

plug

whitepaper

ver
2.0

Table of Contents

- 01. Summary
- 02. Market situation
- 03. Plug ecosystem
- 04. Manufacturing Solutions
- 05. Distribution Solutions
- 06. Sales Solutions
- 07. Use case
- 08. Road map
- 09. Plug (PLG) token
- 10. Team
- 11. Limitations of liability
and legal notices

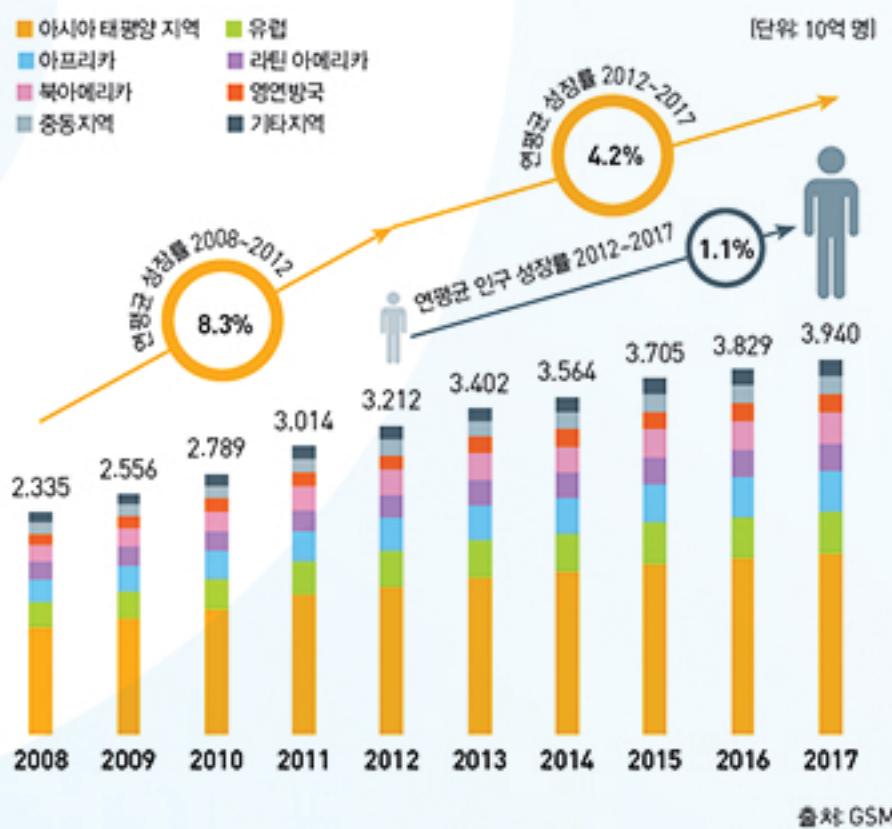
Abstract

Plug uses blockchain technology to connect manufacturing, distribution and sales in a single platform, providing manufacturers with a variety of data for manufacturing, such as product quantity forecasting. In addition, Plug is a life-like blockchain platform that utilizes blockchain characterized transactions, notable for its invariance, to provide manufacturing order service and clarify distribution process. It is also a blockchain distribution All-in-One platform that finds and offers information to the world's lowest prices for products. Plug is designed for the manufacturers whose communication with consumers have always been insufficient due to the serial manufacturing process, consumers who were always in the process of uncertain circulation, consumers who had difficulty in purchasing foreign goods directly (fastball) due to language barriers, and consumers who have struggled with product and store selection. Plug data is big data collected from ecosystem contributors and it is consumption help data that helps consumers make online life easier and healthier. Based on the data acquired through the platform-specific mining compensation system, such as consumption propensity data and product data, you can build big data (Plug data) and provide it to other open markets to receive the commission. In addition, Plug platform is the first real-life close-packed blockchain platform that allows you to find the lowest price product and provide it to the consumer with Plug.

