the amount of mining power devoted to a cryptocurrency is positively correlated to its value in his empirical analysis [10]. He asserts that a rational miner, in pursuit of profit, would employ significant mining resources towards that effort. Consequently, we can infer that the amount of mining power is a proxy to the overall acceptance and use of the cryptocurrency. The best example in this case would be bitcoin. Below is an image of the distribution of Bitcoin mining pools:



Economic and Demographic Considerations

The market for cryptocurrency is vast, if not infinite in its potential. Blockchain technology is a complex technology that is still in the cusp of early research. As the rate of its adoption increases the biggest players will be those who - though may not have the first-mover advantage like Bitcoin - are early adopters of the technology, and we would like to be amongst those numbers.

Simply creating a new cryptocurrency with a specific purpose and its own set of functions may not be sufficient to ensure massive acceptance from the public. Not all problems need a solution. And if the problem only pertains to a group of people, the cost of finding the solution might not be worth the reward. Therefore, we believe that we need to go back to fundamentals.

Bitcoin may have been the magnum opus of cryptocurrency and is leading the market, yet there are parts of the world that are still hesitant in embracing digital currencies. The similarity to a catch-22

situation is uncanny: a mass adoption of cryptocurrencies could ensure stability, yet it is precisely the price volatility that is preventing mass adoption [11]. The goal of Bitcoin is to become a decentralized payment system, giving power to people through liberation from third party reliance.

What we propose is a cryptocurrency that will be used alongside fiat currency. A complementary payment method that people can opt-in and opt-out, depending on their needs. As reiteration, merely the creation of a cryptocurrency will not consign it value, therefore we believe that by leveraging it on a profitable activity (mining), we would increase the value of the cryptocurrency linked to the activity.

It is an accepted knowledge that mining is not for everyone. The initial investment can be costly and there are various factors to consider including the hardware costs, electricity and power consumption. We have chosen Malaysia as a strategic location to build our mining farm for these reasons. Malaysia has one of the lowest electricity tariffs in the Asean region [12] and we plan on using that advantage to set up and manage our mining farm.

The goal of this paper is to introduce a new cryptocurrency that leverages on cryptocurrencies mining activity to add value for its holders. In the first part of this paper, we will expound on how value of Pitis can be created with the backing of real world profitable activity. In the second part, we will illustrate our business model and roadmap that will extend the application of Pitis in other services to raise its value in the market for a higher return in investment.

Mission Statement

Our objective is simple. We want to create a currency that has value. With the advent of blockchain technology, the first part of the objective is easily achievable. However, a cryptocurrency, regardless of the fact that it is created through advanced technology is merely a tool with no inherent value. Let us look back at Bitcoin as an example. Bitcoin was created at the tail end of a financial crisis, lauded as a solution to privacy issues. At the time, people had begun to look for an alternative for banks and this created a perceived value for Bitcoin. In an article by Marshall Val Alstyne, he posits that Bitcoin gained its value for four reasons: 1) it solved double-spending problem, 2) enables frictionless commerce as transaction fees approach zero, 3) its protocol guarantees from fraud and 4) acceptance as a medium of payment [13].

We envision a cryptocurrency that will be used in complement to fiat currency in Malaysia. A cryptocurrency that is based on blockchain technology would open up new possibilities for other potential application of the technology. Mass adoption in Malaysia would ensure the stability of a new cryptocurrency, and thus, we believe that we could bring Pitis to greater heights and be accepted as a working currency in the South East Asian region and subsequently, the Muslim world.

The South East Asian region make up 8.62% of the world's population or about 647 million people with an average growth of 1.09% per annum5 . Whereas the Muslim population makes up 23% of the world's population or about 1.8 billion people with an average growth of 3% per annum, more than half of the Muslim population lives in the South Asia and Asia Pacific. According to a research conducted by the NASDAQ, the global halal industry is valued at USD$2.3 trillion, and growing at an estimated annual rate of 20% [14]. From the statistic alone, we can infer that the potential for a cryptocurrency to penetrate the market as a universally accepted currency is very promising.

