ASSEMBLE Protocol

Assemble Your Points on the Blockchain

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Content

Overview

ASSEMBLE Protocol is a global reward point integration platform based on blockchain, matching point providers, point consumers, and retailers.

ASSEMBLE Protocol recognizes the fact that there are still pervasive issues, such as lack of places where consumers can redeem their points despite the global reward point market's rapid and aggressive growth. 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 for other marketing purposes. 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loyalty programs solely for marketing purposes and to increase sales, their systems are now already regarded to be outdated and need improvement.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 that are found in the reward point market. First of all, the points that are provided to the customers are recorded as a liability on the point provider's side. That's basically why points are provided with certain validity dates, which causes a conflict between companies and customers. From a customer's perspective, points are regarded to be customers' personal assets, which are earned as a result of a series of continuous purchases. Therefore, imposing a certain expiration date or extinguishment policies to the points de facto violates customers' property rights.
Second of all, customers have few options for redemption of their points within the given validity period, which obviously causes dissatisfaction, whereas companies also have difficulties finding and giving more options to customers for redemption. Lastly, customer points that they possess 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 the equal value.

ASSEMBLE Protocol has come up with three primary missions to address the aforementioned issues. 1) Point Providers (Enterprises) should introduce new places for the customers, in order to extinguish their accumulated point liabilities and introduce a channel to attract new customers. 2) Point Consumers (Customers) should not have any limitations on their loyalty points, such as validity date, 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, ASSEMBLE Team introduces ASSEMBLE Protocol which is a blockchain-based global point integration platform. ASSEMBLE Protocol provides a reliable service based on a transparent and safe token ecosystem by exploiting blockchain technology. Consumers can use their loyalty points, with the same attitude as they use cash, everywhere in the world without any time or place restrictions, while companies can expand their businesses and access diverse user pools. ASM Token issued by ASSEMBLE can widely be utilized in various areas such as education, cultural activities, hobbies, fashion and beauty. With its plug-in system, ASSEMBLE will allow easy access to the platform and build a network for ASSEMBLE partners. STA1.com and YWMobile are the major partners of the ASSEMBLE Protocol. Existing point consumers and usage places 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 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 accumulated 1 billion KRW in sales revenue

2) YW Mobile is the provider of chauffeur services, that has 100,000 app downloads and has 2.1 billion KRW in total sales revenue.

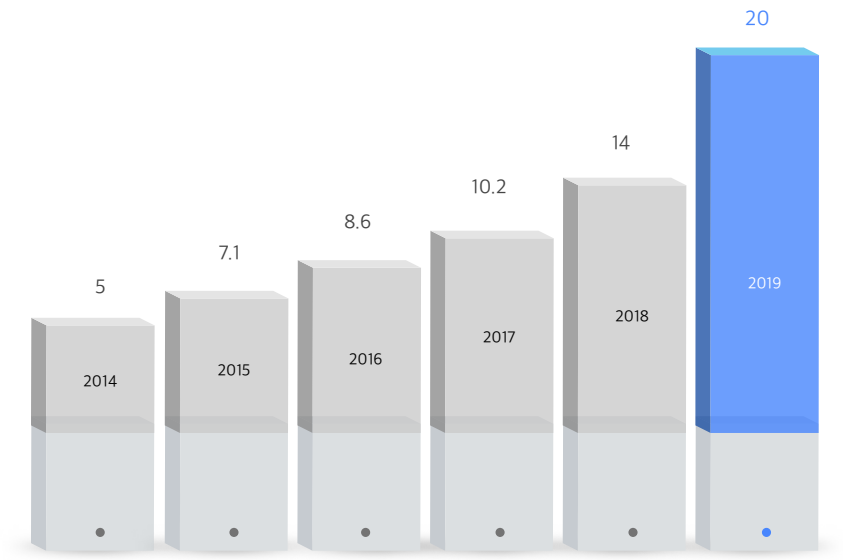
The point consumers and the usage places secured through the core partners of ASSEMBLE will contribute to the popularity of our platform and make it widely recognized both in online and offline domains. This in turn will become the competitive advantage of ASSEMBLE Protocol.

At the current stage, 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 inflow of additional partners to our platform and by establishing a fair partnership ecosystem.

1. Background

1.1. The Point Market

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



Korean Reward Point Market Size

Global Market — 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

From the very start of the introduction of the airline mileage points system, the Korean Point System is being 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 the credit card companies with a sum of 2.9 trillion KRW accumulated, followed by the airline companies with a total accumulation of 2.6 trillion won. As of 2019, according to the data released by the National Statistical Office and the Korea Consumer Agency, the Korean Point Market is currently estimated to be worth around 20 trillion won, with a CAGR trend of more than 10 percent. According to the Japanese Yano Research Group, as of 2018, the Global Point Market is estimated to be worth about 200 trillion won, and it is continuing 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 on point service marketing

Giving reward points is one of marketing strategies to increase consumer loyalty by providing more merits to loyal 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 point system was mostly confined to luxurious goods like airline tickets, but now it is applied all across the industries, even by 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 discount coupons to their clients. Point providers are currently facing an ironic situation, where they have to incur additional marketing expenses in order to promote their point systems that are designed specifically to attract customers.

Financial loss due to maintenance fees

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

Liability in financial statement

In fact, there is a huge gap between providers and consumers within the point system. For point providers, points are regarded as preferential treatment policy that they provide to their customers, yet they are also regarded as the company's liability. When the point provider sells a product, he records the percentage of the point that has been earned by the customer, as a liability in his 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 2.3111 trillion KRWin liabilities due to the mileage points, whereas Asiana Airlines had 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 cannot be regarded as subject to a property right, since they are the bonuses provided to the customers. On the contrary, customers claimed that mileage de facto happen to be their asset, that they acquired by using airline service.

1.2.2. Point Consumer's Perspective

Siloed Points

Customers want to use reward points like cash but there are currently too many limitations that impede this practice, because the reward points are siloed and cannot be used in an integrated manner. Reward points are siloed to different providers which offer different places to use. Since reward points cannot be combined, customers do not recognize points as valuable goods due to these limitations.Furthermore, when making a purchase, customers are obliged to incur payment fully in points, hence it is almost impossible to spend them partially in small amounts. Credit card companies provide points to their customers, when they incur payment with their credit card. However, the collected points from the credit card purchases can solely be used for the purchase of goods and services only at places, which are affiliated with a credit card company. More than that, those affiliated businesses mostly sell expensive goods, which makes it difficult for the customers to use a small amount of their collected points. As it has been already stated, customers indeed want to treat their reward points equally as they treat cash, but there are way too many limitations due to various reward point policies of the point providers.

Not many places to use points

People have raised an issue to 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 is not enough place to use reward points, customers complain about point collection itself.

Extinguishment policy

According to a point extinguishment policy, many reward points that were earlier provided to the customers are reaching the end of expiration date. In Particular, "Airline Mileage Points" collected from 2010 started to expire in 2019 due to "a 10-year validity policy", which caused much complaints from customers. Although reward providers are coming up with improvement plans such as providing more places to use reward points, customers complain that there are still not enough places to use points and that their reward points are deducted too much. Reward providers are violating 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 in order to solve the aforementioned issues that are associated with the points, based on a blockchain-based global point integration platform. The solutions, that our team has presented will be as following:

- Point Providers (Enterprises)
  In order to extinguish the accumulated liability under the point system and also secure a new channel for the customer inflow, enterprises should increase the point usage places, so that the customers will enlarge their options list.

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

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

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

[Image 1] ASSEMBLE Value Proposition

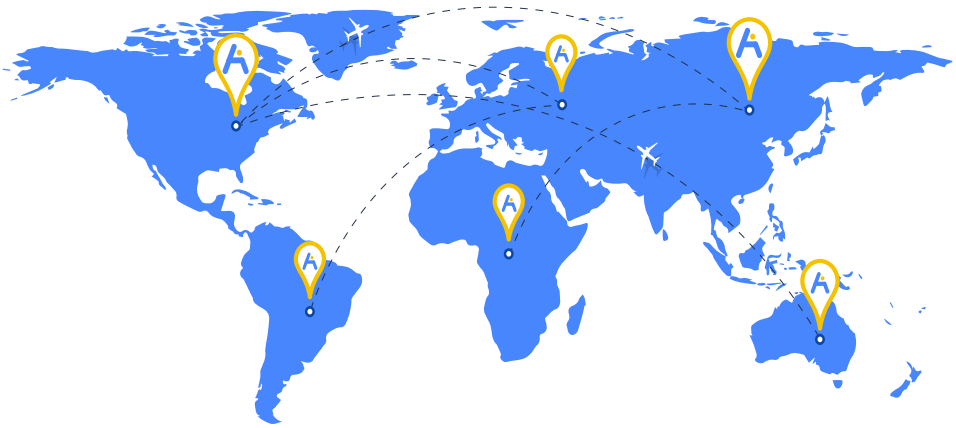
1.4. Why Blockchain?

1.4.1. Making Reward Points to an Asset

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 the Global Markets

ASSEMBLE Protocol is a point integration platform which is based on blockchain technology.
In order to provide a service across the world, we should address various issues regarding changes in exchange rates, slow transfer time or commission fees. For example, if we are to combine reward points between ASSEMBLE partner YWMobile and ASSMBLE's future global partners,we will be obliged to contemplate things like an exchange rate, transfer speed and commission. However, since the value of a digital asset that is 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 siloed among different global partners into a single blockchain network, 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 the ASSEMBLE's partner, and through the ASSEMBLE Protocol's platform, they will be able to lower the barriers to expanding into the global markets.. All of the collection and transactions of reward points will be recorded in blockchain, which prevents any act of forging and falsifying. This will help build security and reliability.



