METACOIN

METACOIN *IS A CRYPTO CURRENCY BASED ON HYPERLEDGER.*

CONTENTS

ABSTRACT

We build an independent platform powered by Hyperledger. Also, we issue Metacoin, which creates an ecosystem that facilitates brisk trading of cryptocurrency in the Hyperledger platform. We have already completed the development of Metacoin Mainnet and Protocol Layer. Soon, a variety of Dapps(Decentralized Applications) will be available in the Metacoin ecosystem.

The Metacoin Ecosystem is a reality, not an empty blueprint. Multiple Metacoin-based projects are already underway over the Metacoin network. Trading channels including a cryptocurrency exchange have already been established in our ecosystem. IT firms with diverse backgrounds are continuously joining the system. Projects run in our ecosystem produce tangible outcomes in the market.

Business viability of the Metacoin ecosystem has already been evidenced by Bitpet, a Hyperledger-based gaming project created by the Metacoin members. Bitpet has clearly shown that cryptocurrency can be a means of transaction in the global gaming market. It is noteworthy that Bitpet is used by numerous players in Japan, one of the leading gaming markets.

Metacoin will shape an ecosystem that fosters promising project. We will provide resources for Blockchain groups with brilliant technologies and ideas. We will create a Blockchain service environment that will help high-potential IT planners and developers to produce fair value. We will also discover IT companies which, with all excellent ideas and technologies, are struggling with lack of talent and financial resources, and collaborate with them to expand our ecosystem.

Furthermore, we will introduce these high-potential IT firms to investors to share business opportunities. To facilitate fast transaction Metacoin and coin issuers, we will launch a cryptocurrency exchange that will enable trading of several coins, dividing value generated in our ecosystem with our partners.

TANGIBLE ECOSYSTEM

TANGIBLE ECOSYSTEM _____

We have seen many different failure cases of Blockchain firms. Generally, they struggled with the following three factors: Incomplete technologies; insufficient financial resources; and lack of opportunities to expand their market.

Lessons learned from failed Blockchain firms have led us to create the Hyperledger-based Metacoin ecosystem. This system is highly practical and realistic. Our ecosystem is already realizing various ongoing solutions and tangible products.

Metacoin will seek a variety of ways to utilize Hyperledger Blockchain technology.

We are currently developing and operating multiple Dapps (Decentralized Applications) powered by Hyperledger Blockchain technology. Moreover, we will seek out and support promising external partners and work with them to continue exploring and expanding the possible application of Hyperledger and Metacoin.

Our relentless efforts start with discovering and supporting Dapp Projects. Inblock Limited, the issuer and operator of Metacoin, will lead resource support through Metacoin as well as technical support for Hyperledger. A significant portion of Metacoins owned by Inblock will be utilized as resources for Hyperledger Blockchain projects, eventually catalyzing high-potential Blockchain projects to join and grow with our ecosystem.

We will also share business opportunities of Metacoin-based projects with external experts in the cryptocurrency community. That is why we have established a cryptocurrency exchange in our ecosystem. Metacoin will be a key cryptocurrency, along with Bitcoin and Ethereum, in our exchange. Furthermore, through the exchange, we will provide opportunities to join our projects for external experts in the cryptocurrency community.

Metacoin will continue to help spread Blockchain technology, facilitate transaction and circulation of cryptocurrency and develop a healthy ecosystem. The following elements contribute to the healthy ecosystem of Metacoin:
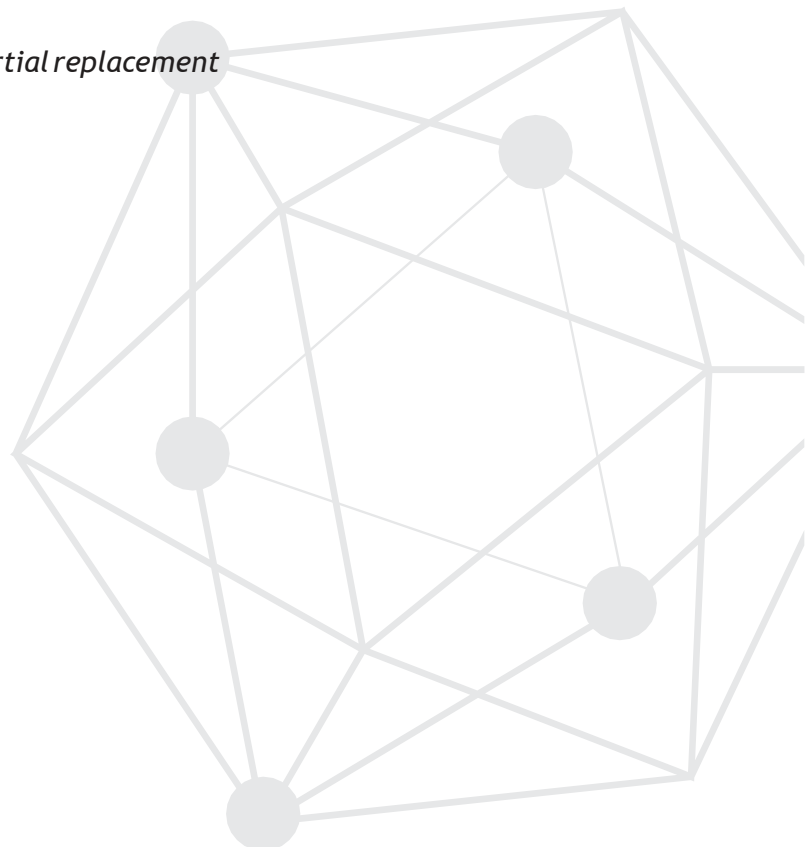
HYPER-LEDGER

