



# WE BLOC

White Paper

Tokenized Advertising Alliance Protocol

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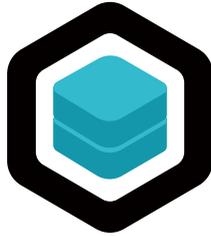


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## Philosophy



This Whitepaper is produced to introduce the blockchain-based advertising platform weBloc and its philosophy, business models, and so on. This document is not produced to recommend investment but to help users refer to the information. All content on the Whitepaper including the project conclusion, schedule, and performance described in the roadmap is not guaranteed. This Whitepaper can be modified according to change in the weBloc team policy or decisions made and any part related to the Whitepaper is not testified or guaranteed. The responsibility for the results (irrespective of profit and loss) of any activity including decision making referring to or using the Whitepaper completely lies on the person who made the decisions. The weBloc team does not take any responsibility for damage, loss, or any other liability of using this Whitepaper. This Whitepaper is not allowed to be copied, used, or released without the consent of the weBloc team and it is required to pay attention to confidentiality and security. This Whitepaper is meant to be used as a brief reference for the business plan and vision. The final content needs to be checked with the final version of the Whitepaper.

# Definition of Advertising

As the saying that advertising has been existing in different forms from the beginning of the human race, everyone is exposed to advertising every second - when watching TV, reading newspaper, or surfing the Web. Some say that the origin of advertising is the thank you note to Pharaoh Ptolemy of the Ancient Egypt in 300 B.C. written by monks for the prerogative they had and others say it is the wanted document for escaped slaves excavated in Thebes and estimated to be written in 1300 B.C.

Advertising has transformed over time: From ancient times of the barter of goods to the mid 18th century, it played a role as a simple notification via verbal and visual communication due to high illiteracy rates. However, advertising had systematically advanced thanks to advances in printing technology in the end of the 18th century and the Industrial Revolution in the mid 19th century. Since then, paper advertisements, flyers, posters, newspaper, and other printed advertisements had been utilized as the major advertising media. In the 20th century, as mass-production and market-oriented production became available in the consumer market, advertising had become more of a tool with functions of persuasion, comparison, and evaluation. And today, in the digital era, various types of content-advertising and advertising methods including native-advertising, video advertising, and affiliate advertising have become dominant.

In order to define advertising, it is required to understand the origin of advertising and its derivation. The terms "Advertising" and "Advertisement" come from the Latin word "Advertere", meaning "to make people look back", "to divert people's attention", and "to turn people's minds". "Die Reklame" and "Re'clame" are the words meaning advertising in German and French and their origin is "Clamo" meaning "to clamor", which in turn mean "to clamor again". Considering the origin of the term, "Advertising" can mean "to clamor again and again to gain attention", which can be deeply related to today's various advertising methods taken to gain customers' attention.

The term "Advertising", which came from the Latin word "Adverter", has specified and distinguished its meanings into "Advertisement" and "Commercial" and has slightly different meanings as the field of advertising becomes more and more complicated. Advertising means the act of advertisement or the entire process of advertisement. In the meantime, advertisement refers to advertising materials or advertising messages. In other words, the concept of advertisement is a subordinate to advertising and part of advertising and in ordinary cases the term advertisement means "Advertising" in English. Wright, Winter & Zeigler's definition of advertising would be the most representative one - to define advertising, the terms of "Information" and "Persuasion" are necessary. According to this, advertising could be defined as controlled information and persuasion through the media of mass communication.

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## Definition of Advertising

From the marketing point of view, advertising can be considered to be a subordinate part of marketing. Promotion is defined as the key element of advertising among the elements of marketing including product, price, distribution, and promotion. In this point of view, advertising is defined as a tool for management and marketing. However, from the communication-centered point of view, advertising can be defined as delivering messages and expressing and exchanging "meanings".

In details, there can be different opinions on the definition of advertising according to different perspectives. But there would be no second opinion on the idea that advertising refers to action to build a link between all participants to achieve certain goals (messages, sales, participations, etc.) via the beginning of advertising and origin of the term.

Advertising as the link gathering participants has both various positive and negative impacts. Advertising plays various roles - generating demands for products, promoting purchase of products, and notifying useful information to many potential customers. It facilitates efficient distribution and consumption, enhancing productivity. It also helps consumers develop a healthy values and habits on consumption. As a result, advertising eventually contributes to an enhanced lifestyle through better products and services and the increase in consumers' standard of living.

In addition, advertising helps economic operation of mass-media through the "symbiotic relationship" with mass-media, contributing to the growth of mass-media. It is also able to provide information necessary for the usage of products and services, helping consumers compare and evaluate products. It can make consumers recognize products and services as well, promoting sales of them.

Advertising also have various positive impacts: helping to differentiate products, making competition more efficient, raising royalty for products, building positive images for advertisers, and developing trust.

On the other hand, advertising encourages unnecessary consumption leading to dissipation and causing materialism. It can also standardize the cultural level making people imitating others and developing false values. Additionally, advertising sometimes fails to follow social ethics and morality to cause advertising responses. In the economic sense, advertising can create imaginary demand doing harm to economic growth causing excessive competition and increase in prices of products. It is the reality that advertising can also cause side effects including competition in image making instead of raising quality.

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# Change in the Advertising Market

Early In the 1990s, when the Internet was not widely used yet, media such as TV, radio and newspapers took the key part of the media industry. Naturally, the advertising market focused on TV, radio and newspapers. Utmost efforts were required to maximize the advertising effectiveness and the same holds true today. How to utilize the existing media mattered most for marketers then. However, all the media were single-sided back then, making it impossible to measure how many people reacted to advertisements and how many people made purchase thanks to advertisements. Moreover, there were only a limited number of media in the advertising market. The power of media overwhelmed advertisers, making them lose the power to negotiate. The value of users who had to be exposed to those media was not appreciated as well.

Advertisers had to pay fixed rates for advertisements and users had to pay prices for using media. The advertising market dominated by the conventional media had gradually shifted to the digital advertising market. With the shift from personal computer communication to the Internet, the concept of advertisement was about simply putting conventional printed advertisements on the internet. Digital advertisements in the form of simple menu-type banner had begun.

In the late 1990s, digital media started to gain ground as advertising media thanks to the widespread of the Internet. Since then new types of advertisements including interactive banner and push mail were tried for the first time. In 2000, the high speed Internet was spread and IT companies mushroomed everywhere. The number of Internet users soared and online and offline companies paid great interests in the online advertisement. The market size had got bigger exponentially as well.

The era of multi-media advertisement was opened at the time as video clips and flash-type advertisements were introduced. After that, digital media became the media at the center of communication. And then, with large corporates taking lead, branding advertisement was tried rather than simple event-type advertisements. Various types of new advertisements including a full-page advertisement and hover advertisement were also tried as the effectiveness of banner advertisements was questioned.

Advance in advertisements has led to the great popularity of UCC and entertainment video clips. This had also led to growth of social media and blogs while community services had got attention.

As search advertising became in full swing and overtook the display advertising industry, the Internet started to be perceived as the 5th medium threatening the position of TV advertisement and the Internet advertisement had reached its full potential of growth.

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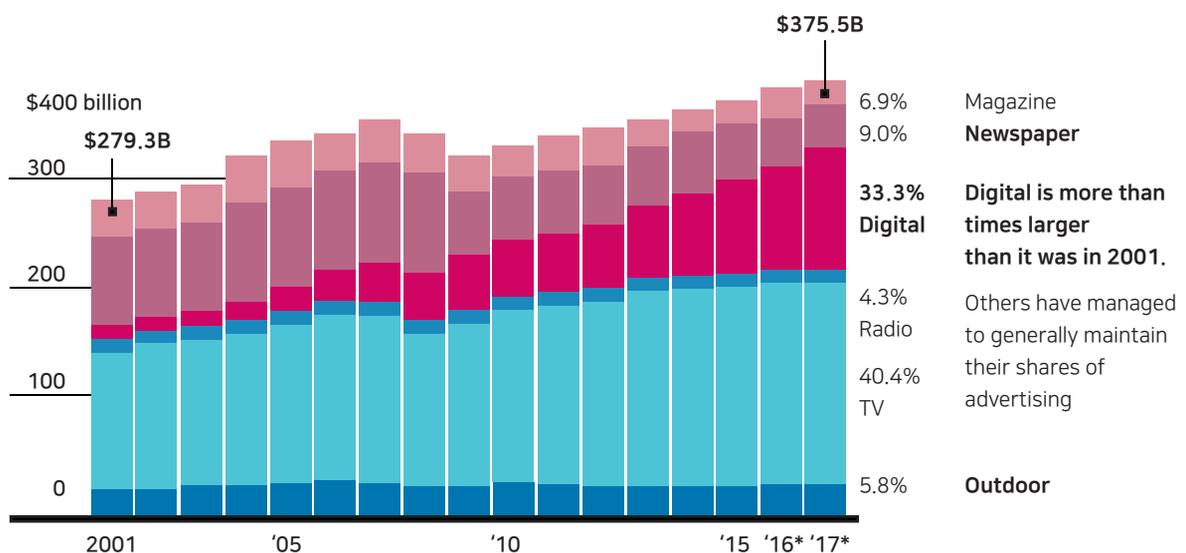
Change in the Advertising Market

With the widespread of smartphones, various types of advertisement were emerged: interactive advertisements combined with the QR code, mass-MMS advertisements, in-game advertisements, advertisements using mobile coupon and social commerce, search advertisements using location-based GPS technology, etc. Today, we are living in an era of multi-media using digital technologies.

Digital advertisements expand its horizon with the intersection of the smart media. It is creating brand new advertisements and commerce market by combining content and commerce. It was impossible in the conventional Internet or mobile advertisement environment. Moreover, the new types of advertisement such as interactive advertisements, program sponsorships, and combination of social media and TV commercials can satisfy customers and the clients at the same time. Such new advertisements will enrich the consumption in the digital society thanks to smart media advertisements and commerce platform technologies that have characteristics of customization, tangibility, content-association and N screen.

Such change was possible as media had changed from one-way system to an interactive system where the reaction of users can be measured. Data have become quantifiable measuring how often advertisements were exposed to the users and how many people bought products. Such measured data started to be used in highly-targeting methods in advertisement based on location, gender, age and so on. In the digital media market, various small groups were linked through the network and increased exponentially. This was one the biggest reasons for the change.

Users had to pay fees to the conventional media but today, the value for their participation is appreciated without paying fees.



\*projections  
Source:GroupM

Change in the Advertising Market

Digital advertisement market is developing faster as the society is ushering into the mobile era, creating many different business sectors. In the Digital advertisement market, throughout the process from registration of advertisements to exposing advertisements to users, there are many businesses: establishing agencies that gather advertisers to provide advertisements on behalf of them, building a trade market for advertisements with advertiser-side platforms, the data management platform business for managing and supporting user-targeting data, and building a media-side platform that can help media make more profits.



These various business areas have been created to expose advertisements more efficiently to users.

In the early stage of the digital advertising era, advertisers made a direct contract with publishers to execute advertisements and could receive the result report. As the digital advertising market exponentially increased, it became impossible to execute and manage all advertisements in the conventional way. This was the point where agencies came up to execute advertisements and report the results. Agencies made profits by receiving the advertising fees from advertisers and the agency businesses had grown fast as digital advertising field kept expanding.

With expansion of agencies, major agencies can have power to negotiate, priority access to inventories and favorable discount of the advertisement and advance to a form of media labs that deputize the small agencies.

Platform companies have established the "Demand Side Platform" (DSP) to allow advertisers and agencies to execute advertisements quickly and easily. With the DSP, it became possible to provide tools to expose digital advertisements to users, accelerating the expansion of the digital advertisement market.

## Change in the Advertising Market

In the early stage of the digital advertising era, there was no issue if it was possible to connect media having websites with advertisers. Advertisers could contact desirable media to make a contract and send advertisements to media. And then media edited the HTML page to expose the website or homepage with banner images.

However, such methods had caused inefficiency in terms of the work of media, having difficulties managing advertisers. It was inefficient for media to edit the HTML codes every time and inventory management also got difficult. In the meantime, advertisers had to check every website whether advertisements were exposed properly to users. As the number of media had risen, it had got more and more difficult managing the efficiency of advertisements comprehensively.

To tackle this issue, advertisement servers for advertisers and media were introduced and platform network businesses started to deal with this issue. Such platform network businesses collect small-sized media or advertising inventories difficult to be sold directly and sell sizable Internet traffic. On the other hand, media advertisement servers called the Supply Side Platform (SSP) had advanced into selecting advertisements maximizing profit for media and exposing them first.

As such, many different business fields have developed along with the growth in the digital advertising market. However, the digital advertising market has developed focusing on advertisers and media and exposed advertisements to users rather than paying attention to users' need under the premise that a certain type of users would be interested in advertisers' products or services.

The concept of advertisement we defined earlier helps to understand the reasons for the current situation. Advertising is an act of making links connecting participants to achieve some purposes (delivering messages, sales, participation and so on). Advertisements have developed from advertisers' point of view.

The digital advertising industry has grown faster than the conventional media industry as it has a higher chance to find users who would participate in the market. It also shows that advertisements can be more efficient if the digital advertising market grows with relevant industries.

We looked at the origin and history of the advertising and the current digital advertising market. Unfortunately, users' view on the market have been neglected and there is no difference in this point of view.

The biggest difference is that users had to pay the fee while being exposed to advertisements in the conventional media, but they don't need to do so in the digital advertising market. But as the price for that, advertising platform companies are collecting data about users to expose a more precisely targeted advertisements to users.

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# Problem Recognition

## Economic value of users

In the Digital advertising market, many efforts are put in place to compensate the users' values in order to draw reactions about the advertisements from the users. Media should reinvest some part of the profits made by advertisements to the service so that the users revisit the media. Some data businesses pay for the agreement of users' data collection and utilization. Some data businesses try to increase the loyalty by providing points and coupons. Despite these endeavors, we still believe that the users' economic values are not evaluated or recognized properly.

The economic value of users can be shown the most in media used by many people such as search engine, portal services and chatting applications that users revisit frequently, and the value would be very high in the digital advertising market. The competition among advertisers for occupying the most efficient spots for advertisements has led to increase in advertising fees. Media also prepare many tools to raise advertising fees.

The reason why advertisers execute advertisements on the major media even with the high advertising fees through the competition is clear. There are so many users that would participate in advertisements.

If there are actual users, not cherry pickers and advertisements can be delivered to users directly, advertisers could avoid unnecessary competition, executing advertisements with the reasonable prices and make an economic compensation to the participants due to the reduced expenses. This will be the start of recognition of the users' value generated by participation in advertisements.

Still, it is hard to see the system as a reasonable compensation. Even though advertisers would reduce advertisement fees by trying to expose advertisements to the correct users on the major media, it is hard to reach to the exactly correct users because advertisements can be executed with the assumed data based on Cookie, ADID, and other footprints of users. Also, as mentioned already, there are so many businesses on the side of advertisers and such businesses make profit from advertising fees.