[Image 2] ASSEMBLE Global Expandability

1.4.3. Cost Saving

In-house development of point-services costs a lot of time for any enterprise. On the other hand, the utilization of tokens issued by blockchain technology may save up a lot of money and time expended on 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

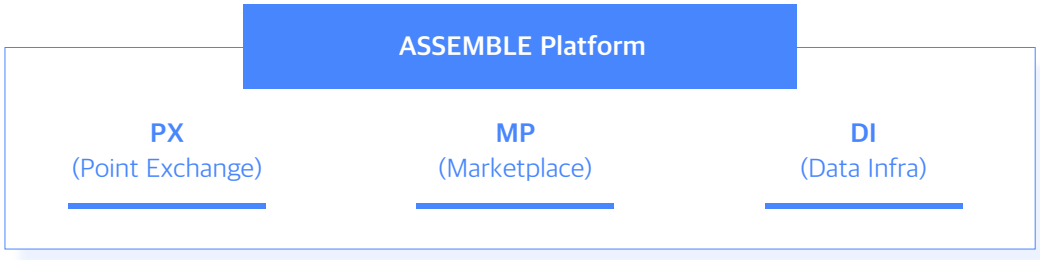
ASSEMBLE aspires to create a business ecosystem that benefits all the participants such as point providers, point consumers and retailers by providing a blockchain based point integration platform to point providers and consumers, while matching consumers who have a strong purchasing power with retailers.

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

Point Exchange (PX) is a place where reward points are integrated and exchanged to ASP (Assemble Point), which is the unified key loyalty point of the ASSEMBLE Platform, that integrates all different segregated external loyalty points. In order to enable the PX for a certain franchize, the point providers should first stake ASM tokens to allow point consumers to convert their external loyalty points to unified **ASP**. PX builds an auto-trading system and point redemption system that allows efficient point exchange for the users, enabled through the ASM staking by the point providers. It should be noted, that introduction of the ASP allows the pegging of the different loyalty points offered by the partnering companies on a fixed basis avoiding the volatility of the ASM token, yet different beneficial & staking perks are associated with **ASM token**.

MarketPlace (MP) is an online market which enables the usage of the **Assemble Points (ASP)** in order to purchase the goods and services offered by the partners integrated within the ASSEMBLE Platform. Once the user exchanges its external loyalty points to ASP, he can purchase the services and goods offered by the affiliates (i.e point providers that staked ASM Tokens). The margin settlement system allows the settlement of profits from sales and provides profits to sellers every day.

Lastly, **Data Infra (DI)** is a place where people use data infra and databases created with various data like consumer behaviors accumulated in ASSEMBLE Platform. Point Providers and MP sellers can pay and run advertisements by using ASM tokens through ASSEMBLE. We will provide more detailed information on this later in the specific section.



[Image 3] ASSEMBLE Platform

2.2. Key Feature

2.2.1. Point Integration

[Image 4] ASSEMBLE Key Feature - Point Integration

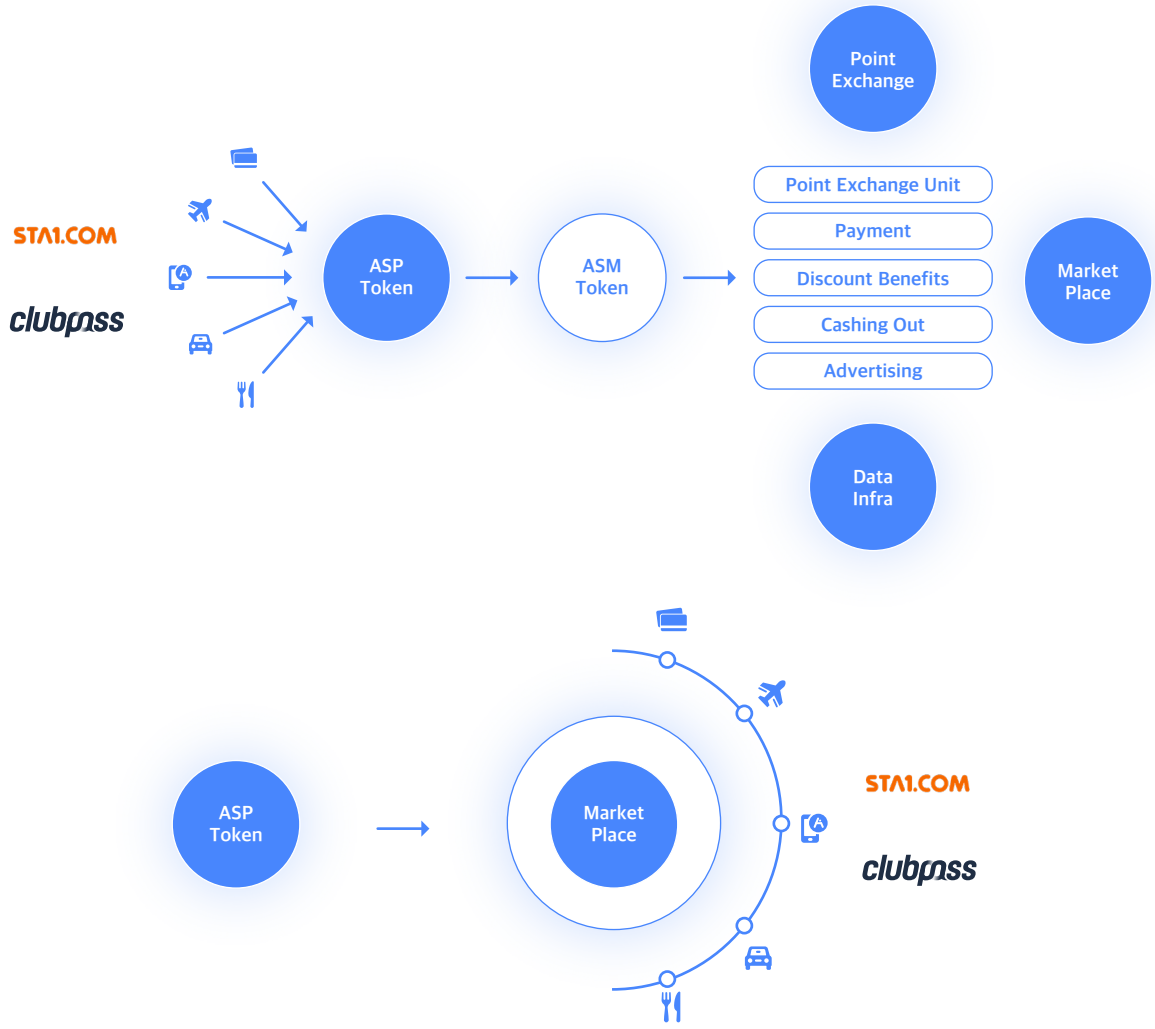
In fact, with the currently existing point management services, customers cannot combine or convert reward points into one single point, if they collected points from different sources. Since they are allowed to use reward points only at a specific franchise store, they cannot use or exchange reward points as much as they want, hence there is a constraint on the freedom of the points' usage. However, customers can convert different reward points to a single digital loyalty point ASP, and can further cash it out by exchanging ASPs to ERC-20 based ASM tokens, through ASSEMBLE Platform.

Converting Points to Cash

ASSEMBLE provides an opportunity for all of its users to convert their points collected from various partners into a single ASP (Assemble Point), and further allows the exchange of the unified points into the ERC-20 based ASM Token. As a matter of fact, countless amounts of points cease to exist every year. According to the Financial Supervisory Service, around eight credit card companies reported the extinguishment of points for the total amount of 49,9 billion KRW in the first half of 2019. Apart from that, the extinguished amount of points for the 2017 and 2018 composed 102.4 and 115.1 billion KRW, respectively. Consumers, who have the external points can conveniently integrate their points into unified platform point (ASP) or just cash them out via ASM within the ASSEMBLE Platform, where the usage of UI enables this practice.

ASM Purchase & Staking

Provided the fact that ASP is a fixed loyalty point and has no volatility engineered in its nature, the ASM holders are provided with several benefits that encourage the staking of their ASM holdings in the Assemble Platform. The users that will stake their ASM tokens in the platform, will be presented with diverse opportunities to obtain discount and reward incentives, while using their ASP points through the purchase of products from retailers within the ASSEMBLE Platform. 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 ASM Tokens at a digital asset exchange and further engage in stacking them in the platform.



[Image 5] ASSEMBLE Key Feature - Point Usage

2.2.2. Point Usage

Token Transfer

Currently, customers are not allowed to transfer their external reward points due to existing policies and technical issues. On the other hand, ASSEMBLE Platform enables interpersonal transfer of the digital assets, so you can send your tokens to anyone at any time in the ASM tokens. Up to now, reward points have been transferable only when they were given to one's family members and even this procedure sought to be quite complex. However, it became possible within the ASSEMBLE Platform, hence, as long as you know the address of the ASSEMBLE Wallet of the person you want to send your points to, you can easily transfer them to him without any obstacles.

Commodity Trading

In ASSEMBLE Platform, anyone can be a buyer or a seller. The most important thing in P2P trade is trust between peers. Individuals and franchise stores can acquire a right to sell goods in ASSEMBLE if they stake a certain amount of ASM tokens. Unlike existing places to use reward points, ASSEMBLE allows a trade between individuals at a marketplace and provides more opportunities to use ASP in the MP.