1

HYPERLEDGER

Employment of Hyperledger Blockchain technology differentiates Meta-coin from numerous Blockchain projects of the past. Hyperledger is a Blockchain solution developed by global IT giants and investment banks. This means Hyperledger is much more general-purpose and stable than other Blockchain technologies developed by individual companies. In fact, Metacoin, powered by Hyperledger technology, has the following strengths:

1. *Permissioned Blockchain*

2. *Support for developer-friendly programming languages*

3. *Reasonable network fees*

4. *Strong performance*

5. *Modular structure to allow partial replacement*

6. *Support for multi-Blockchain*

1. Permissioned Blockchain

Hyperledger is a permissioned Blockchain. This technology is free from the issue of unclear responsibility problems that non-permissioned Blockchain systems with high levels of anonymity could bring because Hyperledger system enables membership management and differential access to data. With Hyperledger, we can make our data more secure as well as identify problems and their causes.

In addition, Hyperledger does not employ old methods of Proof of Work/Stake. Instead, it manages the network governance by introducing a voting-based consensus method that maximizes the network efficiency. Past Blockchain systems were plagued by the transaction finality issue, which refers to a situation where transactions on those systems are not finalized even after a long period. Hyperledger's network governance, on the contrary, secures transaction finality.

2. Support for developer-friendly programming languages

Hyperledger enables developers to write chaincode, which serves the function of smart contract, in widely used programming languages. Hyperledger chaincode facilitates developers' work, providing them with high degrees of freedom.

For instance, Ethereum employs Solidity as its language for smart contracts. The problem is that developers who wish to write code in Solidity are required to learn the language itself and how to create an environment for operating it. In contrast, Metacoin's Hyperledger support widely used programming languages including Go-lang, Java, and Node.js.

3. Reasonable network fees

Hyperledger provides an environment where Blockchain participants can use the network for reasonable fees.

Hyperledger theoretically incurs no transfer fees because the system runs the chaincode (a smart-contract-like function) transferred on the network to pre-designated Endorsed Peers. Ethereum imposes network fees called Gas on its users. Recently, the Gas fees have soared with more users on the Ethereum network. On the contrary, Metacoin's Hyperledger forms its Endorsed Nodes in the initialization stage, freeing its users from concerns over increased network fees.

4. Strong performance

Unlike those in past Blockchain systems, transactions occurring in Hyper-ledger are parallelly processed by pre-designated Endorsed Peers. Parallel processing improves system performance by simultaneously processing a large number of transactions. Hyperledger's transaction processing has achieved higher efficiency by adopting the EXECUTE – ORDER method, instead of the ORDER – EXECUTE method employed by Blockchain systems of the past.

5. Modular structure to allow partial replacement

The whole Hyperledger system is designed to be modular-structured, allowing partial replacement when needed. For example, if one wishes to modify the consensus structure of the current protocol, one just needs to place a new protocol into the relevant module to replace the current one. One can initialize algorithm settings to follow network governance regard-ing whether module replacement is conducted by consensus of the whole Blockchain members or the operator's decision. For numerous projects on its system, Metacoin will support consensus-based module change for more efficient algorithms or other improvements.

6. Support for multi-Blockchain

Hyperledger supports the multi-Blockchain function. Multi-Blockchain is sectionalized into many channels. Each of the channels can have its own governance. Participating nodes may join a specific channel as members and then select and participate in the Blockchain that they want to share. Joining multiple channels are also allowed. Such features of Hyperledger provide compatibility for developers and flexibility for users.

