CAION

Leading a Unique Payment System

Whitepaper Version 1.1

Table of Contents

Introduction

Vision

Caion aims to propagate the new payment culture by working alongside various financial organizations such as PG companies. The blockchain-based project intends to support itself through the generated funds gathered from its products and services. These include the Caion Pay and mobile wallet, Open Market, and MB material sale(Cohen).

Focusing on the company's finance culture, Caion builds a unique and innovative payment system approach by establishing Caion Token to encourage companies, merchants, and individuals to participate in the act of payment.

To provide a profitable, expandable, safe, and guaranteed platform, Caion will utilize the value of its native currency, Caion Token, by partnering with exchange platform providers in Korea and optimizing the fees from the exchange itself and other transactions within the ecosystem.

Background

According to the Bank of Korea (BOK), only 20% of all payments in the country are made with cash.[1] Electronic payments (aka e-payments) have gained popularity in South Korea after the introduction of T-money in 2004. This single touch-and-go smart card aims to streamline public transport payments by integrating a smart chip for fare deduction and mobile tap accessibility.

Accordingly, South Korea is turning into a "walletless" society as more people are opting to use only their smartphones for both offline and online payments and purchases.The wide range of cashless payment options available plays a part to this as numerous tech giants have invested more in mobile payment systems since the government eased financial regulations in 2015.[2]

Such mobile payment platforms have become hugely popular through the years. In Korea, the mobile payment model was initially launched to make the online credit card payment process easier.[3] With this in mind, mobile giant Kakao introduced Kakao Pay in 2014, while leading portal site Naver, launched N Pay in 2015.

In line with this, the multinational smartphone manufacturer Samsung Electronics began introduced the offline mobile payment model with the launch of Samsung Pay in 2015. As it garnered millions of active users, Samsung Pay was able to hit 10 trillion KRW in accumulated transaction volume in South Korea since inception.

According to the BOK Electronic Pay Service Usage report, mobile payment transactions amounted to 2.12 million KRW on a daily basis in 2017. Taking this into account, the proportion of offline payments to mobile payments surged from 46.5 percent in 2016 to 55.6 percent in 2017.

Besides mobile technology, Korea is also open in integrating other advanced technologies like wallet payment and the disruptive blockchain technology. Local

telecommunication providers are among the enterprises embracing the potential of blockchain in improving the financial economy.

Blockchain-based payments are also incorporating its way into more traditional exchange system. Blockchain technology's widely-recognized application to date has been in the payments sector. Aside from the cryptocurrency wallets, there are also numerous ways of exchange systems available not only in Korea, but in different parts of the world.

Blockchain is the most common type of distributed ledger. Known for its decentralization, security, and scalability features, it is most often used to facilitate payments and verify records.[4] The most common use cases for blockchain initiatives are payments and money transfers while users believe that its primary benefits are risk and fraud reduction and increased efficiency on performance.

With people being dependent on their mobile devices, people have chosen their preferred telecom provider. Around 60% of South Korean smartphone owners use SK or LG U+.[5] It is no surprise that these providers have driven South Korea, in general, into becoming a breeding ground for blockchain and cryptocurrency activity.[6]

SK Group, its largest telecom company, has invested $10 million in the global blockchain firm ConsenSys while its subsidiary SK Telecom (SKT) has partnered with Germany's Deutsche Telekom in creating a blockchain-enabled mobile identification solution.
LG U+ has also provided blockchain-based payment services to overseas customers.[7] This is in collaboration with mobile carriers in Japan and Taiwan. The payments will be processed through the Cross Carrier Payment System (CCPS) operated by SoftBank.[8]

Aside from being on top with the latest technological advancement, social consciousness is also being practiced as a culture of new payment system within Korea, because the traditional system lacks transparency and privacy. This is the reason why despite significant investments by development organizations, and the private sector, people are still waiting for arrival of new global payment system.

Existing Concepts

There are several fintech projects that were developed with the main goal of providing an alternative and more convenient payment method to the users.

In the Philippines, 66% of Filipinos were known to have no bank accounts because of bank inaccessibility and lack of documents. Created by Globe Telecom, one of the major telecom providers in the country, **GCash**[9] bridges the gap between financial sectors and paying individuals by allowing anyone to access their wide range of services including bill payment, online and offline shopping, and prepaid load.

At present, GCash has made financial transactions easier for its 20 million registered users and has established strategic partnerships with over 63,000 partner merchants to help Filipinos make seamless transactions.

Similarly representing a secure payment gateway between electronic money and cryptocurrencies, the Pay token represents a similar function in cash.