CORE OBJECTIVES

Phase I - Build and Operate Mining Farm for profit-sharing

Our first goal is to build and operate the biggest mining farm in Malaysia and South-East Asia. The mining farm will be used to mine a variety of high-valued cryptocurrency including, but not limited to, Bitcoin, Ether, ZCash, Litecoin and Ripple. We will start with 1000 rig and expand our capacity depending on the outcome of our yearly activity.

First year : 1000 rig - TNB plus solar energy

Second year : 5000 rig - TNB plus solar energy and gas turbine

Third year : 10,000 rig - Gas turbine

Fourth year : 100,000 rig - Coal energy

As a Pitis token holder, you will receive *hibah* (gift) of up to 20% of the profit gained from mining for 5 years until 2022. The *hibah* will be offered in PTS or any other cryptocurrency denomination that is mined. In order to be eligible as a *hibah* recipient, the token holder must:

1) Open two accounts: one for savings/investments and another as a current account;
2) hold the total amount of PTS bought during ICO for at least a year;
3) withdraw only hibah received in PTS; and
4) hold a minimum of 1000 PTS in their account thereafter.

Phase II - Mass use of Pitis as an online medium for payment

We have already developed an e-wallet that will be used exclusively for Pitis holders, Kodinar blockchain. Pitis holder would have the benefit of a secure and simple form of Pitis storage that can be downloaded from or website. With Kodinar blockchain, users can store Pitis as well as any other cryptocurrencies that are supported by the wallet. We are also in the development of Kodinar Debit Card, which will utilise Visa, enabling the card to be used anywhere in the world that accepts Visa- issued cards.

Other products in the line include an exchange platform for paired cryptocurrencies with Pitis as well as Pitis to fiat currency. Our partners who are owners or affiliates of online stores will also

participate as vendors that accept Pitis as payment. Our vision is that within two years of its conception, the demand for Pitis will increase and consequently, its value increase to the benefit of its holders.

