ASSEMBLE Protocol

Assemble Your Points on the Blockchain

White paper V 1.0 Last updated June 2021
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Overview

The ASSEMBLE Protocol is a global reward point integration platform based on blockchain. The goal is to match point providers, point consumers, and retailers.

The ASSEMBLE Protocol recognizes the fact that there are still pervasive issues in the reward point market, such as a lack of places where consumers can redeem their points despite the fact that the global reward point market has grown rapidly and aggressively. A variety of enterprises including airlines, credit card companies, department stores, and outlets have adopted the concept of a loyalty program in order to maximize their profits, attract potential customers, and achieve other marketing goals. Yano Research Group, a Japanese research company, estimated that the Korean reward point market is worth roughly 20 trillion KRW, whilst the global reward point market is worth more than 200 trillion KRW. Although a number of enterprises introduced loyalty programs solely for marketing purposes and to increase sales, their systems are now already considered outdated and in need of improvement. After all, the reward points are recorded as a liability in point providers’ balance sheets, and yet consumers have almost no opportunity to make purchases with their points.

There are three primary problems found in the reward point market. First of all, the points provided to the customers are recorded as a liability on the point provider’s side, which is basically why points are provided with certain validity dates. Those dates often cause conflicts between companies and customers. From a customer’s perspective, points are regarded as the customers’ personal assets, which are earned as a result of a series of continuous purchases. Therefore, imposing a certain expiration date or retirement policy to the points actually violates the customers’ property rights. Second of all, customers have very few options to redeem their points within the given validity period, which obviously causes dissatisfaction. At the same time, companies also have difficulties finding and providing more options to customers for redemption. Lastly, customers’ points are dispersed across various loyalty programs, which complicates the process of point management. This in turn serves as a primary reason why the majority of customers do not recognize their reward points as goods which have equal value.

The ASSEMBLE Protocol has come up with three primary missions to address the aforementioned issues. 1) Point Providers (companies) should introduce new places for the customers to use their points, in order to extinguish their accumulated point liabilities and introduce a new way to attract customers. 2) Point Consumers (customers) should not have any limitations on their loyalty points, such as validity dates, and they should get more opportunities to use their reward points in various places. 3) Retailers (individuals or companies) should be provided with new advertisement tools and open up additional sales channels for themselves.
To accomplish these missions, the ASSEMBLE Team introduces the ASSEMBLE Protocol which is a blockchain-based global point integration platform. The ASSEMBLE Protocol provides a reliable service based on a transparent and safe token ecosystem by exploiting blockchain technology. Consumers can use their loyalty points in the same way they use cash, anywhere in the world without any time or place restrictions. Meanwhile, companies can expand their businesses and access diverse user pools. ASM Tokens issued by ASSEMBLE can be widely utilized in various areas such as education, cultural activities, hobbies, fashion and cosmetics. With its plug-in system, ASSEMBLE will allow easy access to the platform and build a network for ASSEMBLE partners. STA1.com, ClubPass, and YWMobile are the major partners of the ASSEMBLE Protocol. Existing point consumers and enterprises previously secured by the partners will help ASSEMBLE settle in the market; this in turn will become ASSEMBLE's point of differentiation. Hence, STA1.com, ClubPass, and YWMobile are the core partners of the ASSEMBLE Protocol:

1) STA1.com possesses 520,000 subscribers on their platform, 3,000 partnering firms and an accumulated 1 billion KRW in sales revenue.

2) ClubPass is a service that produces continuous results with 230,000 subscribers and 30,000 MAU members.

3) YWMobile is a provider of chauffeur services. Their app has been downloaded over 100,000 times and their total sales revenue is 2.1 billion KRW.

The point consumers and enterprises secured through the core partners of ASSEMBLE will contribute to the popularity of our platform and make it widely recognized both in online and offline domains. This in turn will become the competitive advantage of the ASSEMBLE Protocol.

At the current stage, the ASSEMBLE Protocol is aiming to secure 0.5% of the market share and 100 billion KRW in annual sales revenue within the Koren Point Market (TAM), which is estimated to be worth 20 trillion KRW a year. This will be achieved by encouraging an inflow of additional partners to our platform and by establishing a fair partnership ecosystem.
1. Background

1.1. The Point Market

As of 2019, it is estimated to be worth 20 trillion KRW with CAGR of 10%.

[Korean Reward Point Market Size]

As of 2018, it is estimated to be worth $1.78 billion (approximately 200 billion KRW)

(Source: Japanese Yano Research Group)

[Diagram 1] Korean Reward Point Market Size

Compared to the very start of the airline mileage points system, the Korean Reward Points System has been applied to various industries nowadays. The airline mileage points system was first introduced by Korean Air in 1984. As of 2017, the largest accumulation of points has been attributed to credit card companies with a sum of 2.9 trillion KRW, followed by airline companies with a total accumulation of 2.6 trillion KRW. As of 2019, according to the data released by the National Statistical Office and the Korea Consumer Agency, the Korean Reward Points Market is currently estimated to be worth around 20 trillion KRW, with a CAGR trend of more than 10 percent. According to the Japanese Yano Research Group, as of 2018, the Global Point Market was estimated to be worth about 200 trillion KRW. It has continued to exhibit aggressive and rigorous growth with the consistent development of the IoT, and with the recent revitalization of the e-commerce industry.
1.2. Point Market Problems

1.2.1. Point Provider’s Perspective

Competition in Point Service Marketing
Giving reward points is one marketing strategy to increase consumer loyalty by providing benefits to returning customers. In fact, companies must be involved in a point marketing competition in order to maintain this point system. In the very beginning, the reward points system was mostly confined to luxurious goods like airline tickets, but now it is applied across all industries, even gas stations, department stores, credit card companies and restaurants. Nowadays, new loyalty marketing strategies are continuing to emerge. For instance, some companies are providing partial cashbacks upon payment or giving discount coupons to their customers. Point providers are currently facing an ironic situation, where they have to incur additional marketing expenses in order to promote their point systems that were originally designed specifically to attract customers.

Financial Loss Due to Maintenance Fees
As a matter of fact, point providers are currently expanding their business connections in order to focus on the places where their customers can easily use their accumulated points, such as movie theaters and wholesale stores. As the network expands, the cost of building and maintaining a point system increases correspondingly on an annual basis. However, the value of those points is much lower than the cost of building and maintaining the network. This is in fact, an NPV negative and therefore an ineffective project for a company to engage in. However, companies are obliged to maintain the points systems in order to prevent an outflow of existing customers or in order to attract new ones. Yet this practice, as it has been mentioned, results in huge investment losses every year.

