The ASTA Platform is designed as a virtual asset-based payment platform, can be used in the real life, to simplify the payment process and reduce costs by using blockchain technology to overcome the limitations of the existing payment solution system for virtual assets. Furthermore, by implementing various ecosystems such as online shopping, accommodation, medical care, tourism and by business expansion, the business model of ASTA Platform will be designed based on participants’ convenience and applicability. In the future, ASTA Platform strives to leap forward as a global platform company by actively enhancing the utility for more participants and easy access.
CONTENTS

1. Abstract .................................................. 3
2. ASTA Platform Model ................................. 4
3. ASTA Platform Technical Architecture .............. 12
4. ASTA Platform Expansion ............................ 20
5. ASTA Distribution .................................... 22
6. Team & Advisor ........................................ 24
7. Road Map ................................................. 25
8. Conclusion ............................................... 26
9. Legal Disclaimer ........................................ 27
1. Abstract

The economic definition of money is generally accepted as the medium of exchange, the unit of account, and the store of value. The legal tender we use nowadays meets all these three requirements and therefore, we can use it as money in real life. With legal tenders issued by central banks around the world, we use them to buy goods, to value goods and to make savings. However, the blockchain, the core technology of the 4th industrial revolution, ensures the security of the personal transaction (P2P) without the present of the authorized third party by sharing the transaction information in real time by all nodes participating in the network. The financial sector would be the industry to effectively utilize the blockchain technology. Even in the 5G era, overseas remittance usually takes 2-3 days through SWIFT nowadays. Moreover, there would be compulsory transaction fee to pay through credit card or PG companies when purchasing any product.

With the blockchain technology, overseas remittances can be averagely completed within 10 minutes and the transaction fee can also be significantly reduced. This would cause a great impact on the financial industry. In addition, the transaction time can be greatly reduced as well. Applying the blockchain technology to the payment solution can greatly reduce the fee caused and the time needed, however, there are still limitations. Given that the price of the token is fluctuated at the real-time market, if the technology is applied to the daily payment in real life, the blockchain-based payment solution platform should overcome the limitations at the same time.

The world’s largest digital giants such as Google, Amazon have dominated the market in different industries such as retail and wholesale, advertising and content industry, and the platform business model is gaining more attention. Being one of the leading companies, Amazon starting from ecommerce platform expands its business to various fields. While Google with its core business as Internet search engine, has further dominated various platforms ranging from streaming platform, YouTube to mobile operating system, Android. Like these successful companies, ASTA Platform strives to expand the business and to become an interactive platform facilitating the users. Therefore, the ASTA Platform is designed as a virtual asset-based payment platform to be used in the real life, simplify the payment process and reduce costs by using blockchain technology overcome the limitations of the existing payment solution system for virtual assets. Furthermore, by expanding our business network in various sectors such as online shopping, accommodation, medical care, tourism, various ecosystems are implemented. We aim to design a business model to incorporate the convenience and applicability of the participants. Our team are developing and researching the scalability that can increase the value of the platform exponentially by creating a diverse ecosystem where many participants can easily use the ASTA Platform in daily life. In the future, ASTA Platform strives to leap forward as a global platform company by actively enhancing the utility for more participants and easy access.
2. ASTA Platform Model

2.1 Limitations of traditional payment systems

There are different ways to perform a transaction like paying through cash, credit card or recently, through mobile payment. However, all the transactions have to be performed under a trusted authority and the fee charged per transaction actually is the fee to cover the operation cost of the intermediate authority like the VAN and card company. The transaction has been transformed into a way to enhance the consumer benefits such as lowering the transaction fee. The recent development of the mobile and internet and the expansion of E-commerce have also accelerated the direction the evolution of the transaction methods.

However, the current fee rate collected through the mobile payment is at an average of 3.5%, which is higher than the 2% of the general credit card companies. The payment method has become more convenient for the consumer however, the existence of the intermediate authority has inevitably increased the extra fee. The economic burden has switched to consumers which goes against the initial objective of developing a payment method to enhance consumer welfare.

The ASTA Platform eliminates the present of the intermediate authority by applying blockchain technology by publicly sharing and verifying data to reduce the overall cost and transaction fee. As a result, it is still convenient for the users to process the payment and credit transaction through ASTA Platform but with a relatively low transaction fee.

In addition, the ASTA Platform is to provide a convenient and fast payment service for the transaction of all digital assets including ASTA anytime, anywhere and it will become a payment system compatible with all the economic systems in all industries.

[Figure 1] Credit card approval and payment procedure
2.1 ASTA Platform model

The ASTA Platform is a platform built for market expansion and everyday transactions and it will develop to a platform that can be used globally and anywhere using ASTA.

The ASTA Platform is designed not only to enhance the convenience of the consumers but also to make sure ASTA to become a global currency. By using the Multi-Swap technology, ASTA is designed to be exchanged mutually not only between the stablecoins relative to the world’s major currency but also with the major cryptocurrency such as BTC and ETH.