Pitis Development Process

Pitis is built on Ethereum, an open software platform that is based on blockchain technology, where developers can run smart contracts. With the introduction of ERC20 token standard, the issued tokens are made more easily interchangeable and the tokens can also work with decentralized applications (Dapps) that adhere to the same standard. The open-source code for the token is as below:

```
pragma solidity ^0.4.2;

/*
This token is a test token
*/

contract owned {
    address public owner;

    function owned() {
        owner = msg.sender;
    }

    modifier onlyOwner {
        if (msg.sender != owner) throw;
        _;
    }

    function transferOwnership(address newOwner) onlyOwner {
        owner = newOwner;
    }
}
```

```
contract token {
    /* Public variables of the token */
    string public standard = 'Token 0.1';
    string public name;
    string public symbol;
    uint8 public decimals;
    uint256 public totalSupply;

     /* This creates an array with all balances */
    mapping (address => uint256) public balanceOf;

    /* This generates a public event on the blockchain that will notify clients */
    event Transfer(address indexed from, address indexed to, uint256 value);

    /* Initializes contract with initial supply tokens to the creator of the contract */
    function token(
        uint256 initialSupply,
        string tokenName,
        uint8 decimalUnits,
        string tokenSymbol
        ) {
        balanceOf[msg.sender] = initialSupply;              // Give the creator all initial tokens
        totalSupply = initialSupply;                        // Update total supply
        name = tokenName;                                   // Set the name for display purposes
        symbol = tokenSymbol;                               // Set the symbol for display purposes
        decimals = decimalUnits;                            // Amount of decimals for display purposes
    }

    /* Send coins */
    function transfer(address _to, uint256 _value) {
        if (_to == 0x0) throw;                              // Prevent transfer to 0x0 address. Use burn()
instead
        if (balanceOf[msg.sender] < _value) throw;          // Check if the sender has enough
        if (balanceOf[_to] + _value < balanceOf[_to]) throw; // Check for overflows
        balanceOf[msg.sender] -= _value;                    // Subtract from the sender
        balanceOf[_to] += _value;                           // Add the same to the recipient
        Transfer(msg.sender, _to, _value);                  // Notify anyone listening that this
transfer took place
    }

    /* This unnamed function is called whenever someone tries to send ether to it */
    function () {
        throw;     // Prevents accidental sending of ether
    }
}
```

```
contract MyAdvancedToken is owned, token {

    mapping (address => bool) public frozenAccount;

    /* This generates a public event on the blockchain that will notify clients */
    event FrozenFunds(address target, bool frozen);

   /* Initializes contract with initial supply tokens to the creator of the contract */
    function MyAdvancedToken(
        uint256 initialSupply,
        string tokenName,
        uint8 decimalUnits,
        string tokenSymbol
    ) token (initialSupply, tokenName, decimalUnits, tokenSymbol) {}


    function freezeAccount(address target, bool freeze) onlyOwner {
        if(msg.sender == owner) throw;
        frozenAccount[target] = freeze;
        FrozenFunds(target, freeze);
    }

    /* transfer from account to account but only the original account has the right */
    function transferDari(address _from, address _to, uint256 _value) returns (bool success) {
        if (_to == 0x0) throw;                               // Prevent transfer to 0x0 address. Use burn()
instead
        if (msg.sender != _from) throw;                      // Prevent user transferring from another
account
        if (balanceOf[_from] < _value) throw;                // Check if the sender has enough
        if (balanceOf[_to] + _value < balanceOf[_to]) throw;  // Check for overflows
        balanceOf[_from] -= _value;                          // Subtract from the sender
        balanceOf[_to] += _value;                            // Add the same to the recipient
        Transfer(_from, _to, _value);
        return true;
    }

}
```

Mission Statement

For the first 5 years of conception, Pitis verification process will use proof-of-stake protocol before reverting to proof-of-work. Proof-of-stake (PoS) aims to replace the way of achieving consensus in a distributed system; instead of solving the Proof-of-Work, the node which generates a block has to provide a proof that it has access to a certain amount of coins before being accepted by the network. This proof of ownership is achieved by sending a specific amount of coins to their own accounts. The network will then choose a creator for the next block in a deterministic way[6] depending on the stake that has been put in.

[6]The process is similar to Nxt, and Blackcoin, where they use randomization to predict the following block creator, using a formula that combines the size of the stake with a search for the lowest hash value.

Model

ICO

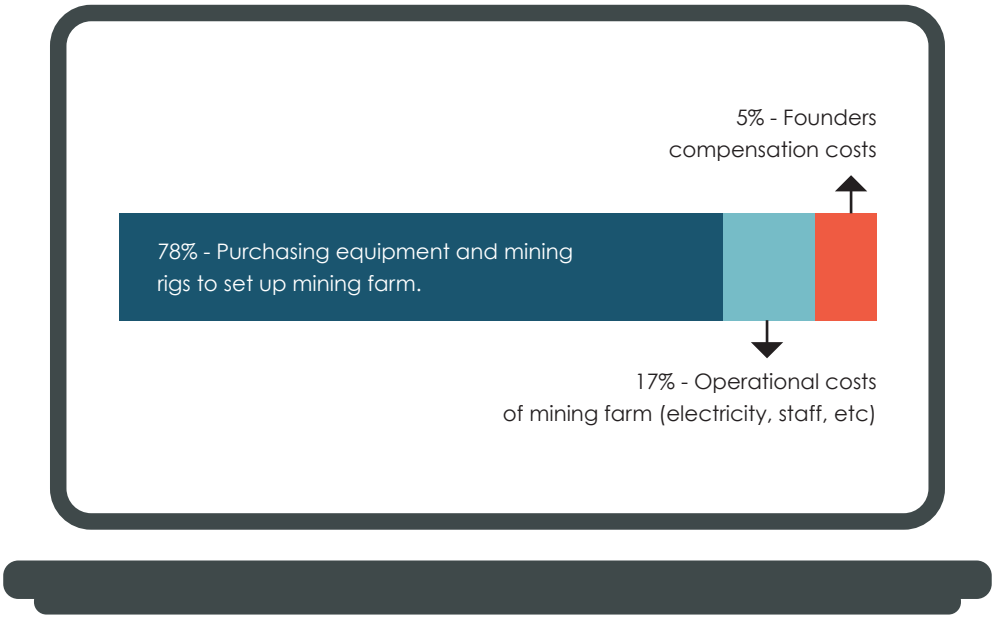
Pitis coin will be released for purchase in two waves, the first on the 01.09.2017 and the second on 16.09.2017. 1 billion pitis will be issued for both waves. The schedule of price is as follows:-