Liability in Financial Statements
In fact, there is a huge gap between providers and consumers within the point system. For point providers, points are considered a preferential treatment policy that they provide to their customers, yet they are also regarded as a liability for the company. When a point provider sells a product, they record the percentage of the point that has been earned by the customer as a liability in their financial statement. Although it is not a debt that the company has to repay in cash, it is still treated as an accounting liability during the period of validity of the point. As of September, 2019, Korean Air had 2.31 trillion KRW in liabilities due to mileage points, whereas Asiana Airlines recorded 723.8 billion KRW. Last year, Korean Air, the biggest provider of airline miles, was involved in a lawsuit over a 10-year mileage validity period. At that time, Korean Air claimed that the mileage points could not be regarded as the consumer’s property, since they were bonuses provided to the customers. On the contrary, customers claimed that the mileage was in fact their asset that they had acquired by using that specific airline service.
1.2.2. Point Consumer’s Perspective

Exclusive Points
Customers want to use reward points like cash but there are currently too many limitations that impede this option, because the reward points are separated and cannot be used in an integrated manner. Reward points are assigned to different providers which offer different places where you can use your points. Since reward points cannot be combined, customers do not recognize points as valuable goods. Furthermore, when making a purchase, customers have to make the full payment using only points, hence it is almost impossible for them to use their small amount of points before they expire. Credit card companies provide points to their customers when they use their credit card. However, the collected points from the credit card purchases can solely be used for the purchase of goods and services at places which are affiliated with the credit card company. More than that, those affiliated businesses mostly sell expensive goods, so customers struggle to use the small amount of their collected points. As it has already been stated, customers want to treat their reward points the same way they treat cash, but there are far too many limitations due to the various reward point policies of the point providers.

Not Enough Places to Use Points
People have already raised the issue of where and how to use reward points. Although there are many sources to collect reward points like credit cards or plane tickets, there are very few places to use reward points. Due to the fact that there are not enough places to use reward points, customers complain about point collection itself.

Cessation Policy
According to point cessation policies, reward points that customers receive will eventually expire. The most recent controversy centered around airline mileage points that were collected in 2010 and were set to expire in 2019 due to a 10-year validity policy. This understandably upset a lot of customers and resulted in plenty of complaints. Although reward providers are coming up with improved plans, such as providing more places to use reward points, customers complain that there are still not enough places to use their points, and that there are too many deductions when they try to use their reward points. Reward providers are actually violating their customers’ property rights by unilaterally setting an expiration period. This is causing conflicts between point providers and customers.
1.3. ASSEMBLE Team Mission

The ASSEMBLE Team is striving and aspiring to solve the aforementioned issues that are associated with reward points. The solutions that our team has presented are based on a blockchain-based global point integration platform. The solutions are as follows:

- **Point Providers (Enterprises)**
  In order to eliminate the accumulated liability under the point system and also to secure an additional channel for the inflow of new customers, enterprises should increase the places customers can use their points, so that they will have more options.

- **Point Consumers (Customers)**
  For the revitalization of point usage, restrictions on the validity period of points should be abolished, and new point utilization methods should also be introduced.

- **Retailers (Individual or Enterprise)**
  The ASSEMBLE platform will provide both individuals and enterprises with new sales channels and efficient advertising tools.

The ASSEMBLE Team has defined the three goals above as its mission and designed a blockchain-based "ASSEMBLE Protocol" to successfully achieve these goals. The ASSEMBLE Team will provide a transparent and safe token ecosystem by building the ASSEMBLE Protocol and inviting ① point providers, ② point consumers, and ③ retailers to the project. The ASSEMBLE Team will build "an ASSEMBLE ecosystem" where Korean and global partners can coexist, and will lead a blockchain project which will be widely used around the world.

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1.4. Why Blockchain?

1.4.1. Changing Reward Points into Assets

In fact, for intangible digital assets to be valued or perceived as valuable, some sort of collateral should exist or reliability should be ensured. By utilizing blockchain technology, you can tokenize your points, which increases reliability, in order to safely and transparently trade your tokens within our platform. If the platform is integrated without applying blockchain technology, the sunk cost associated with the issuance, reliability, and security of the digital assets will be much higher.

1.4.2. Expandability to Global Markets

The ASSEMBLE Protocol is a point integration platform which is based on blockchain technology. In order to provide a global service, we should address various issues regarding changes in exchange rates, slow transfer time and commission fees. These are things we need to contemplate if we are to combine reward points between ASSEMBLE’s partner, YWMobile, for example, and ASSEMBLE’s future global partners. However, since the value of a digital asset issued with blockchain technology is standardized, this allows us to resolve issues regarding exchange rates and commission fees. Blockchain technology can integrate reward point networks that are separated into a single blockchain network with different global partners, which can also speed up transfer time. In the future, point providers and consumers that are based not only in Korea, but perhaps all around the world, will have the option of becoming ASSEMBLE’s partner. Further, through ASSEMBLE Protocol’s platform, it will be easier to expand into global markets. All of the collection and transactions of reward points will be recorded on the blockchain, which prevents any act of forgery or falsification. This will help build security and reliability.
1.4.3. Cost Saving

In-house development of point services takes up a lot of time for any enterprise. However, the utilization of tokens issued by blockchain technology may save a lot of time and money typically spent building security and operating systems. ASSEMBLE provides plug-in-type APIs that can be applied within the platform, allowing a variety of enterprises and individuals to quickly flow in at a relatively low cost.
2. ASSEMBLE Protocol

2.1. The ASSEMBLE Platform

ASSEMBLE aspires to create a business ecosystem that benefits all the participants such as point providers, point consumers and retailers by providing a block-chain based point integration platform to point providers and consumers. At the same time, ASSEMBLE matches consumers who have strong purchase power with retailers.

The ASSEMBLE Protocol fundamentally consists of 1) a Point Exchange (PX), 2) a MarketPlace (MP), and 3) Data Infrastructure (DI). These are all essential components that any participant can access and utilize.