Market situation

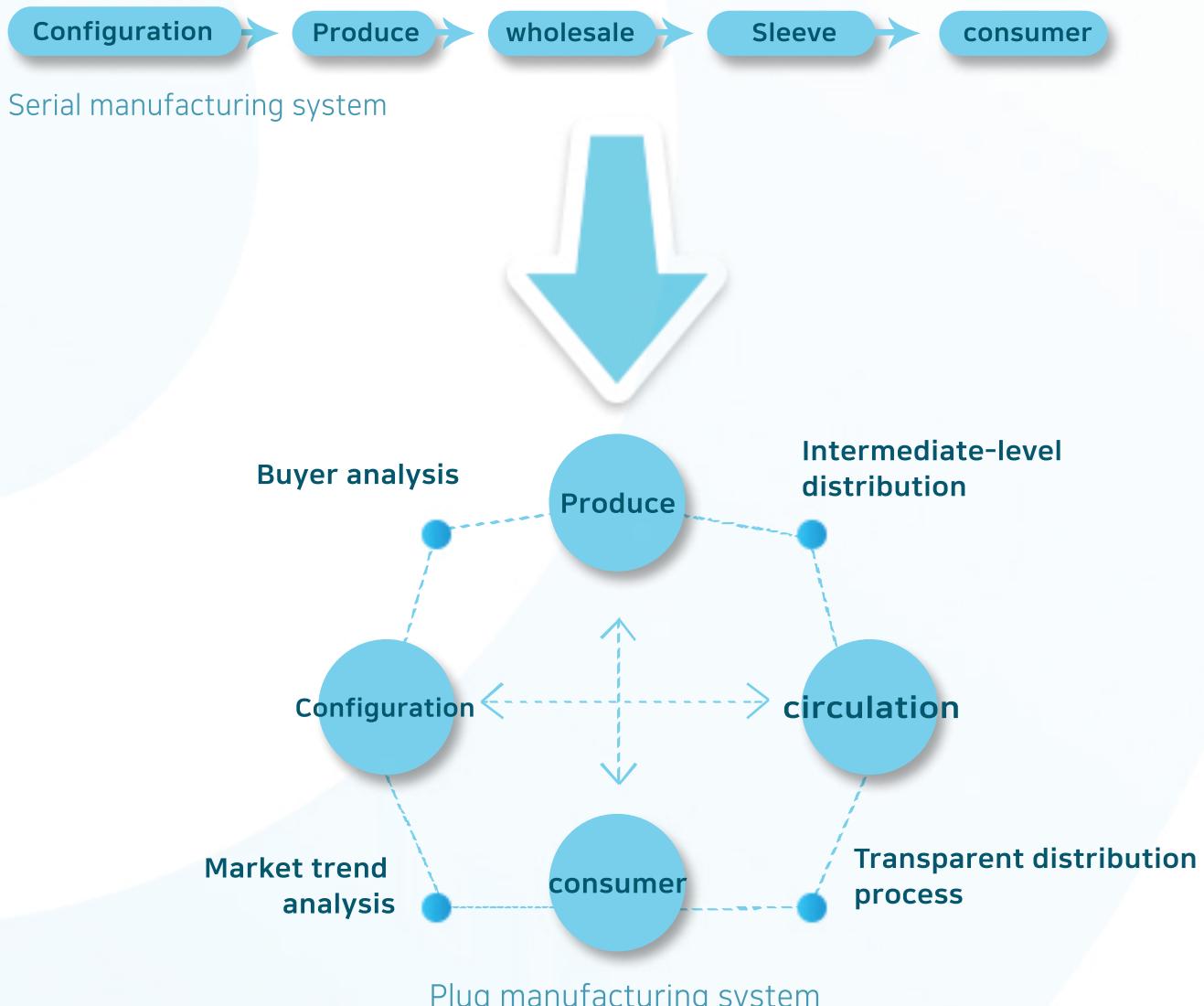
1) Expansion of online / mobile shopping market

With the advent of smartphones, online shopping, including mobile shopping, has grown around 20% annually in recent years. Many investment companies are investing in a shopping platform, with the prospect that online shopping will grow steadily. Plug is a real-life platform that helps one to manufacture, distribute and sell products with a smartphone. Using the Plug data generated based on the most important consumption tendency and price data in online shopping, it is possible to provide the data to other open markets and at the same time, users of Plug platform can gain price advantage in the online shopping market.



2) Conventional serial product manufacturing system

As shown in the picture below, the current wholesale and retail manufacturing system can make quick judgment and decision making from the manufacturer to the actual consumer, but this leads to several additional costs and increases the cost to the final consumer. In addition, because only the directly connected companies interact with each other, it is difficult for manufacturers to know directly what their tendencies are or what they want. The Plug ecosystem connects these serial and conventional manufacturing systems in parallel with the consumer and manufacturer through sales trend analysis, preference voting, buyer matching, and more. Both consumers and manufacturers will be able to reduce interim costs and maximize the efficiency of each other.