[Image 6] ASSEMBLE Key Feature - Interpersonal Token Transfer

2.2.3. Advertisement Placement

Data Infrastructure Development

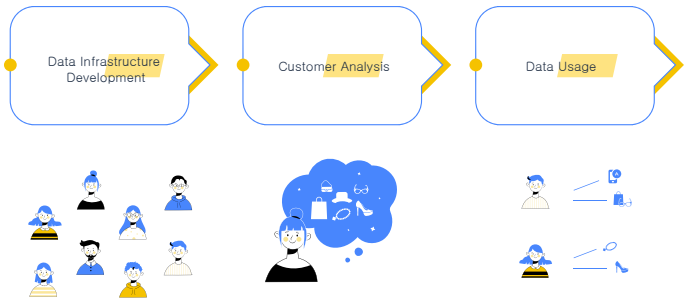
ASSEMBLE Platform will build a data infra to sustain an ecosystem. By utilizing the existing data of our partners, such as the historical pattern of purchasing behavior of the customers and their purchasing power or details of their purchases in order to build an appropriate data infrastructure within the ASSEMBLE's Platform. This means we will create a new data infrastructure by utilizing all the available data like customer behaviors 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 an ecosystem, it is important to attract consumers with particularly strong purchasing power. Customer analysis based on the available data infrastructure in the platform will enable advertisers to set their promotions and advertisements relevant to their target groups, by incurring the payment in ASM tokens. In fact, customers targeted by the consumer analysis will yield a higher conversion rate rather than the existing customers. The ASSEMBLE Advertising infrastructure will further continue accumulating the consumer data through various chains of processes, such as point acquisition, point exchange, and point consumption. The accumulated data will further be exploited in the additional analysis of the 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's platform, which allows advertisers to comprehend consumer behavior. Thus, advertisers using this analysis data, can potentially increase the revisit rate of consumers and increase their sales revenue.



[Image 7] ASSEMBLE Key Feature - Ad Placement

2.3. Token Model

2.3.1. ASM (ASSEMBLE Token)

ASM (ASSEMBLE Token)

- ERC-20
- ASM is a utility & staking token
- External transfers are enabled
- Price is subject to volatility and determined by market forces

ASM is an ERC-20 based utility token that powers the ASSEMBLE Platform. It is a digital asset which is priced according to market demand. ASM provides the utility features to incur the payments for the platform fees and also gives the access to the staking feature.

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

If the ASSEMBLE platform is more widely used as ASM holders enjoy various benefits, this would create a virtuous cycle where holders can get their ASM back or the value of ASM can be sustained and elevated through Buy-Back policy.

#	ASM Usage	User	Content
1	Means of redeeming points for cash	Point Consumers	Point Consumers can exchange their collected points from the point providers to ASP and further exchange their ASPs to ASM Tokens and cash them out.
2	Point Provider's staking to enable the PX	Point Providers	A certain amount of ASM tokens should be staked by the point provider in order to enable its points to be converted into the ASP within PX
3	Seller's staking to enter the Marketplace	Merchants, MP Seller	In order to market the products in the MP, seller should stake an amount of ASM Tokens relative to the selling price of his goods
4	User's staking to increase their rating	Point Consumers	Users will receive additional benefits according to their rating in the MP. Users should stake ASM Tokens to increase their rating in the platform
5	Means of Payment for ads within ASSEMBLE Platform	Merchants, Point Providers	When using ASSEMBLE Platform DI, advertisers should incur payment in ASM Tokens in order to place their ads.
6	General Staking	Merchants, Point Providers, Point Consumers	All users are enabled to engage in staking their ASM tokens in order to receive benefits such as discounts, event accesses, gift card and coupons etc.

[Diagram 2] ASM Usage

2.3.2. ASP (ASSEMBLE Point Token)

ASP (ASSEMBLE Point Token)

- Unified Loyalty Point
- 1 ASP = 1 KRW (fixed)
- Can only be utilized within ASSEMBLE Platform
- ASPs can be exchanged to ASM tokens

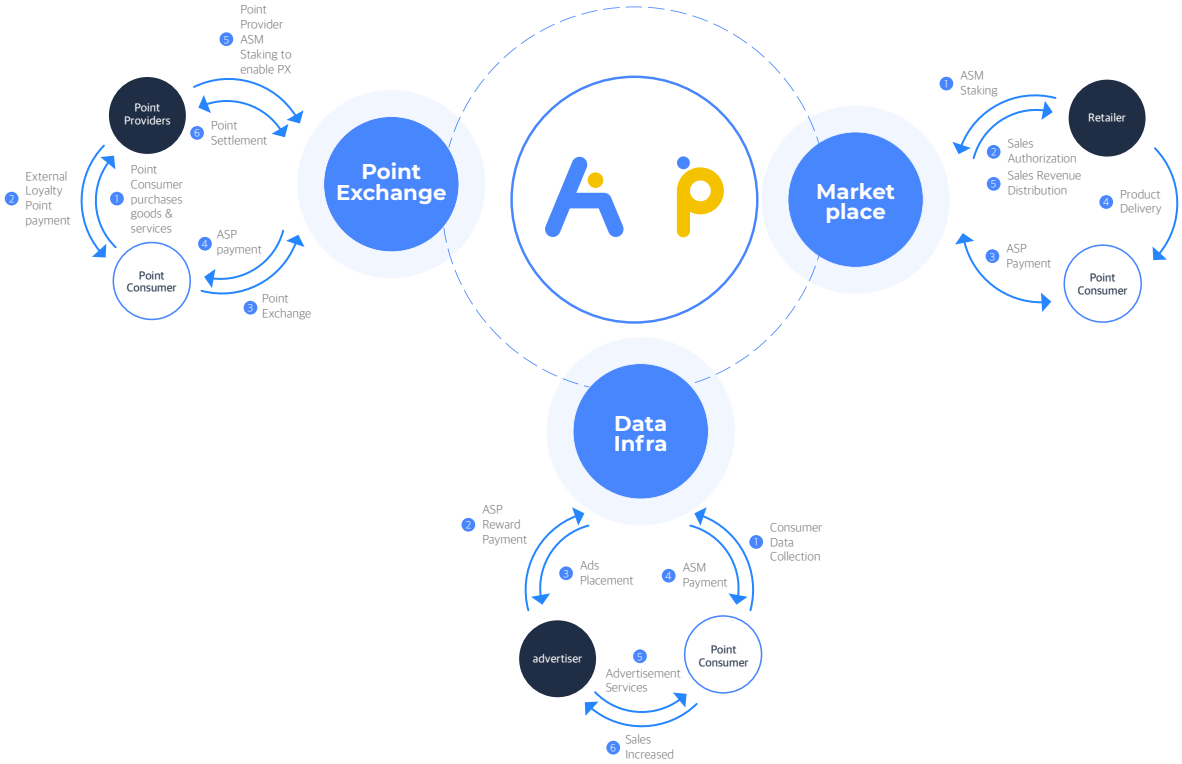
ASP is a unified loyalty point that integrates the points offered by the affiliates and partners. ASP serves as a payment unit in the MP of the ASSEMBLE Platform and is the primary exchange medium, which enables the ASP = ASM exchange. Consumers can exchange their ASPs into ASM tokens in order to engage with other utility features enabled by the usage of ASM.

In order to reduce price fluctuation and use ASP as a payment method in the MP, the price of ASP has been fixed at 1 ASP = 1 KRW. Although the price of ASP is fixed, the price of the ASM is interfaced to a digital asset exchange and updated in real time, based on its market price, the exchange rate of the ASP to ASM is calculated based on the real-time price update strengthened by the oracle solutions. ASP can be used for payment in the MP of ASSEMBLE Platform, yet it cannot be transferred or exchanged outside of this platform, nor can it be cashed out directly without the prior exchange to ASM Token.

#	ASP Use Cases	Users	Content
1	Means to acquire ASM tokens	Point Consumers	Consumers can collect their points from different point providers and integrate them into ASP
2	Payment Unit in the MP	Poin Consumers	ASP is used as a primary payment unit only in the MP in order to fixate the prices of the goods and services offered by the affiliates.
3	Point Integration Unit	Point Consumers	All the loyalty points can first be exchanged to ASP under the 1 ASP = 1 KRW fixed exchange rate.