Users can purchase ASTA, obtain investment profit through investment and to purchase goods and service by using ASTA. In other words, ASTA can be regarded as a currency which can be used for saving and payment.
2.3 Features of the ASTA Platform

<table>
<thead>
<tr>
<th>Utility &amp; Usability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Many other cryptocurrencies have attempted to totally substitute the fiat currency by implementing the blockchain technology. However, to stand out from the crowd and being different from them, the ASTA Platform is going to focus on the actual usability of the ASTA token.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Asset</th>
</tr>
</thead>
<tbody>
<tr>
<td>The ASTA Platform builds an ecosystem based on practicality and usability which guarantees the value of ASTA as an asset and maintains its value just like gold. It serves as a function of asset within the ASTA Platform.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Expansion Availability</th>
</tr>
</thead>
<tbody>
<tr>
<td>The characteristics of ASTA Platform allows it to be applied to all the platforms from different industries so that ASTA can be used not only on the existing platform but also on the other platforms of different industries. Therefore, the continuous extension of business network widens the scope of application of ASTA infinitely.</td>
</tr>
</tbody>
</table>

The money widely used nowadays is recognized as a safe asset for its future value and as a reserve currency. By creating continuous demand and value increment, ASTA aims to function as a safe asset for the users who want to use a new currency.
2.4 Multi-platform Expansion of ASTA Platform

A platform generally refers to a technology and framework allowing various activities carried out by different economic agents. According to Eisenmann et al., a platform business model is defined to be a combination of infrastructures and rules to facilitate exchange and interaction of the individuals within the network.\(^1\) While Parker and Van Alstyne stated that platform is a published standard, together with the operation method and rules.\(^2\)

Building on this definition, a business model can be built by allowing the participation of the third party. Big enterprises such as Amazon and Google have dominated the market in different industries such as retail and wholesale, advertising and content industry, etc. and they have become the major companies leading the global economy benefited from the ripple effect of social networking. The survey conducted by Statista in 2014 reported that 9 out of the top 10 startups with high evaluation are the new platform businesses including Uber and Airbnb. While Naver and Kakao also are very popular in the Korean society. This reflects the great potential of platform business in the growing digital society.

According to the World Economic Forum, the market capitalization of the top 242 digital platforms reached $7.176 trillion by the end of 2018 while it is predicted that by 2025 the value generated by the digital platforms would reach $60 trillion (6,620 trillion KRW), accounting for 30% of the total global corporate sales. In addition, 60%-70% of the value of digital economy generated in the next 10 years would be come from the data-based digital networks and platforms. The development of Fourth Industrial Revolution technologies such as artificial intelligence (AI), Internet of Things (IoT), cloud computing, and 5G expectedly further increases the influence and dominance of the digital platform. Under this premise, ASTA Platform strives to become the center of the platform economy.

We aim to increase the value of ASTA by increasing the number of users while to expand our business model and build an ecosystem by increasing the value of the ASTA Platform.

Platform business model generates revenue by operating as a medium connecting the interested participants. Expanding the network of participants enables more collaboration opportunities and value increase, and hence facilitates the sustainable business growth. Profit will be generated through the interaction between the participants. Therefore, with the increase in the number of participants, the transaction and operation costs per person are reduced, the interaction between the consumer and providers would be maximized and hence the utility increase.

---

\(^1\) McAfee, R.P., H.M. Mialon, and M.A. Williams, "What is a barrier to entry?" SSRN Working Paper No. 594601, 2003.

The marginal cost at the equilibrium is generally higher than the average cost at the equilibrium as shown in Figure 4. As the number of users at the equilibrium increases, an additional cost is required to increase the demand of the users of ASTA Platform.

Most of the companies adopt the conventional business system called ‘pipeline’. Different from platform, pipeline firms create value by optimizing an entire chain of product activities through an established business process or flowchart. Producers would be at one end of the chain, designing products or services, manufacturing and selling to the consumers on the other end. Due to the linear process, pipeline business model is also called linear value chain. Nowadays, while more and more companies are transitioning from pipeline to platform business model, the relationship among the participants become more complicated and more different forms of value are generated.
To compose the ASTA Platform, our professional team is going all-out to develop a strategy to increase the society equilibrium while minimize the user equilibrium.

As a result, ASTA Platform aims to create social equilibrium so that it can be applied to various platforms but not only limited to travel, music, resort affiliate partnership, healthcare, payment and global advertising platforms.

Our team plans to realize social equilibrium by using a positive policy by offering discount within the platform so that participants who use ASTA can be given practical benefits.

However, it is also true the regulation of cryptocurrency and digital asset is still in doubt.

To address the problem of the ASTA Platform such as project improperly processed or many negative factors occurred during the application of the cryptocurrency payment system, the ecosystem of ASTA Platform is configured to increase the value of ASTA by offering benefits to the participants who contribute to the network through ASTA payment.