For frictionless payments, a Pay token for shoppers who want to pay with their cryptocurrencies is also made available for merchants within the UK. UK-based fintech **Kappture** released its fee-less system[10] supporting crypto payments in Nano. Payments will be confirmed within the decentralized Nano network within a matter of seconds.

Another UK-based blockchain project, **KIBIS** aims to drive the mainstream adoption of cryptocurrencies through its platform and services. Utility bills, air tickets, online gaming, and gift cards, are some of the available services within KIBIS.

It claims to be a high-throughput blockchain network that will be used to process transactions with an e-wallet payment network.

While in Korea, there is positive feedback in normalizing cryptocurrencies for payments.[11] This is in line with the announcement that convenience stores in South Korea will be accepting cryptocurrency as a payment method through a partnership with blockchain startups.

Executive Summary

This document presents the basis, technology, use cases, and roadmap of the Caion Platform and its underlying blockchain network. It explains how Caion intends to utilize blockchain technology and kiosks integrated into the global payment infrastructure. Caion will introduce a tokenized solution that will be beneficial to the key figures of the platform which are — Corporations, Users, and Investors.

Caion will be a utility ERC-20 token in parallel to the usage within the platform. These include the Caion Mobile Wallet Service, Caion Token Payment System (mobile coupons), and Open Market (a shopping platform).

The target audience and use cases for Caion involves Corporations, Users, and Investors. All prospect participants will benefit from the three services mentioned above.

In the latter part of this document, we provided the timeline of the Caion platform development. This provides an overview of what Caion aims to do as it progresses through time such as the launch of the wallet payment, exchange listings, and blockchain development.

Project Overview

Technology

Blockchain technology arose along with the popularity of the cryptocurrency Bitcoin. Since then, it has been known as an emerging technology closely related to the financial sector. Due to the disruption blockchain brings about, the financial sector has shown skepticism towards the technology. However, despite early rejections from established financial institutions, blockchain technology succeeds to prosper as the FinTech industry booms.

At present, blockchain technology slowly takes its rightful place within the financial sector. It is greatly considered to be one of the most promising technology to develop for FinTech businesses around the world. Many established international banks and companies have started to explore the technology and others have already integrated blockchain within their ecosystem.

With the growing acceptance of blockchain technology, Caion has initiated in building a blockchain-based payment system to provide the Korean society a highly-accessible and highly-secure payment avenue. More than a payment solution, Caion aims to build a digital payment ecosystem that commits to society.

Platform Overview

Caion has structured a highly-modern payment gateway system based on Ethereum blockchain platform. Caion developers chose to fork from the Ethereum network because it is well-reputed to provide high-performance in digital payment transactions. Also, due to its scalability, flexibility, and speed, Ethereum is deemed to be the most efficient underlying blockchain network for projects focused on providing digital payment solutions.

Furthermore, Caion network aims to build a wide ecosystem with a number of decentralized projects to further expand the use case of its native token and encourage more users. Caion will be introducing Ethereum based decentralized applications to foster its planned ecosystem.

Caion's platform introduces Korean society opportunities instilled within the payment system. By using the Caion applications, users will be able to get rewarded with Caion tokens. In every payment transaction, Caion will allocate a percentage of the profit for the global exchange organizations.

The Ecosystem

The Caion Foundation offers various digital services ranging from payment solutions, e-commerce, trading, and online exchange platforms. All the decentralized projects within the Caion ecosystem will all utilize Caion token as its native digital currency.