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Problem  
Recognition

Consequently, users' compensation is operated as a format of points which can be regarded as costs for businesses, and it would disappear after its validation period. Digital advertising ecosystem has developed in a way that whereas advertisers can decrease the advertising costs and increase the number of participants in their advertisements by operating advertisements more efficiently, media encourage more advertisers to participate maximizing their profits. However, we believe that this whole value chain can be built based on users.

The value generated by users should return to them properly, but under the advertiser-centered structure, it is hard for users to expect economic compensation except points set as costs according to media's decision, and coupons that advertisers provide as an event. The fact that there has been no link that can connect users' value to the advertising market which has grown and changed rapidly is our starting point to recognize problems in the digital advertising market.

Many teams which are aware of similar problems to ours are going to try to solve them together. New data businesses that give users compensation for providing their data which are easily used as a means of targeting in the digital advertising market by putting a value on them, and a new point-type advertising market that users can get the points when they participate in advertisements and easily change the points to goods or services that they want are emerging.

These various changes are very important that can make the digital advertising market recognize the users' value, but in reality, it is not easy to fundamentally establish new value chain structure which can provide economic value for users. It is because compensation costs for using users' data or the points for advertising participants are added to the advertising costs, which in turn could be a burden on the users again as their marketing costs.

## Advertisers and Users

In the digital advertising ecosystem, we always distinguish the advertiser side from the media side and define a process that makes users see advertisement through the latter. From this perspective, you might think that advertisers and users are completely separated, but in fact, it makes you consider the side that sells goods and services with a certain size as advertisers.

It means, in layperson's terms, that people consider those who are capable of spending advertising costs over a certain amount as advertisers, and this way of recognition has become a standard to distinguish advertisers from users. However, given collecting participants for the specific purpose, the amount of advertising costs should not be a standard to define advertisers even if they are not able to spend a sizable amount of advertising costs. For example, if you desire to promote your own private social network and to make around 10 friends, you cannot make a deal with businesses in the digital advertising ecosystem even though you want to.

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Problem	It is because many of those digital advertising businesses cannot earn enough profits to cover advertising costs.
Recognition	<p>We consider that the problems in the digital advertising market start from the various business structures separating advertisers from users and creating and supporting the advertiser-centered ecosystem.</p> <p>In this ecosystem economic value generated by users cannot be recognized. It is because, as explained earlier, this value is unavoidably regarded as types of points or coupons that the media provide as advertising costs with the money advertisers pay.</p> <p>In other words, in order to make a fairer market a standard to define advertisers and users should not be the amount of advertising costs, and advertisers should be defined as the side looking for the participants to realize their own goal and users should be defined as the side participating in that goal out of their own necessity. It means that a fair market enables advertisers to set reasonable advertising costs instead of excessive ones, and users to return their value considering their participation.</p> <p>However, it might be possible only when advertisement should reach to the users regardless the amount of advertising costs and in the process, unnecessary costs should not be incurred.</p>

## Middlemen

In general, industries over a certain size have intermediary agencies, called as 'Middlemen'.

The Middlemen have been introduced as a business opportunity in between production and consumption and play a role in facilitating those processes in a more efficient or precise way. However, those processes require extra costs, which leads to additional costs for users by including the value of goods or services.

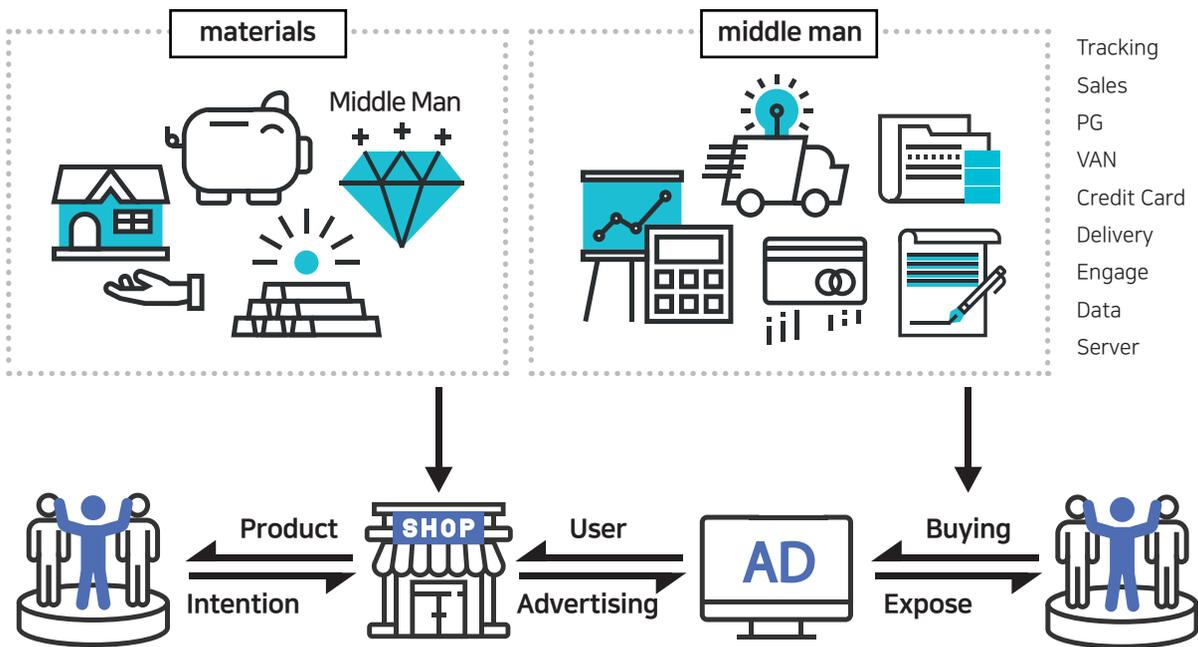
Of course, the digital advertising market has the Middlemen. They also earn their profits based on the advertising costs that advertisers should pay. Consider the actual advertising cost is 100. Among them, 30 go to the Middlemen's profits, 60 go to the media, and the rest 10 go to the reinvestment in service. And the total advertising costs in that process are charged to users as the consumer prices when they use goods and services of advertisers.

While the Middlemen in the advertising ecosystem, as we reviewed so far, support the development on the advertisers' side, we cannot say that all their roles are negative.

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**Problem** The costs incurred by the Middlemen are imposed to the users consequently, however, they can facilitate the business processes by sharing some work that the advertisers cannot do alone in more efficient and intensive ways and increase economic value.

**Recognition**



In addition, they can target users who might have an interest in that advertisement and deliver it to them for advertisers, by doing so they support the participants to consume more effectively decreasing unnecessary costs from users' use value.

All in all, the Middlemen can be considered that they strengthen and enrich the ecosystem because advertisers cannot handle the whole processes by themselves. However, we consider the limitation that users' value is not properly reflected, as Middlemen, too, create the one-way process relying on advertising costs in this ecosystem mainly dominated by advertisers and media, as another significant problem.

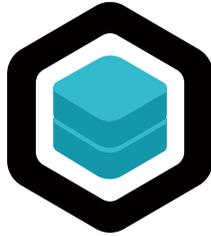
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Problem	Therefore, we define the problems in the digital advertising market as the three followings:
Recognition	<p>First, even though economic value of users who participate in advertisements is significantly important in the advertising ecosystem, it does not lead to compensation for the users because it is considered to have only transparent value. Therefore, a new value chain structure is required to put a proper economic value to users.</p> <p>Second, we should regain the balance of market mainly dominated by advertisers through focusing more on users, and to this end, we should distinguish between advertisers and users not by the amount of advertising costs, but by the purpose.</p> <p>Third, we should eliminate unnecessary Middlemen, and transform from the advertiser-centered market where the Middlemen contribute to and develop to the user-centered market.</p> <p>These three suggestions based on problem recognition commonly contain the necessity to move the digital advertising market to the user-centered one. However, it is almost impossible to move the current advertising ecosystem from the advertiser-centered one to the user-centered one overnight.</p> <p>Of course, some media such as Google or Facebook which secured lots of users have been able to adopt a new standard in the advertising market unlike the previous ecosystem and move it on their own, but statistically it is almost impossible to happen, and under the structure that prioritizes the media's profits (which means focusing on the corporation's value) even if new media which have huge influence on users are emerging, they are more likely to adopt and use the already-established advertising ecosystem where the current advertising businesses have already dominated their own strong links, instead evaluating and compensating users' value. Against this backdrop, it is hard to solve these problems in the current market even though we already well-recognized them.</p> <p>We want to establish a new structure that can evaluate users' economic value and make them receive compensation by changing the digital advertising market lopsidedly led by advertisers to the user-centered one and provide a link that can connect advertisers with users who clearly want advertisements free from unnecessary price competition.</p> <p>In order to tackle these problems, establishing a new market by making media which can connect with many users such as Google or Facebook to evaluate users' value and compensate for them can be one option, but it eventually, cannot overcome the shortcomings of the previous market that allocates points based on the advertising costs, and above all, it can hardly transform the market fundamentally.</p>

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Problem	We desire to bring a fundamental change in the digital advertising market.
Recognition	<p>To this end, we have to move the advertiser-centered ecosystem to the users-centered one by de-centralizing the current structure dominated by media, and newly create a flexible ecosystem accompanying with the structural value of profits and costs incurred in the advertising market in order to provide direct economic compensation for users based on their value.</p> <p>With figuring out problems and looking for solutions so far we confirm why the digital advertising market should be transformed based on blockchain technology.</p> <p>It is because the digital advertising market is the one of the suitable markets for creating the decentralized structure by using blockchain technology and distinguishing between advertisers and users not by advertising costs but by the purpose, and it can generate the biggest profits for advertisers and users at the same time when it successfully grows into a market where ultimately, the value that users contribute to can directly return as economic compensation by establishing an economy ecosystem compensating users' value by using tokens whose value would be determined by economic structures.</p>

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## Service

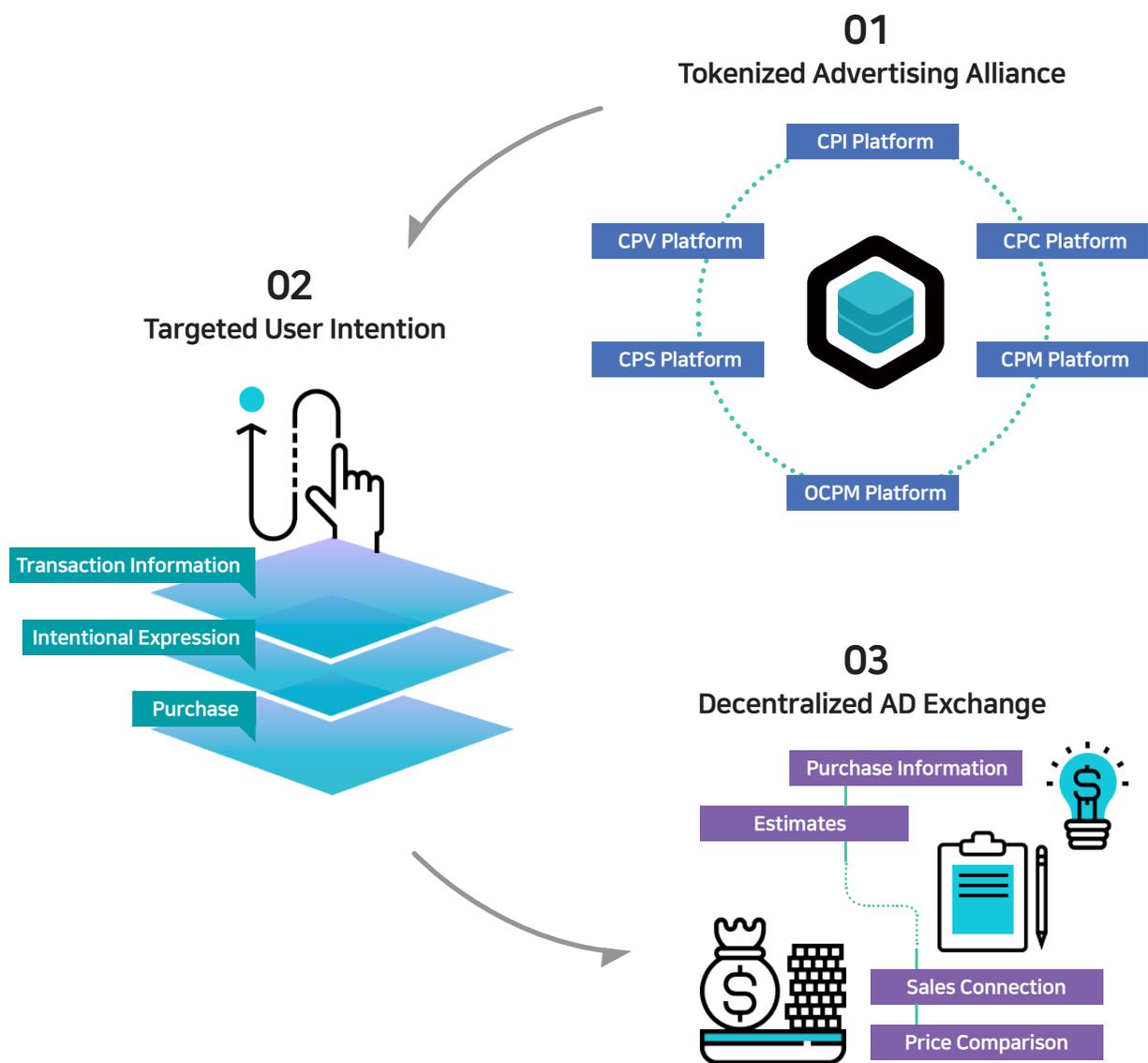


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# Service Definition

Our service aims to shift the center of the gravity from advertisers to users in order to create a horizontal and interactive digital advertising ecosystem.

We believe that users should be able to expose their needs to products and services and receive them. At the same time, a token economy should be realized in the ecosystem where users can be compensated for their economic value created by user participation.



To achieve this goal, we will provide a protocol that helps the conventional advertising ecosystem move to the tokenized economy ecosystem to the digital advertising market to build the tokenized advertising alliance.

**Service Definition** With this, users can be compensated for their participation in advertisements naturally and the businesses on the advertisers' side will increase the efficiency in advertisements.