3) Lack of distribution infrastructure and information

In general, there is a considerable shortage of distribution infrastructure from manufacturing to end-users, which means consumers are paying more for their time and money, or are less trustworthy about distribution due to lack of sufficient information. While some large companies have created their own systems that are non-stop to manufacturing and distribution, most smaller companies lack the capital to invest in platforms that link these complex logistics chains, and several smaller companies operating these nonstop systems are significantly less versatile. In Plug ecosystem, the smart distribution system that utilizes blockchain technology to directly link the movement and settlement of logistics, the distribution system is managed in a transparent and manner as well as the cost system.

4) The need for a global social commerce / open market

Consumers want an open market that can minimize the cost and time required to purchase goods, and this desire is constantly increasing. As a result, current open markets which are urgent to maintain the status quo are easily scaled down and cannot continue to dominate the market. Thus, Plug is proudly presented to serve as a new alternative for consumers who are experiencing problems that current open markets are not able to solve, such as consumers who have wasted time due to difficulties in purchasing overseas goods, consumers who have purchased the same item at a higher cost than others . Plug uses blockchain system for easy trades with Plug tokens anywhere within the Plug platform from anywhere in the world. With Plug's unique mining system, anyone can easily find the cheapest products in the world.



Plug's Seeking value

Plug is recorded using the ERC block chain protocol as a unified market system from the manufacturing to the end customer through the Plug blockchain. By encrypting the data recorded in the Plug block chain and distributing it in several small blocks, you can essentially prevent and reconstruct hacking anytime and anywhere. In addition, transactions can be immutable, ensuring that the accuracy of the logistics and manufacturing system is permanently stable data in the block chain. Plug platform pursues a fair and stable market and is compensated by Plug mining reward system * if anyone provides data that meets the same criteria. Finally, Plug can operated both in Plug tokens and platforms and social markets interchangeably, allowing for constant evolution and the creation of a variety of Plug ecosystems.



stability



Transparency



Fairness



Immutability



Interoperability

Plug Solution

Plug has three solutions for manufacturing, distribution and sales to solve the above problems. Using the Plug mining method *, miners can use the collected Plug data to directly connect the manufacturer and the consumer, and it is recorded in the blockchain. Then, it is possible to distribute the distribution process smartly through the tagging, the lowest price market, and brokerage markets.

※ Unique Mining System of Plug: The Plug mining compensation system is described in detail in the sales solution.

1) Manufacturing Solutions

Plug provides market data analysis for the manufacturer, and manufacturers that are only manufacturing-bound can go directly to the market surface and communicate directly with the end consumer within Plug platform. With Plug mining compensation system, Plug platform can acquire various information such as the propensity and quantity of the consumer. The acquired Plug data is transferred to the manufacturer transparently through the blockchain, and the manufacturer can immediately respond to the market based on this.

Manufacturers can change the trends of consumers and the quantity of goods manufactured according to the situation, and consumers can purchase products at a lower price because of the smooth supply at the same time.



2) Distribution Solutions

Plug platform will continue to evolve with the introduction of innovative distribution models as well as traditional distribution methods to provide the fastest service to both consumers and sellers. Logistics information is generated in real time by connecting manufacturers, consumers, and distributors to Plug platform, which is again validated and evaluated by the blockchain. Plug distribution uses smart tagging and all of the data is stored in the Plug blockchain, for both senders, and receivers.



It will also offer a wide selection of options for both senders and receivers, in conjunction with the Plug's existing delivery system. As a real-life platform, Plug will stay within the platform for more and more consumers, as well as innovative delivery systems, and the choice will be increasingly diverse. Plug platform introduces a new concept called Plug delivery. Plug delivery is a user participation courier brokerage system through the Plug delivery application. Plug platform operates Plug storage lockers in the central area of each region for 24 hours. The buyer can go to the goods at any time, which can be recorded on the blockchain in a transparent manner and also safe storage. Plug delivery system provides a delivery service for delivery brokers. This activates Plug platform - for the user and by the user. Plug platform opens a logistics warehouse in the overseas base city for foreign direct fishing, and helps the buyer to deal directly with overseas goods more easily and quickly.



General delivery system
(universal courier)



Domestic
convenience store
and partner courier
system



24 hour article
locker



All-in-one courier
delivery system
(ex KakaoTaxi
and Uber)



Establishment of
Plug warehouse
in overseas cities.