Initially, Caion will introduce a digital wallet called Caion Pay Wallet. This wallet will be scattered in different cities and provinces in South Korea to ensure Caion extends its payment services nationwide.
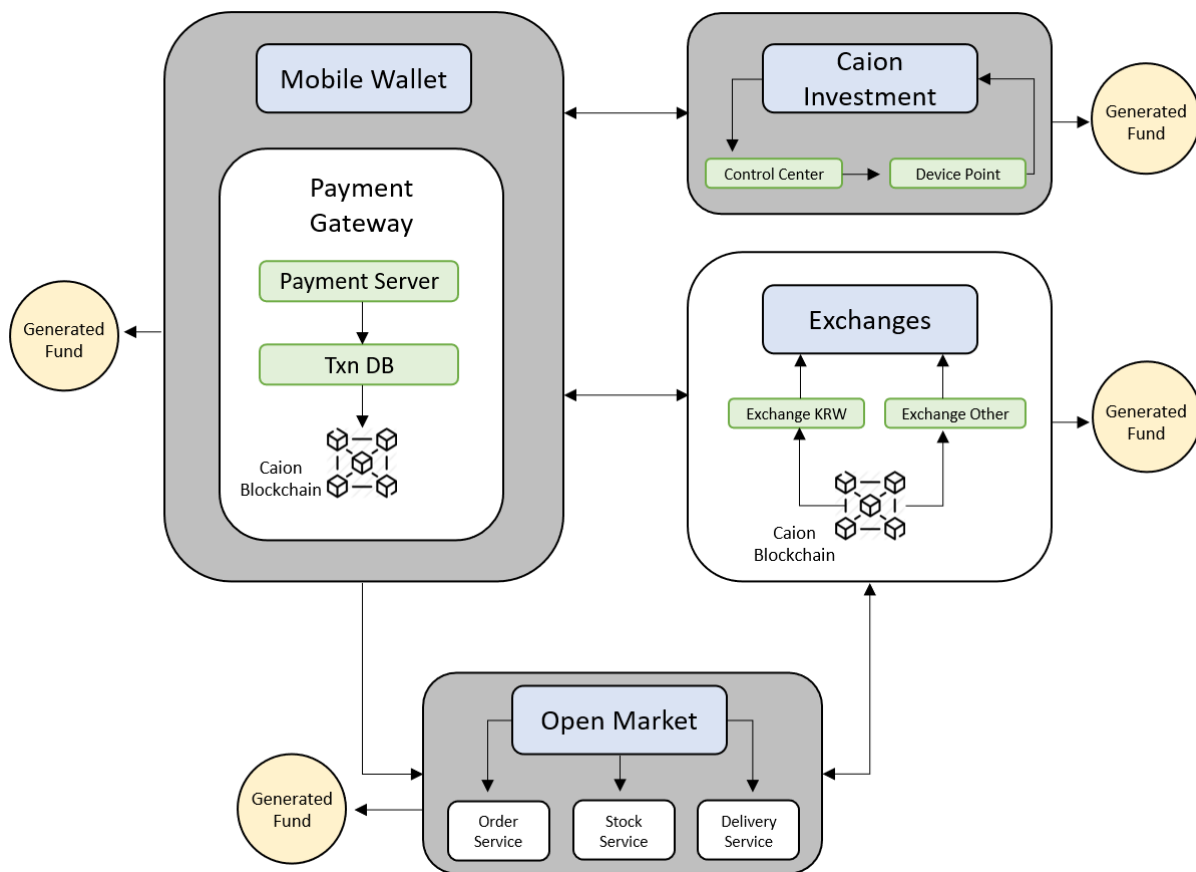
The Caion Ecosystem

The Caion Ecosystem is architected to interoperate with one another. On the diagram above, there are 4 main decentralized projects involved: the Caion Wallet, Caion Investment, Exchanges, and the Open Market Mall. Each decentralized project contributes to Generated Fund for it's globalization— the main cause of the Caion Foundation.

Decentralized Projects

Aside from Caion Wallet and Caion Pay, Caion Foundation will introduce other decentralized applications to grow a wide ecosystem.

- Caion Pay Wallet

  Caion Pay Wallet is the sole and main wallet of the Caion ecosystem. It would be engineered to work with national and private telecom companies in South Korea to sync mobile credits. It will store Caion cryptographic tokens and fiat in the form of credits that can be topped-up by cash or credit card from and with phone balance.

  Moreover, the Caion Wallet application offers a wide array of services, such as money transfer, currency exchange, and store mobile credits or Caion token. It will also serve as the wallet for the succeeding decentralized projects such as the Caion Pay, Open Market Mall, and Exchange platform.

- Open Market Mall

  Open Market Mall is a local e-commerce marketplace that accepts Caion tokens as payment for purchases. The platform will facilitate online trading catering to both merchants and customers within South Korea to ensure the marketplace will sell a variety of brands and products.

  The Caion Pay Wallet is the same synced in-app wallet on the Open Market Mall. Users can use their stored credits, mobile balance, and Caion crypto tokens to shop in this online marketplace. The shopping vouchers that will be given as rewards for the Caion wallet users can be spent on this platform.