The Point Exchange (PX) is a place where reward points are integrated and exchanged, which is one of the key functions of ASSEMBLE. Once point providers stake tokens, point consumers can convert their points to ASM (Refer to 2.3.1). The PX builds an auto-trading system and point redemption system that allows efficient point exchange and redemption for the users. The MarketPlace (MP) is an online market which enables ASP Token (Refer to 2.3.2) usage. ASSEMBLE participants have equal rights to sell products on the MP through staking. The margin settlement system allows the settlement of profits from sales and provides profits to sellers every day. Lastly, Data Infrastructure (DI) is a place where people use data infrastructure and databases that are based on a variety of accumulated data such as consumer behaviors. This data has been gathered on the ASSEMBLE Platform and is used to develop advertising strategies. Point Providers and MP sellers can pay and run advertisements through ASSEMBLE. We will provide more detailed information on this later in the specific section.

[Image 3] ASSEMBLE Platform

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2.2. Key Feature

2.2.1. Point Integration

With current point management services, customers who collect points from different sources cannot combine or convert reward points into one single type of point. Since they are only allowed to use reward points at specific franchise stores, they cannot use or exchange reward points. However, through the ASSEMBLE Platform, customers can convert different reward points into a single digital asset.

Converting Points to Cash
Countless amounts of points cease to exist every year. According to the Financial Supervisory Service, around eight credit card companies reported the total amount of expired points was 49.9 billion KRW in the first half of 2019. Additionally, the amount of expired points for 2017 and 2018 were 102.4 billion and 115.1 billion KRW, respectively. ASSEMBLE provides an opportunity for its users to convert all of the points they have collected from various partners into a single ASM Token. Consumers who have points can conveniently integrate their points into one system or just cash them out within the ASSEMBLE Platform, where the usage of UI enables this practice.
Point Purchase

If you use your points to purchase products from retailers within the ASSEMBLE Platform, you will get various benefits such as discounts and extra services. Further, ASSEMBLE provides more discounts and services if customers purchase goods with their reward points rather than cash or credit cards. To enjoy these benefits, customers can purchase ASSEMBLE tokens at a digital asset exchange and use them on the platform.
2.2.2. Point Usage

Token Transfer
Currently, customers are not allowed to transfer their reward points to others due to existing policies and technical issues. Up to now, reward points have only been transferable when they were given to one’s family members and even that was quite complex. However, the ASSEMBLE Platform lets you transfer your digital assets to other accounts, so you can send your tokens to anyone at any time. As long as you know the receiver’s ASSEMBLE Wallet address, you can easily transfer your points without any issues.

Commodity Trading
On the ASSEMBLE Platform, anyone can be a buyer or a seller. The most important thing in P2P trade is trust between peers, but this is obviously hard to prove. On ASSEMBLE, individuals and franchise stores can acquire the right to sell goods if they stake a certain amount of a token. Unlike existing places that permit the use of reward points, ASSEMBLE allows trade between individuals on the marketplace and provides more opportunities to use reward points.

[Image 6] ASSEMBLE Key Feature – Interpersonal Token Transfer
2.2.3. Advertisement Placement

Infrastructure Development

The ASSEMBLE Platform will build a data infrastructure to sustain the ecosystem. By utilizing the existing data of our partners, such as the historical pattern of purchasing behavior of the customers, their purchasing power, or details of their purchases, ASSEMBLE is able to build an appropriate data infrastructure within the ASSEMBLE Platform. This means we will create a new data infrastructure by utilizing all the available data, like customer behavior or point consumption patterns, thus advertisers will be able to come up with new advertisement strategies based on data gathered from the platform.

Consumer Analysis

To reinvigorate the ecosystem, it is important to attract consumers with particularly strong purchasing power. Customer analysis based on the available data infrastructure of the platform will enable advertisers to set their promotions and advertisements to relevant target groups. In fact, customers targeted by consumer analysis will yield a higher conversion rate than existing customers. The ASSEMBLE advertising infrastructure will further continue accumulating consumer data through various processes, such as point acquisition, point exchange, and point consumption. The accumulated data will further be exploited by the additional analysis of consumer behavioral patterns. Hence, advertisers will be able to exploit the analyzed data to measure ROAS (Return on Ad-Spend) for advertising, and gain effective advertising tools.

Data Usage

Advertisers can also manage their advertisements through the mobile application using data in various ways. Features such as push notifications, banner ads, various discounts, or promotions will also be implemented within the ASSEMBLE mobile application. The data infrastructure, which has already been described, allows the collection of data from a broad range of consumers, which in turn enables targeting a specific group of customers. Furthermore, an additional function of customer analysis is introduced within the ASSEMBLE platform, which allows advertisers to understand consumer behavior. Thus, advertisers using this analysis data, can potentially increase the revisit rate of consumers and increase their sales revenue.
2.3. Token Model

2.3.1. ASM (ASSEMBLE Token)

ASM (ASSEMBLE Token)
- ERC 20
- Price is determined by the market demand
- Can be used for external transfers
- Integrated with points provided by enterprises

ASM is a utility token used on the ASSEMBLE platform and a digital asset whose price is set according to market demand. You can buy ASM on the ASSEMBLE platform or a digital asset exchange, or you can receive it as a reward on the platform.

ASM holders can enjoy additional benefits by purchasing and staking existing ASM. On the ASSEMBLE platform, point providers and retailers can run special events or promotions, providing various benefits like discounts only for ASM holders.

As ASSEMBLE is more widely used, ASM holders will enjoy more perks. This is a mutually beneficial situation because holders could get their ASM back. Additionally, the value of ASM would be sustained and elevated through our buyback policy.

<table>
<thead>
<tr>
<th>#</th>
<th>ASM Usage</th>
<th>ASM User</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Means to acquire ASP Token</td>
<td>Point Provider, Point Consumer, retailer</td>
<td>ASP Token is the means of payment within ASSEMBLE Platform. User should first obtain ASM Token and then exchange them to ASP Tokens.</td>
</tr>
<tr>
<td>2</td>
<td>Means of integrating points or redeeming them for cash</td>
<td>Point Consumer</td>
<td>Point Consumers can exchange their collected points from the point providers to ASM Tokens or they can redeem them for cash.</td>
</tr>
</tbody>
</table>

[Diagram 2] ASM Usage
2.3.2. ASP (ASSEMBLE Point Token)

ASP (ASSEMBLE Point Token)

- ERC 20
- 1 ASP = 1 KRW (fixed)
- Can be transferred within platform only (external transfers are not permitted)
- Can be utilized within platform only

ASP is an actual payment method on the ASSEMBLE Platform. Consumers can purchase ASM and convert it to ASP and vice versa.