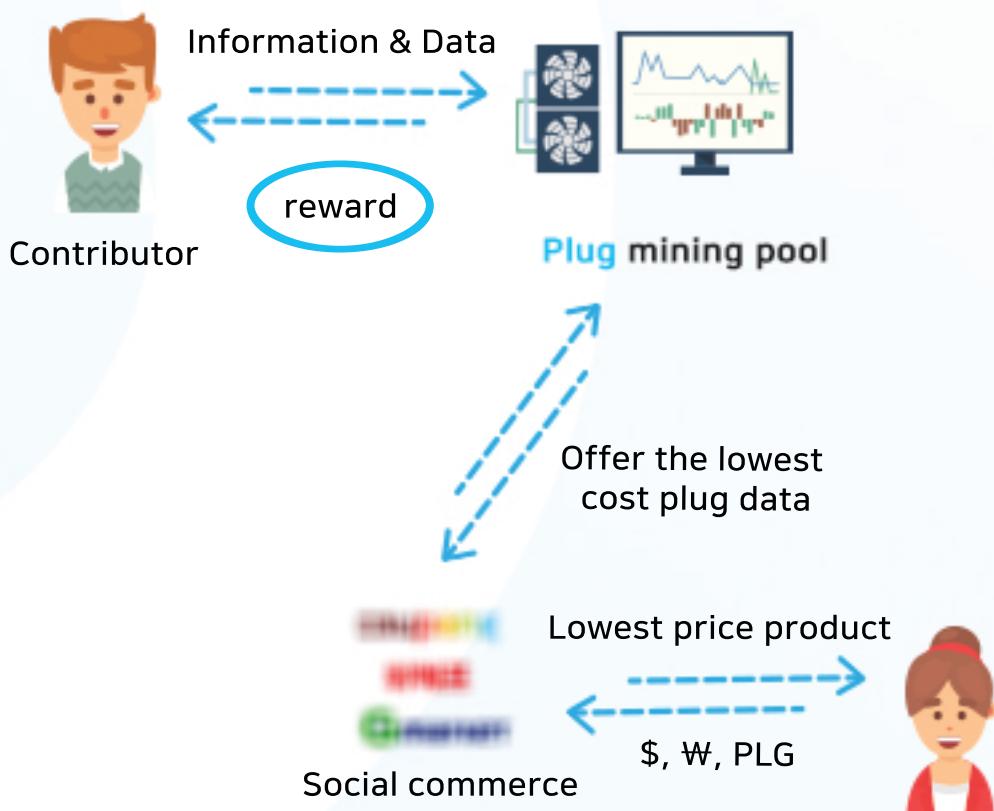
3) Sales Solutions

The amount of information provided by open markets is huge, but false information, false information, and a huge amount of information that are coexisting in vast amounts of information have made consumers unable to make reasonable product choices. Even if the products are essentially the same, the price of goods set differently for each market confuses consumers, and consumers' reasonable purchasing desire is expanding from domestic market to overseas market in order to purchase goods at low cost. In this situation, Plug offers the following alternatives:

Plug Market Platform and Plug Token Mining

Plug tokens are Ethereum-based utility tokens used in Plug platforms and are mined according to a unique mining system of Plug market. Plug tokens are available for those who contribute to the platform ecosystem. The target provides the price data of the goods to the platform, and if the provided information is information necessary for the big data configuration, the price data provider is compensated by Plug token according to the quality factor (Q) determined by the platform.

Plug ecosystem



For example, when the collected price data is Reward Factor (R) 1 and the collected price data is smaller than the existing price, the Quality Factor (Q) is written as follows.

Quality Factor(Q)

$$\text{Quality factor}(Q) = |Original\ price(p) - input\ price(P)| \times \frac{\text{Total Minning Pool}(T)}{\text{Minned PLG}(M)} \times R$$

When broking / selling a product with a difference of 1000 won, the intermediary or seller will receive the following rewards: As the number of tokens remaining in the mining pool decreases, the number of the tokens decreases significantly, and the difficulty level of mining increases simultaneously.

※ Reward Factor and equation can be adjusted according to market situation and platform situation.