METACOIN

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METACOIN

Metacoin is an innovative cryptocurrency powered by Hyperledger. Bitcoin (the first-generation cryptocurrency) and Ethereum (the second-generation cryptocurrency) have various weaknesses. Metacoin will overcome such deficiencies and provide more advanced solutions as follows:

	Bitcoin	Ethereum	Hyperledger
Type	Public Blockchain	Public Blockchain	Private Blockchain
Qualification for the participation of nodes	Open to every node	Open to every node	- Reserved for nodes endorsed by our membership system. - Issues PKI-based certificates.
Consensus Algorithm	PoW	PoW (planning to introduce PoS)	PBFT
Transaction Finality	No	No	Yes
Performance	Creates a new block every 10 minutes	Creates a new block every 12 seconds	Consensus per update / Rapid processing
Transaction Hiding	Transaction information is open	Transaction information is open	Options available for opening / hiding transaction information
Smart contract	Only available for limited uses	- Able to realize smart contracts running on EVM (Ethereum Virtual Machine) - Developed in Solidity	- Able to realize smart contracts through Chaincode - Developed in Go and Java
Minimum number of machines needed	One, but two or more are needed in case of failure recovery	One, but two or more are needed in case of failure recovery	Four or more are needed in case of failure recovery

<Source> http://snowdeer.github.io/blockchain/2018/01/15/blocchain-seminar-comparation-among-some-blockchains/

Metacoin is a project that allows the expansion of the ecosystem. Numerous decentralized Blockchain projects have recently presented many problems stemming from their structures that are not suited to real business. Recognizing such problems from the early stage of development, we have created Metacoin to deliver user convenience as well as technical compatibility. The following Dapps and cryptocurrency exchange are essential members of the Metacoin ecosystem and powerful evidence of its business viability.

METACOIN-BASED DECENTRALIZED APPLICATION

(Metacoin-based Dapp)

3

METACOIN-BASED DECENTRALIZED APPLICATION

(Metacoin-based Dapp)

Metacoin developers have the experience of developing and testing Hyperledger-based products. For instance, we participated in the Bitpet project, which were highly received in the market. Bitpet is a successful case of grafting Hyperledger on to the gaming industry, gaining world- wide traction, particularly in Japan. Building on the success of Bitpet, Metacoin developers are exploring diverse possibilities of Hyperledger. All of the following Dapps are applications of Hyperledger Blockchain technology. Many of these services will be the first to join the Metacoin ecosystem because they have been already commercialized or are on the way to commercialization

BitPet : https://bitpet.co/

We launched Bitpet, a Hyperledger-based gaming service, in early 2018. Bitpet earned huge popularity in Japan and is still often cited as a success case in domestic and foreign Blockchain communities and gaming communities. Currently, Bitpet provides freemium services, proving the high business potential of Hyperledger.

Collectible.
Breedable.
Growable.

Raise Bitpet and sell for cryptocurrency.

Sign Up
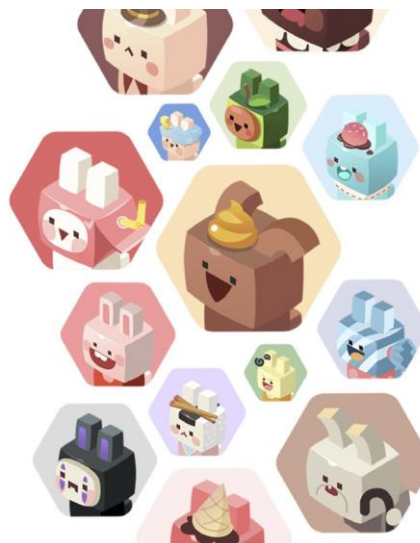
Paradice Club

Paradice Club is a Metacoin-based Dapp that adopts Hyperledger Blockchain technology. It aims to expand into a gaming platform and will provide HTML5-based games for its users. In addition, as the name 'ParaDICE Club' suggests, it will deliver casino gaming service too. We will introduce to Paradice Club a smart-contract-like function running on Hyperledger to shape a reliable environment for trading gaming currencies. We will also build an environment that both game creators and users can trust.

