State-of-the-Art Blockchain Ecosystem
for Smart City

YAP STONE

—

Key Currency of Smart City

Leveraging the Blockchain

VER. 1.361

White Paper Disclaimer

It is strongly recommended that those who participate in the ICO carefully read and understand about the following disclaimers and risk factors before making a decision to participate.

Individuals those who fall under following criteria **cannot** participate in the ICO and this applies to all individuals globally.

- Those who is a resident or a citizen of country treating Cryptocurrency Public offering as stock trading
- Those who belong to violent group or entity, anti-social groups, or equivalent
- Those who have not have owned nor have any knowledge about cryptocurrency
- Those who are over 75 years old or under 18 years old
- Those who need custodian or guardian
- Those who have under 1 year of investing in stock, bond, or other types of securities
- Those who is a resident of developed country and have less than USD 100,000 of financial assets
- Those who is a resident of developing country and have less than USD 30,000 of financial asset
- Those who is planning to invest more than 50% of one's asset to YAP Stone in this ICO
- Those whose identity cannot be verified
- Those who is trying to participate in the ICO on behalf of another person. This includes those who is not a legal resident of the person one is trying to represent

The contents above are to directly/indirectly clarify the legal and financial uncertainty and ambiguity that may arise and to prevent any unnecessary legal disputes and measures. Therefore, one must carefully peruse through the above contents and if you encounter any further uncertainty, one should consult with experts.

As defined and explained in this White Paper, YAP Stone is not classified as securities in any legal jurisdiction and does not have to obtain approval nor need to register with monetary authority in Singapore.

YAP Chain, that have developed the "YAP Chain" will be the supervisory entity for the YAP Stone project that will be the base for Smart City, YAP Chain will be responsible for piping and raising the fund for YAP Stone projects as well as managing the total process for successful mission completion.

The White Paper for YAP Chain clearly expresses the risk and uncertainty that may exist in YAP Chain business and operation. It is necessary that one make thorough analysis of YAP Chain prior to making final decision to purchase YAP Stone. It is strongly advised that you do not blindly rely on the White Paper without the validation process and make purchase decision.

Risk and Uncertainty

1. Price Fluctuation Risk

Price of YAP Stone depends on the success of YAP Stone's business plans, market price, foreign exchange, stock market, trend of other markets, Act of god, war, political trend, regulations, supply of other cryptocurrencies, and many other unexpected market variables. Depending on the business performance of YAP Stone and in case of marginal business progress and management, there is a possibility of YAP Stone owned by the purchasers may drop in value or even fall to no value.

2. Financing in the Initial Stage of the Project

In most cases, YAP Stone issuer may execute financing in the initial stages of the future projects to be implemented and the success of the project result could be uncertain at this stage. If the project fails, the investment made by the purchaser may lose all of one's asset.

3. Potential Risk of YAP Stone

YAP Stone is not a legal currency (USD, Pound, Euro, Yen, etc.)

Furthermore, the value of the cryptocurrency is not guaranteed by specific person or entity. YAP Stone may have potential risk such as program bug.

4. Liquidity Risk

Depending on the market trend and transaction volume, possibility exists that YAP Stone cannot be transacted or be traded on a substantially unfavorable value to owners. Unless someone guarantees the value of the YAP Stone, there is a possibility that liquidity of the YAP Stone can be lost.

5. Risk from Changes in Statue and Tax System

Statue and Tax System for YAP Stone can change at this point of time. Due to the potential changes in statue and tax system or policy, ICO can be prohibited, restricted, or can be subject to taxation. Such phenomenon may cause restrictions in owning the YAP Stone or its transaction can be limited and result in unexpected loss or cause unfavorable transaction.

6. Other Risks

Upon purchase of YAP Stone, there is a possibility of a third party approaching the purchaser and act as if they are issuer of YAP Stone and fraudulently pass the purchaser with fake cryptocurrency address and acquire the purchased coins. Please be aware of such cases and one purchaser must defend themselves.

Wording of Virtual Currency and Cryptocurrency used in this White Paper has equivalent meaning.

CONTENTS

We started in the Year 2008!

Leverage generated by seigniorage and inflation caused by currency issuance shoud be granted to community and it will result in **virtuous circle of economy**.

YAP Stone will formulate Shared Economy platform that will distribute profits generated by the community back to the community that have contributed and become **Key currency of Smart City** with Cryptocurrency with credibility and guarantee.

Abstract

Birth of YAP STONE

Yap is a beautiful island located in the Caroline Islands in the Western Pacific region. It has a magnificent scenery with greenish coral reef, dolphins, and school of fishes.

The island had been using stone money and the value of the stone was decided according to the size, weight, and number of people who were sacrificed in the process of transporting the stone. Thus, the value of the stone was decided according to the history it had.

The limestone that was too heavy to transport also had value even when it was placed in the middle of the road or was located in the middle of the deep blue sea. The ownership of the stone was decided by an oral agreement, 'The ownership of this stone is yours from now'. This is because people had absolute belief and trust for each other.

Yap's system of certifying currency through notary service based on credibility is similar to the principle behind Blockchain's technology.

Yap Stone was born under the idea of community spirit and mutual credibility, which are promised to be provided for our customers.

 "YAP Chain" is a blockchain optimized for Smart City which is an urban operational system for organizations, shopping malls, and cities that will issue YAP Stone, and through the issuance of YAP Token, smart contract and DApp based on credibility and communality will be provided.

Solution of Urbanization, Smart City

All major cities in the world are faced with a challenge of improving citizen's quality of life.

According to the World Urbanization Forecast report by UN in 2014, 50% of the total global population resides in city and is predicted that 2.5 billion will move to city to reside which will result in rapid global urbanization causing shortage of resources, infrastructure, energy, and traffic congestion, etc. Such phenomenon will gradually aggravate the problems in city.

Y 2015, UN World Urbanization Forecast Report
(Urbanization Ratio)

Korea	Japan	USA	UK
82.5%	93.5%	81.6%	82.6%
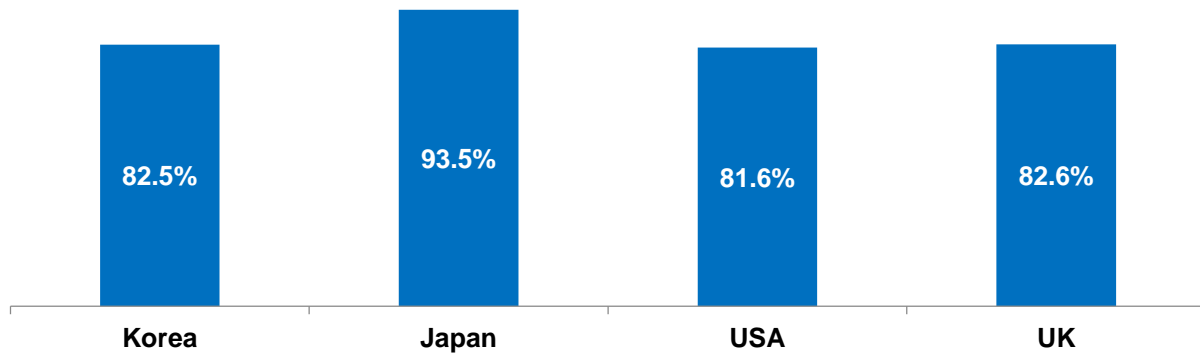
As a resolution, the method of efficiently utilizing technology to the current city infrastructure has gained more attention rather than expanding the city infrastructure.

Low economic growth rate, highly advanced ICT development and increasing level of city development demand require effective solution to urbanization problems. By simultaneously coping with 4th industrial revolution, many countries around the world are competing to develop Smart City as their new motive for stabilization.

Between the period of 2016 to 2030, the whole world needs an investment of USD 3.3 trillion annually to maintain the current growth rate. Compared to the period between 2000 to 2015 with an invested amount of USD 2.5 trillion, required investment for coming years have increased to over 30%. Since the downturn of global economic growth starting from the United States financial crisis, the slowing infrastructure investment is showing signs of gradual recovery centering around the US and Asia Pacific regions. China is planning to strategically secure overseas markets by expanding infrastructure investment in the surrounding countries and the US is also planning to reconstruct the collapsed infrastructure by investing USD 1.5 trillion.

Along with traditional infrastructure investments, diverse types of infrastructure investments have evolved due to arising social expectations from increased level of income and urbanization development.

Finding ways to resolve the urbanization problems and to restructure a new blockchain ecosystem based on 4th Industrial Revolution related new technology such as blockchain, Big Data, Artificial Intelligence (AI), AI related infrastructure, autonomous car, drone and mobile objects, virtual reality, renewable energy, etc. results in improved quality of life. Moreover,

coping with 4th industrial revolution is essential for future growth motives and for developing and expanding Smart City.

Blockchain based Shared Economy Platform and Smart City

Cryptocurrency based on blockchain network gave its birth with key values of definance and decentralization after experiencing Financial crisis in 2008.

Rise of the Internet have reduced the cost of information communication and resulted in IT Revolution. Similarly, changes caused by blockchain will reduce the financial cost and result in Shared Economy Revolution.

Credibility and guarantee provided through Decentralized Blockchain Network and the Community enables reduces finanacing and operational costs and intermediary commissions consequently resulting in Shared Economy Revolution that enables profits to be returned to the community.

In the past, there has been endeavors to create Shared Economy through social enterprises such as Union, group purchase, vouchers, Discount days (Black Friday etc) and blockchain will provide general platform to absorb such efforts.

Finacial utility

Date of first cash flow positive

Date of first cash flow positive

$

$

Time

Time

Maximum financing needs

Maximum financing needs

Date of cash breakeven

Number of users(Community)
Date of cash breakeven

Burn rate

Burn rate
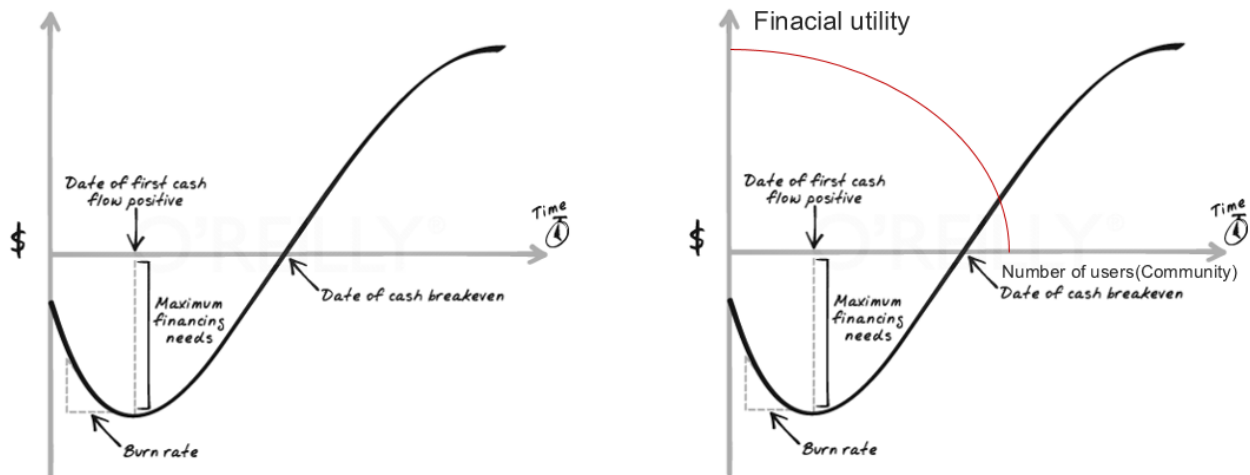
Credibility provided through Blockchain and the Community, the community members can enjoy financing tool that allow community members to obtain speedy financing compared to the existing financing methods. Community members can secure competitiveness via its obtained markets and financing and the profits generated from such activities will be returned to the community members.

The Smart City based on Share Economy Value will prevent leakage of profits generated within the Smart City and will return all profits back to the Smart City Community members.

In addition, YAP Stone, that aims to become the key currency of the Smart City can collaborate with other Smart Cities that are connected to YAP Stone and broanden the scale of the market volume and share even bigger scaled Smart City and the community members can produce and supply highly competitive products/services and the profits generated from its economic activities can be returned to the community members who have exerted their efforts.

1. Market Status

1) Smart City Trend

Global urbanization in 2014 was 54% and is anticipated to increase to 66% in 2050. Furthermore, mega city's growing population of over 10 million is straining resources and infrastructure, and the consequent carbon emissions are fueling global warming and environmental crisis. Increase in income level will seek for more convenient and higher quality of life, and all age groups using internet and mobile phones will have a higher level of expectation for Smart city with smart information.