Caion Token

The Caion token is an ERC-20 based on the Ethereum blockchain. However, it will migrate to its own mainnet in time. The mainnet will free the Caion token from the restrictions set by the Ethereum blockchain. It will also provide Caion token the freedom to create its own rules and limitations inside the platform

Specifically, the ERC-20 token has the following method-related functions, with those in brackets clarifying what each function does:

1. totalSupply() public view returns (uint256 totalSupply) [Get the total token supply]

2. balanceOf(address _owner) public view returns (uint256 balance) [Get the account balance of another account with address _owner]

3. transfer(address _to, uint256 _value) public returns (bool success) [Send _value amount of tokens to address _to]

4. transferFrom(address _from, address _to, uint256 _value) public returns (bool success)[Send _value amount of tokens from address _from to address _to]

5. approve(address _spender, uint256 _value) public returns (bool success) [Allow _spender to withdraw from your account, multiple times, up to the _value amount. If this function is called again it overwrites the current allowance with _value]

6. allowance(address _owner, address _spender) public view returns (uint256 remaining) [Returns the amount which _spender is still allowed to withdraw from _owner]

Use Cases

The Caion token is the native token of the platform that will serve as the medium of exchange for all the transactions that will take place within the platform. It will also be used to reward users, token holders and investors within the Caion platform.

Caion Payment System

One of the great services that the Caion platform offers is the ability to provide banking for the unbanked people, and as part of our partnership with various telecoms firms, SMEs, and charitable organizations, we facilitate seamless online payment transactions for all our users.

Caion Mobile Wallet

Caion Mobile Wallet is an ERC-20 compatible wallet application that can be downloaded on any mobile device that stores the user's fiat debit and credit accounts, as well as Caion funds. The wallet also provides a great level of security to ensure the safety of your funds.

Open Market

Caion partners with a number of shopping retailers and SMEs, Caion token users can purchase the hottest commodities and services available. By using the Caion platform, users will be open to a shopping market where they can choose and compare different types of products depending on their liking.

Conclusion

The importance of currency globalization cannot be stressed enough due to the numerous benefits that it contributes to society. There is an evident need for companies to adopt this type of culture. The Caion platform works in ways that will allow users, corporations, and investors alike to be a part of a project that boosts social welfare along with profitable aspects as well.

The value of social welfare projects is real. It can help build the images of companies who participate in these projects. This can be taken even further through blockchain technology integration. As for blockchain technology, it is generally defined as a distributed, decentralized, and mostly digital public ledger that is utilized to record transactions throughout many computers so that any record cannot be altered retroactively, without the alteration of all subsequent blocks.

With blockchain technology at the forefront, the Caion platform aims to establish an all-around token infrastructure revolving in proliferating the payment culture. This can potentially improve the way people travel, profit, and live.

Road Map

2020

Q4 - Establishing the Company

Begin to establish Caion in the market

2021

Q1 – Establishing Caion Platform

Publishing the Caion Whitepaper Version 1.0

Launching the Caion website

Q2 - Start Listing Caion(Caion Token) on Exchanges

Prepare the Caion Token for listing

List the token and start trading on exchanges

Q3 - Develop the Caion Infrastructure

Start developing the wallet

Q4 - Finalize Alpha Version of Wallet

Finalize the development of the wallet

Launch alpha version wallet

2022

Q1 - List Caion Token in more Exchanges

Achieve the goal of listing in 25 exchanges

Q2 - Caion Token Blockchain Development

Start developing Caion's own blockchain

Disclaimer

Please read this Disclaimer carefully as it includes the most essential information about Caion. Please be aware of the market risks and consult your legal, financial, tax, or any other suitable professional advisor before making any decision.

Before your participation in the purchase of Caion(Caion Tokens), we strongly encourage a careful reading of this whitepaper.

The information provided by Caion ("We," "Us," or "Our") on the Caion Whitepaper version 1.0 is for general informational purposes only. All information on this whitepaper are presented in good faith; nevertheless, we make no representation or warranty of any kind, expressed or implied, regarding the accuracy, adequacy, validity, reliability, availability, or completeness of any information on this document. Under no circumstances shall we have no liability to you for any loss or damage of any kind occurred as an outcome of the use of the website or reliance on any information provided on the whitepaper. Your comprehension and your reliance on any information on the whitepaper is solely at your own risk.

Particular assertions, estimations, and financial information stated in this whitepaper are forward-thinking observations that are based on and have taken into deliberation certain known and unknown contingencies and risks. It may, at some point, generate the estimated results or may differ factually and considerably from the featured approximations or results formulated in such forward-thinking estimations herewith.

Caion reserves the right to make additions, deletions, or modifications to the contents of this document at any time without prior notice.

a. General Information

1. Caion is a platform that uses blockchain technology to deliver its services in line with its vision and purpose. The reader must understand that blockchain technology is an open-source protocol and is not an exclusive property of any single person or organization.