In order to reduce the price volatility of ASM and make it possible to use ASM as a payment method, the price of ASP has been fixed at 1 ASP = 1 KRW. The price of ASM is connected to a digital asset exchange and updated in real time based on its market price. Based on the real-time ASM price, the number of conversions is determined by converting to ASP. ASP can be used for payment and staking on the ASSEMBLE Platform, yet it cannot be transferred or exchanged outside of this platform.

<table>
<thead>
<tr>
<th>#</th>
<th>ASP Usage</th>
<th>ASP Users</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Point Provider’s staking to enter the Point Exchange</td>
<td>Point Providers</td>
<td>A certain amount of ASP should be staked by the point provider in order to enable its points to be converted into the ASM tokens within PX</td>
</tr>
<tr>
<td>2</td>
<td>Seller’s staking to enter the Marketplace</td>
<td>Merchants, MP Seller</td>
<td>In order to market the products in the MP, seller should stake an amount of ASP Tokens relative to the selling price of his goods</td>
</tr>
<tr>
<td>3</td>
<td>User’s staking to increase their rating</td>
<td>Point Consumers</td>
<td>Users will receive additional benefits according to their rating in the MP. Users should stake ASP Tokens to increase their rating in the platform.</td>
</tr>
<tr>
<td>4</td>
<td>Means of Payment in the MP to purchase goods and services</td>
<td>Point Consumers</td>
<td>Users should use ASP Tokens within MP to pay for the goods and services</td>
</tr>
<tr>
<td>5</td>
<td>Means of Payment for ads within ASSEMBLE Platform</td>
<td>Merchants, Point Providers</td>
<td>When using ASSEMBLE Platform DL, advertisers should incur payment in ASP Tokens in order to place their ads.</td>
</tr>
</tbody>
</table>

[Diagram 3] ASP Usage

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2.4. Token Economy

ASSEMBLE is a place where all participants can take part in three key areas such as ① the Point Exchange (PX), ② the MarketPlace (MP), and ③ Data Infrastructure (DI). The following services are provided to participants on the ASSEMBLE Platform for each key area:

- Integrating reward points and making profits: PX (Point Exchange)
- Using reward points: MP (Marketplace)
- Running an advertisement: DI (Data Infrastructure)

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2.4.1. Point Integration and Monetization: PX (Point Exchange)

The Point Exchange

The point exchange function is a major component of the PX. When consumers make a purchase, they can get reward points from point providers and exchange the points for tokens. Or, similarly they can exchange the points that they already have for tokens. If consumers exchange their points for tokens, they will be provided with tokens that will be saved in their token wallet on ASSEMBLE. If they transfer their reward points to the PX and further convert it to ASM or ASP, they will pay a certain amount of commission to the platform.
Point Provider's ASM Staking

For consumers to convert their reward points to ASM within the PX, point providers should stake a certain amount of ASP. The percentage at which the point provider can exchange their points for ASM in proportion to the number of ASP staked by the point provider is determined as follows:

\[ Ca = \alpha \times Ta \]

Ca: Exchange capacity of "A's" reward points
\( \alpha \): Staking coefficient
Ta: The amount of ASP that "A" has staked

Auto-Trading System

If consumers send the reward points that they have collected from point providers to the PX, the PX should provide ASM Tokens to consumers in exchange. Consumers can buy tokens at the digital asset exchange which is connected to the PX in real time. For this, an auto-trading system has been established within the PX. The auto-trading system evaluates the value of reward points sent by consumers, buys an equal amount of ASM at a digital asset exchange, and provides it to consumers.

Point Settlement System

Every time consumers exchange the reward points that they have gotten from the PX to ASM Tokens, various reward points are accumulated on the PX. In order to remove such points accumulated on the PX, a point-settlement batch job is established. The batch runs every 24 hours and ASSEMBLE sends data to point providers. Based on this data, point providers pay fees for point retirement to the ASSEMBLE Platform.
2.4.2. Utilizing Reward Points: MP (Marketplace)

[Image 10] Marketplace
Market
The MP is a place where transactions are made using ASP Tokens. Sellers can sell goods and services at the MP, whilst using a small portion of their profits as sales commission. Consumers can buy various goods at a reasonable price and get additional rewards by leaving comments or engaging with the community.

Seller Staking
The seller on the MP can be either consumers or retailers. To prevent malicious acts (like fraud), only sellers who have staked a certain amount of ASP are entitled to register their goods and services on the MP. The required amount of ASP for staking is calculated using the formula illustrated below:

\[
S_b = \beta \times P_b
\]

\(S_b\): The count of staking required for Seller "B"
\(P_b\): The price of goods sold by Seller "B"
\(\beta\): MP staking coefficient

The MP Rating System
Consumers can get additional discounts at the MP by staking ASP or by buying more goods. Depending on user rating, consumers can enjoy a different range of benefits like additional discounts or extra points. Those who have a certain MP rank can enjoy specific, exclusive promotions. The MP ratings are decided by user scores and users will be introduced to a different range of benefits (detailed information provided in the table below) according to their rating.
Although user scores will be decided as explained in the table, we will change this scoring system in a way that reflects consumers' participation.

\(S_c\): User score of Consumer "C"
\(T_c\): The amount of tokens staked by Consumer "C"
\(A_{cc}\): ASP which is accumulated and used by Consumer "C"

\[
S_c = T_c + A_{cc}
\]
## MP Rating System

<table>
<thead>
<tr>
<th>Rating</th>
<th>User Score</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>New</td>
<td>Newbie - 100,000</td>
<td>1% discount, when purchasing goods</td>
</tr>
<tr>
<td>Bronze</td>
<td>100,001 - 500,000</td>
<td>1% discount, when purchasing goods</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1% ASP Payback, when purchasing goods</td>
</tr>
<tr>
<td>Silver</td>
<td>500,001 - 1,000,000</td>
<td>2% discount, when purchasing goods</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1% ASP Payback, when purchasing goods</td>
</tr>
<tr>
<td>Gold</td>
<td>1,000,001 - 2,000,000</td>
<td>2% discount, when purchasing goods</td>
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<td></td>
<td></td>
<td>2% ASP Payback, when purchasing goods</td>
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<tr>
<td></td>
<td></td>
<td>MP Promotion Right</td>
</tr>
<tr>
<td>Platinum</td>
<td>2,000,001 - 5,000,000</td>
<td>3% discount, when purchasing goods</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3% ASP Payback, when purchasing goods</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MP Promotion Right</td>
</tr>
<tr>
<td>Diamond</td>
<td>5,000,001 -</td>
<td>4% discount, when purchasing goods</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4% ASP Payback, when purchasing goods</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MP Promotion Right</td>
</tr>
</tbody>
</table>

[Diagram 4] MP Rating System
2.4.3. Advertisement Placement: DI (Data Infrastructure)

As mentioned above, the ASSEMBLE platform is equipped with data infrastructure (DI) which accumulates various payment data such as consumers’ behaviors or patterns. Data is stored in the blockchain and used to create or target advertisements. Advertisers process data and find potential advertisement targets through the ASSEMBLE platform DI. They then run advertisements on the platform based on that data. This is why advertisers pay for advertisements on ASSEMBLE.