Smart City Sectors, 2020

- ■ Gov &Education
- ■ Security
- ■ Energy
- ■ Infrastructure
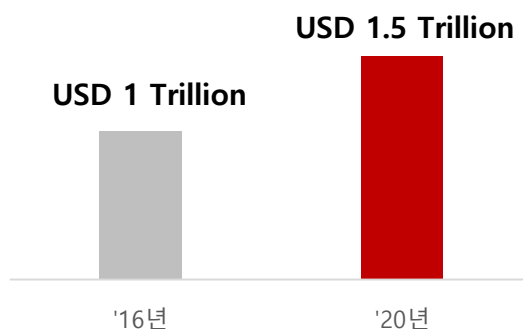- ■ Transportation
- ■ Medical
- ■ Buildings
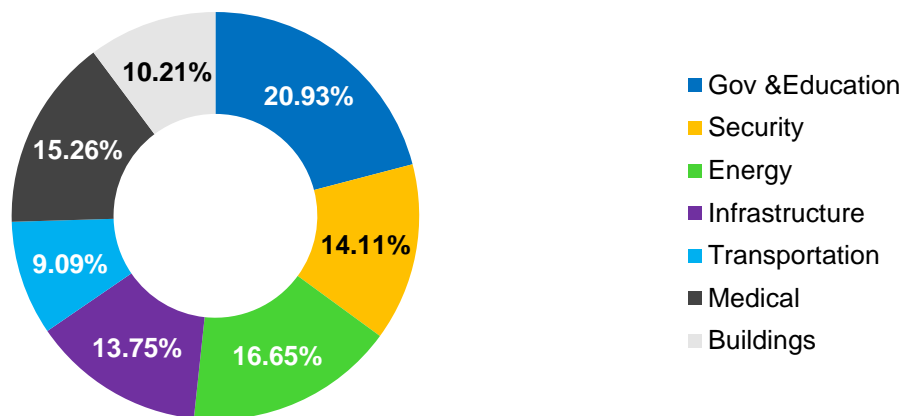
The total market size of global Smart City was estimated at USD 781.9 Billion in 2016 and average annual growth rate is forecasted at 16.6% reaching USD 1.446 Trillion in 2020.

Source : Markets & Markets
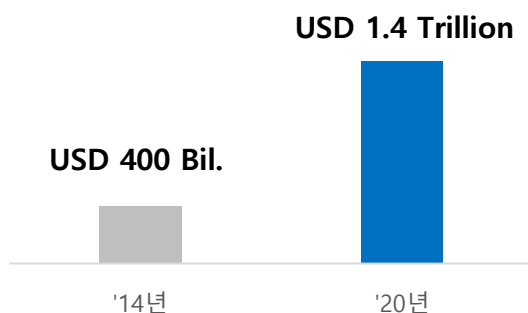
Source : Frost & Sullivan

2) Smart City Execution Status and Opportunities by Country

Along with technology advancement, many of the major cities in the world are working on 'Smart City' project. China alone is investing 500 billion CNY in over 300 cities for developing Smart City and in India, where population is growing 10 million a year, developing Smart City is the utmost priority business. India's Prime Minister Modi's announcement to invest KRW 1 trillion for developing over 100 Smart cities nationwide is an example.

Representative Smart cities like Singapore and Barcelona provide diverse solutions focusing on data centric platform via collaboration between private and government sectors.

Singapore has announced its national vision of constructing Smart Nation by 2025 with the government on the lead and forming private partnerships to attract investment. On the other hand, Barcelona is developing Barcelona city OS platform that implements 24 Smart solutions around various locations in the city by fostering 22@Barcelona as an ICT enterprise cluster and builds partnerships with numerous global companies. Europe is also seriously focusing on the Smart City development and Italy has announced that they will invest Euro 37 million. Middle East and Africa have also announced to allocate 80% of their infrastructure budget to development of Smart City.

Recently, based on the city conditions, Smart cities with diverse contents and strategies such as City Platform (Data Herb), Living Lab, Pilot City, etc. are being developed.

In order to resolve the current city problems, global giants– IBM, Cisco, Google, etc. are preempting and leading the global market of AI, Big Data, autonomous car and other advanced technologies.

On the other hand, there exist negative views about the Smart City business led by the government due to indiscrete business development as well as privacy invasion and issues of personal rights.

Therefore, with Smart City business as a core future industry, it is necessary to validate related legal aspects and encourage active participation of private sectors. So that from the initial stages of business planning, multi-dimensional business models can develop and cooperation with experts can supervise the business in order to prevent fundamental problems that may arise.

As a result, YAP Chain has planned YAP Chain project to build Smart City on top of YAP Chain's exclusive blockchain ecosystem

Once the YAP Chain is established, it will enable the Smart City to develop more smartly and will contribute as a driving force for the 4th Industrial Revolution.

2. YAP Chain Introduction

YAP Chain is an exclusive and independent blockchain ecosystem that has never existed and will become the core motive for Smart City.

It is a decentralized blockchain ecosystem that makes Smart City as a single unified computer that enables users to make smart payment, contract, MOU, voting, etc. without the involvement of a 3rd party thereby allowing users to enjoy a convenient and secure city life.

Smart City is built on mutual interaction of human, technical, infrastructural and organizational resources.
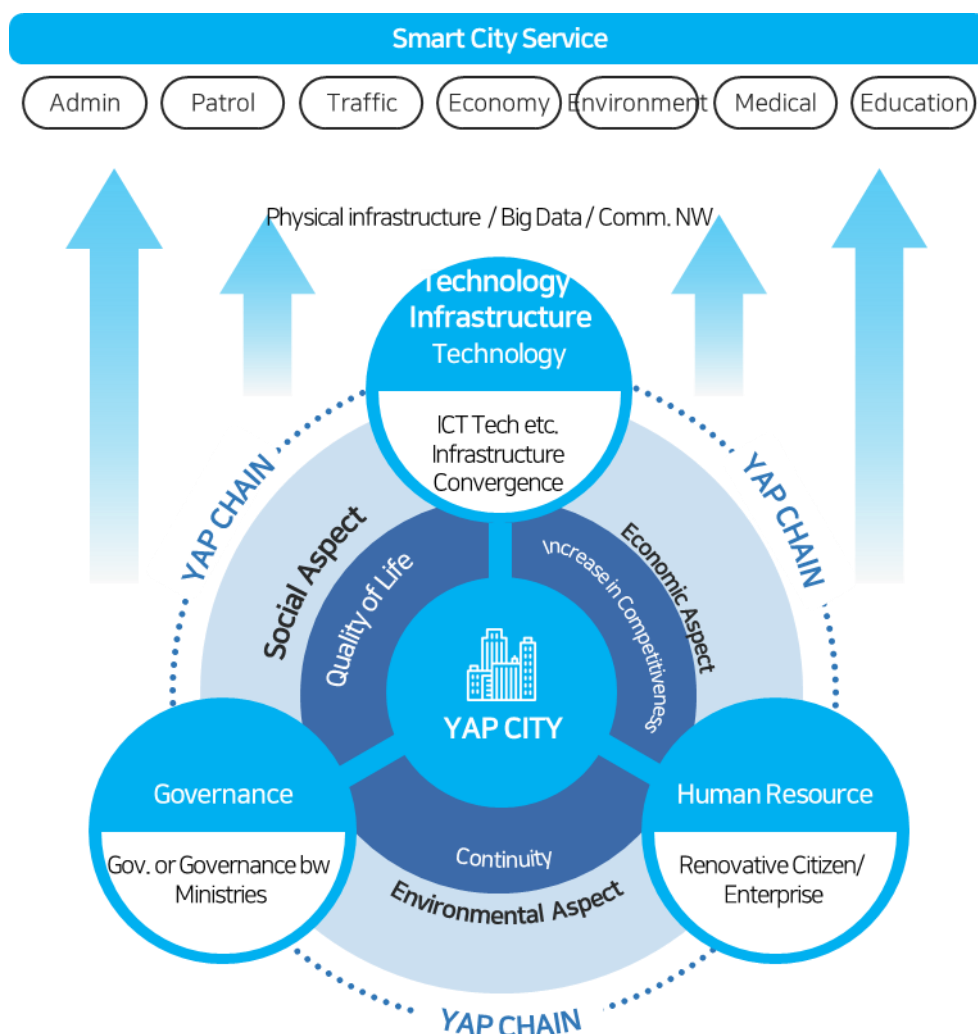
In the perspective of YAP Chain for the composition factors of Smart City, the technological structure will change the lifestyle of residence within the city. Thus, technology will be utmost important to make the city smarter.

YAP Chain is composed of YAP Stone, Smart Contract), and Yap Token.

- YAP Stone saves information Smart City resource generated by YAP Chain.
- When users approach respective industry, Smart Contract digitalizes the contract based on terms and conditions and makes agreement through connected YAP Token asset, completes the contract, and execution and implementation is carried out.
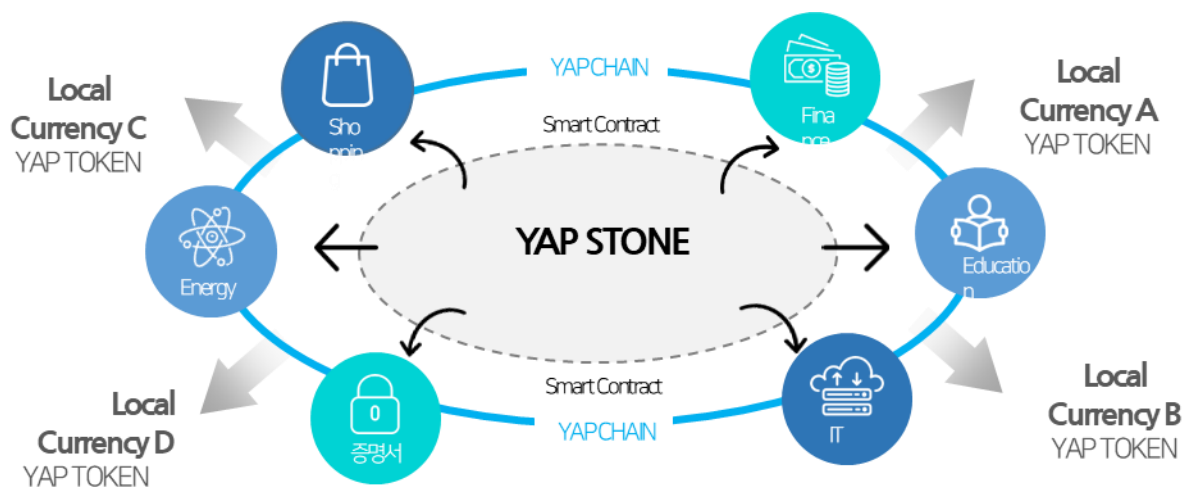
From technical aspect, Smart City developed through YAP Chain is considered as infrastructure and service as part of the blockchain technology.

In the perspective of YAP Chain, Smart City provides resources necessary for city life based on real-time recognition system via Smart Contract while advanced analytics help people to make intellectual decisions on solutions and optimize one's underutilized assets.

Smart City developed through YAP Chain enables residents to live a happier, healthier, smarter, and a cleaner life while the company can provide sustainable, competitive and transparent capital based on innovative interface.

YAP Chain is confident to say that it can resolve the fundamental problems that Smart City holds.

Smart City developed through YAP Chain provides diverse strategic value-added services and eliminates failures or conflict of interest through YAP Chain's core value of blockchain technology.

YAP Chain is an independent platform and issues YAP Stone via independent protocol connected to mainnet, and YAP Chain smart contract produces customized YAP Token to various industries. It can be supplied to the following industries:

- YAP Stone as a global currency in global Smart Cities
- ID card and various authentication sectors
- Domestic and International Remittance sectors
- On/Offline Payment Sectors
- Point payment/mileage sectors
- Chatbot (AI) sectors
- Security, IoT, Smart Home and Communication sectors
- YAP Token for other necessary purposes in Smart City

YAP Chain expects to consistently contribute in the growth of 4th Industry Revolution's core business sector – "Smart City" industry.

3. YAP Chain Composition

YAP Chain is aiming to develop an independent blockchain ecosystem focusing on Smart City.