ASTA Platform expands with the increase value of ASTA. While the participants paying with ASTA in daily life greatly contributes to the increase of ASTA value.
2.5 Eco-Economy of ASTA Platform

Step 1: Expanding the platform affiliate network
Transaction with low transaction fee (almost 0%) can be done on ASTA Platform so that our affiliate partners (merchants) can reduce the cost and increase their profit. Therefore, the more online and offline merchants participate in our network, the more revenue they bring to ASTA Platform.

Step 2: Growing the user base
Users have to purchase ASTA before using it on our affiliated partners’ platforms. If the network continues to extend under favorable conditions, it is expected that users will increase accordingly. While more investors, they can purchase ASTA for income investing which might also lead to an increase in ASTA value. Where there are more people using the platform, the ASTA Alliance can collect and accumulate the data. Different marketing strategies or reward events can be planned by using the big data analytics to increase the user base.
| Step 3: Expanding the platform |
The revenue generated will be invested and used for the platform expansion. We are now constructing a business model including companies from various industries, for example, online travel agencies, global music streaming platforms, leading medical technology companies from healthcare sector, the big data, crowdfunding and P2P platforms recommended by the 2020 industry analysis.

| Step 4: Platform cycle |
By reinvesting the income generated, limitless payment system and a new business platform can be built, and the ecosystem can be expanded. With this ecosystem, a system model generating its own profit can be built up to attract more new users to join. With the increasing demand, the value of the ASTA Platform will keep increasing as well. Based on the cycle of user participation-inflow-expansion, ASTA Platform will be under gradual development.

[Figure 6] ASTA Platform Value Chain
3. ASTA Platform Technical Architecture

3.1 Implementation of ASTA Platform using blockchain technology

Blockchain technology replicates and shares the transaction record to all users without any central institution or management using computer programs. Therefore, blockchain, also called Distributed Ledgers Technology, can monitor and prevent double spending of currency.

Blockchain relies on algorithm, which is also called consensus or consensus algorithm, to achieve agreement from multiple participants. The consensus refers to the method of how to verify and confirm the new block produced in the blockchain network.

When a new block generated in the blockchain, it will connect to the previous block. The incoming block header will be examined, and the node will look for the previous block hash.

If the hash is generated successfully, a new block will be created and will be added to the existing blockchain. However, generating a hash value equivalent to the hash of the new block is a difficult process. It requires numerous attempts since the hash value of the new block should meet the criteria which must be less than the target hash specified by the program.

For example, if the target hash value is 00ff32 and the hash value of the new block is 12fa3b, the block creation will be failed because the value of the block (the block header) is larger than the target value. However, if the newly generated hash value is 00c3b1, the new block will be added to the chain successfully since the hash value found is smaller than the target one.

Although the hash value of the previous block has already fixed, given that the nonce (number only used once) can be varied, the hash value generated will be changed according to the algorithm calculation.

The hash value will be totally different when the nonce changes. The nonce has to be changed, tested for countless times and input into the block. Only when the hash value of the new block is smaller than the target hash, a new block will be added. This process is called Proof of Work (PoW) and is also adopted by the ASTA Platform. In addition, ASTA is a P2P platform with no central organization or institution required for the transaction process, record and management. The data can be maintained by the collaboration of the participants in the network.
By applying blockchain technology, it is not necessary to have central authority for managing the information in ASTA Platform. All the transaction data will be distributed and shared by all the participants on the blockchain network while it is also difficult to forge the data recorded on the blockchain by hackers.

The contents of the recorded blockchain data are converted by a hash function and stored in an encrypted form. If there is an internal or external hack to the system and the hacker forges or alters the data, the hash value of the corresponding block will be changed as well.

In blockchain system, even if one Korean character is changed, a completely different hash value is generated. Therefore, it is almost impossible to change/delete/add data without the knowledge of others. Moreover, since the data is managed in a hash tree structure, it is possible to identify which data has been forged or altered in any locations.

In addition, to use ASTA service, user has to complete the verification through the protocol wallet app (both iOS and Android). User also has to provide additional information according to the international KYC (identity verification) and AML(Anti-Money Laundering) compliance. Through this process, any malicious users can be tracked and detected immediately.

The ASTA Platform aims to build a platform with reliable technology based on the abovementioned technical security measures.

[Figure 7] ASTA Platform Service Architecture
3.2 ASTA Platform technology

<table>
<thead>
<tr>
<th>Service Application</th>
<th>ASTA Wallet</th>
<th>Payment Gateway Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Layer</td>
<td>Web Application</td>
<td>Mobile Application</td>
</tr>
<tr>
<td>API Layer</td>
<td>Auth</td>
<td>CRM</td>
</tr>
<tr>
<td>Service Layer</td>
<td>Merchant Management</td>
<td>Payment Method Management</td>
</tr>
<tr>
<td>Data Layer</td>
<td>RDB</td>
<td>Blockchain</td>
</tr>
</tbody>
</table>

[Figure 8] ASTA Platform System Architecture

**HCI (Hyper Converged Infrastructure)**

The ASTA Platform is configured to have greater ability to scale. Therefore, the ASTA Platform deploys the unified and integrated infrastructure, Hyper Converged Infrastructure (HCI) to increase scalability without compromising the stability of the system.