The conventional advertising ecosystem with passive users will change into the user-oriented advertising ecosystem by combining with services that can encourage users to actively engage in advertisements



<b>The total sales of the top 50 advertisers</b>	<b>₩3.77 billion</b>	<b>₩13.46 billion</b>	<b>₩3.31 billion</b>
<b>Major Advertisers</b>	Daum(kakao) Snow (CAMP MOBILE) NextApps (metaps+)	SK Broadbands Ifamily SC ROEN ob/gyn	HAVE&BE(Dr.Jart+) CVSnet (convenient store delivery service) BIO11
<b>Characteristics of the top 50 advertisers' businesses</b>	Direct advertisers mark high sales in terms of application marketing. Labs/Agencies take 90% of the sales of FocusM.	Sales related to hospitals and medicine are high. Offline direct advertisers take a big portion of sales.	Sales related to branding companies take a bigger portion. Goldenax has secured many convenient store related direct advertisers.
<b>Overlap Rates of the top 50 advertisers</b>	The aggregate sales of the three companies' top 50 advertisers are about ₩20.5 billion (0% overlap rate)		

We are trying to fully utilize our assets in order to change the digital advertising market in a fundamental and solid way.

weBloc team has built direct and indirect relationships with numerous media and agencies through the digital advertising and marketing businesses. The sales in 2017, combined with direct partner sales, reached 31 billion KRW, increasing by 35% compared to the previous year.

If we translate the simple sales into the general market value, our value can be estimated maximum 300 billion KRW. Moreover, as we can distribute the economic value on the weBloc platform through the token economy based on blockchain, the value would surge even faster as we have more partners.

Based on this, we plan to move forward the token economy on the weBloc platform with our strategic partners. Advertisers will execute advertisements at reasonable prices and the value of user participation will be transparently evaluated and the participation will give direct economic values to users as compensations.

The compensated token can be used to execute advertisements along with the expansion of the strategic partners and it will sustainably increase the value of tokens by creating the virtuous circle. Above all, such strategic relationships can be important links that retain early users and build good relationships with them

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Service	The strategic solidarity with the existing partners in the digital ad market can be an important starting point to settle and expand the token economy based on blockchain. But it is most important that the link with users will be made.
Definition	<p>Additional compensation will be provided as much as one contribute to the growth of the weBloc ecosystem and in turn, the growth will result in economic value to all participants. Link as strong as this much also means the user-oriented value chain will become stronger. Through the process, we will confront the door that will lead to the ultimate solution to the problem.</p> <p>In the part of problem recognition, we continue to talk to build a structure where the participants' value should be recognized through the economy.</p> <p>For a more sustainable and stable growth of the ecosystem, the current way of putting advertisers or media on the center and the current way of looking at market from the point of view of advertisers depending on the size of the advertising prices should be changed. They has to be decentralized and the point of view should be two-sided, both from advertisers and users participating in the ads, by defining participation with advertisers and setting goals as participating in the products or services.</p> <p>That is, there needs a platform where users can search advertisements they want besides the data based-platform where advertisers and media decide certain users under their standard and expose advertisements to them.</p> <p>The most representative example of two-way platform is the search advertisement. Of course, executing the search advertisement requires fees to actually expose it to users or link between advertisers and agencies. However, users have to show their intention in the search advertisement and the platform exposes the most suitable advertisement for the intention based on the keywords users put in, providing searched advertisements or information.</p> <p>Although search-advertisements collect a great amount of data to distinguish and target users, advertisers and media have difficulty knowing what information users want to get. Therefore, the interactive process of search-advertising plays an important role.</p> <p>The service provided by weBloc provides primarily starts as a protocol that gives users value in the digital ad market but ultimately, we aim to expand the digital ad economy by providing process where users can express their intentions themselves.</p> <p>With the protocol, users decide whether to participate in the provided advertisements or not and get rewarded depending on the value of their participation. Also, they can require wanted information to weBloc ecosystem directly and also paid back for the participation in turn.</p> <p>weBloc will build a brand new blockchain advertising platform by applying token economy based on the blockchain to the conventional digital advertising ecosystem and by the direct participation at the same time.</p>

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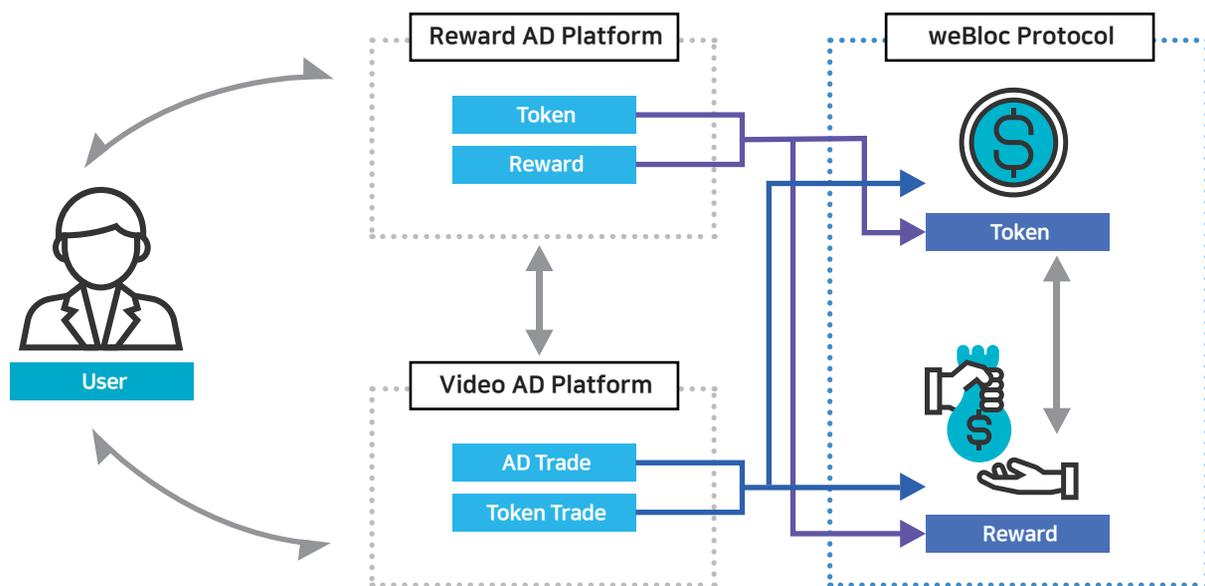
Service

Definition

## Tokenized Advertising Alliance

Our first step is to establish a tokenized advertising ecosystem collaborating with our partners and relevant companies we have. We have already developed a process that can compensate users with tokenized value and been conducting tests for interworking with some companies. This process is provided as a form of protocol, and this protocol would provide value for users in the advertising ecosystem.

We call these strategic partners, as 'Tokenized Advertising Alliance'.

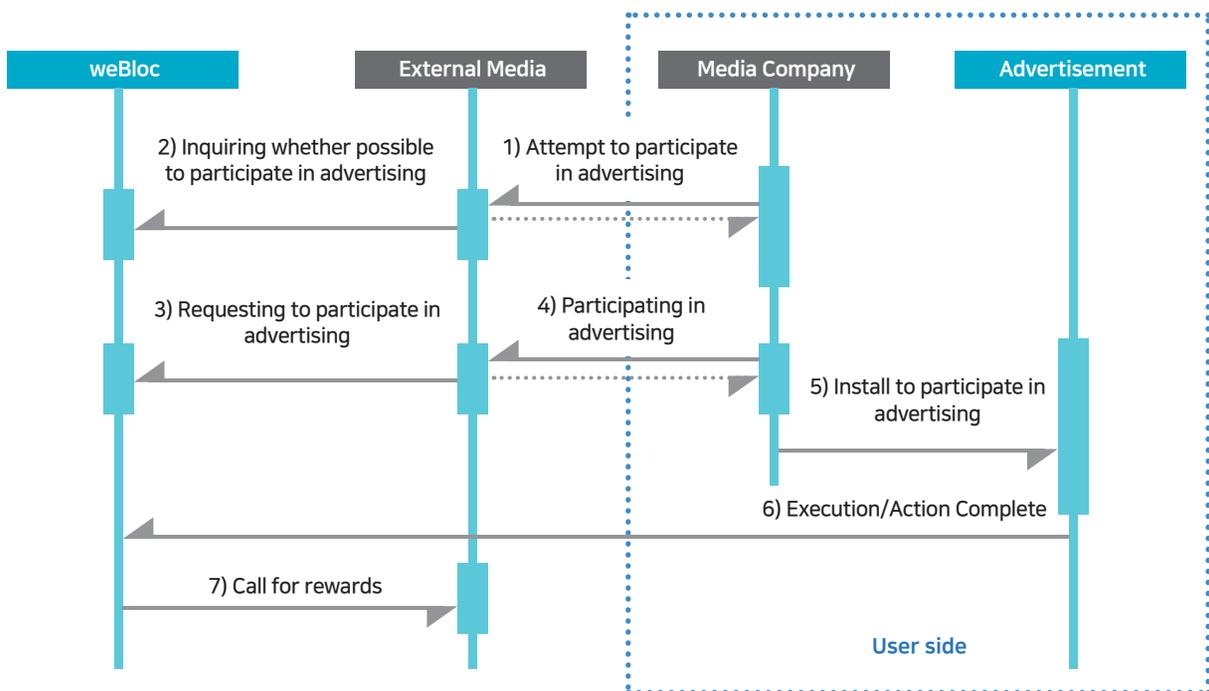


The protocol we provide gives direct economic compensation by calculating value of participants in advertisements with token, and functions for the strategic partners so that they can tokenize based on blockchain by themselves. By doing so, the partners can conduct their own Initial Coin Offering (ICO) raising money. Support through the protocol provides the policy for the token economy and a trading system that we can exchange the issued tokens with the weBloc tokens, which generating a similar effect to IPOs when tokens are swapped.

Apart from evaluating users' value of participation and compensating through the token economy, the weBloc protocol can support to encouraging current advertising businesses to move toward the blockchain based advertising ecosystem in an easy and stable way by providing diverse functions.

**Service Definition** Types and functions of the weBloc protocol are categorized by advertising techniques in the digital advertising market and charging methods. Generally, while banner advertisements charge per click or per impression, app install advertisements charge when users install or run the apps. We designed the protocol based on the advertising models that can be directly applied to the previous market. The weBloc protocol can be applicable to various advertising types and charging methods. It can be applicable to the whole products, but we will support that Alliance partners can also use some parts of its functions considering their business circumstances or issues.

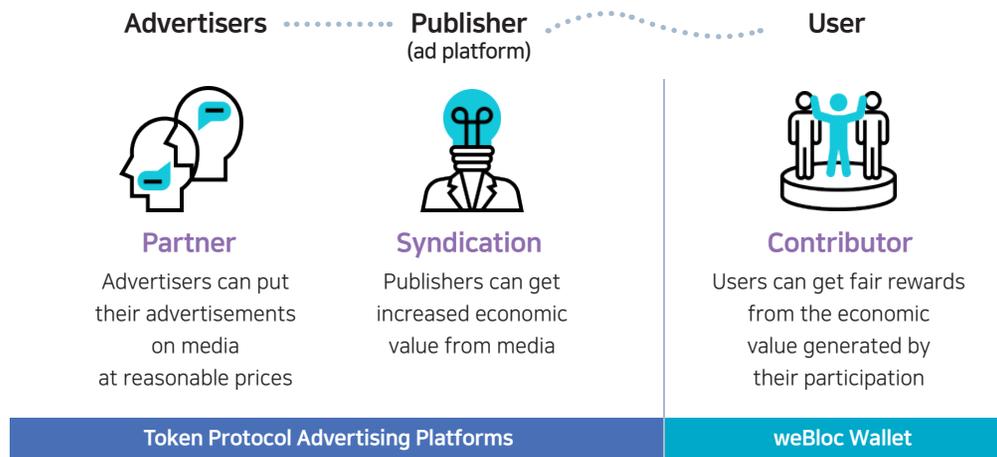
**Protpcol Cases**



When Partner Alliance is made based on the weBloc protocol, users can participate in the tokenized digital advertising ecosystem, and this will be a first step to take a meaningful stride for changing to the user-centered market from the previous advertiser-centered market.

Service  
Definition

## Alliance



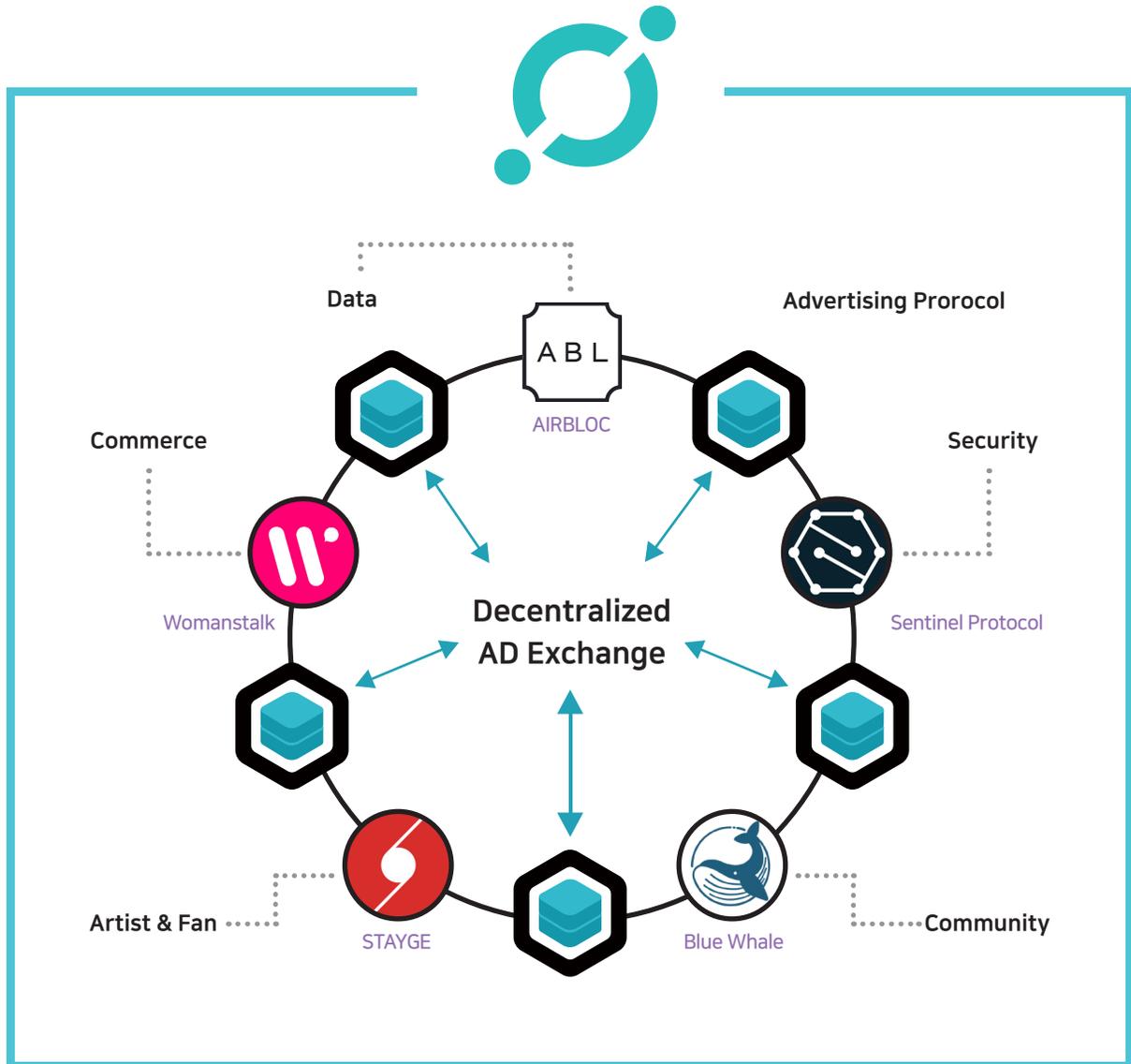
Unlike the conventional digital advertising ecosystem, users can get evaluation for their contributed value and rewards by participating in the advertisements exposed through the weBloc protocol. Such process requires a service directly connected with users. This makes the linkage connecting the direct rewards for participation in advertisements and the foundation for the user-centered advertising ecosystem. To build this structure and process, we have already been making very meaningful MOUs with various media companies including token wallet companies.