YAP Chain is composed of YAP Stone, SMART Contract, and YAP Token.
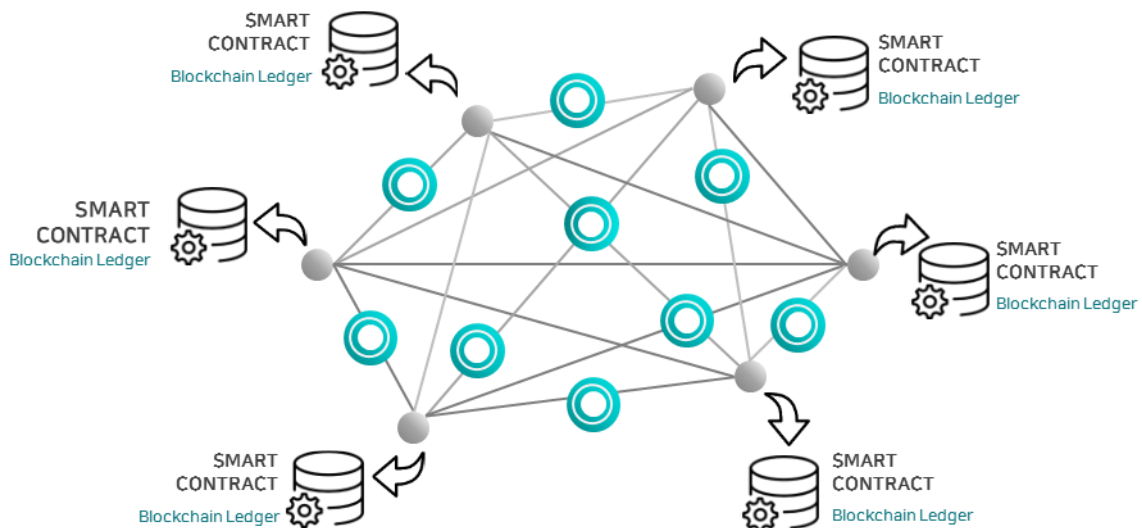
1) YAP Stone

Objective & Purpose

YAP Stone is a composing unit of YAP Chain and is an independent ecosystem that does not belong to an existing platform, thus enabling core activities and transactions. Like other cryptocurrencies, YAP Stone can be relocated, replaced, and used for trading. YAP Stone will be listed in numerous ICO Exchanges and the owners can freely trade the coins.

Supply of YAP Stone will be limited. It will be used as a global currency in Smart Cities developed through YAP Chain.

YAP Stone is completely integrated within YAP Chain and can be exchanged with YAP Token produced in Smart Contract.

YAP Token produced for diverse sectors provided by Smart City is exclusively exchanged through YAP Stone. Therefore, it is anticipated that YAP Stone's demand will increase proportionally to the number of active users.

Technology Implementation

Blockchain technology prevents forgery since it is a distributed database and enables users to use them in distributed network as a shared asset and ledger.

YAP Chain is embraces Turing-Complete programming language, a fundamental and crucial element of blockchain.

Using this programming language, anyone can draft contracts that include 'Arbitrary State Transition functions' and implement afore-mentioned system as well as to help make applications that were never envisioned with ease.

YAP Stone's basic format can be coded in about 2 lines, and currency and evaluation system can be coded within 20 lines.

Smart Contract, which is a type of encrypted box that can save specific value and satisfy special conditions, can be produced on top of this platform as well.

This is possible as it provides functions much more powerful than 'Scripting' provided by Bitcoin, and it includes concepts such as Turing-Completeness, Blockchain Awareness, and States.

2) Smart Contract

Objective & Purpose

Smart Contract is developed on the basis of YAP Stone which is a powerful motive for Smart City that enables residents or visitors to approach diverse sectors without any 3rd party or intermediary involved to digitalized various contracts under conditions via distributed ledger technology. Through YAP Token which is connected to an individual's asset, once mutual consensus is made, the contract is executed.

It functions as a multi-signature account and can be used when more than a certain number of participants agree upon the budget and management of the contract.

- It can manage agreement between user's transactions and contracts. For instance, it can manage content of a contract or transaction information of an 'individual's purchase of an insurance product from another individual'.
- It can provide utility to contents of other contracts.
- It can save domain registration information or membership records.

Technology Implementation

Smart Contract developed by YAP Chain is blockchain platform that overcomes the limitation of Bitcoin's Scripting system by enabling diverse saving state and allows loop.

YAP Stone includes function in a compiled code format and synchronizes to blockchain. At this point, it inputs function for information included in the transaction and executes coded function and the result is separately recorded which completes the Smart Contract.

Therefore, besides the YAP Stone which is an independent coin, it allows saving of other digital objects thereby diverse currency can be produced and transacted on top of YAP Chain network.

In the case of AYP Stone's Smart Contract Supporting blockchain, it is composed of transaction DB storage that changes the status of the Smart Contract and a Smart Contract DB that stores latest state of the Smart Contract.

Smart Contract is an application that can change the status and the status of Smart Contract is variables that are used in the application. The input value to change is included in the transaction.

3) YAP Token

Objective & Purpose

YAP Token is produced for various industry sectors from a platform for Decentralized Application (DApp). YAP Token is based on YAP Chain platform and is necessary for using DApp services. At this point, commission fee for transaction between tokens is paid as YAP Stone.

Developers who use DApp to provide new DApp services can share YAP Token, and the service provider can either directly sell the token or trade within the exchange. Those who own YAP Token will be able to exchange them with YAP Stone at a certain percentage.

Technology Implementation

YAP Token System can be use in diverse industry of the Smart City.

From online and offline payment method, non-forgeable ID card, and to other types of token system disconnected from standard value (e.g. point system for incentives, coupons), applications that allow different types of transaction systems on network are available.

YAP Token System can be developed incredibly easy from the YAP Chain.

The fundamental of YAP Token System is that a database can execute only one type of operation. YAP Token System has a feature that Bitcoin's currency does not have. Transaction fee can be paid with the same currency that was used in the transaction.

The following procedures are necessary in order to complete a transaction. To execute a contract, user must maintain a balance of at least the amount of YAP Stone to be paid to the sender.

During contract execution, the commission fee received as YAP Token can immediately change to YAP Stone at the YAP Chain Exchange System and top-up the YAP Stone balance.

Although users must activate wallet through YAP Stone, value earned from respective contracts can be exchanged to YAP stone, thereby enabling the use of topped-up YAP Stone.

The commission fee paid in the process of contract execution can be paid from either the user or the service provider according to the service policy.

4. Core Service for Growth

The main objective of YAP Chain is to develop Smart City connected to YAP Stone worldwide.

YAP Chain provides distributed platform that enables individuals in the Smart City to easily use and exchange encrypted asset and currency to purchase goods, services, and currencies.
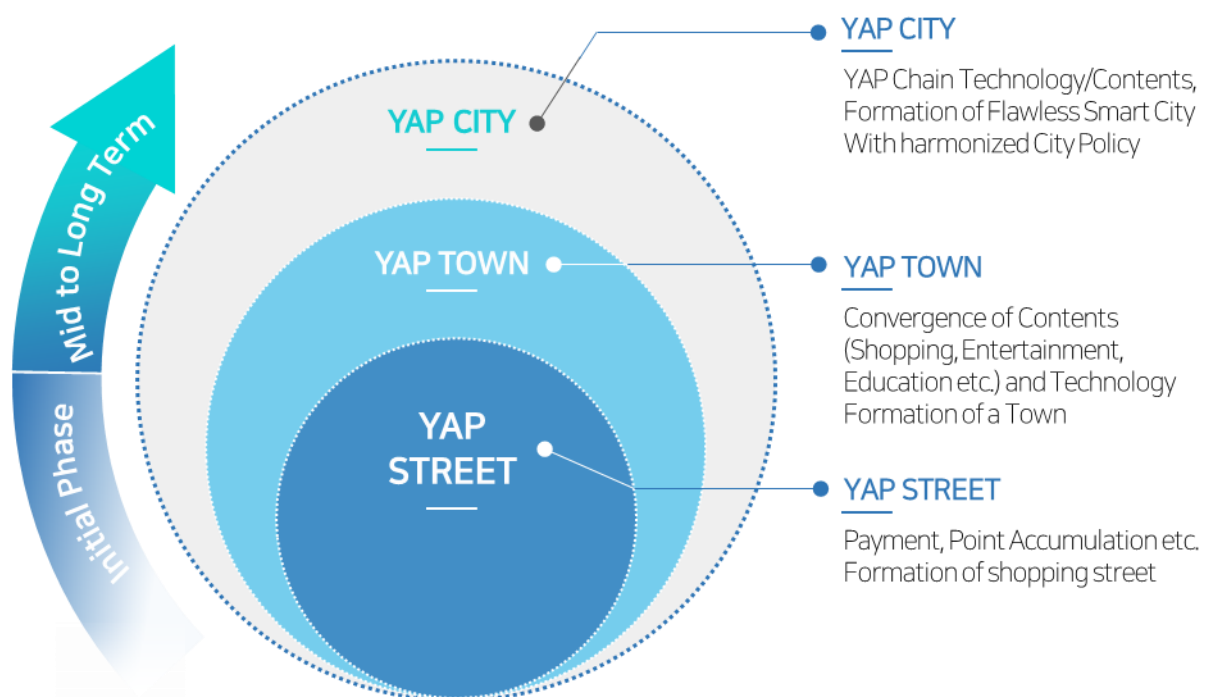
Initial Business Stage is Vertical Unified Process.

Leading changes in paradigm by combining Yap Chain based technology and variety of services to replace services necessary for everyday life.

Long Term Business is Horizontal Unified Process

Vertical unified process will be grafted with contents and city policies to connect the whole city into a unified chain enabling residents to enjoy their city life.

YAP Chain aims to approach more people by overcoming the limitations of the current Smart City.

YAP CITY
YAP Chain Technology/Contents, Formation of Flawless Smart City With harmonized City Policy

YAP TOWN
Convergence of Contents (Shopping, Entertainment, Education etc.) and Technology Formation of a Town

YAP STREET
Payment, Point Accumulation etc. Formation of shopping street

1) Phase 1: Smart Economy

YAP company will replace and develop existing payment-related services with a blockchain base and will execute payment-related services using the YAP Token in the Smart City.

This will enable commission-free payment service resulting in contribution of profit to the local society and reactivation of the local economy.

Furthermore, it can exchange services through interconnection with other Smart Cities that will create added values.
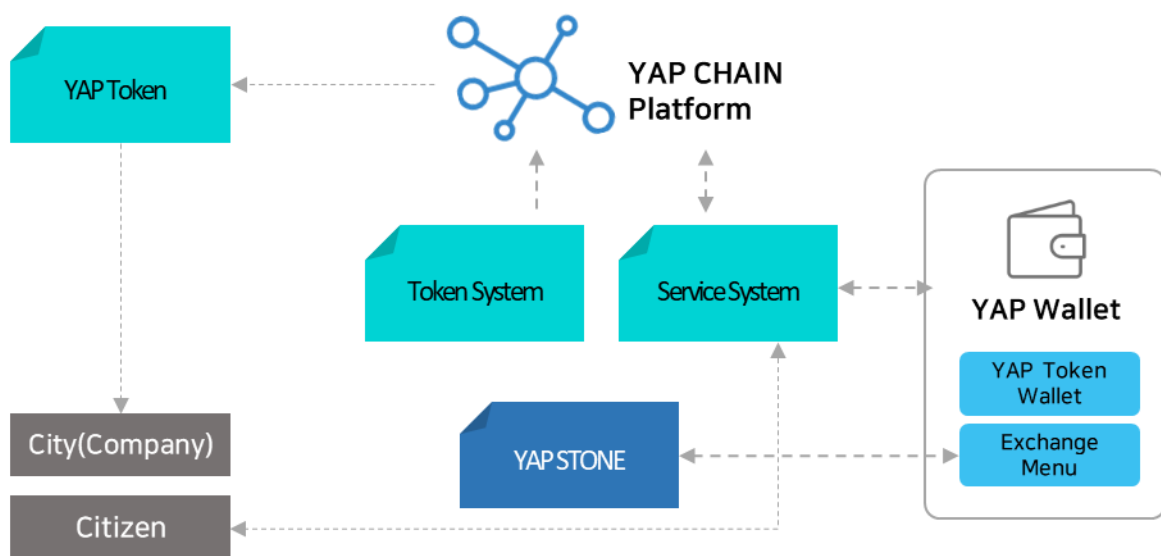
① Local Currency (Peg Coin)

Local Currency can be issued via YAP Chain Token Issuing System to respective Smart Cities. Local Currency can reflect the inflation of the region, accelerate consumption within the regions and restore the added value to the region.

Through the YAP Wallet exchange function, currencies used in different Smart Cities can be exchanged with YAP Stone which will promote and accelerate interaction with other Smart Cities.

Since the YAP Stone will control the exchange rate according to its fluctuation in value, value volatility is minimized and it will become a compatible cryptocurrency for payment.

Additionally, through ICO listing based on its local currency, fund for the relevant local Smart City development can be raised to secure and extend financial resources.

The Local Currency is issued via a YAP TOKEN. The YAP TOKEN provides a variety of specifications for this.

In order for YAP Stone to play the role of Local Currency, it must obtain the exchange value.

General tokens have too much price fluctuation and it is difficult to obtain the exchange value and if the price change is minimal, it cannot attract investment. YAP Stone have overcome the above problems by composing exchange rate system that adjusts exchange rate with Stable token based on price change.

Just like existing currencies that obtained credibility based on Gold Standards, YAP Chain is planning to open exchange market that can obtain credibility via fixed price of specialized local or community products similar to Gold Standards.