**FGBMF (Front Grid Backend Multi Flexing)**

Using a single node in the blockchain network would be have limitations on the processing operation and transaction speed. Transaction delay and higher network fees could be resulted. Therefore, it is crucial to overcome those limitations. FGBMF applied to the ASTA Platform is a technology that allows an intuitive approach to be accessed from the outside and connected flexibly to a multiplexing system inside to ensure a stable and accurate processing of blockchain technology and security enhancement.
Multi-Swap

One of the most important things in a multi-blockchain environment is the data exchange technology between blockchains. Most of the blockchain technology is developed without considering the interworking between multiple blockchains and it becomes a problem when the blockchain expands to other areas. Therefore, considering the transaction type and convenience of the ASTA Platform users, we plan to realize the mutual exchange and utilization of the major coins (BTC, ETH, stablecoins, etc.) with the virtual assets owned in the ASTA Platform without going through the exchanges.

Half-Private Block-Chain

The ASTA Platform will not disclose user's personal information without the request by the government nor the internal decision of the company to ensure the security of the personal asset and the asset used in the real life. This is also a feature of the ASTA Platform to prevent any misappropriation of personal information.
3.3 Increase ASTA value with the expansion of ASTA Platform

The ecosystem of ASTA Platform is constructed to provide various benefit based on the token economy to the participants who pay with ASTA on different affiliate platforms such as travel, music, resort affiliate partnership, healthcare, payment and global advertising platform and to earn and build customer loyalty to ASTA Platform.

In other word, ASTA Platform is a revenue and business sharing ecosystem converging not only various services applying different business models, but also the consumers of ASTA Platform and the ASTA token holders as well.

The more services provided by the ASTA Platform, the more participants joining the ecosystem and the revenue and value of ecosystem shared increases coordinately. This is similar to the theory of platform business models which create value by facilitating exchanges between more participants.

\[
F_{Ast} = f_1 x_1 + f_2 x_2 + f_3 x_3 + \cdots + f_n x_n = \sum_{i=1}^{n} f_i x_i
\]

\[
f_1 + f_2 + f_3 + \cdots + f_n = \sum_{i=1}^{n} f_i
\]

\[
\sum_{i=1}^{n} f_i x_i = m \sum_{i=1}^{n} f_i
\]

\[
F = \sum_{i=1}^{n} f_i x_i = m \sum_{i=1}^{n} f_i
\]

\(f_n\) refers to the individual platform where participants can use ASTA for travelling, music streaming, resort reservation, healthcare service, etc. while \(x_n\) refers to the participants of the ecosystem.

Assuming \(f_1 \chi_1\) is travel platform and \(f_2 \chi_2\) is music streaming platform, then \(f_n \chi_n\) represents various platforms. Therefore, with higher usage of the ecosystem of ASTA Platform, the network value increases in proportion to the number of users.

The value of the company increases in proportion to the number of participants. Therefore, the value created by the platform-based company is expected to be increase exponentially as more users join the ecosystem.
3.4 Strategies to increase the ASTA Platform value

Sarnoff’s Law

\[ V = n \]

The value of the network \( V \) increases in direct proportion to the size of the network \( n \).

Metcalfe’s Law

\[ V = n^2 \]

The value of the network increases to the square of the number of users in the network.

Reed’s Law

\[ V = 2^n \]

Networks may grow proportionally to the network size but there are forming groups that scale faster in value than others (because of influence or interconnectedness).

[Figure 11] Platform Business Model

Network effect plays an important role in ASTA Platform where the larger the network size, the higher network value created. If ASTA is highly utilized and can be used in payments in everyday life such as travelling, music streaming, healthcare service, etc., more people are incentivized to adopt our payment system since the network becomes more valuable. If ASTA Platform can take the lead in the cryptocurrency payment service by converging the blockchain technology to the platform, according to the theory of the Positive Feedback Effect, then we will have an edge over other companies in the industry.
While there have been many approaches trying to explain the phenomenon of the increase in network value by using the Sarnoff’s Law, Metcalfe’s Law and Reed’s Law. While in 2008, the Office of Strategic R&D Planning of Korea also pointed out that the proportional relationship between the number of participants and the scalability of the platform also exist on the big databased platforms in the bio-health industry.

Sarnoff’s Law suggests that the network value increases in direct proportion to the size of the network \( (V = n) \). While Metcalfe's Law states the cost of the network grows linearly with the network size, the network value grows in proportion to the square of the number of users on the network \( (V = n^2) \). A small change results in a larger difference. Reed’s Law emphasizes the concept of ‘group’ and increase in value a rate of \( 2^n \), where \( n \) is the total number of participants in the network. All the three laws conclude that the growth of a network increases may exponentially increase its value. By applying these laws, ASTA Platform aims to continuously increase its value by collaborating with various business models.

The actual value of the platform is determined by the size of the platform, its emergence and the participation of the 3rd party. The platform size depends on the number of participants in the ASTA ecosystem. Emergence is a concept of formation of collective behaviors. For example, it is difficult for an individual alone to build a house while a self-organizing group of people can easily build a large house. Platforms such as Facebook and Google have successfully secured 3rd parties and created values beyond expectations through emergence and self-organization. The value of the ASTA Platform is also expected to expand based on these three factors.