Initially the weBloc protocol will provide the reward tokens for participating in advertisements to users through a Wallet system already having 6 million active monthly users. In addition, a new process that can easily realize the rewarding system inside the media where advertisements are exposed. To build a new user-centered digital advertising ecosystem on blockchain, weBloc protocol will keep making alliances with other services having good direct connections with users.

In particular, the weBloc team has been running various projects with ICON including the global blockchain campus business and blockchain-based voting service (DEVOTE). These projects will play a very important role in building connections with users. The weBloc project has kept working with other ICON's DApps including Bluewhale and Airbloc so that we can take the other pillar of the blockchain world ICON and its DApps, taking the pivotal role in digital advertising.

Cooperative projects with ICON and DApp ecosystem can create synergetic impacts by connecting with the weBloc protocol.

Service Definition We will expand the blockchain-based advertising market by developing a partner-centered protocol on ICON's DApp ecosystem as the official advertising partner of ICON.



Service  
Definition

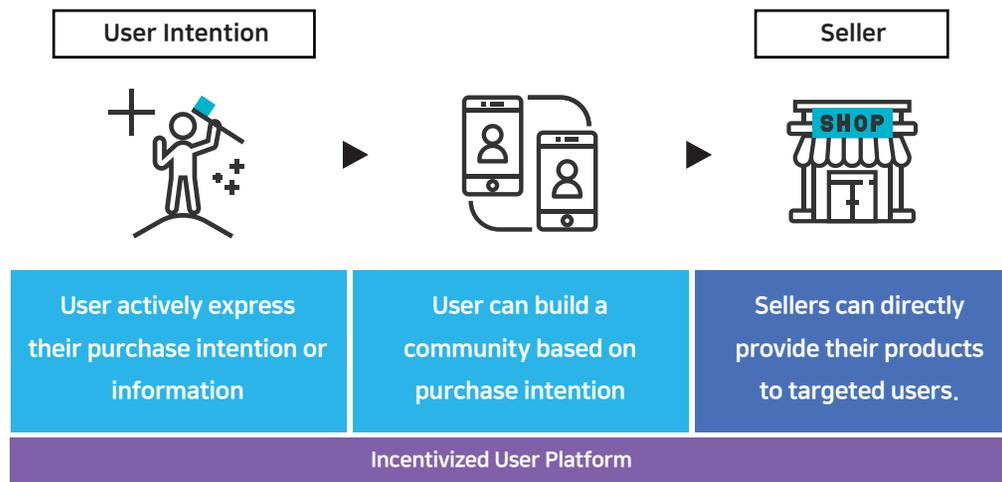
## Targeted User Intention

We will expand our partnership steadily through the protocol and create a direct link with advertisers based on the information of users that we have established relations with at the same time.

The number of users in the protocol based weBloc ecosystem would skyrocket as the partner Alliance has expanded, and we will create the interactive functions in our protocol so that users can directly participate in their advertisements, instead of using the current one-way communication method that middle persons or media adopt.

The interactive function enables users to participate in advertisements based on their direct intentions, or it can attract more users to achieve a specific goal.

We will develop functions to prevent from over-relying on advertisers by transforming the current digital advertising ecosystem where advertisers who can pay for sizable amount of advertising costs become a standard and they dominate, to the tokenized advertising market structure that can provide users compensation. However, ultimately only when reasonable advertising cost structure that can deliver users' intention to their advertisements is established, users' value can be expanded and shared consistently.

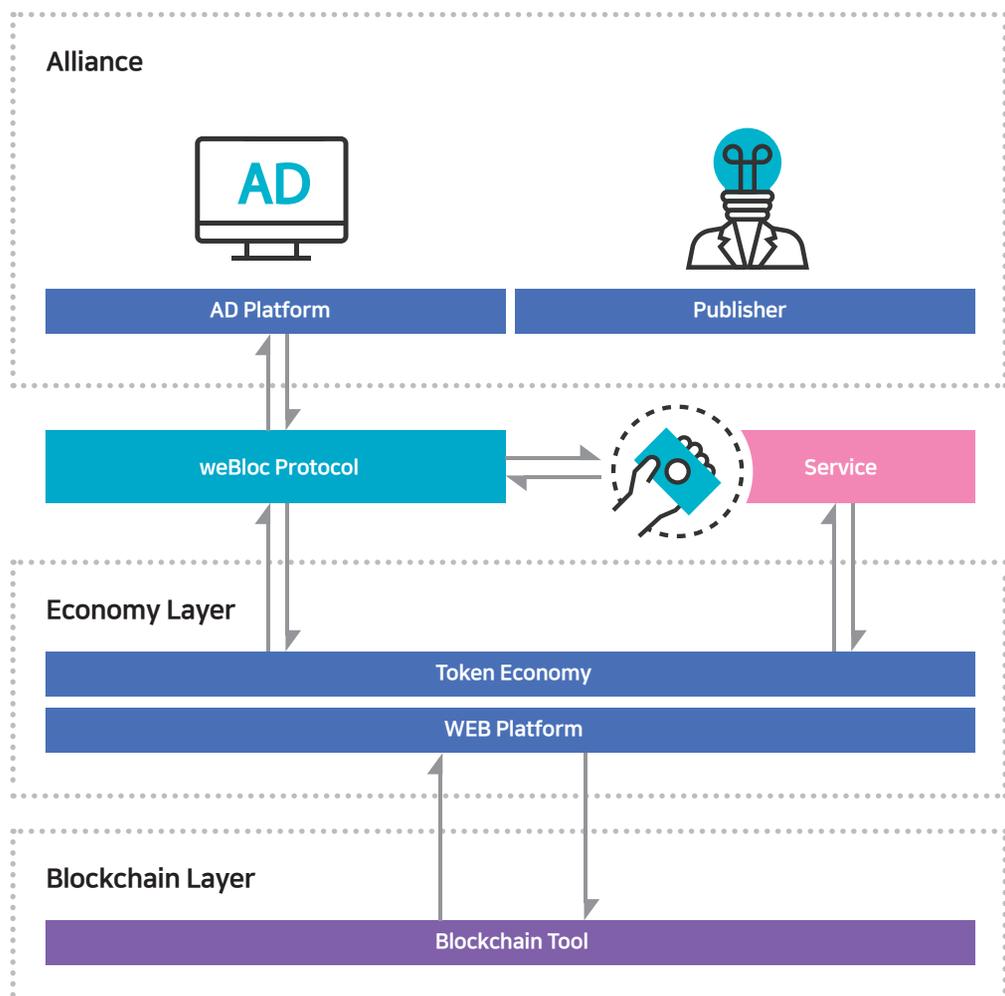


Service  
Definition

We should provide users with transparent evaluation and compensation over users' economic value, and create a link that can reflect users' direct intention through the weBloc protocol in order to make reasonable advertising distribution structure. The structure that compensates for users' value in the digital advertising ecosystem based on protocol is required, however, only when the link is provided as a form of service that can directly reach to users, it can be possible for users to reflect their intention to advertisements and to make their advertisements more effective.

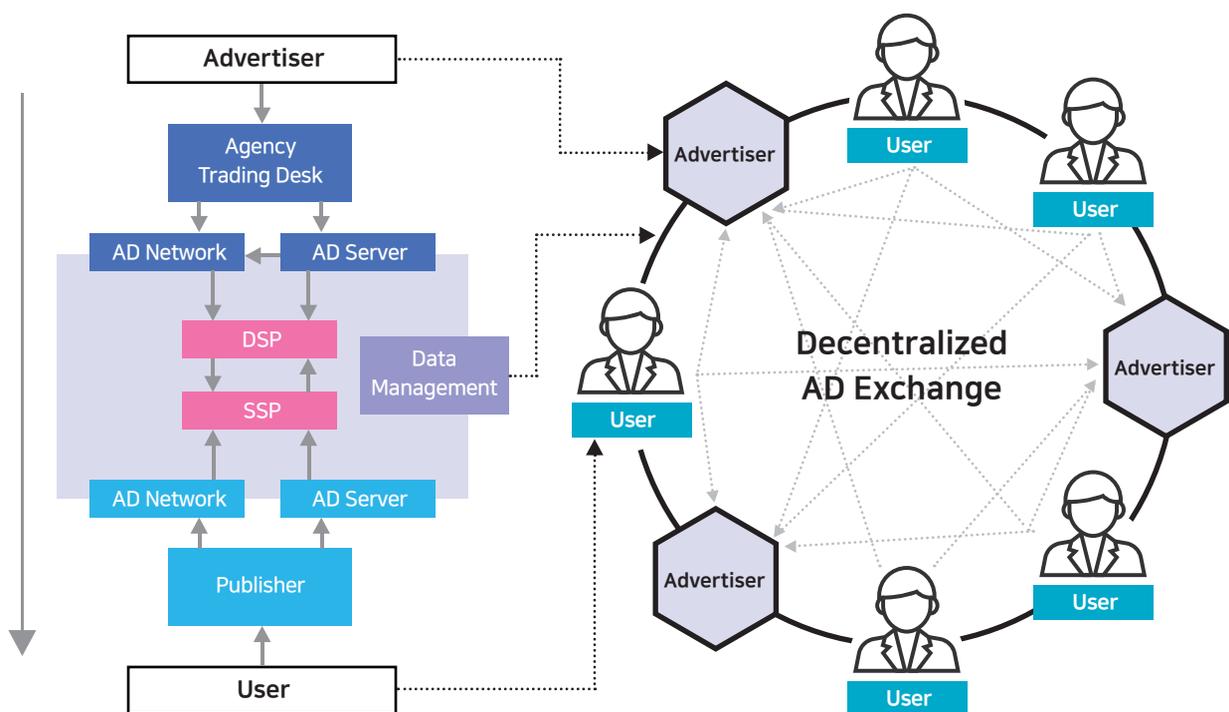
To this end, we are going to develop and provide a service that users who participate in advertisements can use by adopting the weBloc protocol. If a service that can define users' direct intention and link it to advertisements exists as the Alliance has expanded based on the protocol, we will open our supporting function to other blockchain based services so that diverse services are developed from the weBloc protocol.

### Link Concept



# Decentralized AD Exchange

Our team is planning to create a linkage between advertisers and users in the digital advertising ecosystem through weBloc protocol. This linkage eventually will lead multidimensional transactions according to the user intentions. It will gradually evolve into the decentralized AD exchange that drives transactions between various blockchain-based advertising platforms and users.



Our team is going to recognize the economic value for users who participate in advertisements by providing the reward structure through the token economy. Shift from the existing advertising ecosystem to blockchain-based one via the Alliance protocol will make an user-centered environment.

The structure that connected with various blockchain-based decentralized platforms enables users to make transactions. It will play a significant role in moving from the digital advertising ecosystem onto the blockchain.

This linkage will enable all the partners to request and transmit advertisements based on each purpose. Also, this structure will create an ecosystem where users can freely participate in advertisements without the middle-men.

## Decentralized AD Exchange

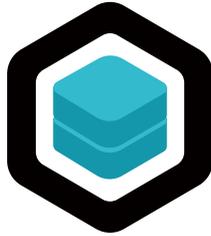
The decentralized AD Exchange market means a marketplace where participants enable transactions of advertisements freely without the middlemen. It attracts users by providing a free linkage structure where users can actively participate in advertisements.

User participation on the existing advertising ecosystem would be also important to develop such an ecosystem. Participants in the existing advertising ecosystem enable to execute advertisements efficiently at reasonable prices by participating in the weBloc ecosystem. In this process, the middlemen will find a role in need.

The key point of transition from traditional advertisement ecosystem into digital advertisement ecosystem is that users' participations in the digital market converted into economic impacts.

The blockchain-based advertising market also can be expanded through users' participations in the ecosystem and the economic value generated by their participation. The weBloc protocol consists of the advertising ecosystem based on blockchain, establishing the Exchange market that enables users to make transactions transparently with each other in the weBloc ecosystem.

The advertising ecosystem connected with the weBloc protocol will gradually evolve into a decentralized AD exchange structure. Unlike the existing advertising ecosystem where only advertisers led transactions, all participants can make mutual transactions in the decentralized AD Exchange.



## Technical



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# Technical Definition

## Selection of technologies

weBloc team believes that any activity participating in the growth of the advertising platform ecosystem should be rewarded. Believing that the platform fulfilling this belief would be blockchain platforms, ICON has been considered the most optimal platform pursuing the Interchain ecosystem among other various platforms.

weBloc project is set to establish a public blockchain based on the ICON project and form a Tokenized Advertising Alliance. To achieve the goals, ICON project's core technology loopchain and its smart contract features will be used for the development of the weBloc project.

## The Tokens of the weBloc platform

The weBloc platform consists of the following two tokens:

- **WEB**
- **WIP(weBloc, User Intention Power)**

WEB plays the role of the basic currency of the weBloc platform. The value of all tokens issued on the weBloc protocol will be evaluated on the basis of WEB. WEB can be purchased through the trade market or used as the payment method, defining the market value and the scale. It is possible to increase WIP or execute advertisements by using WEB.

WIP can be earned by swapping WEB or participating in activities contributing to the weBloc ecosystem. WIP hold by users can be swapped back to WEB under certain conditions. WIP is the platform token used in the ecosystem to maintain the scale of the ecosystem and raise the future value of itself as an independent token. Users can participate in the weBloc network by swapping WEB users retain into WIP and WIP will be provided to users according to the contribution level of users.

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## ICON & Loopchain

### Technical Definition

Bitcoin is using the distributed ledger system practically proving the trustworthiness of blockchain technologies. Blockchain technologies at the initial stage were focusing on developing virtual money like Bitcoin, leading to the emergence of various kinds of virtual money. However, virtual money was decided not to be implemented by actual financial institutions and failed to be used widely. It has been only used as a means of investment through private coin exchange markets.

In the meantime, Ethereum started providing an execution environment known as the smart contract based on blockchain technologies, making the conventional business sectors pay massive attention to blockchain technologies. With the smart contract technology, it has become possible to have transactions without the middleman. It has evolved blockchain technologies from a simple transaction ledger system into the application platform.