Local currency is basis for YAP Stone markets to attract community users. The initial step is to issue local currencies via negotaitions with local governments globally and issuing college coins centered on college towns.

※

College coin is local currency that returns payment commissions back to colleges and students that arises from stores/restaurants within the 4km radius of the respective colleges. The profits generated from College coins will be used for scholarships, copying costs, and for volunteer activities.

※ Local currency refers to the issuing of the coin unlimited to physical space and provision of the same service through interaction between similar service networks.
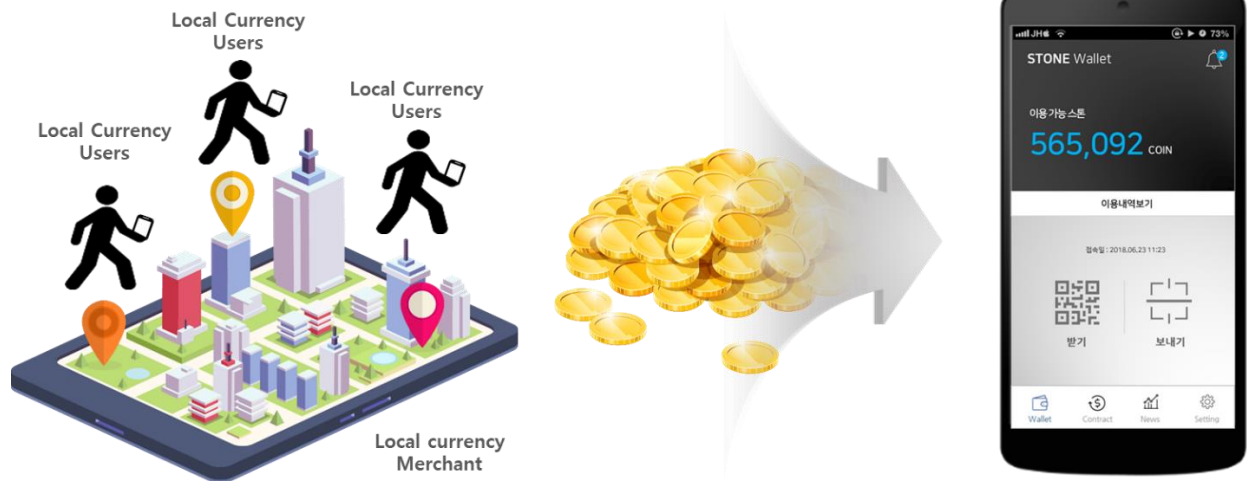
② Point Integrated Coin

Point Integrated Coin combines points from various point systems of numerous companies into a unified YAP Token that can be used and transacted. Similar to Local Currency, the value votality is reduced to offer a transferrable point coin.
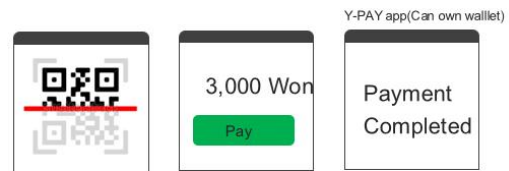
Depending on the its current value, exchange rates can change thereby creating a point coin exchange market. Applying the same principle as above, a coin derived from a different blockchain technology can give rise to its exchange market.

③ Online and Offline Payment

Through YAP Chain, consumers and service providers can interact directly without any intermediaries and settle payment without any commission. Through innovation of logistics, online and offline integrated payments are available. An ATM for exchanging YAP Stone with conventional currency is potentially under development.
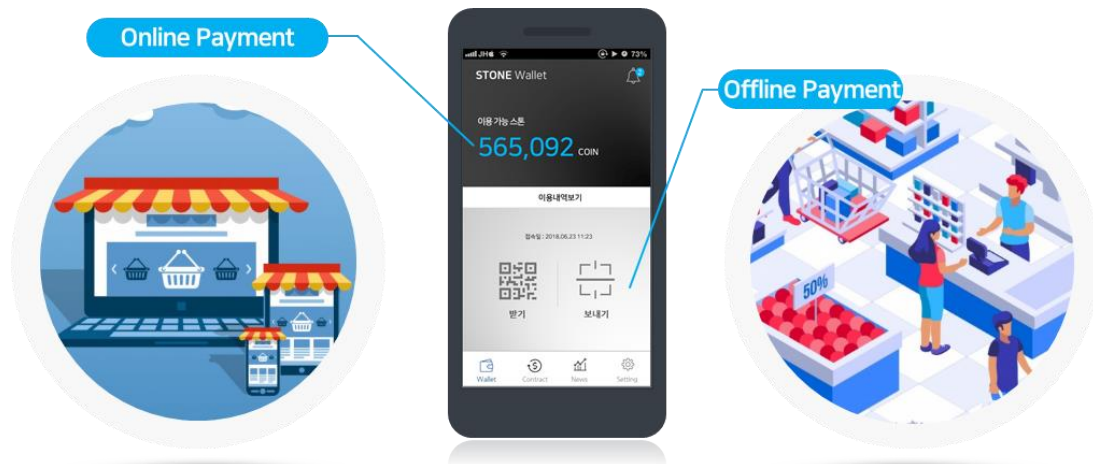

Without bank account!
Without Certified Certificate,
OTP, Security Card!
No need to receive/give changes

Y-PAY app(Can own walllet)

3,000 Won
Pay

Payment Completed

코드찍고 ➡ 금액입력 ➡ 송금완료

Scan QR -> Input amount -> Payment completed

우리과일상회

피스페이로 결제하세요

Online Payment

STONE Wallet

이용 가능 스톤
565,092 COIN

이용내역보기

접수일 : 2018.06.23 11:23

받기   보내기

Wallet   Contract   News   Setting

Offline Payment

50%

④ Smart Concierge (Reservation, Order)

Location based service reservation and order services are developed through indoor navigation, GPS, YAP Beacons, etc.

Reservation and order services via Messenger Chatbot are possible, and appropriate information and benefits can be enjoyed at any time and any place.
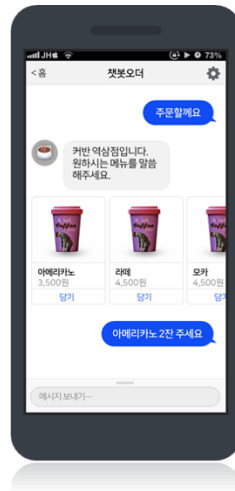
2) Phase 2: Smart Governance & People

The ID card customized for Smart City enables authentication of Smart City residents and foreigner's engagement in local economic activities, life, etc.

Smart City communication system allows Smart City residents to participate in turns for major decision makings and to deliver added values generated from the region.

ID / Pass   Integrated ID
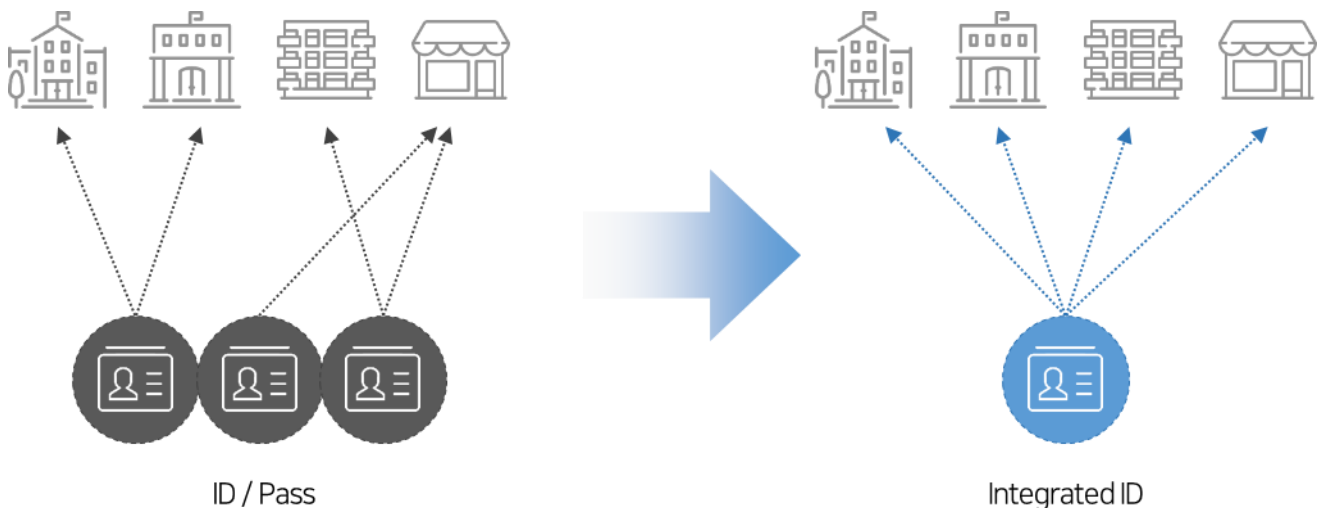
① ID Card

It controls entry of its residents to the Smart City, and it supports the participation of economic activities from outsiders(foreigners).

② Communication

YAP Chain makes communication within the Smart City possible so that residents can participate in major decision makings and receive public announcement.

Contents reward system based on Steemit rewards residents who have produced information and reviews of the local region, and search function without SPAMS is built on a trusted system.

③ Insurance, Medical

There is no insurance salesperson because it is based on smart contract, and it is possible to develop insurance product that benefits the contractor as a priority.

④ Security (Blocky)

Smart City's information security will be developed through Blocky Blockchain System.
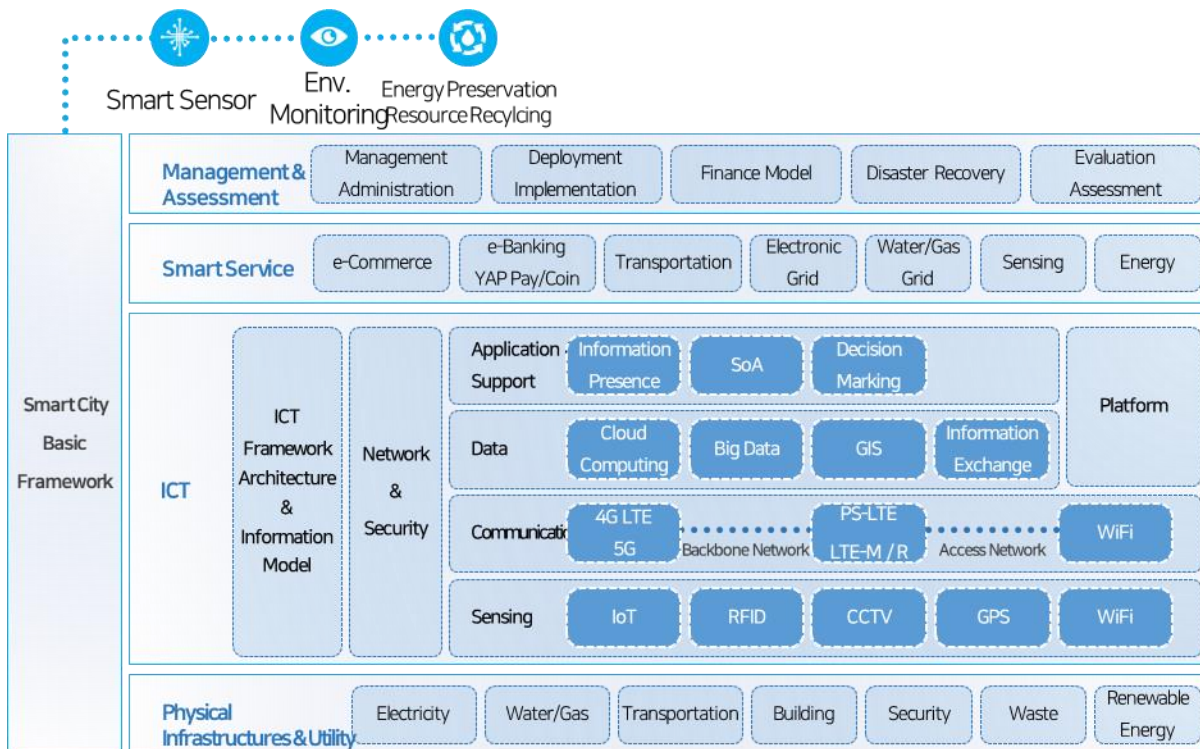
⑤ Others

Smart Contract, Authentication, Smart Education, Employment Support

3) Phase 3 (Partner Participation): Smart Living & Mobility

Through participation of top-tier companies in respective industries, it supports Smart Living & Mobility.

4) Phase 4: Smart Environment

It supports Smart Environment through participation of top-tier companies in the industry.

5) Smart City Partners

Smart City partners of YAP Chain will contribute in providing technology, infrastructure, network, etc., or develop existing services to connect with YAP Stone or YAP Chain platform. Respective partners can implement ICO or issue its coins through YAP Token.