Consumers will initially be asked for consent to be shown advertisements. If consumers are shown advertisements, they get ASP as a reward. The ASSEMBLE team will set up an ASP reward range so that consumers only see advertisements that offer a certain amount of ASP as a reward, which would free them from unwanted spam. For advertisers, they can save on advertisement costs and improve customer satisfaction. This is possible because there is no brokerage agency on the ASSEMBLE Platform in charge of running advertisements.

The following is an example of advertisements that can be run by advertisers using ASP. Details are subject to change and other types may be added depending on the size of the data infrastructure.

<table>
<thead>
<tr>
<th>Marketing Tools</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banner Ads</td>
<td>Banners emerge in the ASSEMBLE Platform on various pages. Advertisers may exploit the banners, which will allow them to target preferred segment of customers, that will further enable them to offer their goods and services to the selected target group. Ad cost will be incurred in accordance with the number of clicks made.</td>
</tr>
<tr>
<td>Push Ads</td>
<td>The Push Ads function delivers small ad phrases or images to the mobile application users. This function allows to receive a real-time feedback from users. Collected user’s data through the push notifications are further utilized to send ads only to targeted users at the optimal time.</td>
</tr>
<tr>
<td>Pop-up Ads</td>
<td>It is a tool for exposing customers to the advertisements through the pop-up function, when users of mobile application or web-version surf a specific page for the first.</td>
</tr>
<tr>
<td>Time Deal</td>
<td>It is a tool that sets a specific time to sell the product at a lower price. Advertisers can utilize the target consumer’s access time and purchasing power data in order to use the Time Deal tool at the most effective time.</td>
</tr>
<tr>
<td>Featured Products</td>
<td>It is a tool, that enables advertisers to target a group of customers with similar needs and expose ‘featured products’, to those who share a pattern of similar needs. Advertisers can set their own themes and expose specifically theme-based “featured products” and draw attention of the potential customers by applying additional discounts on those products.</td>
</tr>
</tbody>
</table>

[Diagram 5] ASSEMBLE Platform Advertisement

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2.4.4. Case Study

Let’s look into the ASSEMBLE protocol’s token mechanism by imagining a few application cases for point providers, consumers and retailers.

<table>
<thead>
<tr>
<th>ASM</th>
<th>ASM is a utility token, that is used on the ASSEMBLE platform. Although it’s price is calculated according to the market mechanisms, just assume that it has a fixed rate of 1 ASM = 1 KRW, merely for the case description purposes.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASP</td>
<td>In order to reduce the price volatility risk of the ASM Token, ASP (Point Tokens) were introduced and are used as a means of payment in the ASSEMBLE Platform, and it has an actual fixed rate of 1 ASP = 1 KRW</td>
</tr>
</tbody>
</table>

Case Study #1: Point Provider and Consumers’ Perspective

Customer S joins the ASSEMBLE platform to redeem Reward Points A that she has collected from Point Provider A. Here, the accounts of the point provider and ASSEMBLE are integrated, and ASSEMBLE collects the database of Point Provider A’s customers.

Company A buys ASM at market price in a digital asset exchange, and converts it to ASP and stakes it at the PX. Company A can provide a service of converting reward points for as much as they have staked ASP.

Points A (100,000 points) held by Customer S are redeemed for 95,000 ASM at the PX (ASSEMBLE’s point exchange) after deducting a 5% commission fee. Customer S can further change ASM to ASP in order to buy goods or services on the MP. Customer S confirms that she has 95,000 ASP in her ASSEMBLE wallet without any conversion commission fee. Customer S can also convert ASP to ASM and redeem it for cash at a digital asset exchange, but instead, she goes to a retailer on the MP.

Customer S who is very interested in fashion and beauty products is shown an advertisement banner with a data-based time deal which is selling a beauty product worth 90,000 ASP. She then purchases this product and now has 5,000 ASP left in her balance. She wants to buy a product which costs 10,000 ASP. To buy this product, she buys 5,000 KRW worth of ASM at a digital asset exchange and converts it to ASP. Finally, she uses all of her Reward Points A. Afterwards, her MP Rating will be upgraded to Bronze according to the MP rating system on the ASSEMBLE platform, and she will get Bronze benefits the next time she makes a purchase.

Company A receives reward points data accumulated on the PX every 24 hours and pays the fee on the PX. Company A secures a place to write off its point liability and an additional channel to attract new customers. Moreover, there is no expiration date for the points imposed on Customer S, so she can use her reward points whenever she wishes.

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Case Study #2: Point Consumer and Retailers’ Perspective

Business Owner B sells fashion and beauty items. Mr. B joins ASSEMBLE, gets a membership and becomes a retailer, as he heard this would allow him to attract new customers from the ASSEMBLE Platform. So, Retailer B purchases ASM at market price in a digital asset exchange. He further converts ASM to ASP and stakes a certain amount of ASP in order to get a right to sell his goods. Retailer B now has a right to sell goods relative to how much he has staked. Now Retailer B wants to run an advertisement to attract new customers. On the ASSEMBLE platform, it is possible to run an advertisement targeted at certain consumers, so Retailer B does not have to pay for an advertisement that will be shown to random people. Additionally, he wants to provide ASP to his customers as a reward. Retailer B can analyze consumers’ purchase behaviors through the ASSEMBLE DI and run an advertisement targeting solely those who are interested in fashion and beauty products. He pays for an advertisement with his ASP.

Customer S who is very interested in fashion and beauty products happens to see a pop-up advertisement and gets ASP as a reward in her ASSEMBLE wallet. Customer S who is satisfied with getting ASP now looks into products sold by Retailer B and considers buying them. Customer S finds out that Retailer B does not have any selling history and wonders why, but she is relieved after seeing that his status reads, “staking conditions to be a retailer”. Customer S, who now has trust in Retailer B, finally buys B’s product.