There have been many attempts to realize transactions without the middleman based on the public blockchain platforms such as Ethereum around the financial sector. However, the number of transactions per second (TPS) is only about 7 to 15. In addition, the transaction details must be disclosed on every node and other issues that required regulation have existed in the financial sector. Unfortunately, there are limits to implementing blockchain technologies.

Accordingly, the enterprise blockchain technology where only approved nodes can participate was emerged to overcome the limits of public blockchain technologies around the financial sector. Hyperledger Fabric and R3 Corda would be the exemplary cases for enterprise blockchain technologies expected to be applied to various areas including finance, public sectors, and supply-chain management.

The domain where the enterprise blockchain is applied has many requirements due to various tasks and requires governance, having a necessity for a blockchain technology that has various characteristics. This is how Loopchain has begun.

Loopchain has been developed to become a high-performing enterprise blockchain supporting the smart contract. It supports various customizing features in accordance with tasks and is linked with other independent blockchain technologies, making it possible to expand the blockchain network.

## Loopchain Features [https://github.com/theloopkr/Loopchain/blob/master/README\\_KR.md](https://github.com/theloopkr/Loopchain/blob/master/README_KR.md)

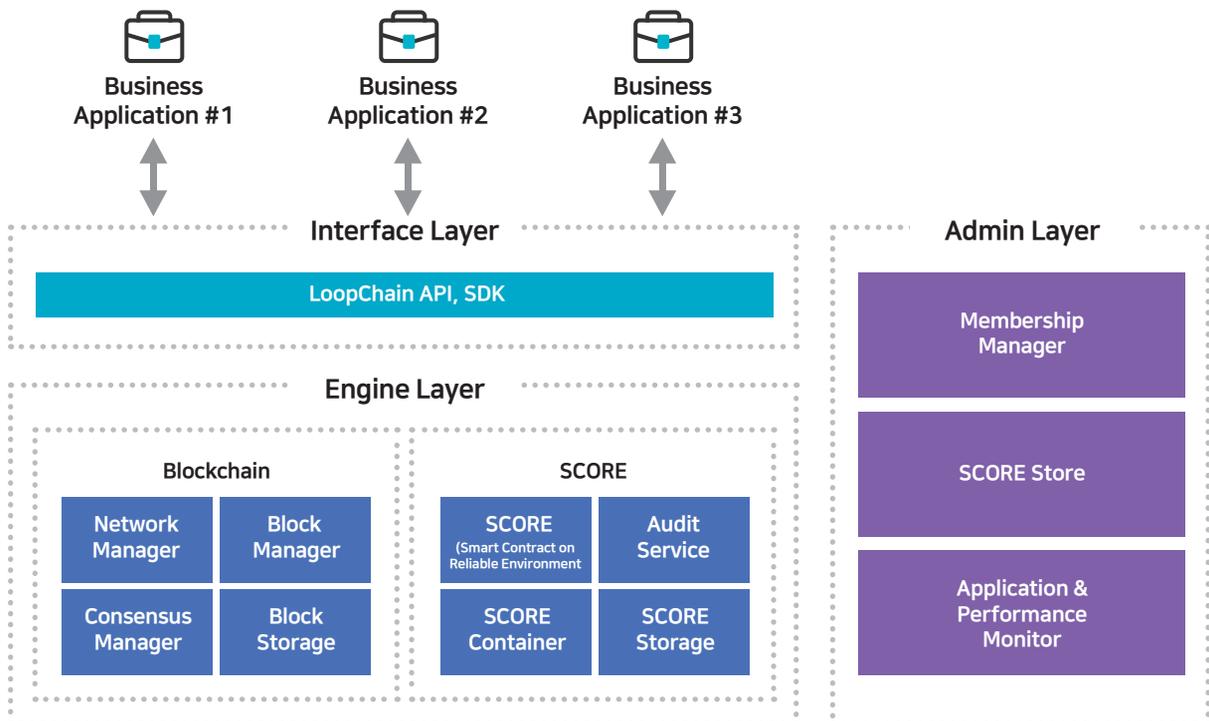
Technical  
Definition

**Consensus:** With LFT (Loop Fault Tolerance) that supports BFT (Byzantine Fault Tolerance), loopchain can provide a fast-consensus without separation. In addition, it can make a faster consensus by connecting trusted multiple nodes into a group. It is also possible to establish various consensus systems by deciding the number of votes for certain groups and nodes.

**SCORE:** SCORE refers to the smart contract feature supported by loopchain. Without a separated VM (Virtual Machine), it provides a high-performing smart contract feature that runs directly on the node-operating environment. SCORE is a smart contract having high productivity that can be easily coded and working as a separate process from the blockchain process, supporting other various tasks to develop.

**Multi Channel:** Multi-Channel refers to a feature supporting transaction requests, consensus, and smart contracts by establishing virtual networks called channels for each task inside an independent blockchain network. In one node, various channels are created for each task connected to the person in charge of the tasks. This guarantees data integrity for each channel and makes consensus. In addition, transaction data will be saved only for the transaction parties, helping them deal with various regulations.

**Tiered System:** When participating in the blockchain network, transaction details will be verified and secured through authentication process and PKI-based certification for each transaction. In addition, it supports a feature to give authority of auditing transaction details to certain nodes if necessary without participating in transaction.



## Detailed Explanation

Technical

### Consensus

Definition

Bitcoin, the first realization of blockchain, is designed to make consensus for the ledger of every bitcoin node on the global scale network using Proof of Work (POW) algorithm. However, the Proof of Work algorithm used in Bitcoin has problems: slow speed, inefficient use of energy, and partial separation on the network leading to low efficiency and poor performance to be used in the environment where the real-time payment is required. In order to solve this problem of conventional blockchain consensus algorithm, BFT (Byzantine Fault Tolerance) consensus algorithm that has been utilized for conventional distributed state machine duplication started to be used.

PBFT (Practical Byzantine Fault Tolerance) is one of the representative BFT consensus algorithms designed to make consensus by sharing the results of voting on effectiveness of data for data consensus.

Tendermint announced DPOS (Delegated Proof Of Stake) blockchain consensus algorithm, a modified version of PBFT algorithm. In addition, IBM Fabric is an enterprise private blockchain project and its version 0.6 chose PBFT as consensus algorithm. Its version 1.0 is a consensus algorithm for Orderer service trying to utilize SBFT (Simple Byzantine Fault Tolerance), a simpler version of PBFT consensus algorithm.

LFT (Loop Fault Tolerance) Algorithm is subset of DPOS (Delegated Proof-Of-Stake) Consensus Algorithm

Loopchain supports fast consensus without separation via LFT (Loop Fault Tolerance) that supports BFT (Byzantine Fault Tolerance). In addition, it can make a faster consensus by connecting trusted multiple nodes into a group. It is also possible to establish various consensus systems by deciding the number of votes for certain groups and nodes.

DApp (Decentralized Application)

DApp is abbreviation of Decentralized Application referring to programs or services working on blockchain platforms.

DApps work on platforms including iCON, Ethereum, EOS, and Qtum. Some of the platforms require a small amount of fees for the use of services.

Technical  
Definition

Verification: Users' basic information is encrypted so that advertisers or other users cannot see the data and only the key for verification is provided. As there is no recognition process for individuals, one person can have many verification keys. However, as the weBloc service is designed to give greater incentive for more participation with its characteristics, participants do not have merit to maintain many verification keys.

User rewards are designed to be given on the basis of weight algorithm (user reward pool - participation reward, reputation reward, bonus reward) come up with the calculation of previous participation number and reaction.

Under a certain score, weight value lower than 1 will be assigned. Therefore, a single verification key used again can get greater rewards compare to the use of many verification keys. (In some cases of advertising inventory or campaign, the number of participation can be limited.)

Fee: A minimum amount of fees can be charged to operate the weBloc service platform. When advertisers execute advertisements, a small amount of icx fees will be charged.

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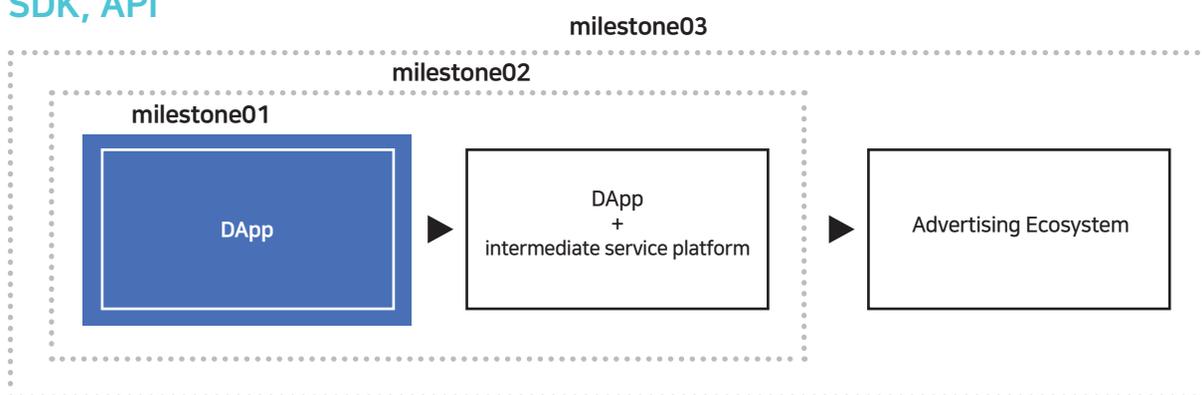
## The pursuit of service

- Technical Definition
1. Providing DApp and SDK/API for DApp
  2. DApp + Intermediate Service Platform
  3. Advertising Ecosystem

By providing SDK and API that can be used for DApps on the basis of ICX, advertisements set for DApp can be exposed. On the weBloc protocol, any advertiser or user can execute advertising.

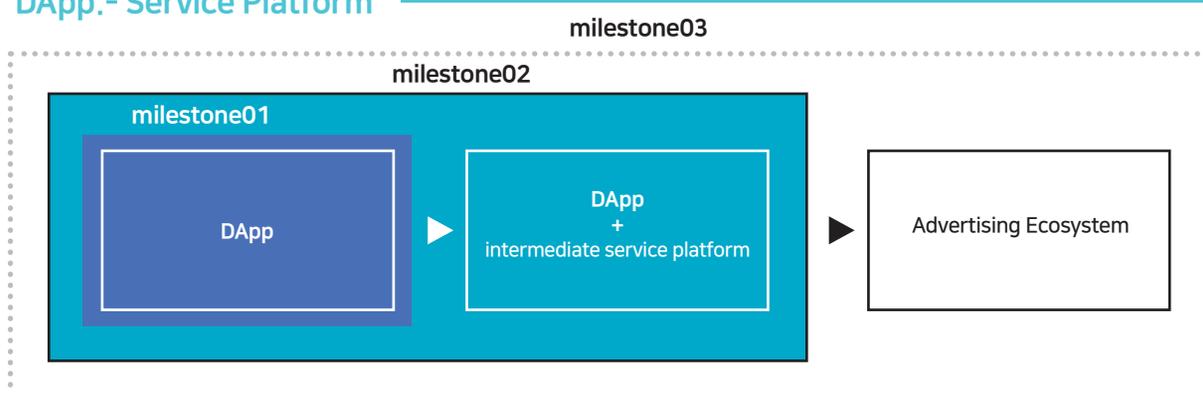
The function to swap WEB and WIP token against each other in the weBloc protocol. By using this function, advertisers and media can earn WIP token to execute advertisements or swap WIP into WEB. The REST API and SDK by environments where DApps of the weBloc protocol can be used will be provided to anyone. By providing advertising functions optimal for web/mobile environments, services and apps on vertical area can execute advertisements more efficiently.

### SDK, API



Intermediate Service Platform will be added to the conventional DApp environment. It has become possible to actively respond to users' preferences and recent activities, improving the efficiency per advertising unit-time. As more data of user activities are accumulated and the user pool gets bigger, more precise targeting is possible. Analysis and dashboard functions will be added or expanded to make this happen.

### DApp.- Service Platform



## The pursuit of service

Technical  
Definition

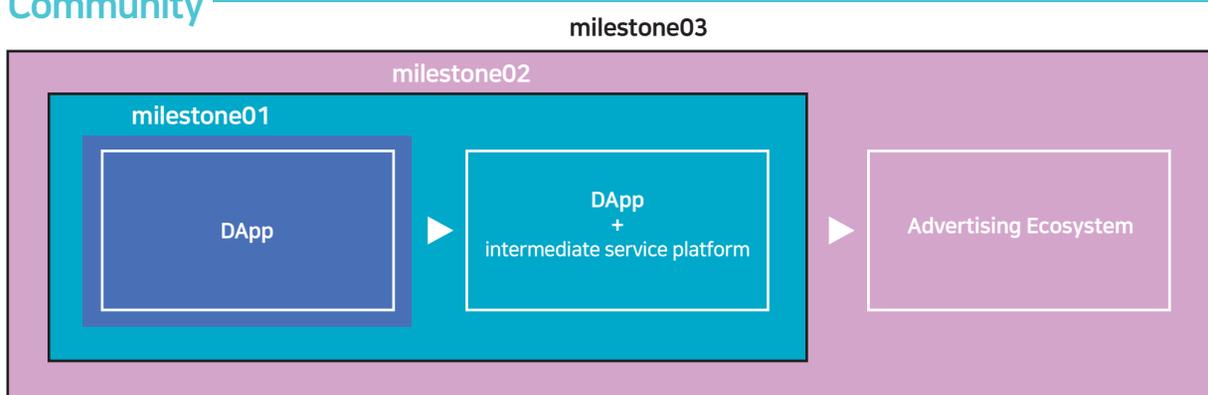
At this stage, the weBloc protocol will evolve into a place where users can actively participate unlike the conventional advertising ecosystem.

Users will be able to become advertisers themselves and suggest their opinions on the content of advertisements to advertisers directly in the weBloc platform. Advertisers can take users' needs into consideration and post their advertisements avoiding a certain group of users who may be against the content.

Eventually, the weBloc community will be established over the intermediate service platform for DApps. The weBloc community is designed to interact with other communities and aiming to be linked with other platforms over the ICON project. Not only the communities on the ICON blockchain but those on other blockchains can be linked with the weBloc community through the interchain technology in loopchain.

Connected to other communities, the target of advertising can be expanded to communities rather than limiting to the users.