YAP Company and its partners will participate in the Smart City business consortium. All top-tier world class companies will participate in the diverse fields of Smart Logistics, Sharing house, Smart Mobility, Healthcare, Smart home, Mixed Reality, Smart Sensor, Environment Monitor, and Energy preservation/recycling.

Main Partners	DRAPER Athena	BIT-BAY KOREA	
	ENABLE	wfuna World Federation of United Nations Associations	
Smart City Partners	HOGOOK D&C	만인의꿈	InfoTerior
	한국드론협회	Mediage	이스타투자
Co-Tech Development Team	wellOn	HYPER TWO	PULZZE
Entertainment & Media	HM Entertainment	YSK	WGS
Others	GINICON / JADEGROUP / Scalar & Vector / ENDO		

6) Vision

While Bitcoin opened up a new generation of blockchain, Ethereum provided vision to its ecosystem.

Recently, numerous 3rd generation coins that has increased its transaction rate and lowered its fee than that of Ethereum are being issued. YAP stone did not simply overcome the limitations of Ethereum like the other alternative coins. Instead of just targeting speed and cost, it will be optimized to be used freely in the actual region and related Smart Contracts and DApps will be provided.
YAP Stone will obtain widely and easily used user case based on local areas. As a result, YAP Stone will obtain actual community user's database and actualize Share Economy leverlage by making token economy within the region. In addition, the fundamental philosophy of YAP Chain is to return the profits generated from leverage to the community

In order to achieve the above goals, YAP Stone will redefine the Blockchain wording and vocabulary to easier and more understable words and develop the UX to be more user friendly and convenient. Additionally, YAP Stone will maximize the leverage by optimizing compatibility and connectivity soasto easily connect with other blackchain based communities or to merge them.

As mentioned above, YAP Chain will apply its broad experience and sophisticated knowledge to various industry sectors to develop a new Smart City that is incomparable to the previous one.

In order to maintain the success of the YAP Chain platform, it is essential for the YAP Stone to continue increase in value in a sustainable manner.

Smart City based on YAP Chain must consistently expand and be developed. Success of the YAP Chain project will increase the population of those using YAP Stone in the Smart Cities and since users have to obtain YAP stone, the increasing YAP Stone demand will proportionally increase the population using YAP Stone within the Smart Cities.

Increase in YAP Stone value will generate higher profit to everyone using the coin.

YAP Stone is completely integrated to YAP Chain and YAP Token which is to be used in diverse industries can be exchanged with YAP Stone only.

Due to such usage right, users must obtain YAP Stone in the Smart City constructed on YAP Chain resulting in active circulation of YAP Stone within Smart City.

YAP Stone will adapt to the market changes by flexibly applying exchange rate within the Smart City.

YAP Chain's main objective is to enlist YAP Stone in all cryptocurrency exchanges which will allow coin owners to use and exchange YAP Stone anywhere and anytime, without any restrictions. By retaining the status of its exchange and usage value, YAP Stone will become a key currency in Smart Cities.

5. Ethereum based YAP Chain Technology Implementation

YAP Chain is a side chain developed to improve the limitations of Ethereum. In status quo, there are numerous 3rd generation blockchain technologies for transaction processing system (TPS) speed improvement and scalability, reduction of transaction commission fee, multi-thread, parallel processing, etc. Therefore, YAP Chain will be adopting validated and improved technologies to continue developing optimized Smart platform system.

YAP Chain is further planning to develop its own core blockchain system. The coming section will look into YAP Chain's core base Ethereum blockchain.

1) Why Ethereum?

By adding smart contract function to blockchain concept, Ethereum enables development of diverse DApp programs and provides new cryptocurrency ICO platform functioning as one of major global currency. YAP Stone is a Smart City platform based on Ethereum and supports smart contract's developing language – Solidity and supports platform for Smart City DApp development.

Ethereum has released several versions of Frontier, Homestead, Metropolis and is on the verge of launching Serenity. Casper function has been released for transferring from Proof of Work (PoW) to Proof of Stake (PoS) and is ready to apply to mainnet. Sharding function, plasma, and plasma cash functions will be applied later on resulting in the capacity to apply TPS and DApp in real life.

Globally, 83% of the companies that are planning to list in the ICO uses Etherium's ERC20.

In order to strengthen the compatibility with these companies, connectivity with Etherium's Solifity is very important.

There remains effort to overcome the limitations of current blockchain and various technology development are in progress. YAP Stone is also participating in this arena to develop technologies and contribute to the innovation of blockchain. As a consequence, YAP Stone is also planning to advance along with Ethereum's function improvement, and YAP Stone developers are also investing efforts to develop internally built functions.

① Ethereum Concept

Vitalik Buterin fell deeply into blockchain in end of 2013 and drafted a white paper that integrated a new blockchain concept. He sent this document to several of his friends, discussed about the concept with 30 engineers, and in January 2014, with key team members including Gavin Wood, announced Ethereum.

According to definition, Ethereum aims to be a DApp platform to be not only a distributed internet but also a distributed app store. From this view of cryptocurrency, it may seem similar to that of Bitcoin but in reality, it has a totally different objective.

Bitcoin has secured as a successful and stable cryptocurrency, whereas Ether of Ethereum is a multi-purpose platform as a component of smart contract application program. The most critical difference between the two project is that Ethereum's internal code is Turing Complete. In other words, if Ethereum is given computing power and time, it is possible to develop any kind of application program. This characteristic makes diverse development of DApp application program possible on top of Ethereum platform.

② Ethereum Functioning Principle

As mentioned above, Ethereum and Bitcoin are both blockchain based cryptocurrencies, but Ethereum functions beyond blockchain. Every node in Ethereum network must share its transaction information, user's balance, smart contract code and its status, storage location and latest information.

All of Ethereum's states comprise of several million transactions. These transactions are grouped into blocks and previous blocks are connected to the recent ones. Before ledger is added to the transaction, it must go through validation check before reaching mining.

③ Ethereum Usability

Developers can produce application programs on top of Ethereum platform and distribute them, and all centralized services can be decentralized by using Ethereum platform. DApp developed on top of Ethereum platform can completely change the relationship between the company and its potential customers because blockchain technology and DApp can be applied to not only

industries that practice conventional way of contract but also to diverse industry sectors such as web services, insurance, distribution, trading, etc.

Ethereum can be used for building digital decentralized autonomous organization (DAO) which can be operated transparently without a leader or central organization. DAO will be owned by token purchasers but the quantity purchased does not represent shares or ownership. However, it gives voting rights to those who have purchased token.

④ Ethereum's Strengths

Ethereum platform utilizes all forms of blockchain technology characteristics, and it is not intervened by a 3rd party. In other words, all blockchain networks are based on consensual principles in which they are not controlled by DApps and DAOs.

Since all nodes in the system must agree to all changes, thereby eliminating possibilities of fraud and corruption and preventing network forgery, decentralized crypto security protects Ethereum network from hacking and fraudulent actions

⑤ Ethereum's Weaknesses

Although smart contract's objective is to prevent network failures, errors can occur from a coder's mistake and it can lead to misuse.

In April 30th 2016, "The DAO" was attacked and over 36 million Ethers were stolen. The hackers took advantage of bugs from smart contract to steal Ethers. This caused a severe damage to Ethereum's credibility and a new version of Ethereum was released with addition of hard fork.

Due to an internal conflict, the organization was divided into Ethereum and Ethereum Classic which are both in existence.

Furthermore, Ethereum can handle roughly 20 or more transactions per second (TPS), much too slow for real life usage. The speed of VISA Card is 45,000 TPS and EOS, a recently popular cryptocurrency, claims to have a speed of 1,000 to 8,000 TPS. To overcome such problem, since Ethereum developers have been putting much effort to produce a better version, which technology will be recognized by the market remains to be seen.

However, due to the ecosystem developed through several years of verified system, Ethereum is considered as a more stable platform than EOS.

In addition, Ethereum transaction, including Ether remittance, is operated on top of Ethereum Virtual Machine (EVM), and gas fee must be paid. In the case of ICO or when there are lots of transactions at once, the gas fee rises to a considerable extent. On the contrary, EOS uses Delegated Proof of Stake (DPoS) consensus algorithm and does not require commission fee. This part needs to be explored further to come up with a better solution.

⑥ DApp Developed based on Ethereum

Ethereum is a platform that can develop distributed applications without technical knowledge on blockchain. Ethereum platform can come as a shock to conventional, centralized businesses such as insurance, finance, and real estate because the platform can unbundle the existing structure.

- Gnosis: Market predicting platform where users can vote for weather and election results
- Weifund: Crowd funding platform for Smart Contract
- Uport: Platform where users collect authentication material, log-in without Password, and digital sign a contract to create one's ID
- Augur: Prediction platform that allows forecasting of events and be rewarded predicting right
- Bitnation: DAO that provides the same services as traditional countries as world's first virtual nation including blockchain governing body, insurance fror embassy and refugees, education, ID, diplomatic program, etc.

⑦ EVM (Ethereum Virtual Machine)
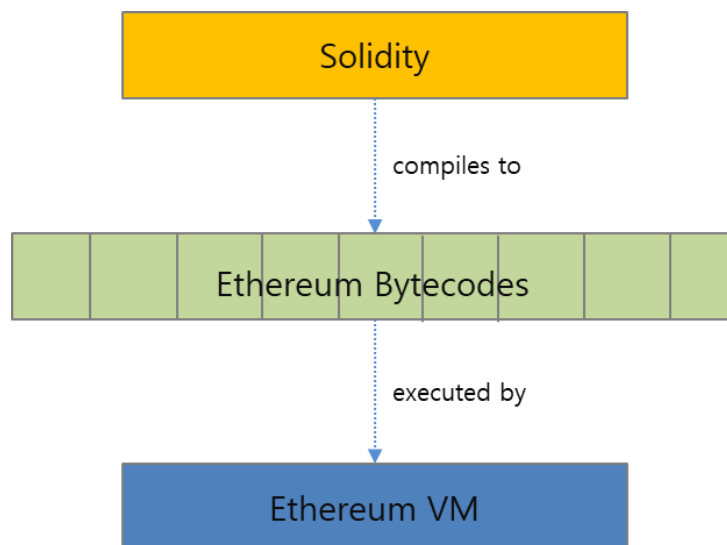
EVM is a runtime environment for smart contracts in Ethereum. Smart contract is coded through language Solidity and is produced by Application Binary Interface (ABI) code via Solidity compiler to be executed on top of EVM. In order to use EVM, gas fee needs to be paid and this is tied to Ether price. Transaction fee is calculated as Gas Limit x Gas Price. To run the program, one must own certain amount of Ether.

2) YAP Chain Ethereum Based Smart City Blockchain Development Platform

YAP Chain is an Ethereum based independent Blockchain ecosystem. Unlike existing Ethereum, YAP Stone of YAP Chain is fixed to total issuance of 1 billion coins and is 100% pre-mined coins. In this platform, block is created every 12 seconds, mining method of Proof of Work (PoW) is used, and hash algorithm used is Ethash. Since all of the coins are pre-mined, no compensation of YAP Stone is given even if it is mined. Although YAP Chain supports ERC20/223, a standard for Ethereum token, YAP Chain will build an independent public blockchain. Diverse Smart City application programs will be developed on top of YAP Chain and payment platform for everyday life will be developed as well. In addition, YAP Chain will develop independent platform for development of Smart City DApp and support its application.

① YAP Stone Consensus Algorithm and Developer Environment Consensus Algorithm

After ICO, YAP Stone's basic Consensus Algorithm will be implemented as PoS (Proof of Stake) based on development schedule. This method is named as Casper by Ehterium Foundation and Developer Community and running PoC (Proof of Concept) and recent test results show that the performance has improved to 13,410 tx/sec from existing 7 tx/sec by applying Shasper (Sharding + Casper). When it is applied to layer 2 chain, the performance will improve several hundred/thousand times. YAP Chain's YAP Stone will be upgraded to Shasper version from existing PoW and will be upgraded to Exclusive Consensus Algorithm of **POTG (Proof of Trustworthy Group) that will be optimized for the Smart City**. **POTG Node** is currently operated by over 20 public entities (C20, City of 20) that has certain level of community population. POTG Consensus Algorithm redeems weaknesses of EOS and DPOS that fails to obtain credibility for Representative Nodes.

Consensus Algorithm of C20 will be validated and monitored separately by Open-Type Node. Read Request procedures will be processed via Open-Type Node and structured and designed to maximize the efficiency level of C20. POTG file system applies IPFS (InterPlanetary File System) decentralized file system and C20 will be composed via separate procedures.

Before obtaining sharding technology for large scale users, Side Chain and Node that interacts with relevant region and DApp will be utilized to immediately service with adequate level of speed improvement.