When ASTA can be used and applied on more platforms, the same-side network effect can occur. For example, the more friends you have in your network, the more likely you are to attract additional friends through your friends’ connection. Cross-side effect occurs when more developers join ASTA Platform, the higher is users’ benefit. Value creation and value capture can be both possible on ASTA Platform by the network effect. As the number of users increases, the diversity of content also increases and attracts more users. Therefore, ASTA Platform is designed to achieve strong network effect.
3.5 Business Model of ASTA Platform

Most of platform businesses show the phenomenon of winner-takes-all, due to the network effect, a small number of platform companies receives most of the market revenue. Network effect is also referred as Snowball effect, a phenomenon describing the multiplication effect, which is metaphorically rolling of a snowball down a snow-covered hillside and gaining more mass as it rolls along. The attractiveness and strength of the platform increases as the number of participants increases, which effectively explains the characteristics of the rapid expansion of the platform by attracting other participants.

The ecosystem of ASTA Platform is constructed to provide various benefit based on the token economy to the participants who pay with ASTA on different affiliate platforms such as travel, music, resort affiliate partnership, healthcare, payment and global advertising platform and to earn and build customer loyalty to ASTA Platform.

ASTA Platform is designed to be a platform which can be benefited from both the direct network effect and indirect network effect. Direct network effect refers to a phenomenon in which the value of the platform increases exponentially with the number of the participants, regardless of producers or consumers. It means the strength of one side has an impact on its growth. For example, when the number of users and the benefit of ASTA ecosystem increases, it is easier for the people outside the system to know about ASTA by their connection’s recommendation. Therefore, the possibility of ASTA Platform gaining more users increases. While indirect network effect occurs between members of two or more user groups. The platform value increases when there is an increase of one side, either suppliers or consumers, there will be impact on the other side. For example, if ASTA Platform collaborates with large companies with good reputation, then more users are willing to join our platform, which will attract more business partners to join us as well.
4. ASTA Platform Expansion

| Building travel platform and establishing partnership |
| We are going to build an online travel platform where users can purchase a wide variety of travel products with ASTA. The platform will provide benefits to our affiliate partners and attractive discounts and rewards to local and foreign users for using ASTA payment. By using blockchain technology, we would like to establish a platform with high-quality to enhance the convenience, improve the management transparency, provide customer infrastructure for affiliates and provide a payment system without central authority. |

<p>| Partnership with Music streaming platform |
| ASTA can be used within the music platform and for purchasing music which can offset part of the transaction fee produced within the process and causes deflation in ASTA. Users have to pay with ASTA for obtaining the copyright license. It would further stabilize the ASTA Platform in the long term. |</p>
<table>
<thead>
<tr>
<th>Partnership with resorts</th>
</tr>
</thead>
<tbody>
<tr>
<td>We have signed partnership with local and overseas hotel/resort to ensure the ASTA holders can enjoy the same benefits and discount as having the membership of condominium, golf course, hotel and resort.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Application of payment platform</th>
</tr>
</thead>
<tbody>
<tr>
<td>Through the offline wallet payment system, payments can be made offline immediately in hair salons, cafes, fast food restaurant and laundromat. Furthermore, it will provide more benefit and discount to the users than the existing payment system.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Partnership with healthcare platform</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooperated with the advanced Korean healthcare management platforms and to attract more global users, ASTA can be used to pay for medical treatment, plastic surgery or medical travel to reduce the high exchange fee for the users.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>As a global advertising platform</th>
</tr>
</thead>
<tbody>
<tr>
<td>The advertisers will pay with ASTA for advertising on major channels or social media. ASTA will be the role of a middleman and discloses the amount received from the advertisers and that paid to the media. The automatic process greatly minimizes the handling fee. In addition, ASTA providing its own browser or content platform where both advertiser and user can charge and collect handling fee through ASTA system, aims to become a global advertising platform in the future.</td>
</tr>
</tbody>
</table>

By developing more service in different business areas, the value of ASTA can be greatly increased and a new platform can be implemented. ASTA strives to lead the blockchain-based payment service.

[Figure 13] ASTA Platform Reward
5. ASTA Distribution

The final goal of ASTA Platform is to implement an ecosystem based on ASTA and to become a borderless payment service available for people around the world and can be used anytime and anywhere without inconvenience. To this end, ASTA Platform aims to ensure that all network participants including platform users and strategic alliance partners to share more benefits.

ASTA Platform will also expand the ecosystem so that participants can gain benefit from just participating in the network. We strive to establish a global payment method to be used anywhere in the world without currency exchange.