## Community



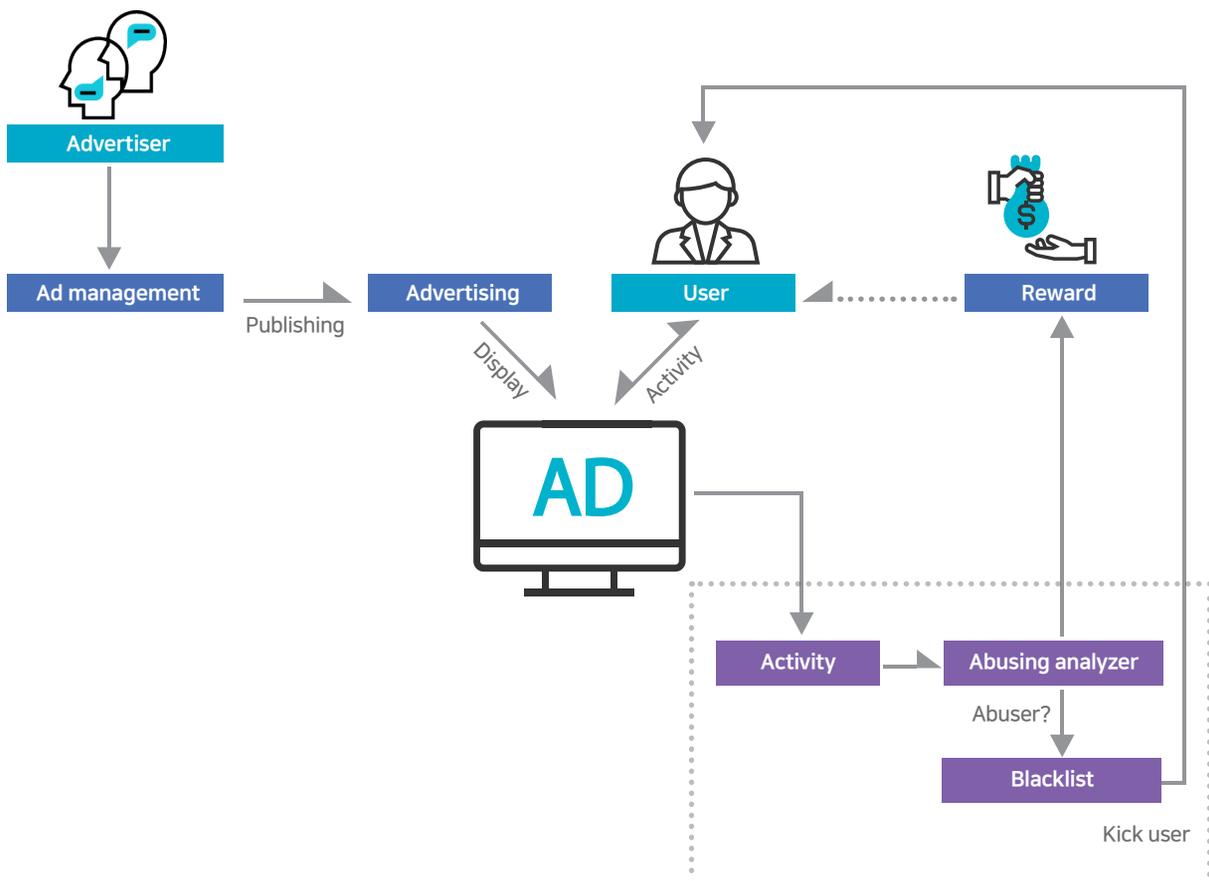
## Service Architecture

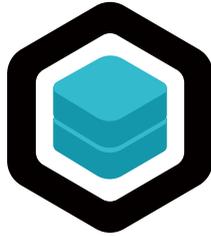
Technical  
Definition

Advertisers and users will interact with each other in the service environment of the weBloc protocol.

First, when advertisers make advertisements and execute them, the users set as the target for advertisements by advertisers will be exposed to the advertisements. At this moment, user activity defines the amount of rewards. In the period of evaluation, if the user activity contributes to the growth of the weBloc ecosystem, the rewards can be bigger. But if the activity undermines the ecosystem such as abusing activities, the rewards can be smaller significantly.

Such activities of users will be analyzed on the real-time basis through Activity Service and Abusing Analyzer Service. Based on the analyses, it can be decided to reduce the rewards or to put a certain user on the blacklist. This area will be the key of the weBloc protocol and its knowhow and the blockchain technology will be used as the key for trust rather than just an use of tokens. Static images and files for advertisements will be saved and managed in ipfs.





## Economy



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# Definition of Economy

In the current digital advertising ecosystem, the roles of media, advertisers, and users are clearly distinguished. Media want to put more advertisements on the services they are running to maximize their profits. To achieve this goal, media give competitions among service users for better spots their advertisements can be exposed first or they can get attention easily, causing rise in advertising fees.

However, advertisers want to find actual users who respond to their advertisements rather than paying the rising advertising fees due to competition. In the mean time, users want to get useful information for them rather than being exposed to irrelevant information.

The conventional digital advertising ecosystem has a structural limitation for media, advertisers, and users to have more benefit. It has a single-sided system where profits are allocated only to media and advertisers, making it difficult to give benefit to every player in the ecosystem.

Unlike advertisers and media have had certain profit models, users who play the key role in advertising profit do not have had a clear profit model with a rewarding system for their participation.

However, when we establish the digital advertising system on blockchain, all players including media, advertisers, and users can get greater profits than what they used to get in the conventional advertising system thanks to the tokens existing in the advertising ecosystem.

The weBloc team has belief that the team can innovate the conventional digital advertising ecosystem through the blockchain-based token economy.

weBloc is a new digital advertising system where all players including media, advertisers, and users can get profits through the token economy based on blockchain technologies.

If the players of advertising participate in the weBloc alliance system based on blockchain technologies, they can share information anytime they want in the decentralized system and get rewards in a fair manner. In addition, the characteristics of blockchain technologies including transparency and irreversibility can ensure the credibility of information interchange.

Unlike the conventional advertising market running through actual transaction, the weBloc ecosystem will generate greater values when more and more communities are participating in the weBloc economy. Starting with building a new economy in the conventional advertising ecosystem, the weBloc ecosystem will create a new place where anyone participating can share and exchange targeted information quickly and easily..

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# Token Economy

## weBloc Economy

The weBloc, a blockchain-based, new advertising alliance system, will give rewards to every player including advertisers, media, and users.

The weBloc, a blockchain-based, new advertising alliance system, will give rewards to every player including advertisers, media, and users. In particular, the weBloc economy system gives sufficient rewards for the users who participate in advertising to induce them to join the weBloc ecosystem. In the weBloc ecosystem, advertisers, media, and users will have different profit models.

## Advertisers

Advertisers must swap (Power Up) WEB with WIP (weBloc, user intention power) on 1:1 ratio in the weBloc ecosystem. WIP can be used in the advertising alliance. Unlike the conventional advertising system, WIP will be given to users as a participation reward so that the value can rise inside the weBloc ecosystem by active participation of advertisers, media, and users.

It is possible to provide information transparently to users and advertisers can provide efficient targeting advertisements on their budget.

## Media

Media is the channel to expose advertisements to users. As a reward for exposing advertisements to users, media can get WIP from advertisers. In addition, as a reward for participating in the weBloc ecosystem, media can get part of tokens of the weBloc ecosystem pool in proportion to the size of user participation.

## Users

Users, who play the key role in advertising profit, can get WIP as rewards for participation in the weBloc ecosystem. In addition to the participation rewards, users can get additional rewards according to the contribution level (Reputation) on advertisements of certain advertisers.

Lastly, users can get different amount of rewards based on the time they have stayed and the amount of token they have retained for a certain period of time in the weBloc ecosystem. It is because the retention of the tokens by users is considered to contribute to the weBloc ecosystem.

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## User Reward Pool

Users participating in the weBloc ecosystem can get WIP tokens as rewards that can be used in the weBloc ecosystem. Users can have 3 different ways to get rewards in the ecosystem: participation, reputation, and bonus. The amount of rewards described below has been converted 25% of the total user reward pool into 100%.

### **Participation rewards (60%)**

Users inside the weBloc ecosystem can get rewards by participating in various types of advertisements exposed to users. As active participation of users is a crucial part in the weBloc ecosystem, participants should take the biggest share of the total user reward pool.

### **Reputation rewards (30%)**

Reputation rewards the additional incentives that will be given to users who continuously contribute to the establishment of the fair and transparent weBloc ecosystem without abusing.

Reputation rewards will be given to the entire users in the weBloc network according to the number of participation and abusing last month on every first week of the month.

### **Bonus rewards (10%)**

The weBloc ecosystem is run by the WEB token having the exchange value and the WIP token to operate the service ecosystem. In order to raise the value of WEB tokens, active supply and demand of WIP tokens would be important and the action retaining WIP tokens by users can be regarded as a valuable action contributing to the weBloc ecosystem.

Consequently, users can get WIP tokens for participating in advertisements and if the users retain the tokens with swapping request for 13 weeks, 10% of the user reward pool will go to users as bonus rewards based on the amount of tokens they hold.

In the weBloc economy system, the user reward pool (20%) will be used only for the rewards on users. It would be possible to attract more users to participate in the weBloc ecosystem by giving sufficient amount of rewards. Users' transparent participation in advertisements enables advertisers to execute advertisements more efficiently with the optimal amount of budget, leading to creating a virtuous circle between users and advertisers in the weBloc ecosystem.

# Participation reward

The participation rewards for users will not be given to users when they participate in immediately. On the basis of the day users finish participating in advertisements, rewards will be provided throughout a week. For the first, second, and third day, rewards will not be given until finishing checking the abusing on the advertisements.

If any abusing case is found during the three days checking the abusing patterns, the certain users who participated in advertisements in the weBloc ecosystem will be immediately excluded from the reward targets.

And the abusing users will get penalty points on user levels in the weBloc ecosystem grade that affect the level of reputation rewards. 100% of abusing users' participation reward tokens will be reclaimed to the user reward pool and become the token provided for user reputation rewards.

$$\text{Participation reward token} = \sum_{d=4}^7 \text{Participation reward token} \times \frac{(8-d)}{10},$$

where  $4 \leq d \leq 7$

Users showing no signs of abusing will receive rewards gradually on the fourth date from the time users finish participating in advertisements: 40%, 30%, 20%, and 10% on every 24 hours.

# Reputation rewards

Reputation rewards for users will be distinguished by grades through 3 factors in the weBloc ecosystem.

Through the reputation reward system, we can give additional rewards to users by evaluating their contribution value that can help the weBloc ecosystem grow further.

Reputation rewards can promote transparent and active participation of users as the volume of the reputation rewards is 50% of participation rewards.

$$\begin{aligned} \text{Reputation Score} &= \text{Contribution weight} \times S.\text{Contribution} \\ &+ \text{Holding weight} \times S.\text{Holding} \\ &- \text{Abusing weight} \times S.\text{Abusing} \end{aligned}$$

$$\begin{aligned} \text{Contribution weight} : \text{Holding weight} : \text{Abusing weight} &= 2 : 1 : 2 \\ (\text{Contribution weight} + \text{Holding weight} + \text{Abusing weight}) &= 1 \end{aligned}$$

## Contribution value score

Contribution value score is the value calculated by standardizing the number of participation in advertisements for a month after removing the unit standard. Contribution value score can be the barometer of how much users are actively engaging in the weBloc ecosystem taking 40% of the total weight value.

$$S.\text{Contribution} = \frac{AD \text{ Participation Number} - E(AD \text{ Participation Number})}{\text{Var}(AD \text{ Participation Number})}$$

Reputation  
Rewards

**Retention value score**

Retention value score is the value calculated by standardizing the number of retained WIP tokens in the weBloc ecosystem for a month after removing the unit standard. Retention value score can be the barometer of how much the value of WIP is reliable in the weBloc platform taking 20% of the total weight value.

$$S.Holding = \frac{Retaining\ WIP\ Number - E(Retaining\ WIP\ Number)}{Var(Retaining\ WIP\ Number)}$$

**Abusing level score**

Abusing level score plays the most important role in designing user participation rewards. If users conduct abusing activities in participation advertising, participation reward tokens will be reclaimed and the level of reputation rewards in the weBloc ecosystem will be affected. Except the excessive abusing cases subject to exile from the weBloc ecosystem, all abusing users will get 2.5 points of abusing level score regardless of cases. Those participants without abusing will get 0 abusing level score.

$$S.Abusing = \begin{cases} 2.5, & Abusing\ User \\ 0, & Clean\ User \end{cases}$$

Through the standardization process, the range of contribution value score and retention value score will be  $-1 \leq score \leq 1$ . By multiplying the scores with weight values respectively, each will receive scores up to 1.

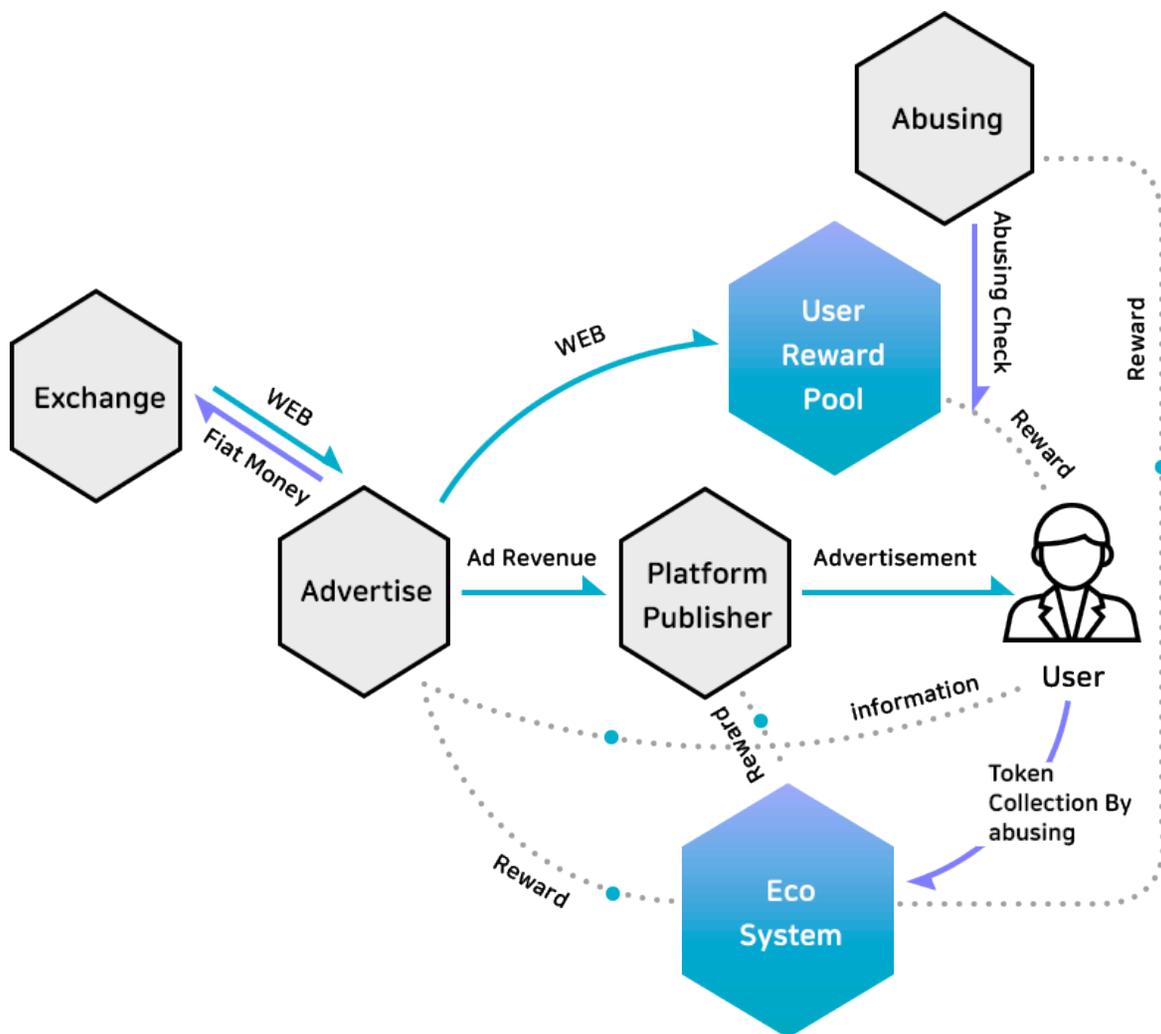
As a result, it is possible to make Reputation Score at the lowest level by assigning the value of  $Abusing\ weight \times S.Abusing = 1$ . to abusing users.