Price Gap	Remaining PLG	Minned PLG	Reward
1000	49	1	49000
1000	30	20	1500
1000	20	30	666.7
1000	10	40	250

Graph1. Reward Expectation at Different supply pool

When brokered / sold the products with different price difference as below, the mediator or seller receives the following rewards respectively. A person who brokers / sells products with little price difference will receive less rewards than brokers / sellers with large price differences. Therefore, the larger the price difference, the higher the platform compensation is measured. This makes it possible for Plug market to compete with the broker / seller and provide the consumer with a lower price.

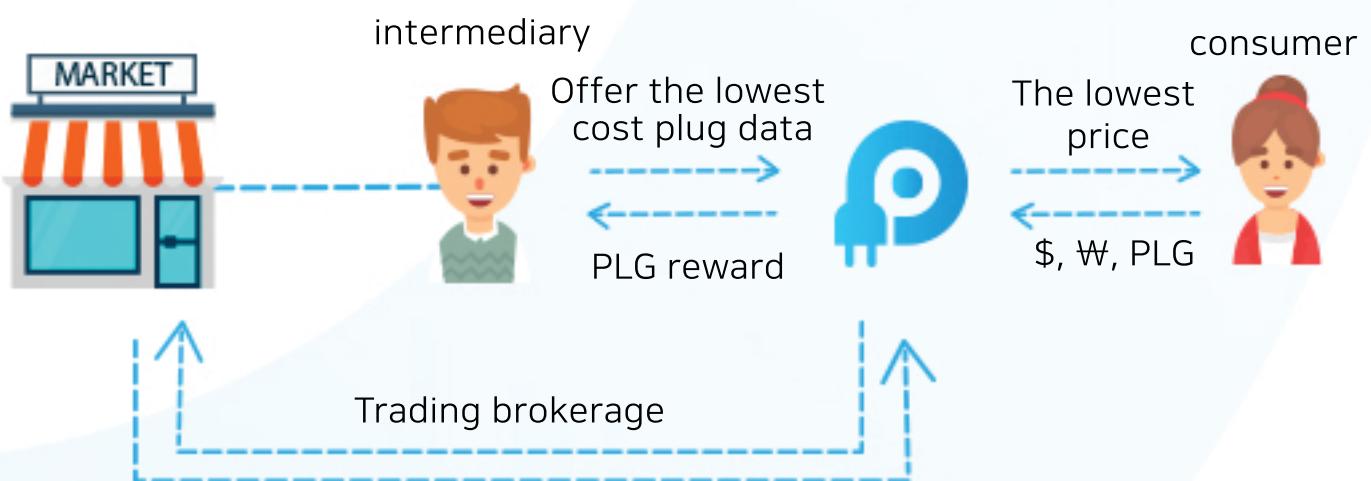
Price Gap	Remaining PLG	Minned PLG	Reward
600	50	10	3000
500	50	10	2500
400	50	10	2000
300	50	10	1500
200	50	10	1000

Graph2. Reward Expectation at Different price gap

With this new compensation system, Plug platform can acquire consumer trends and the latest price data for a particular product, while at the same time constructing the lowest price list on Plug.