Now Retailer B can secure additional sales channels and run advertisements easily and effectively. Customer S can find good places to use her reward points like Retailer B and even get ASP as a reward for seeing advertisements.
2.5. Business Model

ASM and ASP, which are digital assets on the ASSEMBLE platform, will be used for trading purposes and as exchange units for various goods and services. ASM and ASP will also be provided as a reward for customers who join the ASSEMBLE platform. Some of the profits will be bought back to reinvigorate the ASSEMBLE ecosystem.

The expansion of point providers and retailers will increase product variations on the MP, while allowing consumers who want to buy goods at a low price to buy ASM with their reward points. To consume ASM they bought on the MP, consumers should convert it to ASP again. In this way, ASSEMBLE can make a profit on commissions from the ASSEMBLE ecosystem which consists of point providers, point consumers and retailers.

2.5.1. PX Profits

PX Settlement Commission Fee
The commission fee rates illustrated below will be applied to any exchange between reward points and ASM, or ASM and ASP on the PX. The commission fee rate is subject to change depending on how widely ASSEMBLE is used and how a settlement agreement with point providers has been stated.

<table>
<thead>
<tr>
<th>exchange item</th>
<th>Before exchange</th>
<th>After exchange</th>
<th>Commission Fee Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Points collected from point providers</td>
<td></td>
<td>ASM</td>
<td>X%</td>
</tr>
<tr>
<td>ASM</td>
<td></td>
<td>ASP</td>
<td>0%</td>
</tr>
<tr>
<td>ASP</td>
<td></td>
<td>ASM</td>
<td>Y%</td>
</tr>
</tbody>
</table>

[Diagram 6] ASSEMBLE Platform Exchange Commission Fees
The commission fee rate will also be applied to consumers who use the ASSEMBLE platform depending on their usage frequency and accumulated amount of points exchanged.

As mentioned above, the PX performs point settlements between point providers and ASSEMBLE every day through the point settlement system. The difference between the amount that ASSEMBLE receives from a point provider for point retirement and the amount of ASM provided to a customer becomes profit for the ASSEMBLE platform.

\[ P_{px} \]: Profit from ASSEMBLE's PX settlement commission
\[ PO_a \]: The value that a customer gets from point provider "A"
\[ X\% \]: The commission fee rate applied when a customer exchanges point provider "A"'s reward points to ASM
\[ ASMA \]: The value that a customer gets by converting reward points to ASM
\[ Fa \]: The commission fee that the ASSEMBLE platform pays for the retirement of reward points which are equivalent to \( PO_a \)

\[ P_{px} = Fa - (PO_a \times (1 - X\%)) \]

2.5.2. MP Sales Commission Fee

Once a retailer records the sale of goods on the MP, the sales commission fee is determined on every product that the retailer sells. When a purchase is made on the MP, the money, except for the MP sales commission, is transferred to the retailer. The sales commission is determined by a contract between the retailer and ASSEMBLE which states the product type, production cost, SG&A, etc.

2.5.3. Advertisement Commission Profit

As mentioned above, advertisers can run various advertisements using data accumulated on DI. Advertisers pay a commission fee to the ASSEMBLE platform to run an advertisement, and the remaining value, after the reward points given to customers have been deducted, is ASSEMBLE’s profit from the advertising commission.
3. Technology

3.1. Smart Contract

ASSEMBLE’s token usage and transfer processes are saved on the Ethereum blockchain, and no one can amend the transaction history or token information. This makes it easy to trace and retrieve token information. Consumers will have more trust in the transaction history of the ASSEMBLE platform since all of the records are logged on the blockchain.

The image above is the DApp’s execution process. Interaction with local Ethereum nodes is done through the RCP Protocol with solidity codes compiled in local or Web3, and is arranged on Ethereum’s main chain in a Smart Contract format which cannot be modified.
3.2. RPC

Remote procedure call (RPC) is a computer communication protocol where a program, which is executed on a computer, calls a subroutine from another computer without interactive programming. RPC is a distributed computing program. A client makes a request to a server in order to execute multiple processes. The server accepts and processes this request by using parameters provided by the client. Once calculation is completed, the client will get the results. In distributed computing, there are many RPC protocols like initial CORBA, Java RMI, RPC-style web services, Hessian, Thrift and REST API.

The following is a typical RPC process:

- Clients call the RPC call function locally.
- Upon calling, the client serialization service combines methods and parameters so that they can be transmitted in a message through a network.
- Client serialization service searches for the server’s address and sends a message to the server.
- Server serialization service receives and decodes the message.
- Server serialization service calls a local service based on its decoding results.
- Server execution results are sent back to the server serialization service.
- Server serialization service sends back a message containing the results to the client.
- Client serialization service receives and decodes the message.

The ASSEMBLE Platform communicates with Ethereum via RPC calls. Since smart contracts are executed on Ethereum’s main chain, all ASSEMBLE operations enter the Ethereum network through RPC. This guarantees a successful operation of the smart contract.
3.3. Storing Data

Pictures and videos featuring ASSEMBLE events can be stored and shared on the IPFS, a distributed storage system. The InterPlanetary File System (IPFS) is a distributed blockchain file system and encrypted-blockchain-based database. Data can be encrypted, stored, and shared by selected users. Users can encrypt data using their own pair of keys (asymmetric encryption) and save encrypted data on the IPFS. With asymmetric encryption, ASSEMBLE users can encrypt data using the public key of other users with whom they want to share data. Then, selected users can access this data by using their individual key. Users who do not have access cannot decode this data, which guarantees the protection of personal information.

![Image 13] Storage of the asymmetrically encrypted data using the IPFS

[Image 13] shows how user consent is obtained and data is selectively shared. Specifically, User A wants to share his data but only allows User B to access it. ASSEMBLE encrypts User A’s data by using User B’s public key, uploads an encrypted data file in the IPFS, and gets a hash value of the file. User B can find and open this file since he has an individual public key which was used to encrypt the file.
The IPFS can be regarded as a storage protocol similar to BitTorrent. It provides multiple tasks for files through hash references for deeper program interaction by using a completely distributed interaction. Blockchain usually has a dedicated BPM module which can log simple text records very effectively. This makes it suitable for a digital asset to be executed on a blockchain. Under a digital asset application scenario, a BPM module can be executed in a very effective way because it just needs to record the information of the sender, receiver and digital asset. However, if you need to save a large volume of other types of data like text data or personal information, all of the hashes need to be calculated and checked every time you create a block, which significantly reduces storage efficiency. Keeping chain integrity results in very inefficient block creation.