Week 1	**1 PITIS = USD 0.07**
Week 2	**1 PITIS = USD 0.09**

When the ICO is complete, the initial recommended price for Pitis trading is 1 Pitis = USD 0.25.

Business Plan

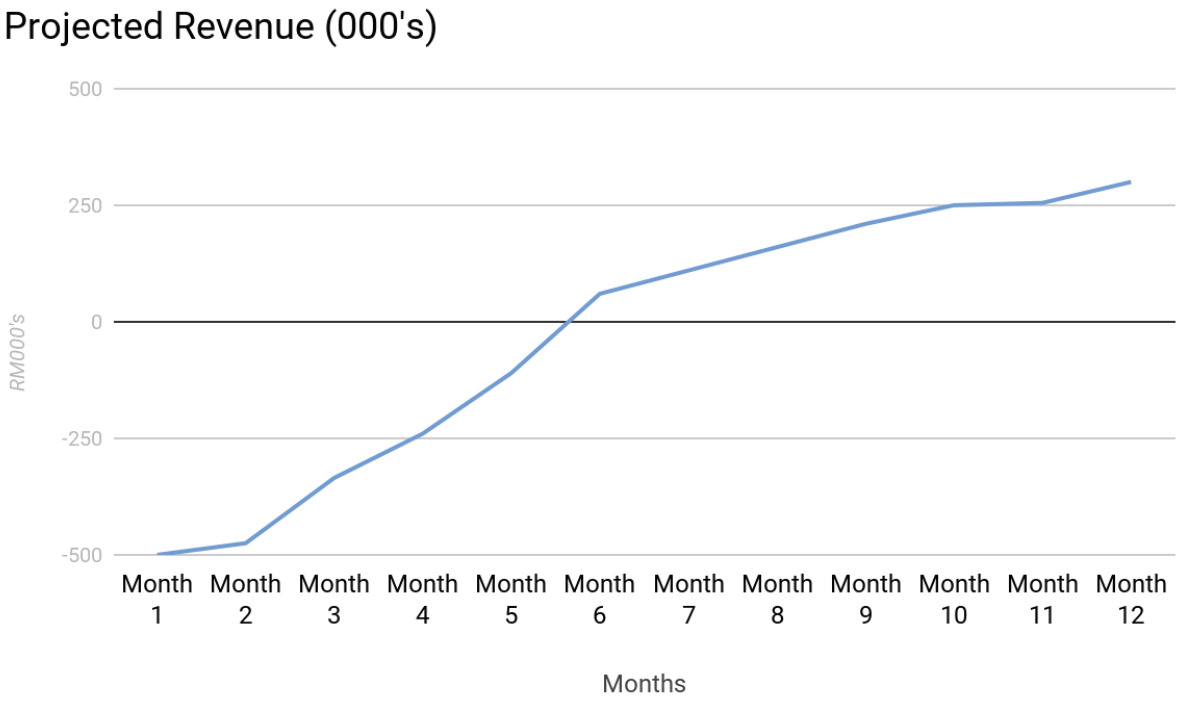
The amount collected during the pre-sale and token launch will be distributed as follows:-