Grade	Percentage	Reputation Reward
1	1 ~ 5%	30%
2	5 ~ 20%	20%
3	20% ~ 50%	10%
4	50% ~ 80%	5%
5	80% ~ 100%	0%

# Bonus reward

The Bonus reward system helps the weBloc ecosystem keep the value of tokens stable. Bonus rewards will be provided to users who earned WIP tokens by participating in the weBloc ecosystem and never requested for swapping WIP to WEB for 13 weeks from the next day users received the participation rewards. Exactly 13 weeks later, 10% of the entire advertisement participation reward pool (60%) will be provided as additional rewards.

$$\text{Interest reward token} = \text{participation reward token} \times \frac{1}{10} \times \left\lfloor \frac{w}{13} \right\rfloor, \quad \text{where } 1 \leq w \leq 13$$



Structure of the weBloc ecosystem

# Ecosystem

Advertisers, media, and platforms participating in the weBloc ecosystem are important members of the weBloc protocol. Among various media and platforms forming the weBloc protocol, advertisers can find the best one that maximizes advertising impacts of their products or services and spend reasonable amount of budget for advertisements.

As media and platform play the mediator role helping advertisers and users exchange information, they can contribute to increase in the value of weBloc tokens significantly.

Likewise, the weBloc ecosystem will play the role of weBloc governance that keeps the ecosystem rich to encourage the members to make efforts to increase the value of weBloc while preventing the members from having negative impacts on the value of weBloc.

## Information Provider

Advertisers and media (platforms) play the role of promoting campaigns to encourage users to participate in advertisements or delivering necessary information to users. As a result, users looking for necessary information will participate in the weBloc ecosystem with receiving rewards. The rewards in the ecosystem will be also provided to the advertisers and media (platform) who deliver information necessary for users. Advertisers who have executed advertisements at reasonable prices will provide content with even better quality to users so that users can actively participate in the weBloc ecosystem. In addition, advertisers and media can get tokens as compensation for the user rewards provided by advertisers in the weBloc ecosystem when they successfully make a certain number of users participate in their advertisements.

## Users

Users can get rewards only from the user reward pool. However, if users conduct abusing activities while participating in advertisements or campaigns, they will be excluded from receiving rewards. Reward tokens reclaimed by abusing activities will not be burnt but redistributed to the teams developing and managing the ecosystem and abusing management programs at the ratio of 8:2. With these measures, it will be possible to give the compensation back to the advertisers and media (platforms) who had to spend unfair advertising fees due to abusing activities. The team dealing with abusing activities contributes to the transparent management of the weBloc ecosystem.

## Ecosystem

**Abusing prevention measure**

The weBloc ecosystem is the place where users and advertisers can participate and share information with high level of transparency and trustworthy.

Abusing activities of users undermining the transparency and trustworthy of the weBloc ecosystem are degrading the value of weBloc. Such actions will be regulated on the basis of abusing regulation rules inside the weBloc ecosystem. As a result, the weBloc ecosystem can evolve into a transparent and trustworthy advertising protocol.

Abusing regulation rules suggest different penalty standards to users according to the advertising types advertisers participate in (CPC, CPI, CPM, etc.). 80% of tokens reclaimed from abusing will be included into the ecosystem allocation portion, which takes 15% of the entire token allocation. The abusing regulation team can use the reclaimed token to prevent abusing in the weBloc ecosystem, separated from the existing token allocation.

**weBloc ecosystem maintenance**

It would be the most important thing for the weBloc ecosystem to raise the values of WEB and WIP tokens while maintaining and operating the weBloc ecosystem. The ecosystem is in charge of overall tasks from rewarding media and advertisers to punishing abusers.

The weBloc protocol can receive fees to keep the weBloc ecosystem transparent from weBloc participants.

The minimum costs for maintaining the ecosystem will be charged in WIP token and the corresponding tokens will be used for the maintenance purpose only.

---

# Value of weBloc

## Token Inflation

Token inflation rate is a crucial methods controlling the token issue amount to maintain the value of tokens in the weBloc ecosystem. 40% of the total token issue amount will be allocated through token sales while 20% for the user rewards pool and 15% for ecosystem. After the token issue, the initial inflation rate will converge to the inflation function with the logarithm of the ratio of 1%.

Token issue rate has a direct impact on the values of weBloc tokens in the weBloc ecosystem. The token inflation rates are inversely proportional to the number of participants in the weBloc ecosystem and time.

As the number of users in the weBloc ecosystem, the number of WIP tokens given to the user reward pool by advertisers can decrease. But the number of the total token issue is fixed, the value of each token can increase gradually. As a result, the token issue amount can decrease as the demand for token increases but the token value can surpass the expected value as the total issue amount is fixed in the weBloc ecosystem.

$$New\_weB = [ecosystem + user\ reward\ pool] \times Inflation\_rate$$

$$Inflation\_rate\ (\%) = Initial\_Inflation - \left[ \frac{U_t}{100,000} \right] \times 0.5 - \left[ \frac{t}{12} \right] \times 0.5$$

$$\sum_i New\_weB_i \leq 3,500,000,000$$

New token issue amount New\_weBloc implements the inflation rates in the user reward pool and total issue amount of the weBloc ecosystem. Inflation\_rate (%) is inversely proportional to the number of users and time. Therefore, when the number of users ( $U_t$ ) increases by 100,000 in the initial inflation (Initial\_Inflation), the inflation rate decreases by 0.5% in the form of Gaussian function. In every 12 months (t), the inflation rate decreases by 0.5%. In other words, every 1 year, the inflation rate will decrease by 0.5% each year in the form of Gaussian function. If the number of users increases as time goes, the inflation rates will continuously decrease converging to the ratio of 1%. The total token issue amount cannot exceed 3,500,000,000 tokens allocated for the user reward pool and the ecosystem.

Value of  
weBloc

### **WEB and WIP value swap**

Users can receive WIP tokens by participating in advertisements in the weBloc ecosystem.

Users can get additional rewards other than the WIP tokens received by participating in advertisements, according to the standard of user reward pool. Users also can request for swapping WIP to WEB tokens.

However, the swap from WIP to WEB tokens will be proceeded by every week evenly over 13 weeks. The swap will begin a week later since the request date and the swapping process cannot be stopped in the middle of process.

### **Future value of the weBloc ecosystem**

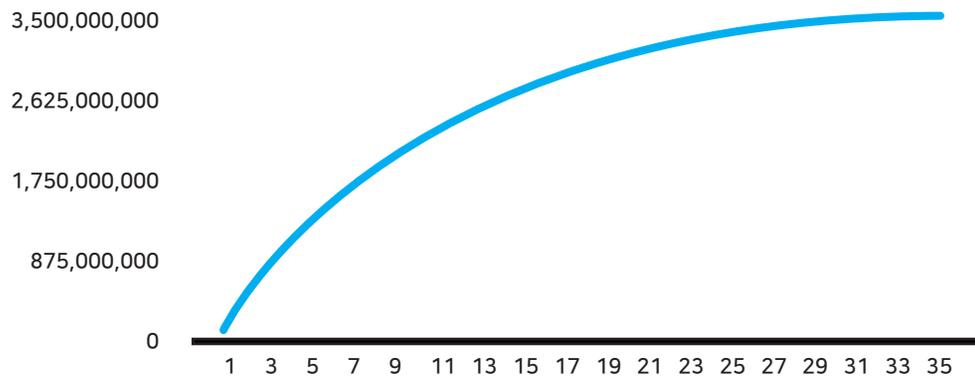
The initial ecosystem of weBloc will mainly consist of advertisers and users participating in advertisements but once the weBloc ecosystem successfully builds a stable structure, it would evolve into a structure where users are providing information and consuming information as well.

Users get rewarded with WIP tokens by participating in advertisements until now, the weBloc ecosystem will eventually evolve into a self-sustainable ecosystem where all users can share information using WIP as the medium and both provide and consume information according to their needs.

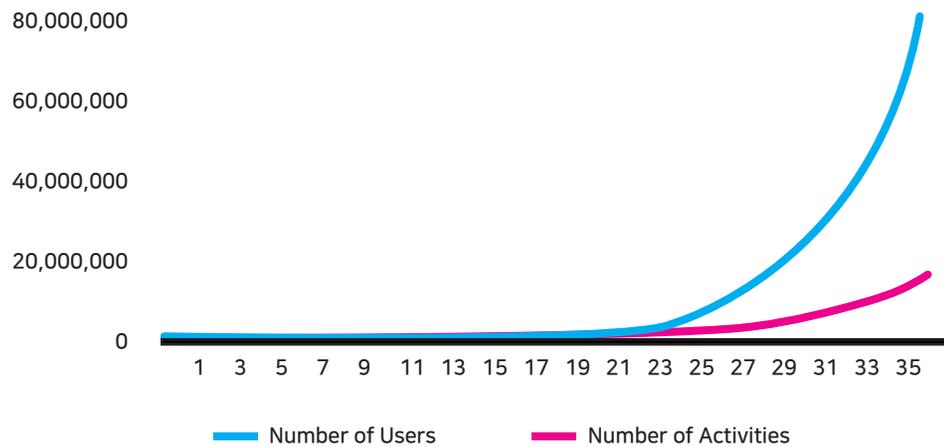
# Value Model

The number of participants in the webloc ecosystem will increase in proportion to time while the token issue amount of user reward pool and ecosystem. We will give relatively high rewards for initial participants for fast settlement. In fact, as the number of participants increases, the amount of token rewards for participants can decrease. However, as the total issue amount of WEB token is fixed, the value of WEB token can increase.

The number of cumulative issued weBloc tokens



The number of weBloc Protocol Users



**Value Model** The token issue amount and the token values in the weBloc ecosystem can change according to the rise or fall in user numbers. It is possible to confirm that the token issue amount and the token values change in accordance with the number of users through internal simulations.

**Token Issue Amount according to increase in user numbers (Total 350,000,000)**

Year	Year 1	Year 2	Year 3	Year 4	Year 5
WEB Issue Amount	1,872,500,000	472,500,000	420,000,000	420,000,000	315,000,000
Total Issue Amount	1,872,500,000	2,345,000,000	2,765,000,000	3,185,000,000	3,500,000,000
Number of Active Users	311,985	2,855,194	63,073,178	94,609,767	126,146,357

Year	Year 1	Year 2	Year 3	Year 4	Year 5
WEB Issue Amount	1,907,500,000	507,500,000	420,000,000	420,000,000	245,000,000
Total Issue Amount	1,907,500,000	2,415,000,000	2,835,000,000	3,255,000,000	3,500,000,000
Number of Active Users	278,887	1,725,435	19,825,236	29,737,854	39,650,472

# weBloc Allocation

## weBloc allocation

The total WEB token issue amount that consists of the weBloc ecosystem will be 10,000,000,000 (10 billion) and the allocation pool is as described below:

### Token Allocation

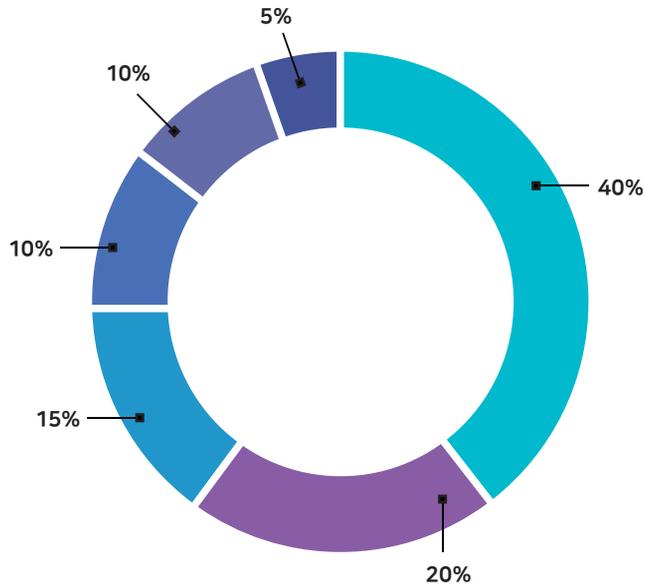
Groups	Token Amount (WEB)	Proportion
Token Sales	4,000,000,000	40%
User Rewards	2,000,000,000	20%
Ecosystem	1,500,000,000	15%
Team	1,000,000,000	10%
Corporate	1,000,000,000	10%
Marketing/Bounty	500,000,000	5%

User The user reward pool consists of participation rewards (60%), reputation rewards (30%), and bonus rewards (10%). If weBloc project fails to reach the Hardcap, unsold tokens will be allocated to the user reward pool and ecosystem in the ratio of 6:4.

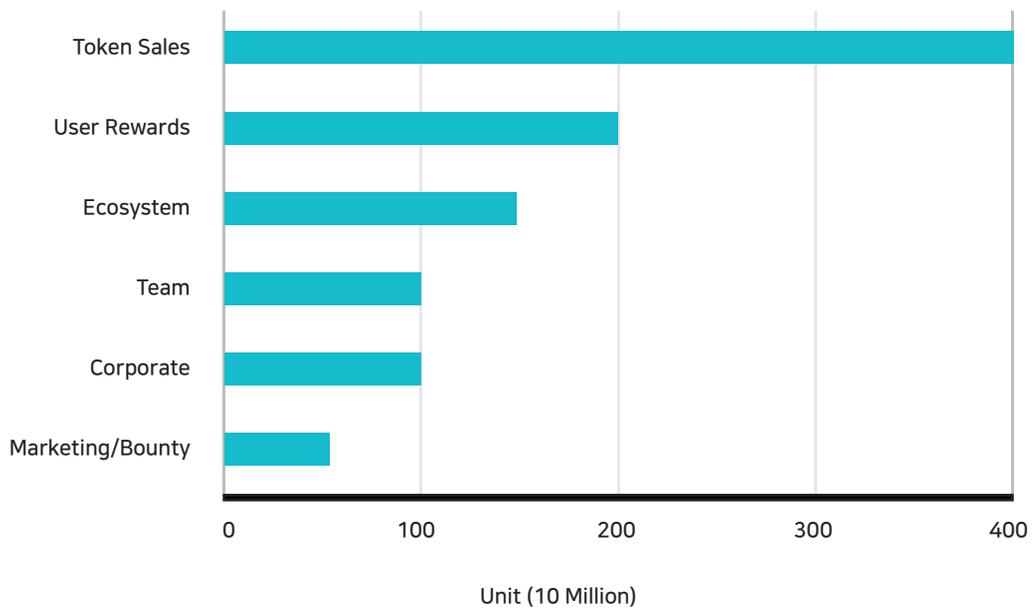
### Usage Plan

Token Sales	Token Amount (WEB)	Proportion
R&D	2,000,000,000	50%
Marketing	800,000,000	20%
Service	600,000,000	15%
Reserve	400,000,000	10%
Corporation Establishment	200,000,000	5%

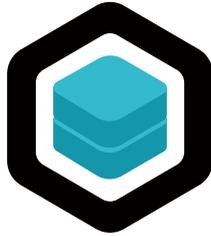
Token Allocation



■ Token Sales ■ User Rewards ■ Ecosystem ■ Team ■ Corporate ■ Marketing/Bounty



WEB tokens allocated to the team will be distributed by 25% for each 6 months over 2 year.