Currently, 30 percent of the development process is completed. We are working to make Paradice Club available on both the mobile and the web environment.
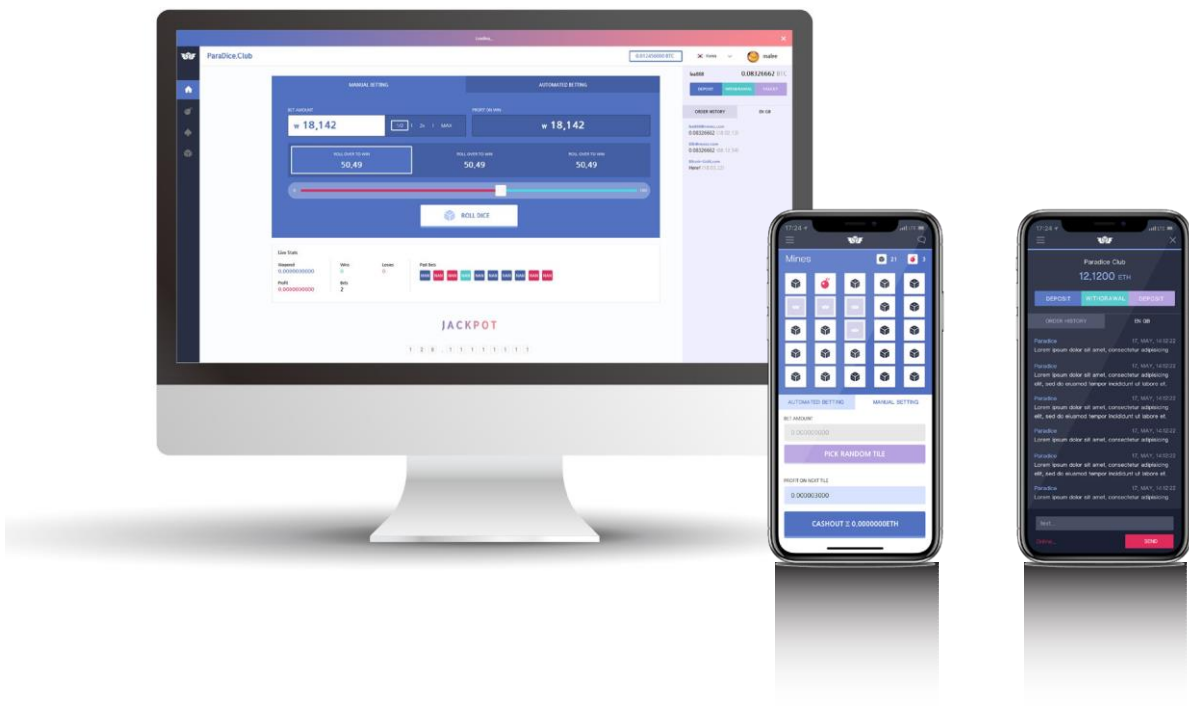
Playpang (Incentive-based gaming community)

Playpang is a Metacoin-based Dapp. Both Playpang and Steem are content-sharing Blockchain systems. Playpang is, however, differentiated from Steem in that Playpang only provides gaming content and Metacoin-based tokens as incentives. Playpang is built upon the Hyperledger technology. Through its smart-contract-like function, it offers incentives to both content-providers and content-consumers.

Currently, 40 percent of the development process is completed.

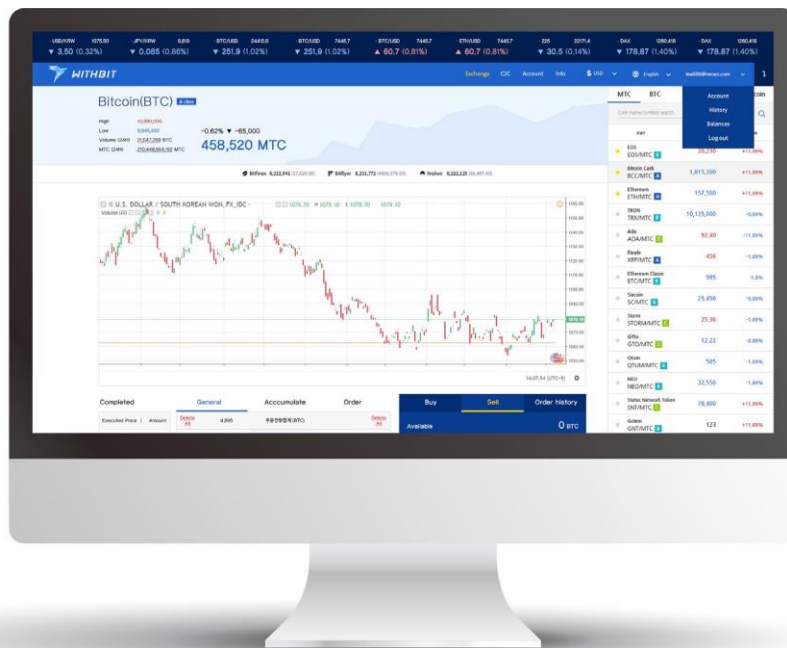# CRYPTOCURRENCY EXCHANGE: WITHBIT

4

CRYPTOCURRENCY EXCHANGE: WITHBIT

Metacoin plan to launch a Hyperledger-based cryptocurrency exchange called Withbit. We will make Metacoin be the main transaction means in the exchange, which will help a rapid expansion of the Metacoin ecosystem. Also, we will ensure that Metacoin will go beyond the immediate purpose of a cryptocurrency transaction means and be positioned as a protocol which will promote shared growth with Metacoin ecosystem members including Dapps.