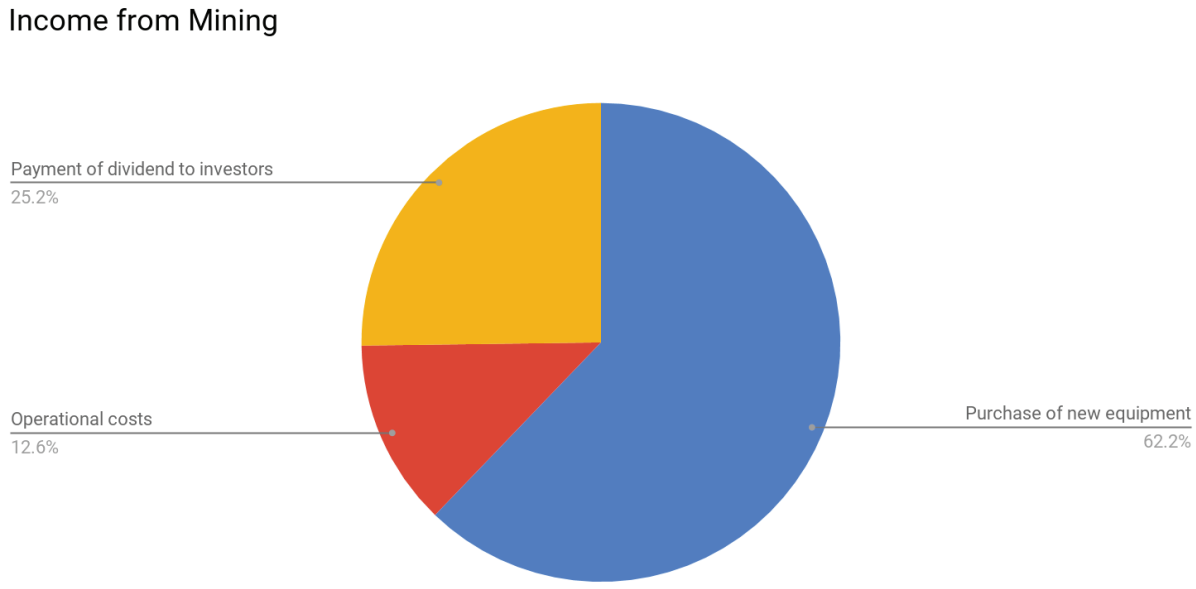
The initial costs for setting-up a mining farm in Malaysia is approximately USD40 million including purchase of mining rigs and other technical equipments, technical hire for installation and maintenance, deposit on electricity and other miscellaneous costs.

As a move to support non-profit organisations that are making the world a better place to live in, parts of the ICO will go towards supporting a development project to build and operate an autism therapy centre in partnership with PasarWafa™ and Waqfeya Project.