[Diagram 3] ASP Usage

2.4. Token Economy



[Image 7] ASSEMBLE Token Economy

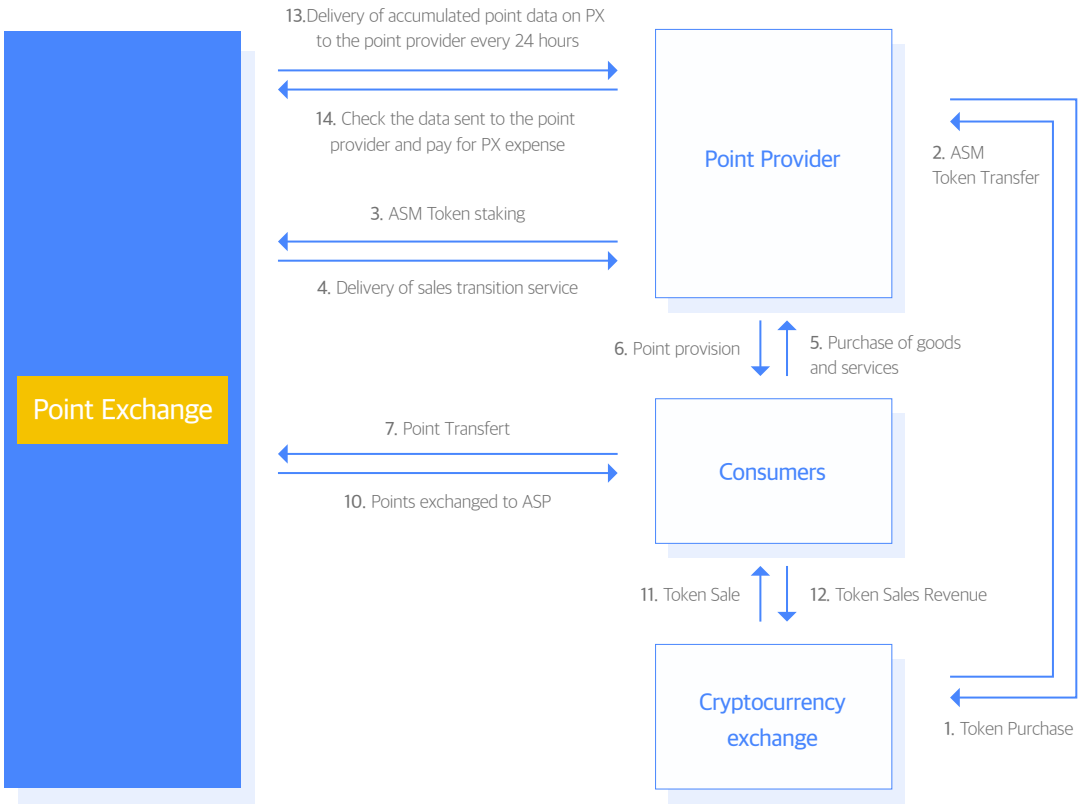
ASSEMBLE is a place where all the participants can engage in three key areas such as ① Point Exchange (PX), ② MarketPlace (MP), ③ Data Infra (DI), and each participant can be provided with services below in ASSEMBLE Platform.

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

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

Point Exchange

Point exchanging function is a major component of PX. If consumers make an external purchase of the services and goods of the affiliate partner, they can get a reward point from a point provider and exchange their external loyalty points to the unified loyalty point ASP, further they can exchange their ASPs to the ASM token in order to engage in staking or cash their points out. They will be provided with ASM tokens that will be saved in their digital wallet in ASSEMBLE Platform. Once the users transfer their external reward points to PX and further convert it to ASP, they should pay a certain amount of commission fee to the platform.



[Image 9] Point Exchange

Point Provider's ASM Staking

For the consumers to convert their reward points to ASP within PX, point providers should stake a certain amount of ASM tokens to enable this practice. Proportionately calculated by the count of ASM staked by point providers, the ratio which is required to exchange a reward point to ASP is calculated by using the formula illustrated below:

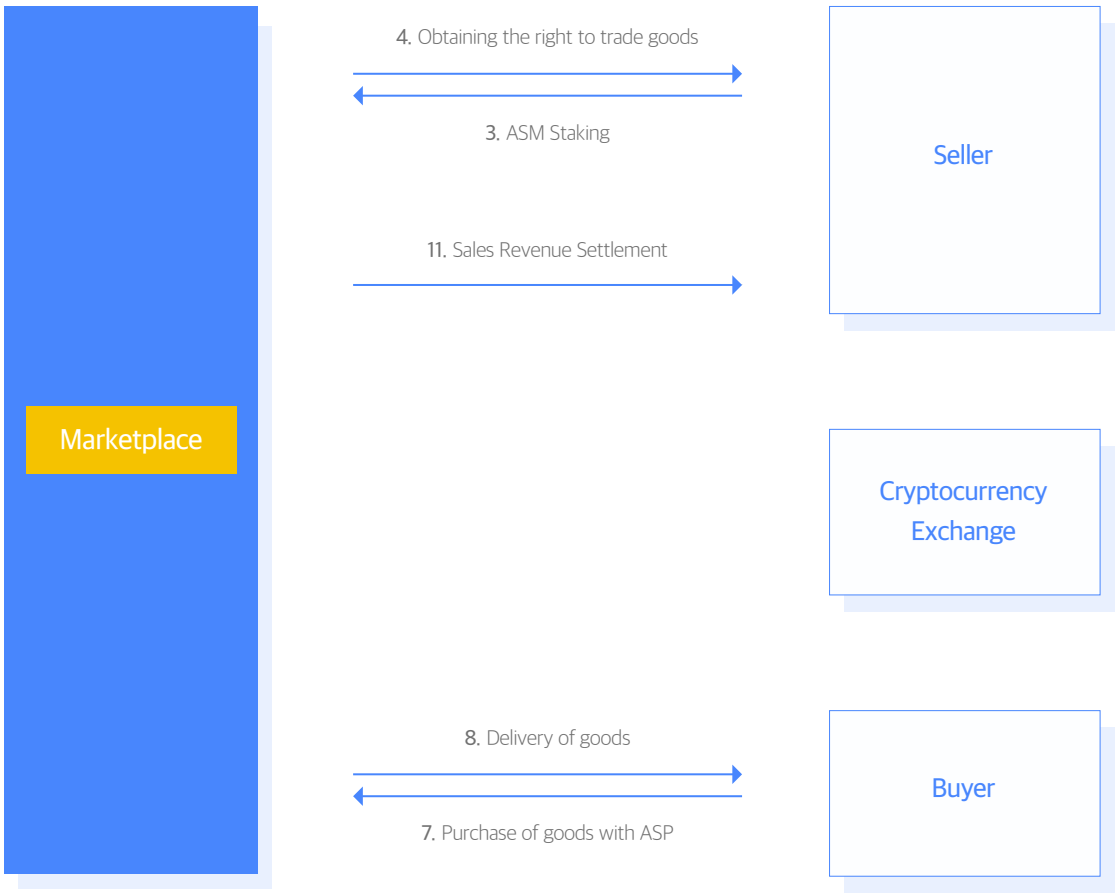
Ca: Exchange capacity of 'a's reward points
α: Staking coefficient
Ta: The amount of ASM that 'a' has staked

$$Ca = \alpha \times Ta$$

Point Settlement System

Every time consumers exchange reward points that they get from PX to ASP, various reward points are accumulated at PX. In order to remove such points accumulated at PX, a point-settlement system running through a batch is established. The batch runs every 24 hours and ASSEMBLE sends data to point providers. Based on this data, point providers pay fees for the point extinguishment to ASSEMBLE Platform.

2.4.2. Utilizing Reward Points: MP (Marketplace)



[Image 10] Marketplace

Market

MP is a place where transactions are made through the usage of ASP Tokens. Sellers can sell goods and services at MP, whilst paying a small portion of their profits as a sales commission fee. Consumers can buy various goods at a good price and get additional rewards by leaving comments or engaging with the community.

Seller Staking

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

Sb: The count of ASM staking required for Seller 'b'
Pb: The price of goods sold by Seller 'b'
β: MP staking coefficient

$$Sb = \beta \times Pb$$

MP Rating System

Consumers can get additional discounts at MP by staking ASM or accumulating large purchase amounts. Depending on the user rating, consumers can enjoy a different range of benefits like additional discount or payback, and those who have a certain MP rank can enjoy certain exclusive promotions. MP ratings are decided by user scores and according to their rating, users will be introduced to a different range of benefits (detailed information provided below in the table).
Although user scores will be decided like it is explained in the table, we will change this scoring system in a way that will reflect on consumer's participation and encouragement.

Sc: User score of Consumer 'c'
Tc: The amount of ASM tokens staked by Consumer 'c'
ACc: ASP which is accumulated and used by Consumer 'c'

$$Sc = Tc + Acc$$

MP Rating System		
Rating	User Score	Benefits
New	Newbie ~ 100,000	1% discount, when purchasing goods
Bronze	100,001 ~ 500,000	1% discount, when purchasing goods 1% ASP Payback, when purchasing goods
Silver	500,001 ~ 1,000,000	2% discount, when purchasing goods 1% ASP Payback, when purchasing goods
Gold	1,000,001 ~ ~2,000,000	2% discount, when purchasing goods 2% ASP Payback, when purchasing goods MP Promotion Right
Platinum	2,000,001 ~ 5,000,000	3% discount, when purchasing goods 3% ASP Payback, when purchasing goods MP Promotion Right
Diamond	5,000,001 ~	4% discount, when purchasing goods 4% ASP Payback, when purchasing goods MP Promotion Right

[Diagram 4] MP Rating System

2.4.3.Advertisement Placement: DI (Data Infrastructure)

As mentioned above, ASSEMBLE Platform is equipped with data infra (DI) which accumulates various payment data like consumer behavior or pattern. Data is stored in blockchain and used to run an advertisement. Advertisers process data and find potential advertisement targets through ASSEMBLE Platform DI and run an advertisement in the platform. This is where advertisers pay for advertisements to ASSEMBLE.

Consumers' will initially be asked for consent for exposure to advertisement. If consumers are exposed to an advertisement, they get ASP as a reward. By setting up an ASP reward range, they can be exposed only to advertisements that offer a certain amount of ASP as a reward, which would free them from unwanted spam. For advertisers, they can save advertisement costs and improve consumer satisfaction. This is possible because there is no brokerage agency in ASSEMBLE Platform for running an advertisement.

The following is an example of advertisements which can be run with the usage of ASM by advertisers. Details are subject to change and other types can be added depending on the size of data infrastructure.

Marketing Tools	Description
Banner Ads	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.
Push Ads	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.
Pop-up Ads	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.
Time Deal	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.
Featured Products	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.

[Diagram 5] ASSEMBLE Platform Advertisement

2.4.4. Case Study

Let's look into ASSEMBLE Protocol's token mechanism through application cases on point providers, consumers and retailers

ASM	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.
ASP	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

Case Study #1: Point Provider and Consumers' Perspective

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

Company A buys ASM at a market price in a digital asset exchange, and further stakes their holdings at PX. Company A can provide a service of converting reward points as much as they have staked ASM amount.