Withbit provides each user with their individual wallets to enhance security and user convenience. Centralized exchanges are vulnerable to the risk that, if their centralized wallets are threatened by hacking, all exchange users will also be exposed to possible hacking. Withbit's wallet policy prevents such risks and improves security. Moreover, Withbit enables ICO participants to directly remit funds from their individual Withbit wallet, sparing unnecessary remittance from the participants when they participate in multiple ICOs. Such features of Withbit saves ICO participants' time and money, bringing distinct economic advantages.

Furthermore, Withbit provides its add-on service named Metascan to deliver transparent information on circulation of Metacoin or other events occurring in the exchange. In terms of function, Metascan is simi- lar to Etherscan (an add-on to the Ethererum network), showing data released by Withbit on its transaction details and status. Metascan is integrated with Withbit's exchange service, delivering more conve- nience to Withbit users trading cryptocurrency.

There are many other advantages that Withbit will offer to its users, including discounts on transaction fees, a voting right as a way of supporting blockchain projects, sharing preferential information on new Blockchain projects. More details on Withbit's advantages and benefits will be provided in the Token Economics chapter in this white paper.

< Withbit Crytocurrency-exchange Image >
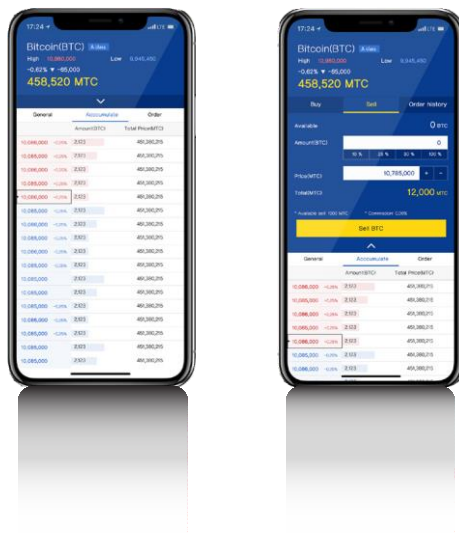
INBLOCK

(Inblock Limited)

5

INBLOCK
(Inblock Limited)

Inblock was established to issue and efficiently operate Metacoin as well as to develop and harness Blockchain technology.

Inblock is the issuer and operator of Metacoin, an institution covering various aspects of the Blockchain market. Inblock will actively share the value of Metacoin with the cryptocurrency market and Metacoin users. Inblock will overcome technical deficiencies of cryptocurrencies issued by existing protocol Blockchain projects and make cryptocurrency transaction even faster, easier, and safer.

Taking one step further, Inblock will lead the way in shaping a greater future of Blockchain. We have seen many Blockchain firms, with all their innovative technologies and ideas, frustrated by various constraining factors in the existing Blockchain ecosystem model. Inblock will utilize Metacoin to support such companies and pursue shared growth with them in the Blockchain market. Plus, Inblock will create opportunities to showcase high-potential Blockchain firms by establishing platforms and channels that will invite direct evaluation of external experts in the cryptocurrency market.

TOKEN ECONOMICS

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VALUE IN METACOIN

With Metacoin, we will build a new Blockchain ecosystem. Metacoin is a more advanced type of cryptocurrency. It is sophisticatedly designed to be used in multiple service areas and to create and store various eco- nomic value. In our ecosystem, Metacoin will serve the following key functions:

Cryptocurrency for Protocol Service

Metacoin is a cryptocurrency that provides platform service. One can harness Metacoin to build a Hyperledger-based Blockchain network and create Dapps.

On top of that, Metacoin has the function of currency. It stores value and serves as a medium of exchange. The prices of Metacoin are deter- mined by supply and demand in the market. Metacoin holders can con- tribute to increasing Metacoin's monetary value by engaging in transac- tions in cryptocurrency exchanges.

Key Currency for Crypto Exchange

Metacoin will be the key cryptocurrency in the Withbit exchange. With- bit will support coin-to-coin exchanges between Metacoin and other cryptocurrencies, along with exchanges between Metacoin and fiat money on a conditional basis. This means that users of Metacoin and our exchange will obtain special benefits.

Moreover, Metacoin users who join Withbit will benefit from many other advantages. First, discounts on transaction fees will be offered. It encourages Withbit users to engage in cyptocurrency transactions utilizing Metacoin, instead of Bitcoin or Ethereum, thereby boosting trade volume of Metacoin. Second, those who deposit their Metacoin in specific cryptocurrency exchanges including Withbit can gain additional benefits. Third, it will be possible to obtain preferential information on new Blockchain firms that will be introduced in the Metacoin exchange and to take opportunities to grow with them. This policy will also contribute to the constant demand for Metacoin in the cryptocurrency market and boost its value.

Seed for Incubating Blockchain Developers

Metacoin will serve as the facilitator that attracts Blockchain technolo- gies and institutions to the Blockchain ecosystem. Such a feature differ- entiates Metacoin from past protocol cryptocurrencies and those issued by exchanges. Metacoin and Inblock will engage in the Blockchain ecosystem more actively, seeking collaboration with high-potential Blockchain companies.