To address this issue, people are coming up with new strategies which utilize the combination of the IPFS and blockchain. ASSEMBLE saves a hash value of the IPFS creation storage file, which is the user’s data, on the Ethereum blockchain instead of on BPM as above. This guarantees the simplicity of data which is necessary for blockchains. In the meantime, this also provides the benefit of the complete decentralization of the IPFS.

[Image 14] IPFS file per block
3.4. Data Tracking

It is possible to track records by saving a hash of encrypted data on the blockchain. It can be used, for example, to trace users’ personal data. Project configuration files (DIP) are designed to give a unique number to each ASSEMBLE user’s information. This is then saved in an encrypted-blockchain-based database, the IPFS, as mentioned above. Finally, this is mapped to the Ethereum network and blockchain (side chain) through DIP hash value.

DIP consists of digital containers which store reference information in records and digital documents. All of this data can be collected and traced. Records in DIP are saved in chronological order and used to create small-sized blockchains that form transactions in DIP including time stamps and the hash value of former records. Logging records requires the signature of one’s individual key, which enhances verifiability of each record.

[Image 15] Blockchain Data Tracking via IPFS
The three characteristics of ASSEMBLE’s data tracking are shown below:

User Identification
Each user should have a unique identity (ID), so the key concept is the DIP of ASSEMBLE users. Records stored on ASSEMBLE are based on the unique user DIP.

Data Encryption and Integrity
ASSEMBLE stores data on a blockchain. Anyone who has authorization can trace this data. At the same time, it is impossible to have access to it without authorization and no one can modify this data.

Tracking Tool
Convenient systems are needed so that users can quickly and automatically track certain data. ASSEMBLE builds a safe tracking system using blockchain technology shown in the image above.
3.5. Processing Data

ASSEMBLE builds a big data processing platform using Spark. Spark is ideal for machine learning applications and building large-scale, low-latency big data analysis. Big data users can use this platform for data mining and machine learning which are related to other events and customer behaviors. For example, you can study the behavioral patterns of consumers who make a certain purchase and use this data for more targeted marketing through ASSEMBLE’s big data processing platform.

To be more specific, this is like an open-source cluster computing environment which is similar to Spark or Hadoop, but there is a difference between those two. Due to this difference, Spark performs better under certain workloads. Spark can activate a data set which is distributed to memory, which provides interactive inquiries and optimizes repetitive workload. Below is the structure of Spark on the ASSEMBLE platform.

[Image 16] “Spark” - Big Data Processing Platform
4. Key Partners

As explained in the Overview, ASSEMBLE Protocol’s key partners are STA1.COM, ClubPass, and YWMobile. They will share their IT and patent experiences and some members will join this project during the initial stage.

4.1. STA1.COM

STA1.COM is a crawling-based, fashion curation commerce site. This is a service which allows customers to buy products at a reasonable price by collecting data about online fashion items and providing product curation with its crawling technology. Since the release of its app in March, 2016, STA1.COM has recorded 64 billion won in accumulated transactions, 4.3 billion won in accumulated sales, 370.47 million product search hits, and 997,000 items sold in total. Also 2.3 million people have downloaded this app which has around 520,000 subscribers, 5,000 shops and 6 million products.

![Graph 8] STA1.com App Downloads (units in thousands)

![Graph 9] STA1.com Subscribers (users in thousands)

The crawling engine, which is STA1.COM’s core technology, collects documents distributed throughout the internet and combines them into an index of search targets. The crawling technology, which collects and categorizes data very quickly and decides which items deserve priority, is STA1.COM’s unique core technology. With its crawling data distribution system, it takes eight hours maximum to collect data quickly and accurately on 5,000 customers and 6 million products. It is also possible to find a product and buy it at a reasonable price.
We are planning to utilize this crawling technology to promote the competitiveness of ASSEMBLE’s MarketPlace while encouraging 5,000 customers to use the ASSEMBLE Protocol.
4.2 ClubPass

The second major partner company of the ASSEMBLE Protocol is ClubPass. ClubPass is the only club O2O (Online to Offline) app in Korea and it leads Korea’s club culture with an accumulated download count of 480,000 and a total of 230,000 members. It provides various ticket sales (Club Passes) that can be used at 26 clubs in Korea, real-time reviews and community services. The average number of tickets downloaded usually reaches 40,000 per month. Currently, club passes are mainly sold to boost entries to clubs.

[Image 18] ClubPass Application

[Graph 10] Total App download (units in thousands)

[Graph 11] Total number of members (users in thousands)
Club Pass intends to create additional services focused on the EDM (electronic dance music) market in the future. The global EDM market, including digital copy sales and festivals, is continuing to grow and is expected to be worth about 8 trillion won. The scale of a single EDM festival is also about 300 billion to 400 billion won.

ClubPass’s user base is in their 20s and 30s and likes club music. Through them, club music (EDM, hip-hop, etc.) has established itself as a global music trend. Due to this, ClubPass will provide a variety of services for clubbers, users who love club music, and DJs to participate in. Specific service examples include EDM festival ticket sales, communication between club pass users through location-based chat services, providing real-time information on the hottest places, helping DJs’ with self-promotion, supporting the formation of fandoms, etc.

ClubPass is likely to be the first partner to use ASP. With 220,000 ClubPass members in their 20’s and 30’s who are familiar with e-commerce and interested in using points, it’s expected they will help ASSEMBLE settle well in the early stages of the market. ClubPass has a range of clubs, including key partners shown below [Image 19].

[Image 19] Club Alliance
4.3. YWMobile

YWMobile offers services called “Mobility on Demand” that connects the customers’ need to go somewhere with drivers based on its superior technology. In this way, it can meet the rapidly changing demand for mobility. YWMobile has a flagship service, called “Chauffeur Service”, which is a self-developed AI technology that allows users to call chauffeurs by voice command without installing a separate app. The first time you use the service, you should link your phone number, and then you can use the service. Keep in mind you can only use this phone number once. Then, if you give Bixby a voice command, including the destination, you can use their One-Stop Service. This includes checking operation information, matching you with chauffeurs, and allowing the use of simple payments. Given these features, by 2019, the company had made steady growth with sales of 2.1 billion KRW, 100,000 cumulative app downloads, 30,000 MAU’s, and 200 DAU’s.