POW	POS	DPOS	POTG[1]
Decision based on computing capability of Block Generator	Decision based on random block generator in proportion to possession amount of Tokens	Participation of Representing Node election in proportion to Number of Tokens possessed	Block generation credible public entities that actually provides service
	Possible to participate in more block generation if more Tokens are possessed	Block Consensus process will be solely delegated to Representative Nodes	Block Consensus process is solely delegated to Representative nodes (C20) + Coarse node verification
Ecosystem formation focusing on Miners	Low level of actual participants	Representative does not work resulting in unjustifiable ecosystem	

Developer Environment
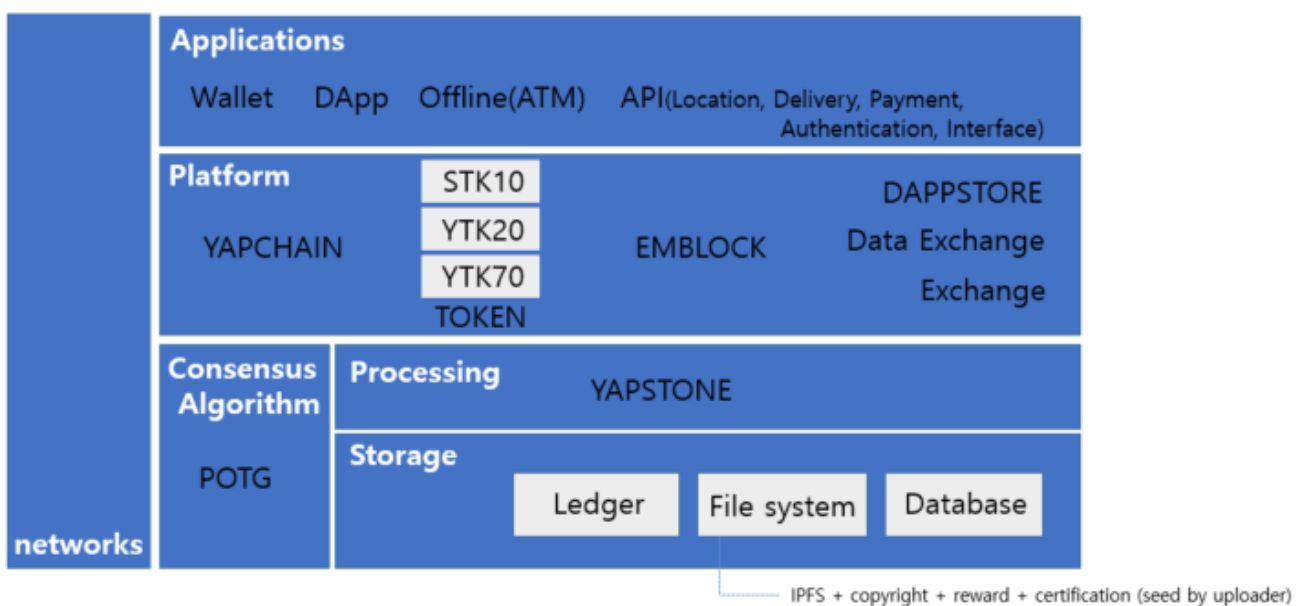
Planning to provide all tehcnologies and services via Broadband Network.

② Necessary Technology

Raiden Network

The most serious problem faced by Ethereum and other blockchain cryptocurrencies is Transaction speed (TPS). To solve this, YAP Chain will graft Raiden Network. Once YAP Chain applies Raiden Network, it will enable faster transaction authentication, reduced commission fee and micro-payment which will allow IoT's Machine to Machine (IM2M) trade.
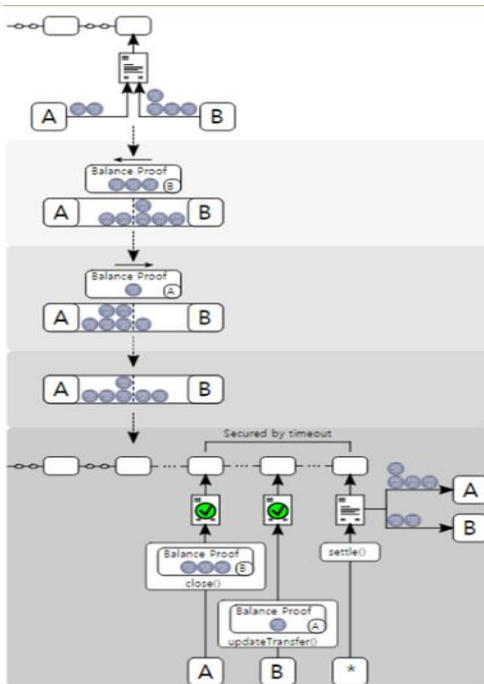
Assuming that A and B are making transaction via Raiden Network, a separate channel connecting A & B will 'open'.

As the transaction is stored in blockchain, it produces gas. However, A & B can trade unlimitedly and no gas is needed as the transaction is executed in an off-chain environment where transaction is not recorded in blockchain.

If A & B 'closes' the channel and make an actual transfer, above transaction will be recorded in the blockchain and gas fee will occur.

Above example is only between A & B but if B & C channel and C & A Channel also gets interlinked, the frequency of closing the channel can be minimized and it will have a larger ripple effect.

Raiden Network is a similar project to Lightning Network which is used by Bitcoin and Litecoin. It minimizes recording on blockchain by opening and closing the transaction channel via off-chain, reducing the commission fee.

- No need to wait for block transaction, so authentication process is faster
- Commission fee only paid when opening or closing the channel. Intermediary transaction requires no commission fee.

Plasma

YAP CHAIN Software Team is actively investigating the possibility of adopting Plasma technology. While Raiden is an off-chain technology that utilizes the opening and closing of a channel, Plasma is a Child-chain technology that minimizes blockchain bloating.
DApp is currently recording all of its data in YAP blockchain (Main-chain). This causes problems not only to processing speed but also block size and increase in gas consumption due to data volume.

Plasma generates an independent chain and synchronizes it with YAP Chain's main blockchain with minimum data volume and the following outcomes are expected:

- Reduces YAP Chain's Block size
- Drives DApp with faster speed
- Minimizes gas consumption

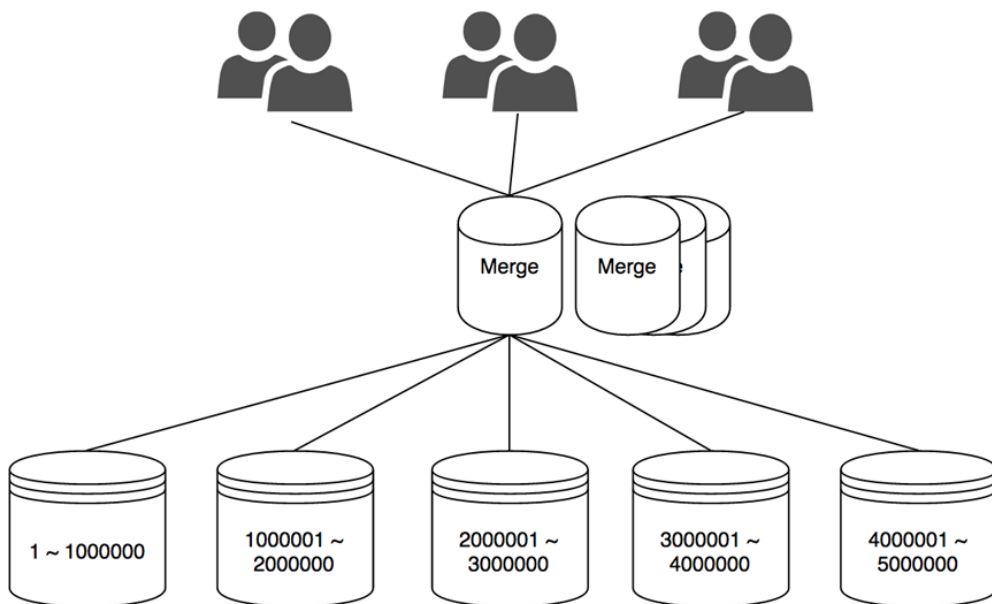Effectiveness of Plasma's lower chain can be validated through Main blockchain of YAP Chain.
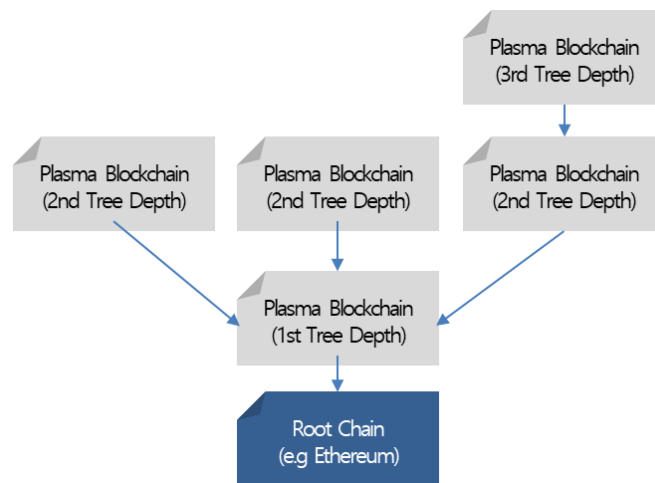
After combining Raiden and Plasma, YAP Chain will transfer into PoS (Proof of Stake) Casper.

Sharding

YAP Chain is also considering to adopt Sharding Technology. When the size of the database becomes too large, database is partitioned for efficient management. Sharding uses a conventional scaling method called Database Sharding. This technology effectively divides database into pieces and stores each of them in different servers. Ethereum is also using Sharding technology to productively carry out transactions and to increase the number of TPS as well.

Sharding divides the data managed by YAP Chain Node to speed up the work. Through Sharding Technology, it optimizes the number of TPS and is a necessary component along with Raiden and Plasma technology.

- Efficient management of DApp data through Plasma
- Reduction of gas fee and increase in transaction speed via Raiden Network
- Optimization of TPS via Sharding
- Use of DApp at a realistic speed for low commission rate

③ YAP Chain Feature

Yap node (Full node) – geth with YAP Chain

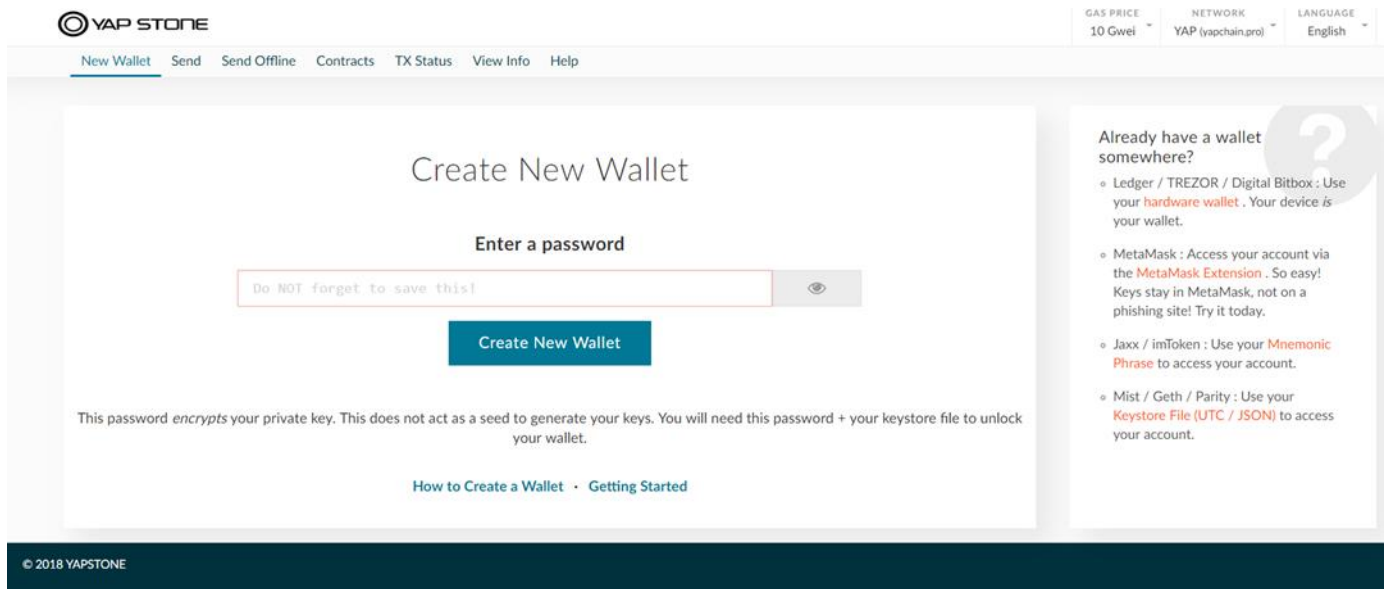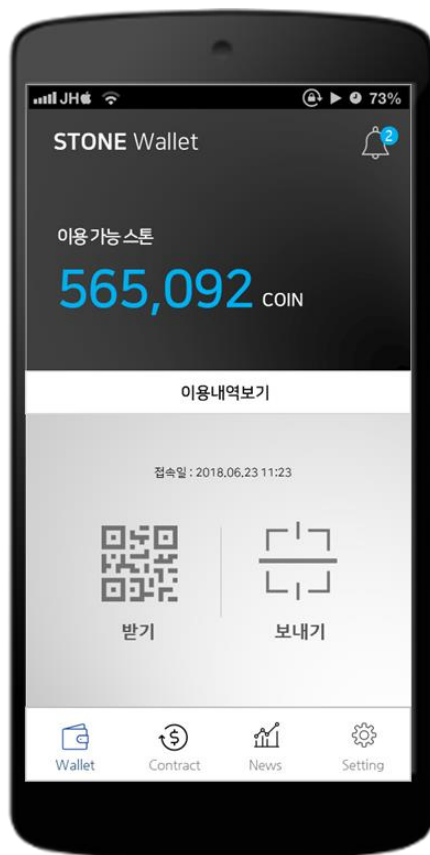### Yap Netstat