Point A (100,000 points) held by Customer S is redeemed to 95,000 ASP at PX (ASSEMBLE's point exchange) after deducting 5% of commission fee. Customer S can further use their ASP to buy goods or services at MP or can exchange to ASM tokens to engage in certain stakings to increase their ratings. Customer S confirms that he has 95,000 ASP in ASSEMBLE Wallet, hence Customer S who also has an option to convert its ASPs to ASM Tokens and redeem it for cash at a digital asset exchange, goes to a retailer at MP.

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

Company A receives reward points accumulated at PX every 24 hours and incurs payment for it to PX. Company A secures a place to write off its point liability and a channel to attract new customers. Moreover, there is no limitation to the point's validity period imposed on Customer S, so she uses her reward points at her will.

Case Study #2: Point Consumer and Retailers' Perspective

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

Customer S who has much interest in fashion and beauty happens to be exposed to 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 comes to think about buying them. Customer S finds out that Retailer B does not have any selling history and wonders why, but she is relieved after seeing "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 an advertisement easily and effectively. Customer S can find a good place to use her reward points like Retailer B and even get ASP as a reward for exposure to advertisements.

2.5. Business Model

Both digital currencies, where ASM is an ERC-20 based token and ASP is a unified loyalty point, are considered to be essential pillars of the ASSEMBLE's business model, and they both will be used for payment and trading purposes and as exchange units for various goods and services. ASP will also be provided as a reward for customers who join ASSEMBLE Platform. Some of the profits will be used in order to deploy the buy-back policy to reinvigorate the ASSEMBLE ecosystem.

The expansion of point providers and retailers will increase product variations in MP, while allowing consumers who want to buy goods and services with their ASPs. It should be noted that ASPs can be exchanged to ASM Tokens in order to redeem their points for cash or to engage in staking services, yet the opposite exchange cannot be completed. ASSEMBLE can get profits out of commission like below in the ASSEMBLE ecosystem that consists of point providers, point consumers and retailers.

2.5.1. PX Profits

PX settlement commission fee

Commission fee rate illustrated below will be applied to any exchange between reward points and ASM or ASM and ASP at PX. Commission fee rate is subject to change depending on how widely ASSEMBLE is used and how a settlement contract with point providers is stated.

exchange item		Commission Fee Rate
Before exchange	After exchange	
Points collected from point providers	ASM	X%
ASM	ASP	0%
ASP	ASM	Y%

[Diagram 6] ASSEMBLE Platform Exchange Commission Fees

Commission fee rate will also be applied to consumers who use ASSEMBLE Platform depending on their usage frequency and accumulated amount of point exchange.

Like mentioned above, PX performs point settlement between point providers and ASSEMBLE every day through the point settlement system. The difference between an amount that ASSEMBLE receives from a point provider for point extinguishment and an amount of ASM provides to a customer becomes a profit to ASSEMBLE Platform.

Ppx: Profit from ASSEMBLE's PX settlement commission
POa: The value that a customer gets from a point provider 'a'
X%: The commission fee rate which is applied when a customer exchanges a point provider 'a's reward points to ASP
ASPa: The value that a customer gets by converting reward points to ASP
Fa: The commission fee that ASSEMBLE Platform pays for the extinguishment of reward points which are equivalent to POa

$$Ppx = Fa - [\ POa \times (1 - X\%)\ ]$$

2.5.2. MP Sales Commission Fee

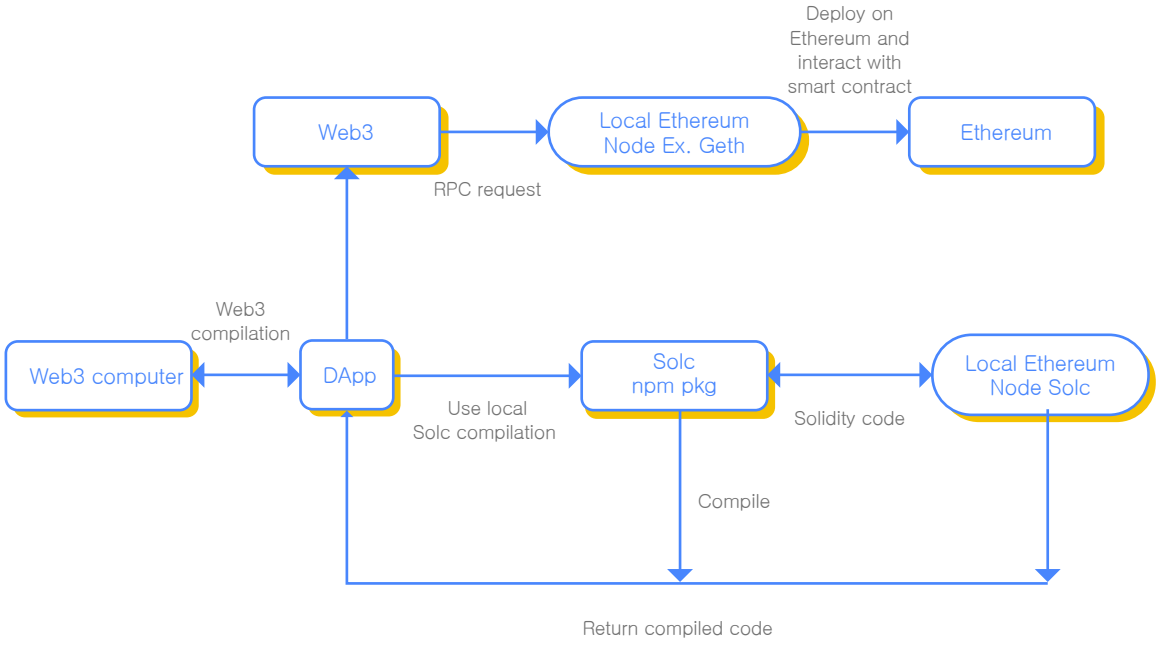
Once a retailer records sale of goods at MP, sales commission fee is determined on every product that the retailer sells. When a purchase is made, the money with MP sales commission deducted is transferred to the retailer. Sales commission is determined by a contract between a retailer and ASSEMBLE which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

2.5.3. Advertisement Commission Profit

Like mentioned above, advertisers can run various advertisements by utilizing data accumulated in DI. Advertisers pay a commission fee to ASSEMBLE Platform for running an advertisement, and the remaining value that reward points to customers are deducted becomes ASSEMBLE's profit from advertisement commission.

3. Technology

3.1. Smart Contract



[Image 11] ASSEMBLE Smart Contract

ASSEMBLE's token usage and transfer process are saved in Ethereum blockchain, and no one can amend transaction history and token information. This would make it easy to trace and retrieve token information. Since all of the records are logged in the blockchain, this will promote consumer's trust in the transaction history of ASSEMBLE Platform.

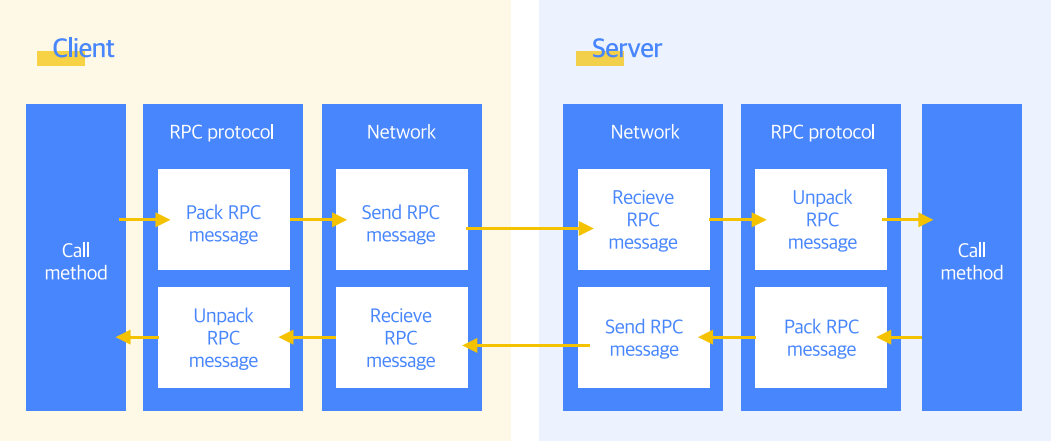
An image above is DApp's execution process. Interaction with local Ethereum nodes is done through RCP Protocol with solidity codes compiled in local or Web3, and is arranged to Ethereum's main chain in a Smart Contract format which cannot be modified.

3.2. RPC

Remote procedure call (RPC) is a computer communication protocol that a program which is executed on a computer calls a subroutine from another computer without interactive programming. RCP 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 general PRC process.

- Clients call RPC calling functions to a local.
- Upon a calling, client serialization service combines methods and parameters so that they can be transmitted in a message through a network.
- Client serialization service searches a server 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 server serialization service.
- Server serialization service sends back a message containing the results to the client.
- Client serialization service receives and decodes the message.