Metacoin will make a direct and indirect investment in expanding the Metacoin ecosystem. Our investment will be channeled into individuals and institutions who can contribute to the ecosystem. Metacoin welcomes individuals and institutions with different backgrounds, including Blockchain firms or cryptocurrency exchanges, as long as they wish to share Metacoin's value or have shared business objectives with us.

COIN ISSUANCE

MTC(Metacoin) is a Hyperledger-based cryptocurrency. The details of MTC issuance, funding and distribution are as follows:

Coin Issuance
  - Title : MTC (Metacoin)
  - Initial Price : 1 MTC = 0.1 USD($)
  - 1 $ = 1,074 KRW (As of June 11, 2018)
  - Total number of coins issued : Two billion (2,000,000,000 MTC)

Funding
For the sake of convenience in international funding, MTC funding amounts will be expressed in USD($).

➤ Soft Cap : $5,000,000
    -The Soft Cap is equivalent to the minimum MTC funding amount (50,000,000MTC) converted to USD.

    -If the Soft Cap is not reached by the end of the funding campaign, projects described in this white paper will be cancelled. In such a case, the funds will be returned to participants. Individual participants will receive 90% of their contributing amount.

➤ Hard Cap : $70,000,000
    -The Hard Cap is equivalent to the maximum MTC funding amount (700,000,000MTC) converted to USD.

    -Coins that are not sold during each stage of the funding campaign will be carried forward to the next stage. Coins that are not sold by the end of the campaign will be burned.

Fuding Campaign and Incentive Programs

The MTC funding campaign has three different stages by sales date: Private Sale, Pre-Sale, Crowd Sale.

See features of each part are as shown below.

	Private Sale	Pre-sale	Crowd Sale
Sales Date	Ongoing	From Aug. 20 Till Aug. 31	From Sep.8
MTC Funding Amount	400,000,000	200,000,000	100,000,000
Bonus Rate	30%	15%	Up to 5%
Minimum	200ETH 15BTC	1ETH 1BTC	0.1ETH
Maximum	N/A	300ETH 20BTC	100ETH
Lock-in Period	1 year	3 months	N/A
Whitelist registration	Required before Sale	Required before Sale	Required before Sale
KYC / AML	Required before Sale	Required before Sale	Required before Sale

➤ 'Funding participants' refers to those who purchase MTC.

➤ MTC funding amount differs by each funding stage and its period.

➤ Bitcoin(BTC) and Ethereum(ETH) are accepted for the MTC funding. Each coin's MTC purchasing ratio is as follows: 1 BTC=77,000 MTC, 1ETH=6,000 MTC (Bonuses not included)

➤ 'Bonus rate' refers to the ratio of additional coins awarded to MTC buyers. Bonus rates offered to Funding participants differ by each funding stage and their contributing amount.

> 'KYC' (Know Your Customer) is an identity verification process for MTC purchasers. For the sake of transparency of the funding campaign, Inblock, the issuer of MTC, will request Funding participants for identity verification and their personal information. Those purchasers who do not pass the verification process will recover the full amount of their participating funds.

> 'Whitelist' is the group of MTC funding participants. Those who wish to participate in the MTC funding campaign are required to register for Whitelist first. Participants can sign up for Whitelist on the MTC funding campaign website. Upon registering, Funding participants can request information on their coin wallets.

> Only those who have signed up for Whitelist on the MTC funding web- site and passed KYC verification are eligible to participate in the fund- ing campaign.

> The KYC verification process may take up to two weeks. Therefore, it is highly recommended that potential purchasers finish the Whitelist regis- tration and the KYC process before the start of the funding stage where they wish to join.

> If each funding stage does not reach the Hard Cap, the remaining coins will be carried forward to the next stage. Coins that are not sold by the end of the campaign will be burned altogether.

> Coins for those who have participated in Private Sale or Pre-Sale will be locked in after the time of coin distribution. However, the bonus coin will not be locked in.

> The details of the MTC funding are provisional and subject to change.

Private Sale

Private Sale, with a 30% bonus rate, is currently underway. For example, if one buys 100 MTC in the Private Sale stage, additional 30 MTC will be awarded to the buyer.

Sales Date	Ongoing
Bonus Rate	Additional 30%
Accepted Coins for Purchase	BTC, ETH
Minimum	200ETH , 15BTC
Maximum	N/A
Lock-in Period	1 year
Whitelist Registration	Required before Sale
KYC / AML	Required before Sale

➤ Only those who have signed up for Whitelist on the MTC funding website and passed KYC verification are eligible to participate in Private Sale.