The Chauffeur Service is already running a loyalty program, and has already set aside some of the amount used as points so that customers can use their points when using the service again. Currently, the repurchase option is the only way to use points held by customers. To meet diverse customer needs and to expand to related services, the company intends to support the purchase of various tangible and intangible products from the ASSEMBLE Integrated Point (ASP) exchange and the Marketplace (MP). In addition, it is also preparing a matching service between a self-driving clubber and a clubber who wants to ride together in conjunction with ClubPass, a key partner of the ASSEMBLE Protocol.
5. Token Distribution

5.1. Plan to Issue ASM Tokens

Ticker ASM
Token type ERC-20
Total Supply 1,500,000,000 ASM

The total issuance of ASM is 1,500,000,000 and 25% of it (375,000,000 ASM) is sold through ICO. Once ICO is completed, all of the unsold tokens will be burned. ASM which has been allocated to the Team & Founders, Advisors, and Early Supporters will be locked up as a Smart Contract and will not be distributed for some time.

[Image 19] Token Distribution

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5.2. Use of Fund

Use of Proceeds
When fundraising is completed, funds will be distributed and used in the following ways: If the target is not met, the operation of the funds will be adjusted according to the priority for project development by amending the original allocation plan.

Use of Platform Revenue
Profits made from ASSEMBLE will be used for technical support, promotion, ASSEMBLE operations, and financial management, as well buy-back policies to stabilize the value of ASM in the future.
6. Team

6.1. Team

Park Kyu Do
CEO
STAT.com CEO
Clubpass CEO
Marketing Friends CEO

Lee Sung Hyen
CTO
INTECH Team SI Head
NJSystenm Team SI Head
Tomato Group Blockchain Director
Director of the 13 Mile Research Institute

Jessi Lee
Legal Director
Representative Attorney in NB Law Firm
Legal Director in BodyFriend
JWI Co., Ltd. Invest Auditor
31st Judicial Research and Training Institute

Jang Dae Gun
Business Development Manager
GOPAX Compliance Manager
Hyundai Card Risk Manager
BC Card Risk Manager

Kim Sang Woon
Back-End Developer
STAT.com Back-End Developer
Head of Development Team in Gruber Co., Ltd

Choi Soo Chul
Front-End Developer
LG U+ In-house System Project PM
Seoul Milk PJT of Asset Management System
IT Nomads Development PM
VertexID
Interbill

Kim Chan Mi
UI / UX Designer
CJ O shopping Promotion Designer
Kookmin Card UI/UX Designer

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6.2. Advisor

Alex Min
Global Strategic Advisor
Seoul National University Global MBA
RE:harvest CEO
PwC Consulting (Strategic Planning)
Amgen Inc. Financial Planning and Accounting

Kim Se Ho
Global Strategic Advisor
Peking University Economics Department Alumni
CJ CheilJedang Brand Marketing
Hanmi Marketing Group
Shanghai Office Directorate

Andrew
Global Strategic Advisor
Incubes CEO
SponB International Business Team Manager
Formica Taiwan Assistant Director
Boston IAS Institute Researcher

Robin Luo
Blockchain Advisor
NihaoUrban & Yolomedia Founder
i-house.com General Manager
Responsible for European Market
An Editor and Planner at Xinhua News Agency
Oxford Said Business School Alumni
Nottingham Trent University (MA)

Han Hye Soo
Blockchain Advisor
Pingstone Company COO
Waltonchain Marketing Regional Headquarters GM
Visiting Professor at Namseoul University

Lee Young Suk
Business Advisor
Seoul National University
Manager at Samsung Electronics
YWMobile CEO

Hwang Hyun Min
Business Advisor
M&J Entertainment CEO
7. ASSEMBLE Partner

Exchanges & Custody services

- Coinbase | Custody
- Bithumb
- Coinone
Partners

- ORACLE
- LAST.COM
- LIONHEART
- clubpass
- AKG VENTURES
- CollinStar Capital
- wanchain
- HyperDAO.com
- Blockchain Ventures
- slow mist
- cha & kwon law offices

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8. Roadmap

2020 Q4
- White Paper Release
- ASM Token Generation Event
- Partnership Establishment with STA1.com
- Partnership Establishment with Club Pass
- Tech Partnership Establishment with Wanchain
- Tech Partnership Establishment with Luniverse
- ASP Plug-in Point Accumulation API Development Completion
- Commercialization of the ASP Plug-in of the Partner Company "Club Pass"

2021 Q1
- Assemble Wallet Development
- Assemble Wallet Alpha and Beta Testing
- Assemble Wallet Launching
- Point Exchange Function Development for Android & IOS App
- Point Exchange Function Release for Android & IOS App

2021 Q2
- Assemble Market Development
- Assemble Market Alpha and Beta Testing
- Launching Assemble market

2021 Q3
- Deploying the Plug-in API Development Guide
- Assemble Wallet and Point Exchange Function Desktop Version Development
- Assemble Wallet and Point Exchange Function Desktop Version Alpha & Beta Testing
- Assemble Wallet and Point Exchange Function Desktop Version Launching

2021 Q4
- Assemble Wallet & Market & Point Exchange Language Pack Development
- Assemble Wallet & Market & Point Exchange Language Pack Alpha & Beta Testing
- Assemble Wallet & Market & Point Exchange Language Pack Launching

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9. Indemnity Clauses

The White Paper that you have read was prepared and delivered by the ASSEMBLE Protocol. The contents you have seen and become familiar with do not include or provide personal opinions on legal or financial matters. Hence the white paper, prepared by the ASSEMBLE Protocol does not have any legal responsibility. We strongly recommend that after reading the contents of this white paper, you seek professional legal and financial advice on your own.

The white paper that has been prepared by the ASSEMBLE Protocol is actually provided solely for technical or non-technical information acquisition purposes. Thus, it does not cover all the relevant aspects of the protocol. Furthermore, the contents regarding the signed or intended to be signed contracts may not be interpreted in the way that they may appear in this white paper.

Certain reports, evaluations, and financial information that are provided in this white paper include arbitrary predictions or future estimates. There is always a possibility for significant differences between the expectations and the actual outcomes since there are risks and uncertainties that are either known or unknown at the current stage.

The contents that were provided in this white paper are not intended to induce certain types of investments, nor intended to induce purchases of certain securities within a specified jurisdiction. The actual purpose of this white paper is to provide a better understanding of the ecosystem that the ASSEMBLE Protocol is engaged in.

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- As securities of all countries or something similar to them
- As collateral or warranty for a financial commodity
- As bonds, stocks, equity issued by any individual or institution, rights, option or certificate of indebtedness, or a unit of a joint investment plan for derivatives in shares or equity.

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