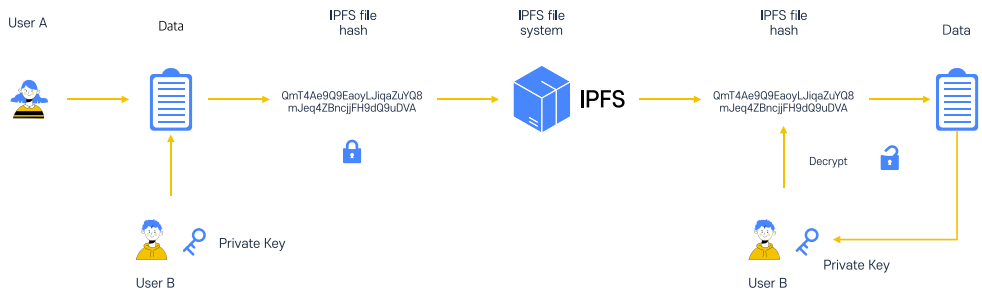


[Image 12] RPC Process

ASSEMBLE Platform communicates with Ethereum via PRC call. Since Smart Contract is executed on Ethereum's main chain, all of the ASSEMBLE operation passes Ethereum network through RPC. This guarantees a successful operation of Smart Contract.

3.3. Storing Data

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

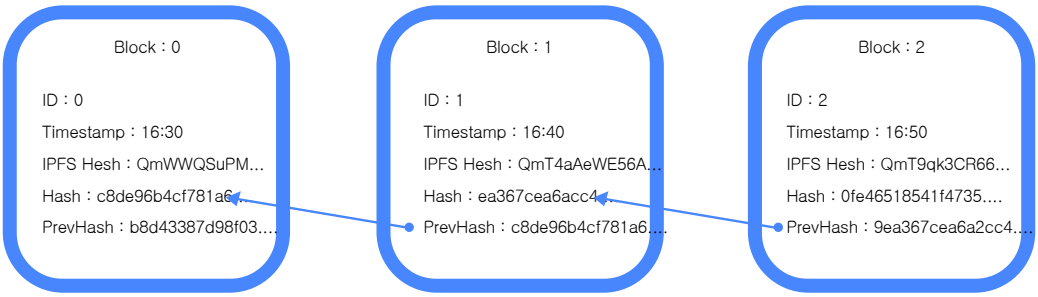


[Image 13] Storage of the asymmetrically encrypted date using the IPFS

[Image 13] shows how user consent is obtained and data is selectively shared. Specifically, User A wants to share his data but allows only User B to access it. ASSEMBLE encrypts User A's data by using User B's public key, and uploads an encrypted data file in IPFS and gets a hash value of the file. User B can find and open this file since he has an individual key of a public key which was used to encrypt the file.

IPFS can be regarded as a storage protocol similar to BitTorrent. It provides multiple tasks through hash reference 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, which makes it appropriate for a digital asset to be executed in blockchain. Under a digital asset application scenario, BPM module can be executed in a very effective way because it just needs to record information of a 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, you should calculate and check all of the hashes every time you create a block, which significantly reduces storage efficiency. Keeping chain integrity results in a very inefficient block creation.

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

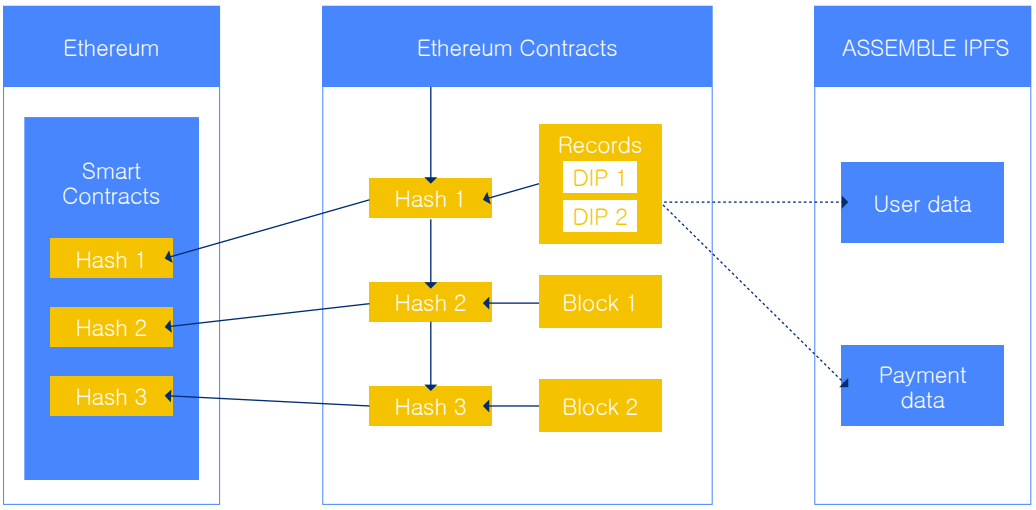


[Image 14] IPFS file per block

3.4. Data Tracking

It is possible to track all the records by saving a hash of encrypted data in blockchain. For example, it can be used to trace users' personal data. Project configuration files (DIP) are provided to give a unique number on ASSEMBLE's user information, and saved in an encrypted-blockchain-based database which is IPFS like mentioned above. Then this is mapped to Ethereum network and blockchain (side chain) through DIP hash value.

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



[Image 15] Blockchain Data Tracking via IPFS

There are three characteristics in ASSEMBLE's data tracking like below.

User identification

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

Data encryption and integrity

ASSEMBLE stores data in blockchain. Anyone who has authorization can trace this data, while it is impossible to have access to it without authorization and no one can modify this data.

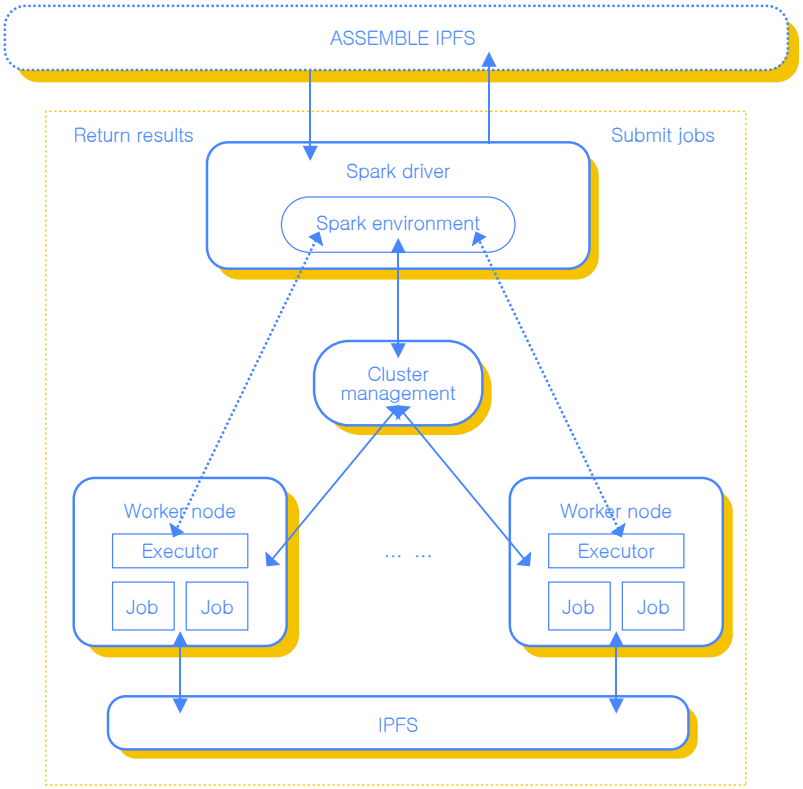
Tracking tool

For quick and automatic tracing to certain data, users should use a convenient system. ASSEMBLE builds a safe tracing system like an image above by using blockchain technology.

3.5. Processing Data

ASSEMBLE builds a big data processing platform by using Spark. Spark is ideal to build large-scale, low-latency bigdata analysis and machine learning application. 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 and Hadoop, but there is a difference between these two. Due to this difference, Spark performs better under certain workload. Especially, Spark can activate a data set which is distributed to memory, providing interactive inquires and optimizing repetitive workload. Below is a structure of Spark in ASSEMBLE Platform.



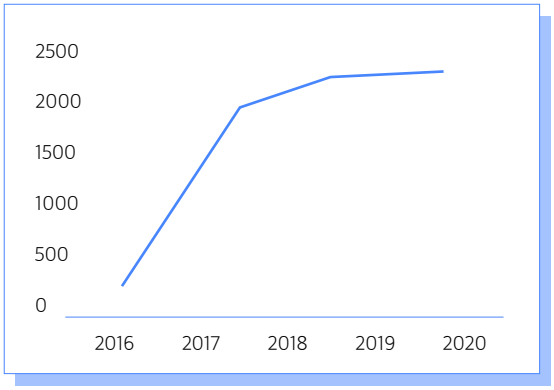
[Image 16] "Spark" - Big Data Processing Platform

4. Key Partners

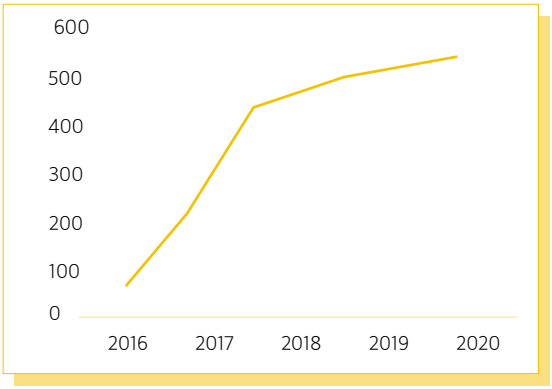
Like explained in Overview, ASSEMBLE Protocol's key partners are STA1.COM and YWMobile. They will share their IT and patent experiences and some members will join this project in the initial stage.

4.1. STA1.COM

STA1.COM is a crawling-based fashion curation commerce. This is a service which allows customers to buy products at a reasonable price by collecting data of 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 transaction, 4.3 billion won in accumulated sales, 370.47 million hits in product search, 997 thousand items in accumulated sales. Also 2.3 million people have downloaded this app which has around 520 thousand subscribers with 5,000 shops and 6 million products.