➤ Inblock, the issuer of MTC, may restrict, on its own decision, partici- pation of those who are suspected to be representatives of multi-lev- el marketing organizations or involved in AML(Anti-Money Launder- ing) violation. In such cases, the full amount of their funding will be refunded.

➤ Only BTC and ETH are accepted in the Private Sale stage.

➤ Coins for those who have participated in Private Sale will be locked in for one year after the time of coin distribution. However, the bonus coin will not be locked in.

➤ Minimum contributing amount applies to Private Sale. (See the table above)

Pre-Sale

Pre-Sale is offered with a 15% bonus rate. For example, if one buys 100 MTC in the Pre-Sale stage, additional 15 MTC will be awarded to the buyer.

Sales Date	From Aug. 20 Till Aug. 31
Bonus Rate	Additional 15%
Accepted Coins for Purchase	BTC, ETH
Minimum	1ETH, 1BTC
Maximum	300ETH, 20BTC
Lock-in Period	3 months
Whitelist Registration	Required before Sale
KYC / AML	Required before Sale

➤ Only those who have signed up for Whitelist on the MTC funding website and passed KYC verification are eligible to participate in Pre-Sale.

➤ Inblock, the issuer of MTC, may restrict, on its own decision, the participation of those who are suspected to be representatives of multi-level marketing organizations or involved in AML violation. In this case, the full amount of their funding will be refunded.

➤ BTC and ETH are accepted in the Pre-Sale stage.

➤ Participants may use all the different coins that are accepted for purchase. For example, one buys may use 300 ETH AND 20 BTC to purchase MTC.

➤ Coins for those who have participated in Pre-Sale will be locked in for three months after the time of coin distribution as followed. However, the bonus coin will not be locked in.

Lifting Plan	Rate
Initial Period (at the time of coin distribution)	100%
After 1 month	60%
After 2 months	30%
After 3 months	0%

➤ Minimum and Maximum contributing amount apply to Pre-Sale. (See the table above)
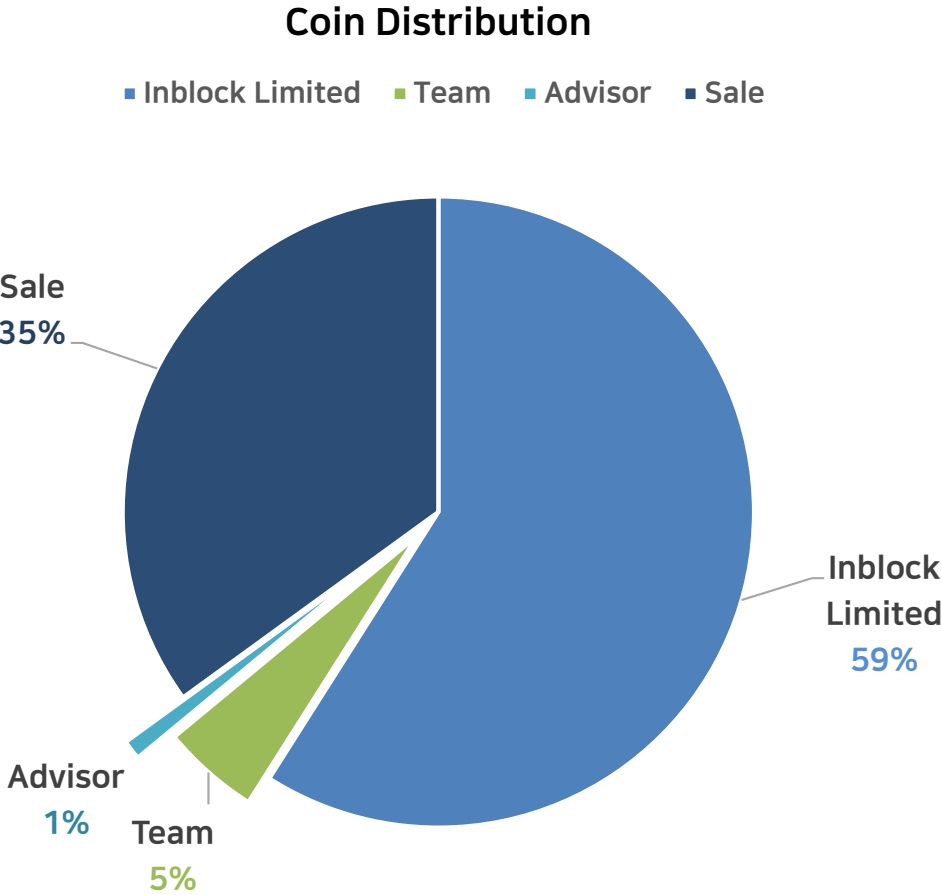
Crowd Sale

A maximum of 5% of bonus rates are applied to Crowd Sale. Bonus rates differ by purchase amount. As shown below, those who buy 60,000 or more MTC are eligible for higher bonus rates.