A chart of the projected revenue is provided below:-

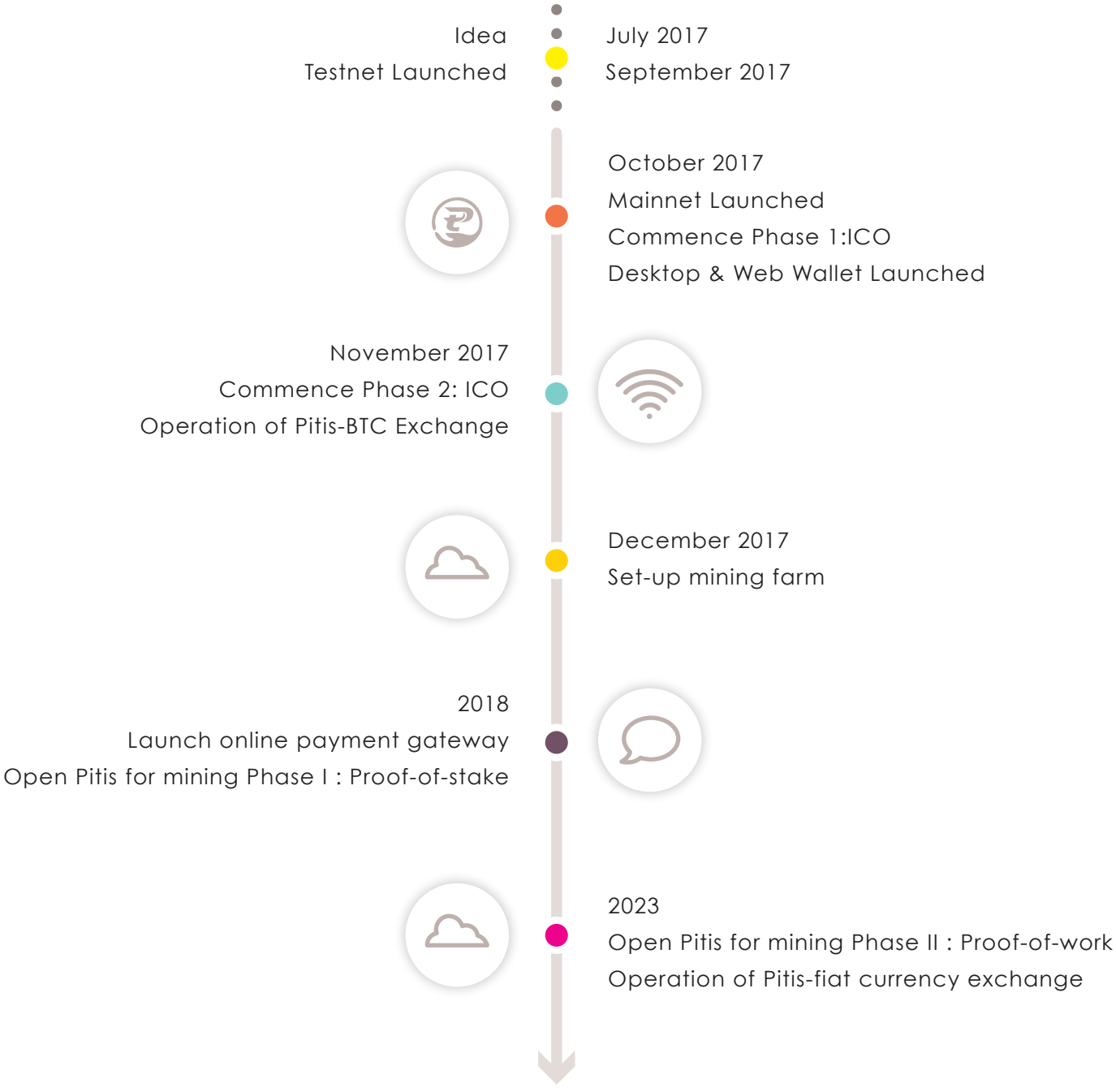


Income from mining will be used to



Roadmap

We are offering a new cryptocurrency in the market with an ambitious and wide-ranging blockchain project. The roadmap for the launch of Pitis is as below:



To buy Pitis, we will accept payment in Bitcoin/Ether/Ripple and we are offering an initial rate of USD0.07 for every Pitis in the first wave, which will be increased to USD0.09 in the second wave.

Partners and Supporters

The Pitis project is supported by numerous affiliates that provides different services and goods, as well as expertise in a wide range of businesses. The list of partners and supporters are as follows:-

1. www.cryptorepublic.com.my
2. http://aurainner.com/
3. www.ifmal.com
4. www.prosumerworld.com
5. www.neunggeulis.com.my
6. www.tune2romaniaga.com
7. www.mycryptozone.com
8. www.hjwafa.com
9. www.promosicuckoo.com
10. www.nine2seven.my
11. www.vbiz.my
12. www.kbeautyoriginal.com
13. www.kbeautyluxury.com
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Appendix

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