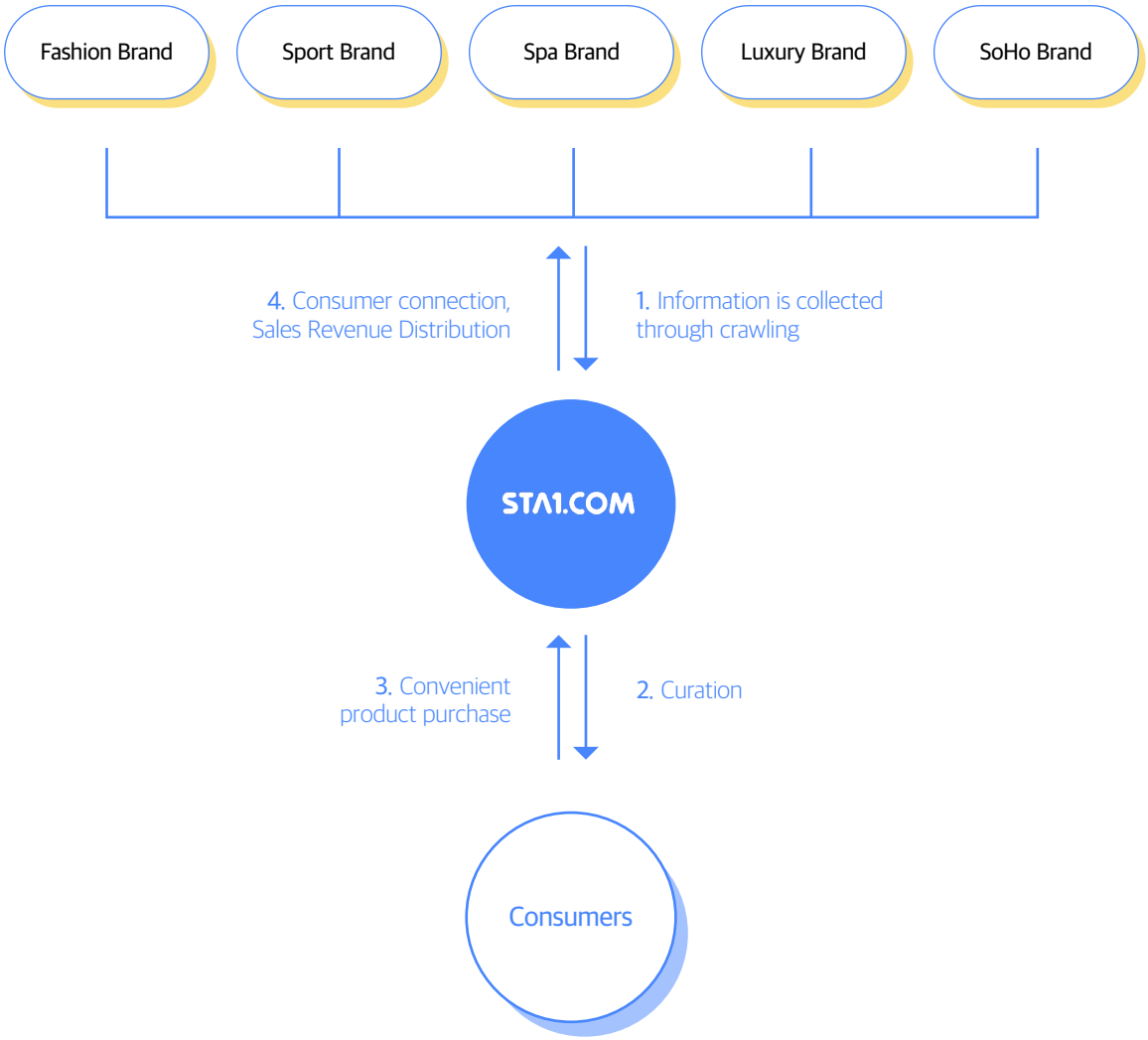


[Graph 8] STA1.com App Downloads (units in thousands)



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

The crawling engine which is STA1.COM's core technology collects documents distributed everywhere and combines them to an index of a search target. The crawling technology which collects and categorizes data very quickly and decides exposure priority is STA1.COM's unique core technology. With its crawling data distribution system, it takes maximum eight hours to collect data on 5,000 customers and 6 million products in a very accurate and quick way. It is also possible to find a product and buy it at a reasonable price.

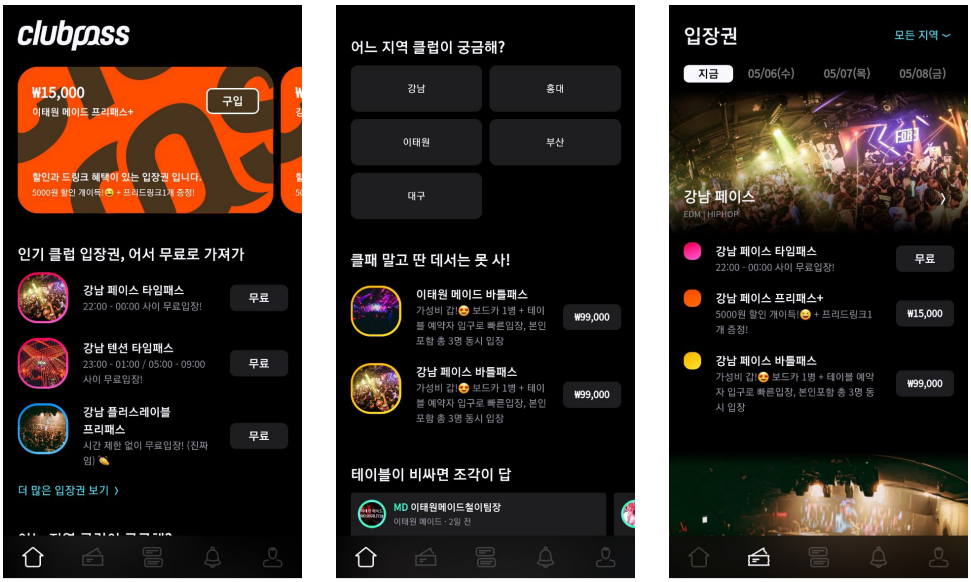


[Image 17] TA1.com Business Process

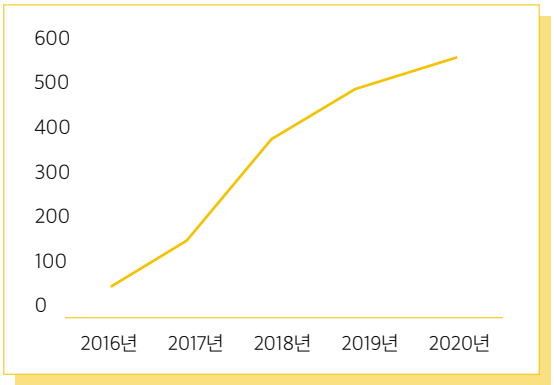
We are planning to utilize this crawling technology and promote the competitiveness of ASSEMBLE MarketPlace while encouraging 5,000 partners to introduce ASSEMBLE Protocol

4.2 ClubPass

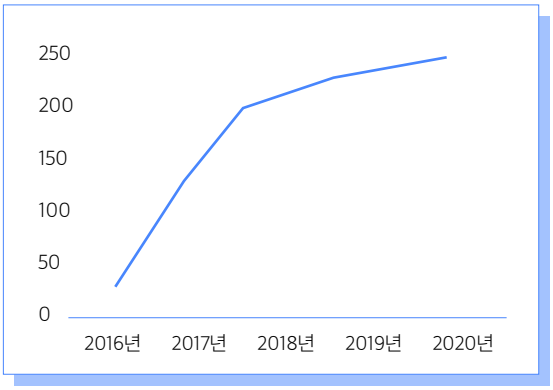
The second major partner company of the ASSEMBLE Protocol is ClubPass. ClubPass is the only club O2O (Online to Offline) app in Korea and it leads Korea's club culture with an accumulated download count of 480,000 and a total of 230,000 members. It provides various ticket sales (Club Passes) that can 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.

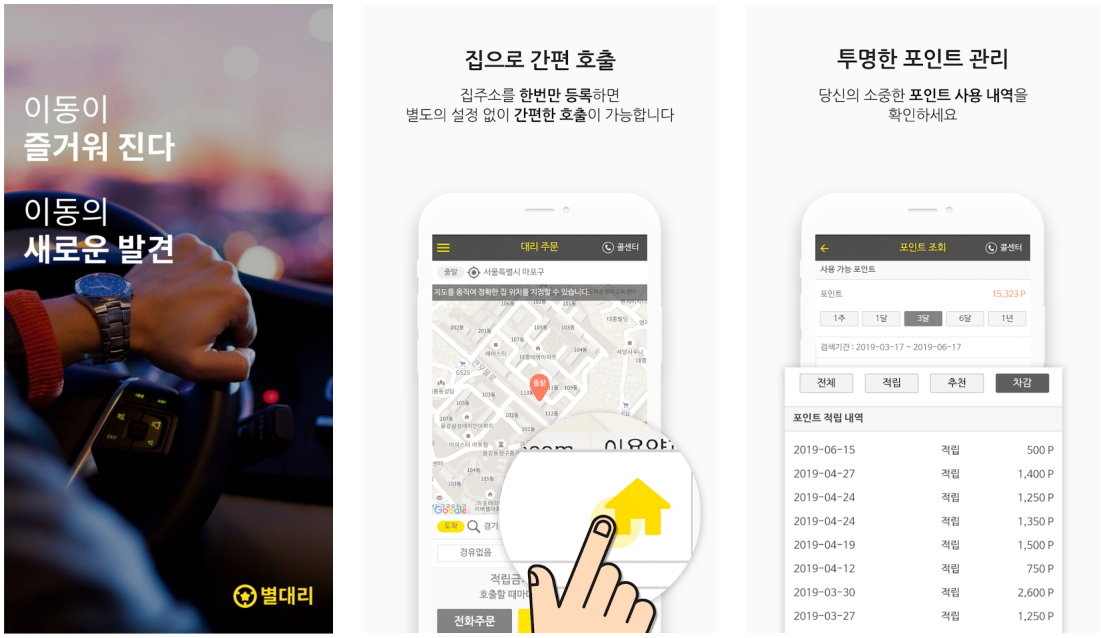
ClubPass's user base is in their 20s and 30s and likes club music. Through them, club music (EDM, hip-hop, etc.) has established itself as a global music trend. Due to this, ClubPass will provide a variety of services for clubbers, users who love club music, and DJs to participate in. Specific service 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