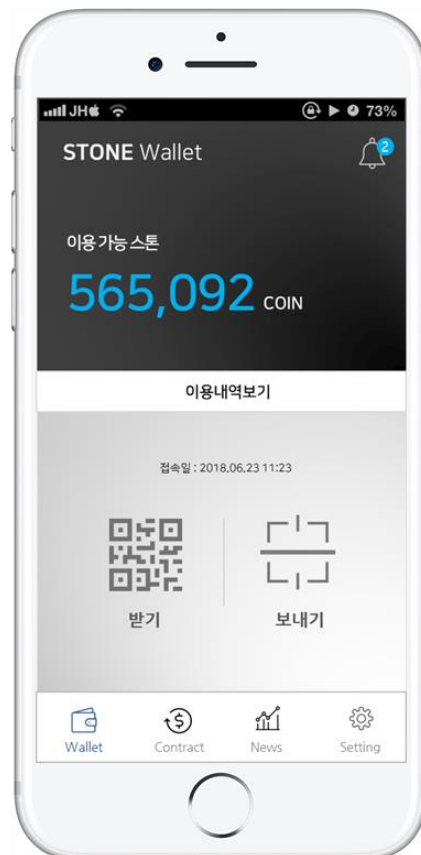### Yap Block Explorer
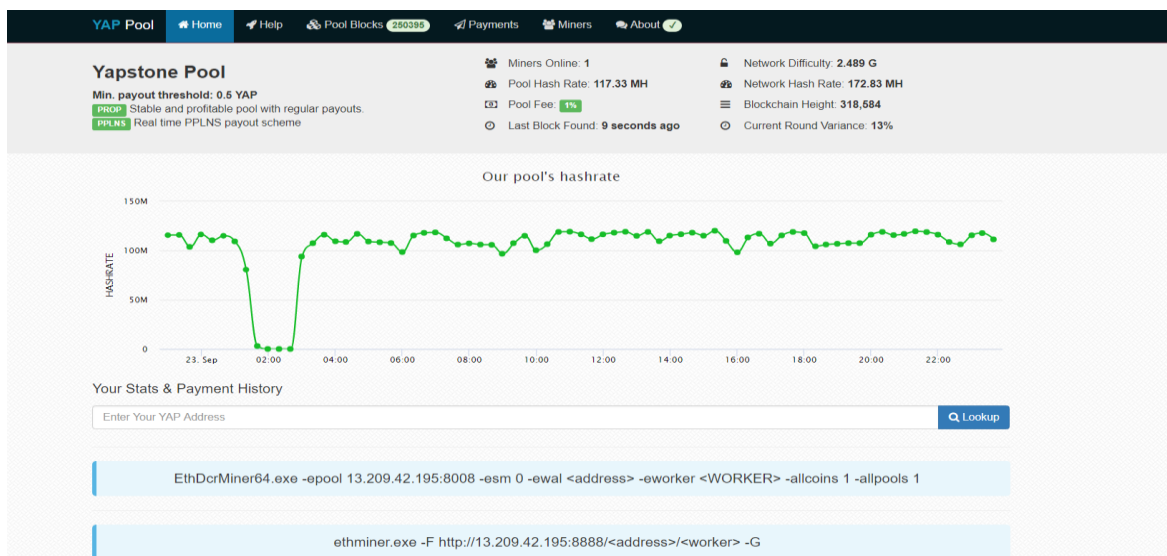
Yap Web Wallet

Yap APP Wallet

Android Wallet   **iPhone Wallet**

6. Business Contents Overseas

Smart City projects include diverse sectors such as transportation, energy & environment, security, healthcare, education, etc., and 70% of them focus on energy, transportation, and security.

Smart City projects are different country-by-country. Asian region including China and India focus on strengthening national competitiveness and expanding investments in city development and infrastructure, whereas developed western countries focus on improving quality of life, energy, environment, and smart city services.

Globally, Smart City related technology is still under verification level and executed projects are in their initial stages. However, it is expected that Smart City related market will rapidly expand in the near future.

Smart City based on YAP Chain guarantees technological success and YAP Chain will be a global leader in the Smart City blockchain platform market.

Especially, South East Asia, Africas, Central/South America are regions that can expect quantum jump for industries via Blockchain Network. More endeavors are invested in the region.

Country	Projects in Progress
USA	• Announced Smart Cities Initiative in 2015, planning to invest USD 160 million in related technologies, R&D, and to Federal government projects • Resolve traffic, climate change, economic development and other regional issues
EU	• Announced execution plan of Smart City and Community Renovation Partnership Strategy in 2013. • European Community (EC) responsible for Smart City policies on solving energy and traffic problems
UK	• Aim to control 10% of global market for Smart City project, 'Open Data, Future Cities Demonstrator' policy in action since 2012 • Invest in standardization for Smart City related IT technology
China	• Smart City development plan in 500 cities in 2015

Country	Projects in Progress
	• Invest 500 million Yuen for R&D and 1 billion Yuen for infrastructure development by 2020
India	• Announced to invest KRW 19 trillion to develop 100 Smart Cities by 2020
Singapore	• Established Smart Nation Program Office (SNPO) in 2014 •Promoted a pilot project on cooperative system between local and overseas universities, private sectors, and multinational enterprises
Japan	• Focusing on energy efficiency and investing in 4 Pilot regions Yokohama, Kyoto, Toyota, and Kyushu
Korea	• Smart City Related Enactment (Ubiquitous City construction related Law (2008. 3)) and pilot business under way • Exporting of AI traffic system to foreign market as a pioneering leader in the market

7. Execution Schedule

Smart City started off in mid 1990's as a Digital City and evolved and undergone 3 phases. It has been rapidly expanding along with the integration of technology advancement and its demand.

While the initial phase of Digital City was led by telecommunication firms, Ubiquitous City (U-City) was a starting point for appearance of technology-led Smart City.

The main objective of Smart City based on YAP Chain is to proceed in three stages of constructing YAP Street, YAP Town, and YAP City, release necessary technology source to the public which can reduce errors due to participation of large number of people, and create a successful business platform with technical precision.

2017

/ 06 ● YAP Chain Project Planning
/ 08 ● YAP Chain Project Team
/ 08 ● YAP Chain Main Net Development

2018
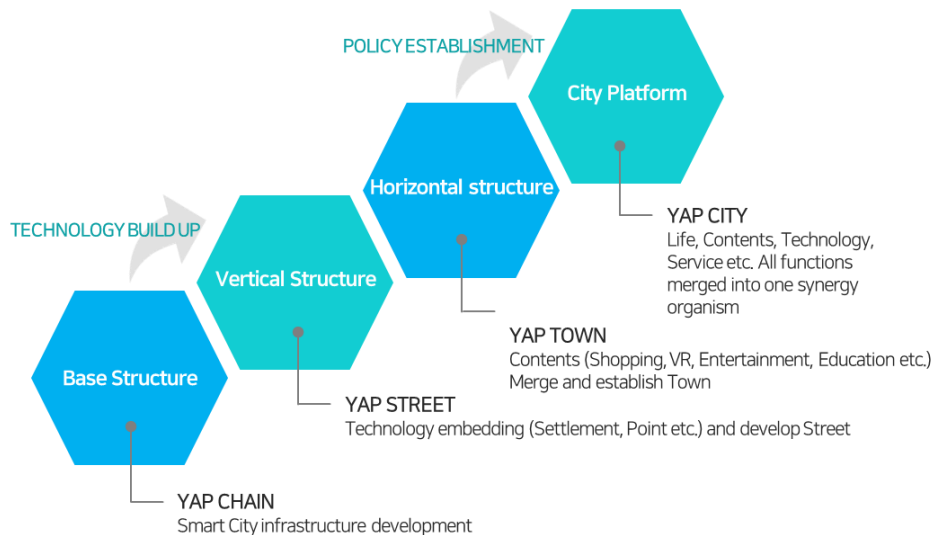
/ 07 ● YAP Chain Main Net Launching
/ 07 ● YAP Stone White Paper Released
/ 07 ● YAP Chain ICO Company Set-up

2019
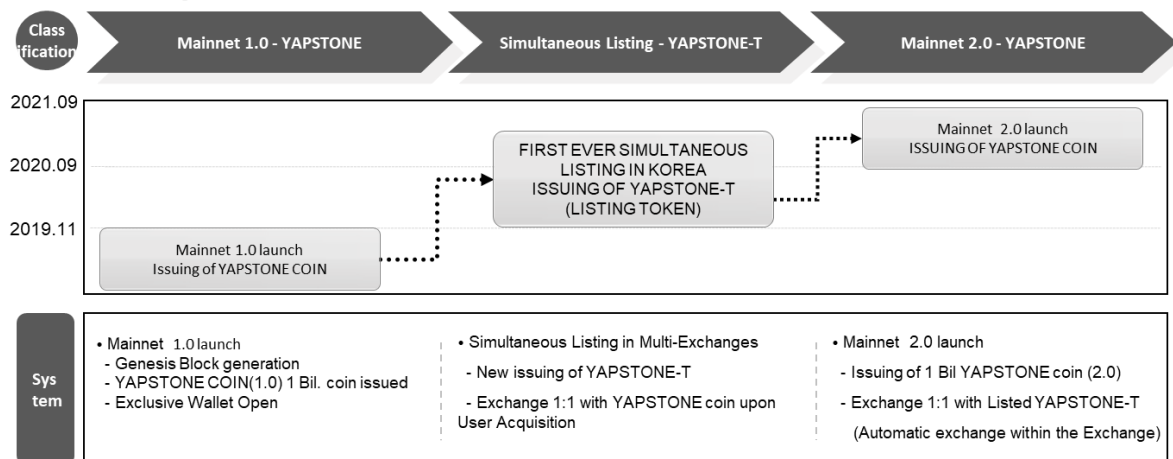
/ 01 ● YAP Chain Respective Service Launch
/ 03 ● Global Smart City Association Formulation
/ 05 ● YAP Chain Platform launching
/ 05 ● YAP Street Pilot service launch
/ 09 ● YAP Chain main platform launching

2020

/ 01 ● Announce Development Plans for YAP Town, YAP City

Mainnet Operation Plan

Classification	Mainnet 1.0 - YAPSTONE	Simultaneous Listing - YAPSTONE-T	Mainnet 2.0 - YAPSTONE

| System | • Mainnet 1.0 launch
　- Genesis Block generation
　- YAPSTONE COIN(1.0) 1 Bil. coin issued
　- Exclusive Wallet Open | • Simultaneous Listing in Multi-Exchanges
　- New issuing of YAPSTONE-T
　- Exchange 1:1 with YAPSTONE coin upon User Acquisition | • Mainnet 2.0 launch
　- Issuing of 1 Bil YAPSTONE coin (2.0)
　- Exchange 1:1 with Listed YAPSTONE-T
　(Automatic exchange within the Exchange) |

[Main Business Model]

1) Phase 1: Settlement Ecosystem Composition

- Listing of YAPSTONE: Secure Umbrella ICO base via Listing of YAPSTONE at Global ICO Exchanges

 -Umbrella ICO: Supporting of ICO listing of partner companies via YAPSTONE-T to compose Settlement Ecosystem

2) Phase 2: Network Platform to compose Settlement Ecosystem

- Mobile Gift Certificates, Prepaid Gifrt Certificates: Mobile Gift Certificate Issung Platform

- Settlement Exchange: Compose Global Settlement Exchange that plays the role of Crypto PG
3) Phase 3: Smart City Shared Economy Platform (Mobility, Real Estate, Energy etc.)