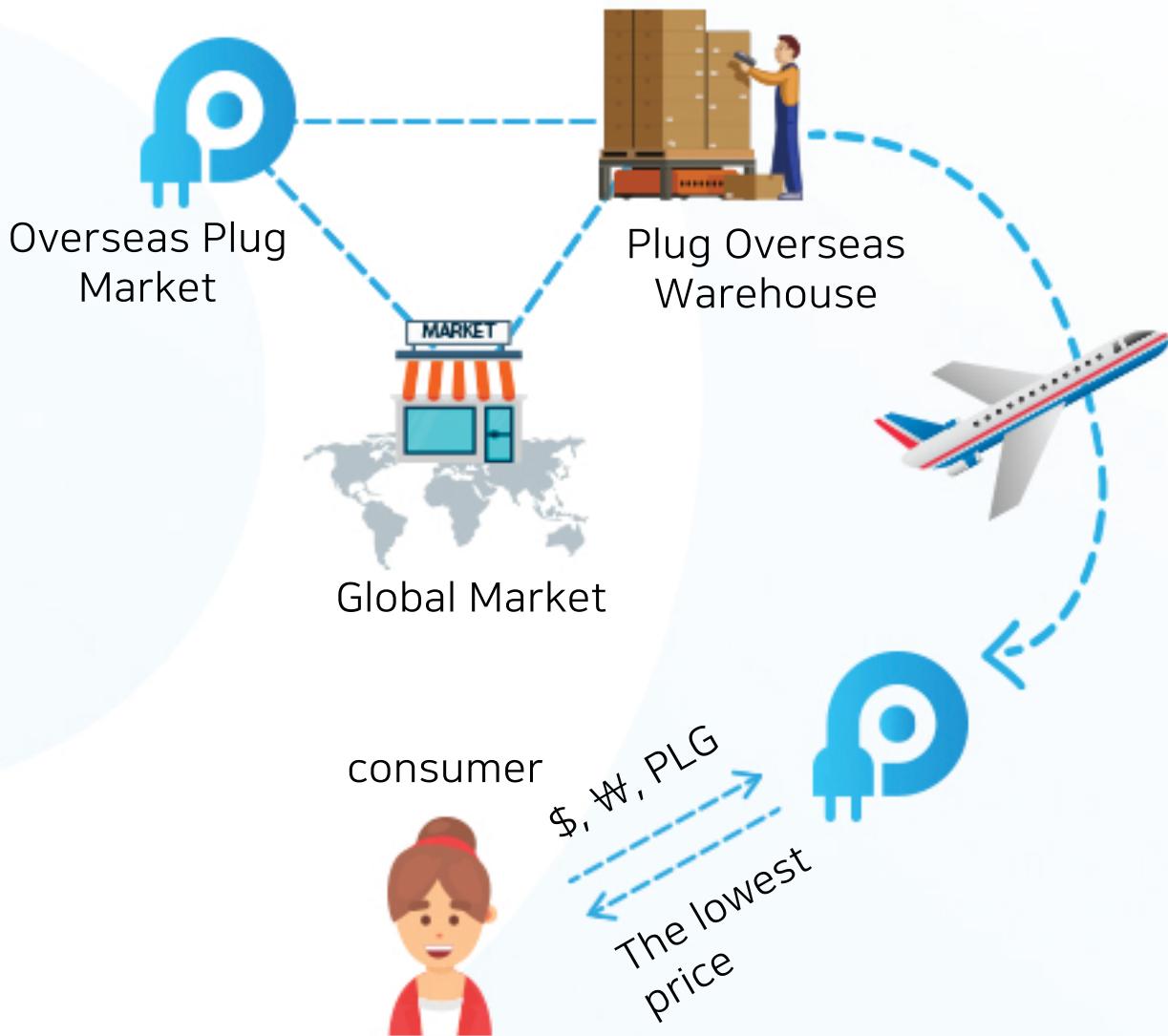
Plug's Unique broker system

Each of the contributors in the Plug platform ecosystem can be consumers, sellers, or brokers. Brokers can broker products that are not of their own but of high quality and at the same time high price, and brokers can also receive corresponding mining rewards in Plug mining pool if the products are traded in Plug market. In other words, without the actual goods to be sold, the intermediary can receive mining reimbursement under the nominal amount, so consumers can attract products with better quality and price competitiveness to the Plug market. Sellers who actually sell mediator brokers in the future can also enter the Plug market to receive mining rewards, and sellers can also be rewarded by the mining reward system.



Overseas goods transactions made easy

Plug platform partners with international and international exchanges to increase the exchange and efficiency of Plug tokens and to trade foreign goods in the global market with Plug tokens. As a result, consumers who have experienced difficulty in direct purchases can easily trade any goods or items with Plug tokens on Plug platform. Plug platform aims at providing maximum satisfaction to consumers and easy participation in the trade.



Utilizing commission for reliable operation of Plug market

Plug will charge a 20% commission on mining compensation for stable platform operation. A contributor pays a 20% commission to the Plug market for redeeming a few Plug after they have been reimbursed. A contributor pays a 20% commission to the Plug market for redeeming a few Plug after they have been reimbursed. For fairness, the use of stabilization funds will be open to all.

USE CASE

1) Direct connection between consumer and manufacturer

Based on the records recorded in the blockchain, manufacturers can easily identify changing market conditions and prepare for changing market conditions. Consumers can connect directly with the manufacturer through the Plug platform.

2) Ecosystem contributors and mining

The Plug ecosystem contributors provide information about their surroundings and their consumed goods to the Plug platform. If the item information provided meets certain criteria (eg, if it is the lowest price in the country) As well.