2. Caion aims at providing a new system to connect blockchain with propagating the society payment culture by working alongside various finance organizations, and there is a possibility that some of its features may be identical to others.

3. This whitepaper is used to introduce Caion to the community and to emphasize all of its specific features. It only serves the purpose of providing comprehensive information to the reader regarding Caion and nothing else.

4. Please observe utmost caution when trading cryptocurrencies. If mistakes are made during the transaction, particularly if the address of the receiver's wallet is mistakenly specified, the funds will be lost without any possibility of their recovery.

Privacy Policy

Caion ("Us", "We", or "Our") operates the website and the Caion Database and Blockchain ("Service").

This whitepaper informs you of our policies regarding the collection, use, and disclosure of personal data when you use our Service and the choices you have associated with that data.

We will protect your data privacy, and we will not share your details with any third party organization unless forced to do so, and if we deem it necessary.

Should you not consent to our policy, we highly recommend that you refrain from availing of our services. Otherwise, using our services and providing your personal information means that you comply and agree with our privacy policy in its entirety.

For the sake of those who are staying in countries that are under the European Economic Area (EEA), we created our policy agreeing with the provisions in the General Data Protection Regulation (GDPR).

1. Data collection

We collect some vital information by visiting our website such as the internet protocol (IP) address used by your computer or mobile device to connect to the internet, operating system, browser type and version, duration of the Caion Whitepaper Version 1.0 visit to the site, date and time of the visit, time zone setting, links you click on, and information you key into our forms.

We will ask for your approval for the cookies on our website upon visiting. We also use your provided information such as your full name, email address, age, mobile number for the customer, and technical support.

2. Utilization of data

The information we collect will importantly provide us timely and appropriate support that will prevent fraud and illegal activities from happening through our website.

3. Information sharing

We will never use your information to make a profit in any way by sharing it with third party organizations and companies affiliated with Caion.

We may disclose some of your personal data with government officials, law enforcement officers, legal courts, and others if compelled by a court order or other similar legal procedures.

4. Data protection

For your protection, do not disclose any personal information on platforms and online applications which is not managed and owned by Caion to prevent heinous and illegal activities on your account.

5. General Data Protection Regulation

Should you be a resident of a country situated within the European Economic Area (EEA), we respect your right for the following, as stipulated in the General Data Protection Regulation—the right to be informed, the right to access, the right to rectification, the right to be forgotten, the right to restrict processing, the right to data portability, the right to object, and rights in relation to automated decision making and profiling.

6. Service Providers

We may hire third-party companies and individuals to perform service-related services or assist us in analyzing how our Service is used. These third parties may have access to your data only to perform these tasks on our behalf and are obligated not to disclose or use it for any other purpose.

7. Advertising

We may use third-party Service Providers to show advertisements to you to help support and maintain our Service.

8. Links to Other Sites

Our Service may contain links to other sites that are not operated by us. We strongly advise you to review the site you visit. We have no control over and assume no responsibility for the content, privacy policies, or practices of any third party sites or services.

9. Children's Privacy

Our Service does not address persons who are under the age of 18. Should you know someone who uses our services under the age of 18, please report to us so that we may perform appropriate actions.

10. Changes to This Privacy Policy

We may renew our policy from time to time, so we advise you to visit this page regularly. We also recommend checking this privacy policy more often for any changes. Changes to this policy are effective when they are already posted.

11. Contact Us

If you have any questions about this Privacy Policy, please contact us.

References

[1] **Travel money guide: South Korea,** *Finder.com*

[2] **More South Koreans turning to digital wallets, mobile apps,** *The Nation Thailand*

[3] **Going walletless: Korea's mobile payment market diversifies as competition grows,** *The Investor*

[4] **Blockchain for Social Impact: Moving Beyond the Hype,** *Stanford Center for Social Innovation*

[5] **60% of S Korean Smartphone Users to Gain Blockchain Platform Access,** *cryptonews.com*

[6] **South Korea's Largest Telecom SK Group Invests $10M in ConsenSys,** *Cointelegraph*

[7] **Initiatives around Blockchain Technology in South Korea**, *Leeway Hertz*

[8] **Softbank working on mobile payment service**, *Ledger Insights*

[9] **How You Can Use GCash To Make Life Easier,** *Globe Telecom*

[10] **Crypto's Killer Kiosk? New Device for Frictionless Payments Integrates Nano for the Mainstream,** *The Daily HODL*

[11] **Major Korean Convenience Stores to Accept Won-Based Stablecoin (But No Mention of Bitcoin)**, *StormGain,*