<table>
<thead>
<tr>
<th>Sort</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Name</td>
<td>ASTA</td>
</tr>
<tr>
<td>Symbol</td>
<td>ASTA</td>
</tr>
<tr>
<td>Volume</td>
<td>3,000,000,000 ASTA</td>
</tr>
</tbody>
</table>

[Table 1] ASTA Information

ASTA Platform has issued a total of 3,000,000,000 ASTA to be used in the platform, and it is unlocked in sequence according to the ASTA Platform’s roadmap.

<table>
<thead>
<tr>
<th>Items</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Private Sale</td>
<td>15.00%</td>
</tr>
<tr>
<td>2 Managed by Foundation</td>
<td>20.00%</td>
</tr>
<tr>
<td>3 Marketing &amp; User Incentive</td>
<td>30.00%</td>
</tr>
<tr>
<td>4 Team &amp; Advisor</td>
<td>5.00%</td>
</tr>
<tr>
<td>5 Strategic Partnership</td>
<td>20.00%</td>
</tr>
<tr>
<td>6 Reserve Fund</td>
<td>10.00%</td>
</tr>
</tbody>
</table>

[Table 2] ASTA Token Distribution
For the scalability of ASTA Platform, the appropriate quantity and duration must be unlocked. In addition, ASTA will be controlled timely depending on market situation to prevent from being distributed beyond necessity in the market and losing its value as the payment method. The following is the plan for unlocking the quantity of ASTA that has been locked up for the purpose.

**Managed by Foundation : 2 years Lock up**
For the operation of ASTA Foundation with a compulsory lock-up period of 2 years.
It will be unlocked sequentially every month for 24 months after the lock-up period (2 years).

**Team & Advisor : 2 year Lock up**
For distribution to the ASTA Team, Founder and Advisor, etc. with a compulsory lock-up period of 2 year.
It will be unlocked sequentially every month for 12 months after the lock-up period (2 year).

**Strategic Partnership : 2 year Lock up**
For distribution to the current ASTA affiliate partners or those joined in the future with a compulsory lock-up period of 2 year.
It will be unlocked sequentially every month for 12 months after the lock-up period (2 year).

※ The lock-up period and time schedule for unlocking may be changed or extended due to the market.
6. Team & Advisor

The developers of ASTA Platform include talented people with various nationality from prestigious universities in Korea and abroad, as well as blockchain and artificial intelligence developers and professors of computer engineering. Moreover, ASTA has grown with the help of many others and is still growing. The advisors who participated in the project are as follows, and the company still expects to serve many advisors in the future.

<table>
<thead>
<tr>
<th>Classification</th>
<th>Position</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTO</td>
<td>Project Managing Director</td>
<td>Ok Sun Ho</td>
</tr>
<tr>
<td>Developer</td>
<td>Technical Development Director</td>
<td>Kim Seong Kyun</td>
</tr>
<tr>
<td>Developer</td>
<td>Blockchain / Mining</td>
<td>Batbayar Khandish</td>
</tr>
<tr>
<td>Developer</td>
<td>Blockchain / Wallet</td>
<td>Jin Seong Jae</td>
</tr>
<tr>
<td>Developer</td>
<td>Back-End / Data Architect / Big Data</td>
<td>Yoo Hyo Sang</td>
</tr>
<tr>
<td>Developer</td>
<td>Back-End / api Service</td>
<td>Javkhlan Gansukh</td>
</tr>
<tr>
<td>Developer</td>
<td>Front-End / Payment and Wallet Service L</td>
<td>Lee Tae Kwang</td>
</tr>
<tr>
<td>Developer</td>
<td>Front-End</td>
<td>Oh Eui Seob</td>
</tr>
<tr>
<td>Developer</td>
<td>iOS Application</td>
<td>Park Hee Won</td>
</tr>
<tr>
<td>Developer</td>
<td>Android Application</td>
<td>Lee Won Seok</td>
</tr>
<tr>
<td>Developer</td>
<td>Design / UI / UX</td>
<td>Zolzaya Lkhagvasuren</td>
</tr>
<tr>
<td>Developer</td>
<td>System and Service Security</td>
<td>Ulziitamir Davaadorj</td>
</tr>
<tr>
<td>Developer</td>
<td>System Operation / Blockchain Node</td>
<td>Jeong Ji Yong</td>
</tr>
<tr>
<td>Developer</td>
<td>System Operation / Service Infrastructure</td>
<td>Kim Tae Kyun</td>
</tr>
</tbody>
</table>

[Table 3] ASTA Team & Advisor
7. Road Map

2017 3Q
- Initiate developing the project for real-life virtual asset platform

2018 2Q
- Establish a prototype

2019 1Q
- Strategic alliance with KDAX exchange
- Establish Mainnet and Alpha type
- Complete developing Wallet 1.0v and Distribute
- The first official release

2019 4Q
- Change CI as ASTA
- Implement Stable Coin Inter-working System

2020 1Q
- Expand the linked business affiliation
- Complete developing Wallet 2.0v and Distribute

2020 2Q
- Launch business affiliation of ASTA Platform
- Develop affiliated business App and Payment Solution

2020 3Q
- Interconnect the Wallet and Ecosystem through collaboration with exchanges

2020 4Q
- Construct cryptocurrency payment system
- Opening of travel/ accommodation platform, ASTA TOUR