3) Plug broker

Plug broker, A, introduces / brokers the lowest priced items sold in the XX market to the Plug market. When the goods are brokered in the Plug market and the consumer completes the transaction, the broker will be compensated for the mining compensation standard provided by the Plug market. The Plug market will be filled with cost-competitive products, and a large volume of merchants will be expected to receive compensation

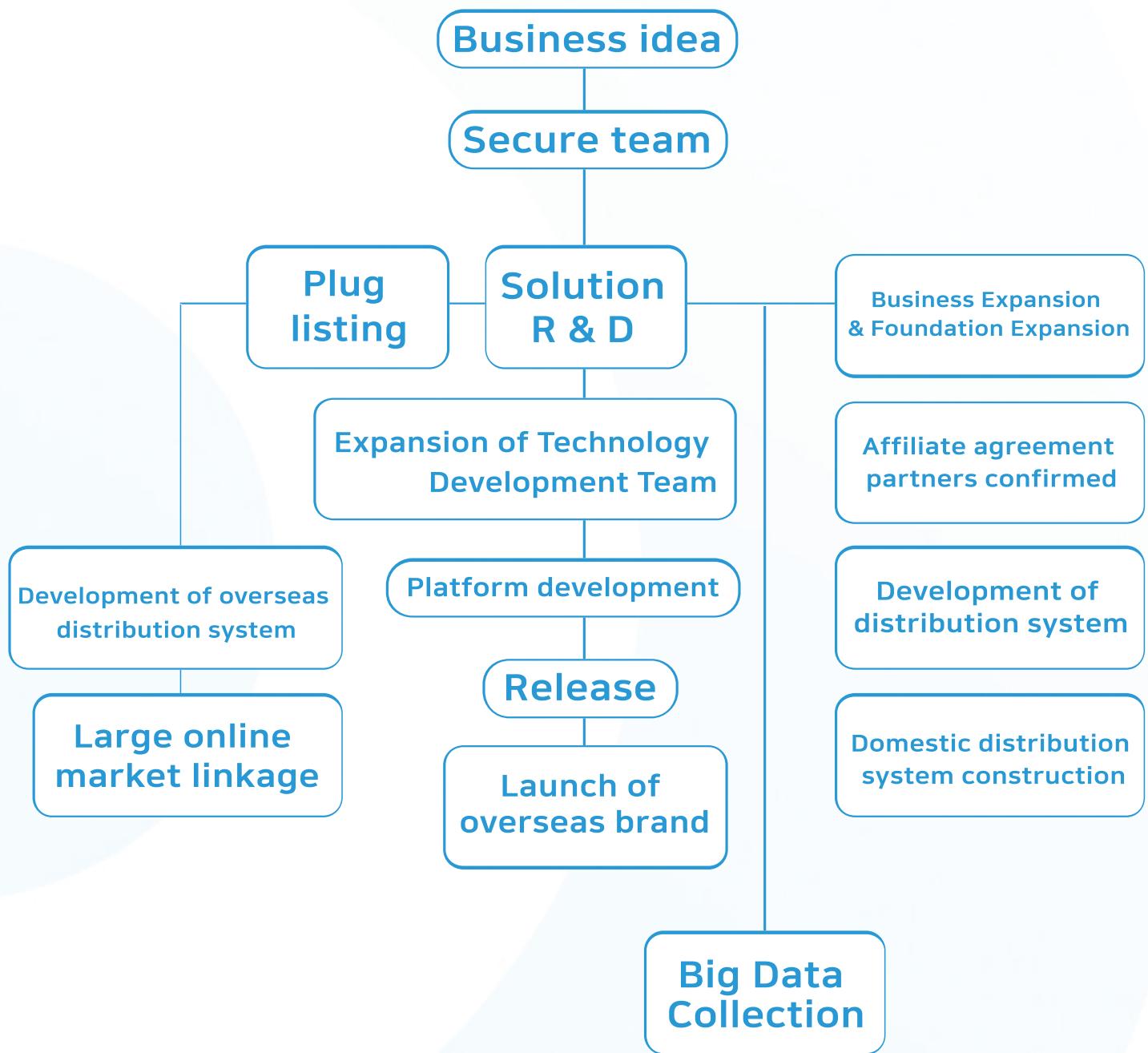
4) Trading Plug Tokens

Plug tokens will be listed on domestic and international exchanges and gain values. The redeemed Plug tokens can be exchanged at any time with current quotes and also when purchasing items from the Plug platform.

5) Big Data Utilization

Plug platform can collect domestic and overseas price information by utilizing the collected Big Data, which can be used in other social commerce, open market, etc., and it can be utilized in its own Plug market.