8. YAP Stone Issuance

YAP Stone will provide 60% of the total sales (1,000,000,000 YAP) which is 600,000,000 YAP to the participants after coin sales.
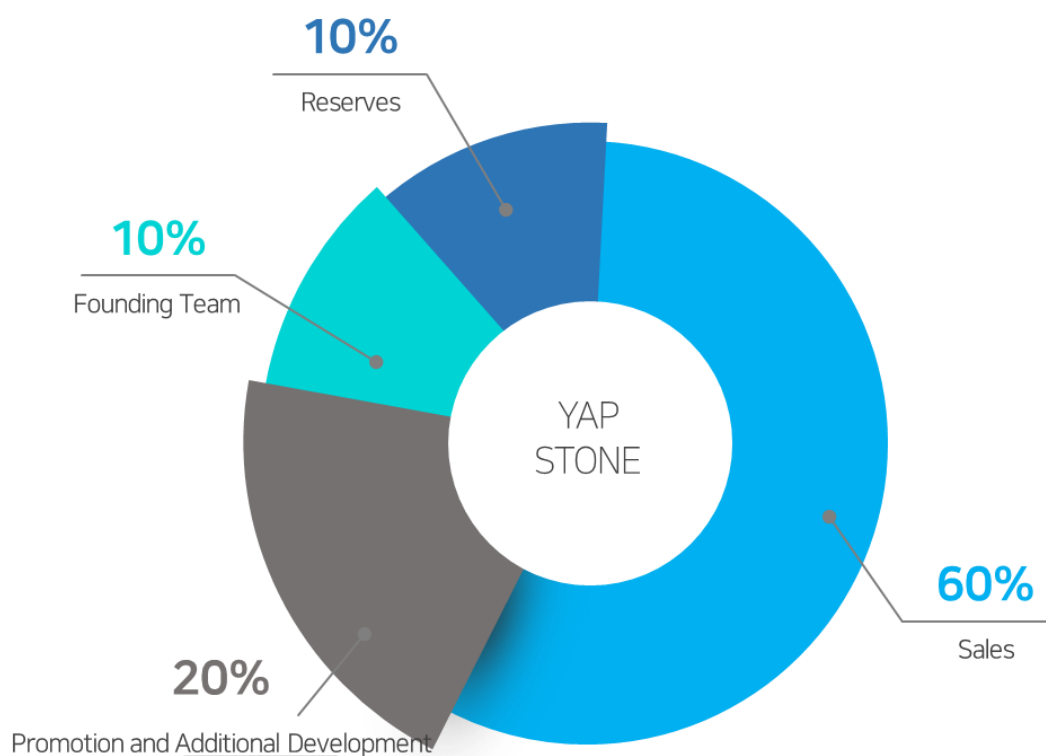
Investment raised from YAP Stone sales will be allocated to YAP Chain Technology development and resources.

9. YAP Stone Sale

1st Private Sale

- URL: www.yapstone.pro
- Min. Transaction amount = 0.45$ (**Accepts:** Crypto Currencies)
- Rule : KYC(Know-Your-Customer), AML(Anti-Money Laundering)
- Sale related schedule will be notified via www.yapstone.pro

1st Pre-Sale

- URL: www.yapstone.pro
- Min. Transaction amount = 0.45$ (**Accepts:** Crypto Currencies)
- Rule : KYC(Know-Your-Customer), AML(Anti-Money Laundering)
- Sale related schedule will be notified via www.yapstone.pro

2nd Pre-Sale

- URL : www.yapstone.pro
- Min. Transaction amount = 0.6$ (**Accepts:** Crypto Currencies)
- Rule : KYC(Know-Your-Customer), AML(Anti-Money Laundering)
- Sale related schedule will be notified via www.yapstone.pro
- It could be Pre-IEO.
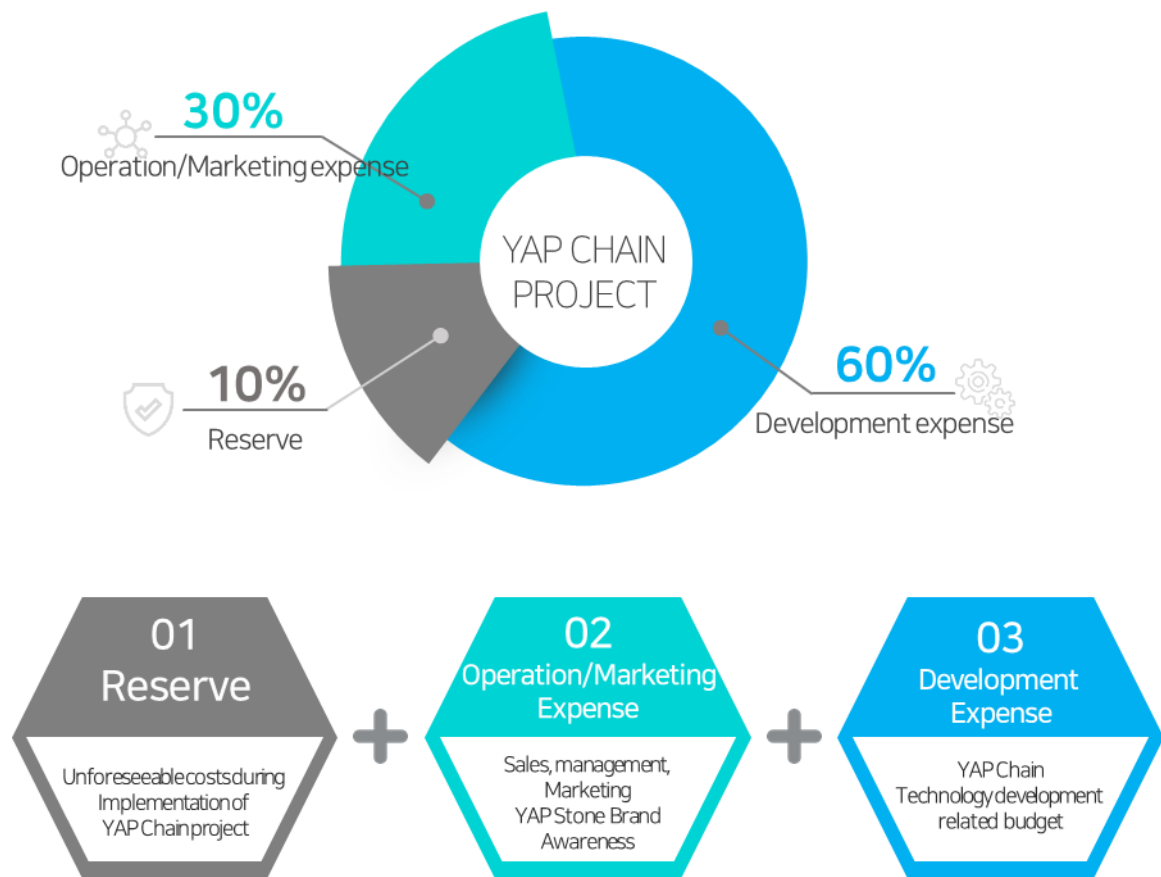
Fundraising Goal	Fundraising Price	Description
Soft Cap	3,000,000$(US)	
Hard Cap	40,000,000$(US)	
Equity Financing	90,000,000$(US)	Investment Funds for building up the token eco-system

10. Fund Spending Plans

Estimated spending plan for received fund for YAP Chain development are as follows:

30%
Operation/Marketing expense

60%
Development expense

10%
Reserve

YAP CHAIN PROJECT

01 Reserve

Unforeseeable costs during Implementation of YAP Chain project

+

02 Operation/Marketing Expense

Sales, management, Marketing YAP Stone Brand Awareness

+

03 Development Expense

YAP Chain Technology development related budget

11. Founding Members

YAP CHAIN Software Team is composed of experts in Blockchain technology, Software engineers, design experts, marketing professionals, etc. Additionally, internal external experts and external community groups are invited to make the YAP CHAIN project successful.

CEO / Lloyd Park

YAP Company CEO

ex) Dopple Soft CEO
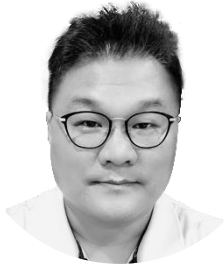
Korea University / Law

CTO / Charles Lee

Bit Bay Korea CTO

EXPO Chain/Blockchain Lab CEO

ex) Future System CTO, isoft CEO

KAIST / Computer Science

COO, CIO / Pil Soun Kang

Wellone CEO / Bit Bay COO

ex) Contents Park Director

ex) Mailcaster Director

CDO / Daniel An

YAP Chain

KAIST / Ph.D. in School of Computing

Tsinghua University / BS, MS in Computer Science

Head Manager / Aiden Jang

Fynamics Foundation CEO

KyungHee University / Business Administration

CLO / Hyun-Chul Ryu

SPIDOR YAP CEO

Foodtech Incorporated Association / Vice President

Korean Rider Incorporated Association / Business Manager

ex) FDIA / CEO

Dongkuk Univ. / Department of Distribution Economics

Software Director / Sung Woo Lee

EF Tech Founder

NVRAMOS Conference Committee /

Korea Storage Researcher Director

ex) Kyungbuk University Computer Science Dept.

Adjunct Professor

Kyungbuk University / Computer Science Ph.D

Software Director / Sung Beum Sohn

PROTOFAB CEO

ex) LND Systems Director / ex) Xwaresolution Director

Illinois State University / Bachelor of Computer Information Science

Software Director / Shim Jae Bum

Bit Bay Korea Chief of Research Institute

ex) Green C&T CEO

ex) Shinhan Data Systems Digital Research Center

Token Economy Advisor / Ju-yeol Lee

MCA / CEO

Youthfulness School / Representative

Stupid Challengers Forum / Chairman

ex) KMA / Principal Consultant

RC State University of New York / Invited Professor

Hanyang Univ. Graduate School of International

/ Master of Chinese Studies

Token Economy Advisor / Taesung Kim

Mohenic Garages / CEO

Crowdfunding Council / President

ex) The Design/ CEO

ex) Design Strategy Management Institute / Director

Hongik Univ. / Department of Wooden Furniture

Token Economy Advisor / Min-seok Kim

PULZZE SYSTEMS / Business Lead (CSO)

ex) KAKAO(DAUM) Advertising platform / Business manager

Seoul National Univ / Department of French Language and Literature

Token Economy Advisor / Hye-sik Yun

2miles / CEO

ex) Microsoft Korea – Azure Cloud Marketing Manager

ex) SK Planet Cloud Architect

ex) Blizzard Singapore, Korea System Engineer

ex) Yahoo Korea System Engineer

Token Economy Advisor / Joseph Lim

World Federation of United Nations Associations

    / Senior Coordinator of Cooperative Innovation

Whitelist Institute Co-Founder

KOREA MIDLAND POWER Co., LTD. / Innovation committee

International NGO BaramNuri / Representative

Yonsei Univ. International Graduate School / Visiting Professor

Columbia University Graduate School of International Policy

Advisor / Yongduk Kim

hyosung Capital CEO

Ex) Standard Chartered Korea Capital CEO

Ex) NewYork Bank Korea CEO

Ex) Commerz Investment Trust Management CEO

Ex) samsunglife Overseas Investment Officer

EX) Samsung Secretary

Advisor / Michael Song

YSKMedia Co-Founder

Korea Food Tech Association Co-Founder

WGS Owner

ex) Samsung C&T

Advisor / Perry Ha

Draper Athena – Founder / CEO USA

Ex) Amicon R&D Group – Principal

MIT - B.S / M.S.

Harvard Univ. – M.B.A.

Advisor / Youngbae Moon

Block Chain and Coin Assessment / CEO

ex) NICE INFORMATION SERVICE / CB Research Director

ex) Hana institute of finance Chief of strategic planning / Compass Lexecon VP

ex) The bank of Korea Research Department, Economist

University of California, Santa Barbara / Ph.D. Korea Univ. Department of Statistics

Advisor / Sean (Yung Soo) Ryu

Cynergy Global (IT Consulting) CEO

GPM (VR Theme Park) / Global Chief Advisor

ENDO Protocol Singapore / Ambassador Korea

ex) KG Mobilians Co., Ltd. CMO

ex) ORC International Korea CEO

ex) AC Nielsen Korea International Research Manager

University of Maryland - Business Administration

Sogang Univ. MBA

Advisor / Hyosung Won

Enable Market / CEO

ex) BC Card Vice President, Smartro Ltd. CEO

ex) KB Kookmin Bank Vice President

ex) Hanmi Bank Vice President

Advisor / Sungkon Cho

Enable Korea / CEO

Korea Banking Institute adjunct professor

ex) Citi Financial Korea CEO

ex) Aisa Head of CITIBANK DS

Advisor / Hwangkyun Lee

Enabled Daonsoft Vice President

Ex) New business of Samsung Electronics

Ex) Hansol PCS / KTF Team Manager KT Smart Finance Business Executive (Mocha Wallet & Clip)

Syracuse University-MBA

Dongguk University, Ph.D. in Fintech Blockchain, Graduate School of Industrial Engineering.