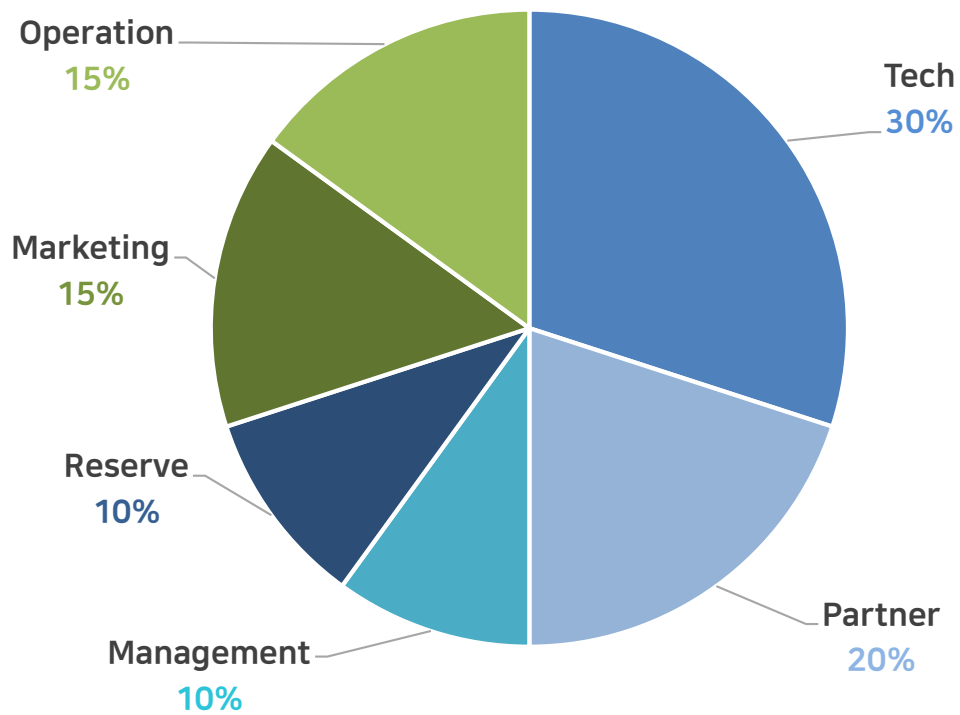| Purchase Amount	>= 60,000 MTC	< 60,000 MTC
Bonus Rate	Additional 5%	0%
Date	From Sep. 8	
Accepted Coins for Purchase	ETH	
Minimum	0.1ETH	
Maximum	100ETH	
Lock-in Period	N/A	
Whitelist Registration	Required before Sale	
KYC / AML	Required before Sale	

➤ Only those who have signed up for Whitelist on the MTC funding website and passed KYC verification are eligible to participate in Crowd Sale.

➤ Inblock, the issuer of MTC, may restrict, on its own decision, the participation of those who are suspected to be representatives of multi-level marketing organizations or involved in AML violation. In this case, the full amount of their funding will be refunded.

➤ ETH is accepted in the Crowd Sale stage.

➤ Minimum and Maximum contributing amount apply to Crowd Sale. (See the table above)

Coin Distribution

Coin Distribution

■ Inblock Limited ■ Team ■ Advisor ■ Sale

Sale
35%

Inblock
Limited
59%

Advisor
1%

Team
5%

Use of MTC funds

Legend: ▪ Tech ▪ Partner ▪ Management ▪ Reserve ▪ Marketing ▪ Operation

Operation
15%

Tech
30%

Marketing
15%

Reserve
10%

Management
10%

Partner
20%

➢ 'Tech' is expenses for development of Blockchain engines and Dapps.

➢ 'Partner' is expenses for expanding MTC usage that will be awarded to or shared with our Strategy Partners.

➢ 'Management' is expenses for operation of Inblock and Metacoin Network

➢ 'Reserve' is funds retained to secure liquidity for facilitating transaction of Metacoin and exchange between Metacoin and other cryptocurrencies.

➢ 'Marketing' is expenses allocated to various future promotion events.

➢ 'Operation' is expenses allocated to operation and global expansion of the Metacoin ecosystem.

ROADMAP

2018

1st QUARTER

Hyperledger-based Dapp
"BitPet" Release

SEPT

WITHBIT

METAWALLET

- Testnet&API Release
- Cryptocurrency Exchange "WithBit" Open
- Metawallet App Release (Mobile & Web)

OCT

Site for Chaincode Open
Site for Metacoin-generated Token Open

DEC

ParaDice.Club

- Hyperledger-based Dapp
  "ParaDice Club" Release

2019

FEB

Hyperledger-based Dapp
"Playpang" Release

playpang