ROAD MAP



PLUG Tokens and Distribution

Token name: PLUG, 플러그

Symbol: PLG



platform: ERC20

Contract address: 0xBa069Ee53b8B531F3AB117c92ca09A204C9E6285

Category: Utility Token

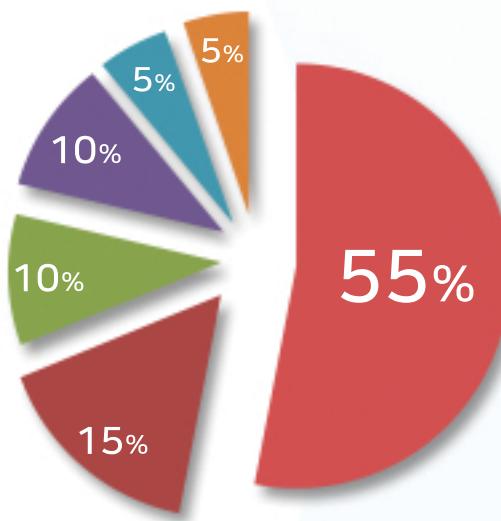
Issued: 30,000,000,000개

Use value of PLUG token

A Plug token is a token used by the Plug platform. Plug token digging is carried out by the Plug platform's own mining reward system and is mined to compensate for ecosystem contributions. This Plug token is available for trading in the Plug market and can be exchanged at listed exchanges. The Plug platform operates a stabilization fund that can be used for multiple events and Plug buy-back and incineration purposes to keep the value of the token and the owner of the token stable.

Token distribution:

Usage	%	개수
Mining Pool	55	16,500,000,000
Market Expansion	15	4,500,000,000
Operational Cost	10	3,000,000,000
Marketing & promotion	10	3,000,000,000
Reserved Fund	5	1,500,000,000
Team& Partner	5	1,500,000,000
	총	30,000,000,000



A total of 30 billion Plug tokens will be issued, of which 55% will be locked out until the platform launch, and will be gradually distributed by Plug Quality Factor and Reward Factor systems after the Plug is released. In addition, team and partner volume will be locked down for one year to ensure smooth development and concerns of token owners. 15% of the total will be traded directly through the exchange.

PLUG Management Team



Minho Lee

CEO

Founder of PLUG Company
Founder of EdeunBio Technology



Brandon Bae

Developer/ General Manager

Georgia Institute of Technology
Seoul National University



Luna Cho

Developer/Software Manager

Industrial and System Engineering
& Computer Science
Georgia Institute of Technology



Justin Cho

Financial Manager

Fund Operator(etf)
Brandeis University in Economics

PLUG Management Team



Johnny Lee
Strategy Manager

Research Assistant at Bain & Company
John Hopkins University in
Business Administration



TTEO Kim
Operating Manager

Distribution & logistics Specialist



Paul Kim
Community Manager



Jaden Kang
Community Manager

Limitations of liability and legal notice

The PLUG team (including shareholder-management-related companies in general) is a member who is interested in the PLUG and provides a detailed description of the PLUG's platform and team. The tokens issued by the PLUG team are not financial instruments such as certain securities, legal currencies (dollars, pounds, Euros, yen, etc.). Therefore, it does not guarantee specific value. Although current token laws are flexible, there is a possibility that laws or regulations, such as token possession and transaction regulation, taxation, or transaction prohibition, are subject to change. In such a case, PLUG team or Plug will not be liable for any kind of damages, such as unexpected damage, loss or liability arising from changes in laws and regulations. Tokens can be affected by unexpected circumstances such as success of business plan, price trend, other market trends such as foreign exchange market and stock market, natural disaster, war, regulation change. If the business plan of the token issuer does not proceed as planned or if the management is neglected due to negligent management, the value of the token may be exhausted. However, the PLUG team is not responsible for this. Tokens possessed by token holders are susceptible to fraudulent transmissions due to account information leakage due to cyber attacks. The PLUG team does not warrant the information at the time of writing this Whitepaper or any future information not yet confirmed. The PLUG team does not express or warrant the accuracy and responsibility of this white paper in terms of professional laws, financial and technical matters. The actions and consequences of the decision of the token holder and the potential token holder shall be the judgment and responsibility of the token holder and the potential token holder. Therefore, PLUG Team shall not be liable for any kind of damages such as unexpected damages,