2021 1Q
- Finalize ASTA Wallet 3.0 and start distribution
- Launch THE ASTA (mobile E-commerce platform)

2021 2Q
- Develop the multi-swap function of ASTA Wallet

2021 3Q
- Expansion of THE ASTA Affiliates (car rental, flight ticket)
- Establish ASTA ALLIANCE 1st group

2021 4Q
- Launch the payment system of ASTA Wallet
- Establish ASTA ALLIANCE 2nd group

[Figure 14] ASTA Platform Road Map
8. Conclusion

ASTA Platform is a new virtual asset-based payment platform designed as a differentiated strategy to overcome various limitations that virtual assets face in real life and secure reliability by applying blockchain technology to existing payment methods such as cash, credit card companies, PG companies and Pay.

ASTA also pursue to implement a multiplexed ecosystem by expanding its business areas through ASTA Platform. In order to implement the ecosystem, the company is moving forward to form a platform that links industries, joining hands with partners in various fields such as shopping, accommodation, medical care and tourism. It also forms various marketing platforms that can be linked to ASTA ecosystem and captures convenience and application together in the business model for the gradual and infinite increase of platform participants.

The goal of ASTA Platform is to provide an opportunity as offering payment system for affiliates to gain market competitiveness by significantly lowering the fees of existing credit card issuers and PG companies. In addition, the platform has a purpose to create an ecosystem that benefits users by providing virtual assets available at all merchants around the world as well as eliminating inconvenience in exchange rates.

For the optimization of ASTA Platform, our professional project team are contemplating and researching the strategy to establish ASTA ecosystem in various fields and to maximize platform’s optimization. When the number of users and use of ASTA Platform increases, more and more users will join our platform. ASTA Platform endeavors to lead the digital asset payment service development and aims at accelerating the exponential expansion of the platform by applying the theory of network effect.
9. Legal Disclaimer

The ASTA Platform is planning and implementing improved services that can directly and indirectly affect people's lives. Therefore, this white paper purposes reference for those who would express their interest and sympathy in these social issues.

The reason of writing this white paper is to share the purpose and technical orientation of ASTA Platform at the time of writing, and it is NOT TO ENCOURAGE INVESTMENT in ASTA team or ASTA Platform Therefore, the information including the business operation and financial status of Korfin Holdings Co., Ltd. (hereinafter “the Company”) may be changed, and this white paper or website may be changed or deleted frequently.

The content of this white paper DOES NOT RESTRICT the Company operating ASTA Platform and is subject to change in accordance with the ongoing research and development of ASTA Platform. This white paper DOES NOT TO INTEND TO PROVIDE ADVICE ON INVESTMENT, LEGAL REGULATION OR FINANCE OR ACCOUNTING, nor does it imply an intention to provide criteria for assessing virtual assets. It is also clear that NO PART OF THIS WHITE PAPER IS NOT AIMED TO CONTAIN THE INTENTION OF RECOMMENDATION.

This white paper contains forward-looking information about projects or future business prospects. These statements are not historical facts and can be identified by words "will", "forecast", "expect", "plan", "predict", or similar. These forward-looking statements are also included in presentations, interviews, videos and other publicly available materials.

This white paper includes the future, expected achievements, or achievements of the Company and its Affiliates. The statement of future expectations includes a variety of risks and uncertainties. This statement does not guarantee future performance and it SHOULD NOT BE OVER-DEPENDENT. The actual performance and progress of the Company or its Affiliates may differ from the expectations set by the forward-looking statement.

CUSTOMER SHALL BE SOLELY RESPONSIBLE FOR ANY INVESTMENT THAT ARISES AMID THE ABSENCE OF A FORWARD-LOOKING STATEMENT BASED ON FORWARD-LOOKING INFORMATION OBTAINED FROM THE Company’s or its Affiliates’ websites or other materials produced by its affiliates.

Loss or damage of information related to a customer’s wallet and platform ID may affect access to and storage of virtual assets.
There is a risk of permanent loss of access to and ownership of virtual assets if the identity information, such as unique personal ID and biometric information generated on the platform, or the essential private keys related with the purchaser's wallet or storage space is lost by the mistake of purchaser.

ASTA DOES NOT GUARANTEE BACK following statements,
1) Whether the white paper is written on the basis of legitimate rights and does not infringe on the rights of third parties;
2) Whether the white paper is commercially valuable or useful;
3) Whether the white paper is suitable for investors to achieve a specific purpose;
4) Whether there is any error in the contents of the white paper;
5) Whether ASTA was duly prepared and distributed under the laws of the countries of the world,
   and whether the contents violated the laws of the countries of the world.

In addition, the scope of exemption from liability is not limited to the above examples.

The regulatory framework applied to the blockchain technology, to the provision of virtual assets and to the platform is uncertain, and any change to regulations or policies can have a significant impact on platform development and the utility of virtual assets.