4.2. YWMobile

YWMobile offers services called "Mobility on Demand" that connects all movements that meet customers' needs based on its superior technology to 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 only through voice without installing a separate app through a separate agent capsule. The service can be used only with the first one-time phone number link, where the issuance of a voice order to Bixby, where the destination address is included, the services, such as one-stop service, checking operation information, matching chauffeur service, and simple payment can be used. Given these features, by 2019, the company is making steady growth with sales of 2.1 billion KRW, cumulative app downloads of 100,000, MAU of 30,000, and DAU of 200.
The Chauffeur service is already running the loyalty program, and has already set aside some of the amount used as points, so that customers can use it when purchasing it again. Currently, repurchase option is the only use point held by customers. To meet diverse customer needs and to expand to related services, ASSEMBLE Integrated Point (ASP) exchange and Marketplace (MP) support the purchase of various tangible and intangible products.



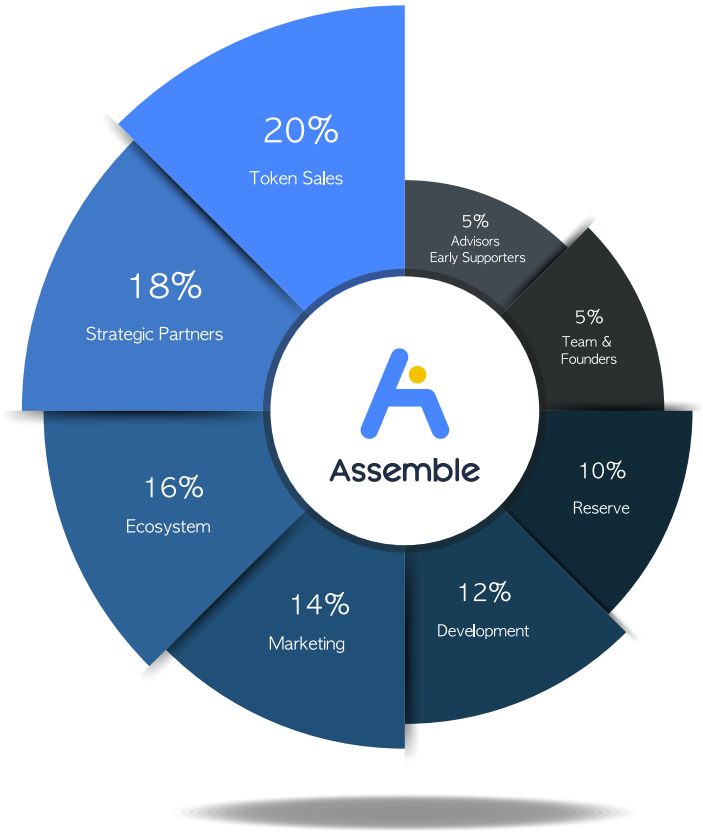
[Image 20] "YW" Mobile AI-based Chauffeur Service

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 is allocated to Team & Founders, Advisors / Early Supporters will be respectively locked up as Smart Contract and will not be distributed for some time.

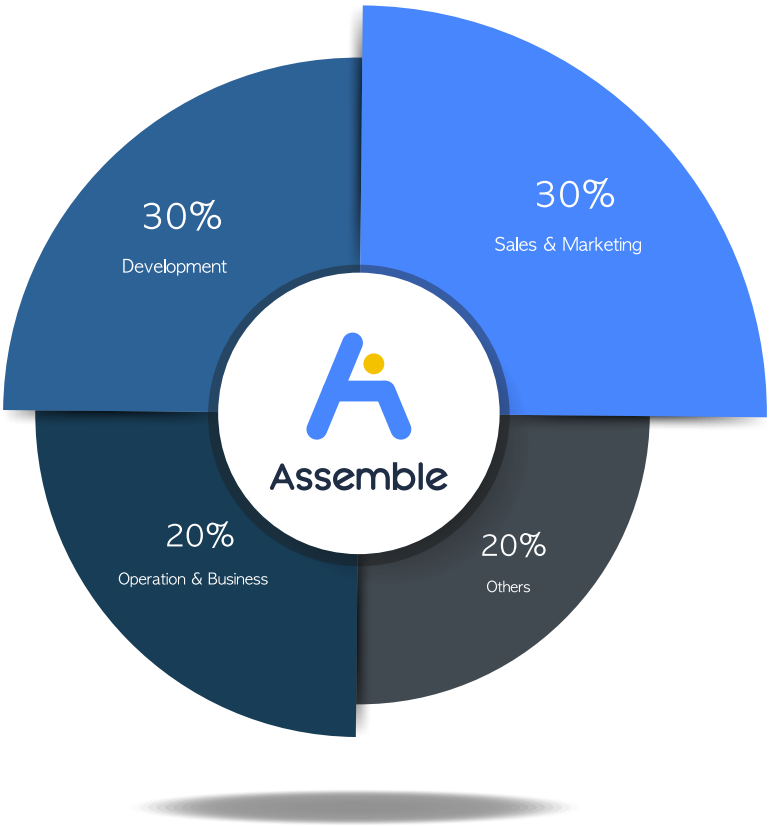


[Image 19] Token Distribution

5.2. Use of Fund

Use of Proceeds

Once fundraising is done, the fund will be distributed and used in the following manner. If a goal is not achieved, an initial distribution plan will be revised and fund operation will be adjusted according to a priority on project development.



[Image 20] Use of Fund

Use of Platform Revenue

Profits made out of ASSEMBLE will be used for Buy-back policy designed to stabilize the value of ASM Token as well as for technical support, promotion, ASSEMBLE operation and finance.

6. Team & Advisor

6.1. Team

Park Kyu Do

CEO

STA1.com CEO

Clubpass CEO

Marketing Friends CEO

Lee Sung Hyen

CTO

INITECH Team SI Head

NJSystem Team SI Head

Tomato Group Blockchain Director

Director of the 13 Mile

Research Institute

Jang Dae Gun

Business Development Manager

GOPAX Compliance Manager

Hyundai Card Risk Manager

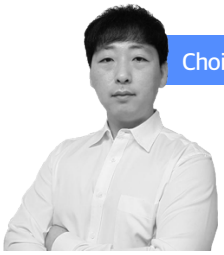
BC Card Risk Manager

Kim Sang Woon

Back-End Developer

STA1.com Back-End Developert

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

ITNomads Development PM

VertexID

Interbill

Kim Chan Mi

UI / UX Designer

CJ O shopping Promotion Designer

Kookmin Card UI/UX Designer

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 Interntaional 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 Headquarter 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

coinbase | Pro

coinbase | Custody

gate.io

bithumb

coinone

UNISWAP

Partners

ORACLE

STA1.COM

LIONHEART

clubpass

A·K·G VENTURES

科银资本 CollinStar Capital

wanchain

HyperDAO.com

Blockchain Ventures Hyperdrive growth

慢雾科技 slow mist

CHA & KWON LAW OFFICES

cobak

Prestige Fund investment

8. Roadmap

2019 Q3~Q4
- Team Building
- Application & Service Concept Formation

2020 Q4
- White Paper Release
- ASM Token Generation Event
- Partnership Establishmnet with STA1.com
- Partnership Establishmnet with Club Pass
- Tech Partnership Establishment with Wanchain
- Tech Partnership Establishment with Luniverse
- ASP Plug-in Point Accumulation API Development Completion
- Commercializaition 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 Exchage Function Desktop Version Development
- Assemble Wallet and Point Exchage Function Desktop Version Alpha & Beta Testing
- Assemble Wallet and Point Exchage Function Desktop Version Launching

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

9. Indemnity Clauses

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ASM Token is not a security nor derivative or any other type of financial instrument. It is not issued or registered on the basis of securities laws in certain jurisdictions where potential token owners may reside, or securities laws in Hong Kong, securities laws in China, or any other national securities laws.

ASM Token shall not be sold or used in jurisdictional areas where the sale or use of certain digital currencies, digital assets, etc. is prohibited. Thus, all the responsibilities for the breach should be accounted to the perpetrator, and neither ASSEMBLE Protocol nor its officials should be responsible for it.

Any given user, when purchasing ASM Token, should comprehend and the facts (illustrated below), that ASM Token cannot be perceived, interpreted, classified or used:

- As any kind of currency (crypto is not the same as money)
- As a unit of business trust in every country in the world.
- As securities of all countries or something similar to them
- As a collateral or financial instrument
- As a debt certificate, stock, equity issued by any individual or institution, or as a unit of a derivative instrument or option, applicable debt certificates, shares or interests certificate.

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