Any transaction of a virtual asset or failure of a company, affiliate or platform user to comply with laws, rules and regulations (some do not yet exist, may be subject to interpretation and may be subject to change) may result in various disadvantages to the Company and its Affiliates, including civil penalties and fines.

Furthermore, the tax treatment of the acquisition or disposal of virtual assets and stablecoins may depend on what the virtual assets and stablecoins are classified as in the classification criteria of securities, assets, currencies, or other items. Currently, the tax characterization of virtual assets is uncertain, and customers should seek tax advice regarding the purchase, acquisition or disposal of the assets. (In particular, in Korea, it should be noted that income tax will be imposed on gains from the transfer of virtual assets from the second half of 2021 due to the revision of the Korean tax law in 2020, and various reporting obligations will be imposed in the future). In this regard, the customer may be required to pay taxes or report.

The business model using the blockchain faces uncertain regulatory environments in many countries. In the near future, various jurisdictions may adopt laws, regulations, or guidance that affect the platform, which may change the value of virtual assets.
In such cases, laws, regulations, or guidance may directly and negatively affect the operation of the Company and its Affiliates. The effects of future regulatory changes are unpredictable, but they can be significant and have a real adverse effect on the development and growth of the platform, and the adoption and utility of virtual assets.

The Company and its Affiliates may need to obtain licenses, permits and/or approvals (collectively “regulatory approval”) to carry out the creation, development and operation of virtual assets. Failure to obtain such permission with respect to the platform or failure by the relevant authorities to renew or revoke regulatory approval for any reason may adversely affect the business of the Company and its Affiliates.

There is NO GUARANTEE in the future that the authorities will not impose stricter requirements on the Company and its Affiliates or that the Company and its Affiliates will be able to adapt in timely to changing regulatory requirements. These strict regulations may limit the ability of companies and their affiliates to operate their businesses, and if they do not comply with those requirements, they may be subject to nonconformity measures.

Furthermore, if the costs (financial or other) to comply with the newly implemented regulations exceed certain criteria, platform maintenance can no longer be carried out commercially and the Company and its Affiliates can discontinue the platform and/or virtual assets. It is also unpredictable how governments or regulators will implement accounts distribution technologies, including platforms and virtual assets, and laws and regulations that affect the applications. The Company and its Affiliates may be required to discontinue operations in the jurisdictions that make it commercially impossible or undesirable to obtain the regulatory approval. Virtual assets may hold little, or no value under the circumstances described above.

There may be risks associated with natural disasters, natural disasters, wars, terrorist attacks, riots, widespread epidemics and other events beyond the control of the Company and its Affiliates. Sales of virtual assets and activities of the Company, its affiliates and/or platforms may be suspended or delayed due to natural disasters, wars, terrorist attacks, riots, civil disturbances, widespread epidemics and other reasons beyond the control of the Company and its Affiliates. These events can also create uncertainty in the economic prospects of the global market, and there is no guarantee that such markets will not be affected or that recovery from the global financial crisis will continue.
In such cases, it can have a significant impact on the business strategy, operational results and prospects of the Company and its Affiliates, and it can have a significant impact on the demand and use of virtual assets and platforms. In addition, such infectious diseases or epidemics in the country where the Company, its Affiliates and platform participants operate in the future may be adversely affected by market sentiment, which may adversely affect platforms and communities.

There may be other risks related with the purchase, possession and use of virtual assets, including those that cannot be expected other than those foreseen. These risks suggest that unexpected fluctuations or risks discussed in the text may appear in complex.

No agency has officially reviewed or approved the information in this white paper, and no such action has yet been taken under any jurisdiction.

If any of the people who read this white paper use it to make their own decisions and actions, it is based on the judgment of the person, and THE RESULT OF IT IS ENTIRELY ATTRIBUTED TO THE PERSON, REGARDLESS OF PROFIT OF LOSS, and the Company DO NOT BEAR ANY RESPONSIBILITY.

Platforms and related services provided by the Company and its Affiliates are provided in a usable state, but the Company and its Affiliates do not guarantee the accessibility, quality, suitability or completeness of the platform or related services provided by the Company.

Executives and employees of the Company and its Affiliates that operate the ASTA Platform shall not claim or make any form of statements, warranties, or promises to the entity or individuals of the integrity, accuracy and completeness of all information presented in this white paper, including relevant statements, warranties, or promises.

To the maximum extent permitted by applicable laws and regulations, the Company and its Affiliates shall not be liable for unlawful acts, contracts, or other kinds of indirect, special, accidental, consequential or other losses (loss of revenue, use, or loss of data). Therefore, even if damages, losses, liabilities and other damages are caused by the use of the white paper, ASTA shall not bear any liability, compensation or other liability.

This white paper can be translated into other languages. The official source for ASTA-related information is a Korean white paper. The Company is not responsible for the transmission of incorrect information such as omissions, transformations, or errors in some information that occurs during the translation process that has not been approved in advance. Also, in such cases, the Korean white paper is applied first.

The white paper may be updated in the future. Please check the latest white paper on the official website. This white paper cannot be copied, used or leaked without the consent of the author of this white paper and the ASTA team.