## Appendix



This Whitepaper is produced to introduce the blockchain-based advertising platform weBloc and its philosophy, business models, and so on. This document is not produced to recommend investment but to help users refer to the information. All content on the Whitepaper including the project conclusion, schedule, and performance described in the roadmap is not guaranteed. This Whitepaper can be modified according to change in the weBloc team policy or decisions made and any part related to the Whitepaper is not testified or guaranteed. The responsibility for the results (irrespective of profit and loss) of any activity including decision making referring to or using the Whitepaper completely lies on the person who made the decisions. The weBloc team does not take any responsibility for damage, loss, or any other liability of using this Whitepaper. This Whitepaper is not allowed to be copied, used, or released without the consent of the weBloc team and it is required to pay attention to confidentiality and security. This Whitepaper is meant to be used as a brief reference for the business plan and vision. The final content needs to be checked with the final version of the Whitepaper.

# Roadmap

	Schedule	Main Content	Description
<b>2018</b>	<b>Jun.</b>	WhitePaper Release	Sharing the direction and philosophy of the project weBloc
	<b>Sep.</b>	Pre-Sales Start	Fund raising with ICO
		Corporate Establishment	Plan to open a corporate in Dubai or Singapore
	<b>Dec.</b>	PoC : ICX Reward Application	Testing the application for rewards on user participation
Alliance 2018 Partner open		weBloc Alliance will be opened officially in 2018.	
<b>2019</b>	<b>Apr.</b>	Distributing mobile application SDKs (AOS)	Connecting media by distributing SDKs to the AOS targets
		Listing on the exchange market	Preparing and planning to be listing on the exchange market in April 2019
	<b>May.</b>	Distributing mobile application SDKs (iOS/WEB)	Connecting media by distributing SDKs to the iOS/WEB targets
	<b>Jun.</b>	Opening the advertiser center	Opening the admin for advertisers and agencies
		Opening the agency admin	
	<b>Jul.</b>	Opening the media center	Opening the admin for media
	<b>Nov.</b>	Extended application of advertising BM (Phase 1)	Extended application of advertising BM of CPC, CPI, and eCPM
	<b>Dec.</b>	Opening the Alliance for partners in 2019	Officially opening the Alliance in 2019
<b>2020</b>	<b>Jun.</b>	Developing User Intention Program (Beta)	Developing a new advertising service that can directly apply user intentions with the existing weBloc participants
	<b>Sep.</b>	weBloc : opening User Intention Program	Opening actual services in September after having preparation period in the first half of 2020
	<b>Dec.</b>	Opening the Alliance for partners in 2020	Officially opening the Alliance in 2020

# Advisors



## EK Song

### CEO of Capstone Partners

EK Song advisor graduated from SNU majoring in computational statistics and got the Master's degree at KAIST School of Computing majoring in AI. Had experiences at Samsung Advanced Institute of Technology, Samsung Electronics, Internet TF team at Samsung Chairman's office, etc. Currently working as the CEO of Capstone Partners. EK Song advisor evaluates the values of various startups and has had many experiences in investment. Currently supporting AD4th Insight in terms of investment and growth.



## KJ Eee

### ICON Foundation Council

KJ Lee advisor is Founder of Nomad Connection and CEO at DAYLI Intelligence. Nomad Connection is the company behind Zimly, a P2P media service with over 3 million users worldwide. KJ was previously software engineer at the SecureSoft team which developed South Korea's first firewall 'Suhoshin' in 1996. KJ holds a BS in Computer Science from from the Pohang University of Science and Technology (POSTECH). Currently supporting AD4th Insight in terms of investment, tech, and business.



## JH Kim

### ICON Foundation Council

JH KIM advisor majored in computer science and engineering at POSTECH University, and has worked in the field of information security for nearly 20 years. He has experience in developing patented applications such as PKI, authentication and security protocol and products applied to embedded environment to enterprise environment in finance, public, and private sector. He holds the CISA qualification and is currently the CEO of ICONLOOP, the blockchain specialized company. Currently supporting AD4th Insight in terms of blockchain technologies.



## HG Lee

### CEO of LINE Unchain

HG Lee advisor holds a BS in Computer Science from the Pohang University of Science and Technology (POSTECH). He had worked as ICON's tech director and board member of ICONLOOP covering Dapp development and investment. He is currently the CEO of Unchain, the joint venture between LINE and ICON, developing the token economy tech platform. Currently supporting AD4th Insight in terms of designing token economy, DApp technologies, and investment.

# Advisors



## Matthew Lee

### CEO of LINE Unblock

HW Lee advisor holds a BS in Economics from Sugang University and PH.D in Business from Hoseo University. Had many startup experiences at IDG Ventures Korea, Cognitive Investment, etc. After studying blockchain technologies, he co-founded AD4th Insight and declared to be a token economy architect. Currently working as the CEO of Unblock, LINE's blockchain project. Currently supporting AD4th Insight in terms of blockchain business, designing token economy, and investment.



## Jay Kim

### ICON Foundation Council

Jay Kim advisor holds BAs in Political Science and Philosophy from Korea University. As CPA at PwC Consulting for over 10 years, Jay was a specialist in strategy and IT operations for leading financial institutions. Jay is now CFO at ICONLOOP, a blockchain developer based in Seoul. Currently supporting AD4th Insight in terms of investment and finance.



## Hoon Lee

### ICON Foundation Council

Hoon Lee advisor was previously Senior Analyst in macroeconomic research and strategic planning at Woori Finance Research Institute, the corporate think-tank at South Korea's Woori Financial Group. Hoon holds a BS in Mechanical and Aerospace Engineering and Ph.D in Management of Technology from Seoul National University. Currently supporting AD4th Insight in terms of blockchain business.



## JH Juen

### Nomad Connection CEO

JH Juen advisor majored in computer science at POSTECH University and worked at Penta Security Systems, Mpeon Asia. Currently working as Nomad Connection CEO and supporting AD4th Insight in terms of blockchain technologies, business, and DApp development.



## SJ Hong

### Attorney at Law

SJ Hong majored in Mechanical Engineering(MS) and Psychology(MA) in Stanford University in CA, U.S., and graduated from Sungkyungwan University Law School(JD), Seoul, Korea.

SJ Hong, an attorneyBased on his experience in patent law, trademark, copyright, etc., he has been in charge of legal consulting for start-ups and foreign companies. He has been providing legal advice from the beginning of the blockchain-based industry in Korea, and recently he pays special attention to cryptocurrency, blockchain, and ICO-related legal advice. In addition,he has been shared legal advice and critical judgement about blockchain based issue through his blogs to contribute to create a healthy blockchain technology ecosystem.

# Advisors



## M Hong

### SCH Univ. Professor

M Hong advisor has a MA in computer science and PH.D in Bio informatics at Colorado University. Currently working as professor of computer software engineering at Soon Chun Hyang University and supporting AD4th Insight in terms of blockchain technologies and global blockchain campus project.



## Jung, Yoonsuh

### KOREA Univ. Associate Professor

Yoonsuh Jung advisor has MA and PH.D in Statistics at Ohio State University. Currently working as professor in Statistics at Korea University and supporting AD4th Insight in terms of blockchain token economy.



## Roi Nam

### CEO & Co-founder of AIRBLOC PROTOCOL

Roi Nam majored in Business Administration and graduated from College of Liberal Studies at Seoul National University. In 2015, he was selected as the National TOP 8 software developers of Software Maestro by the Ministry of Science, ICT and Future Planning in Korea. He is currently Co-Founder and CEO of ab180, a digital big data analytics company and leading a project AIRBLOC, a decentralized personal data protocol.



## Hyun Oh

### Managing Partner & Founder of Deblock

Advisor Hyun Oh has a BA majoring electrical and electronic engineering at Chung-Ang University. He had worked as a SW developer at the Mobile Communication Department of LG Electronics. After that, he had worked in mobile service development and new business development such as Cloud service, IM, and App Store since the early stage of smartphone era. At GS Shop, he worked as venture investment capitalist (VC) from operating accelerating programs to startup investment and fund investment inside and outside Korea. Working as professional VC on IT/HW/Mobile services, he had chances to learn various business models inside and outside the country and to acquire advanced technologies. As a professional VC who has deep understanding in development and business, he is currently working at AD4th Insight to support the company get investments. In addition, he is CEO of Dblock, ICON's professional investment corporation, consulting Blockchain business, Token Economy, and investment.

# Team Leader



## Ken Hong

### CEO

CEO Ken Hong has a BA majoring in computer science at Dankook University and worked at Naver as search AD business team leader experienced explosive growth in the digital advertising market. He co-founded Future Stream Networks, launched the mobile advertising service Cauly in Korea and listed the company. After the success in business, he moved on to Riot Games taking the executive director in business development having wide spectrum of experiences. At GS Shop, he worked as an investment consultant contributing to the expansion of the venture business ecosystem. After the 20 years of advertising, marketing, and venture investment, he currently works as CEO of blockchain marketing company AD4th Insight and a co-founder of DEBLOCK, investor in blockchain projects. Last but not least, he had been running "Just Start Investing" which introduced approximately 400 start-ups for the last 8 years. In these days, he is currently running YouTube channels about blockchain technologies including "Blockchain World", "Just Start Blockchain", "Looking into Blockchain", etc. leading the growth of the blockchain industry. In addition, he is hosting the most promising blockchain demo day - ICON, New kids on the Block(chain). He is doing his best to contribute to the expansion of sound blockchain business ecosystem in South Korea.



## James Baek

### CTO

CTO James Baek has a MA in engineering at Yonsei University and developed blog and map services at Naver. He has joined startup business twice as a co-founder. He moved onto kakao leading the development project of voice recognition library on Android, and developed and launched iOS app "Lazy", a recommendation service based on interests. After quitting kakao, he co-founded XHIFT as sharing service related to real estate. After this he joined AD4th Insight as CTO.

Based on 13 years of experience in development, he has developed his career as a full-stack developer proficient in web/server/mobile (iOS, Android). Currently leading the entire development team of AD4th Insight and weBloc project.

# Team Leader



## NamHyun Kim

### COO

COO NamHyun Kim was in charge of marketing strategy, media strategy, new business strategy and so on at Sport Chosun daily paper in the Chosun Media Group. He has many experiences in the field of traditional advertising-media ecosystem.

After that he moved to affiliated companies of Sport Chosun in digital area taking the role of COO at T-on Network and CEO at SYL Company. He has launched many apps and recorded 10 million downloads at many vertical categories such as sport, entertainment, fashion/beauty, game, and O2O and companies including Score Center, Celeb's pick, and Delivery 25. With such experiences and careers, he could have developed deep understanding in digital advertising-media industry in overall. Currently he has joined the blockchain business company AD4th Insight and taking in charge of operation of the organization. He has a BA in Psychology and Sociology.



## Sics We

### CSO

CSO We has a BA in Statistics at Korea University. After graduation, he worked at Samsung Card risk management team to develop FDS (Fraud Detecting System) analyzing the patterns of credit card usage and preventing abusing in advance. He had worked at Naver, NHN Entertainment, and kakao in charge of advertising data analysis, search advertising, mobile advertising platform development, and so on. He experienced overall tasks relevant to developing a digital advertising platform. In particular, he also has experienced startup business having a successful launch of the very first mobile advertising network Cauly. With the experiences of business process in large corporations and efficient work process in startups, he is currently working as the weBloc PM at AD4th Insight leading the project and making efforts to develop the No.1 advertising platform in Asia.



## Lena Kim

### CBO (Business consulting)

CBO Lena Kim graduated from the graduate school of business and has many work experiences including advertising business at Naver, marketing at online economic, and business and sales strategies. And she moved on to IBM GBS and Accenture to analyze Samsung and LG group's data, managing digital marketing projects. Up to the recent past, she had been leading the advertising business and developing marketing strategies at eBay Korea. With strong confidence in blockchain technologies, currently she is controlling blockchain business and consulting works at AD4th Insight.

# Team

## Platform Development

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### Jason Yang

Jason Yang has a BA in computer science and worked at Naver and Coupang for 12 years in total. At Naver, he has developed blog services and deep understanding and experiences about community services. He also experienced various TF in terms of structure enhancement and new projects. At Coupang, he stayed in the platform organization in charge of distribution, monitoring, provisioning, API Gateway service, etc. to apply Micro Service Architecture and to work on Cloud Migration. Current he is an assistant director of platform development at AD4th Insight taking responsibility for back-end management and platform development.

### Fritz Lee

Fritz Lee has a BA in Electricity and Electronic engineering and experiences working at GS Shop, KTH, KT, Coupang, Smart Media Contents, Roan Entertainment, etc. He has experienced in many fields including front-end and back-end in development, DevOps, mobile Application development. At Smart Media Contents, he worked as CTO and launched video clip services. At KT/KTH, he developed baas.io, an API service for developers. At GS Shop, he also developed suggestion-searching service. At Coupang, he worked at the platform tribe team in charge of distribution and service provisioning. Currently, he is working at AD4th Insight as Architect at platform development team.

## Advertising Development

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### Teddy Hong

Teddy Hong has a BA in Computer Science and has 10 years of experience at Shinsegae I&C and Naver brain pub. He graduated from the Bit Computer Academy JAVA master's course with high grades and co-worked at SKTelecom (telecommunication), Shinsegae International (import/customs, distribution), T-Store (Market service), etc. At Naver Brain pub, he worked as CTO and experienced in various field of work including planning, development, operation, mass-data processing at telecommunications company, and mobile App services. At FocusM Insight, he was in charge of AD-platform and various awards service leading service enhancement and stabilization. He has know-hows and experiences in the field of advertising tech. Currently, he is working at AD4th Insight as the head of advertising development.

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# Team

## Web Development

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### John Suh

John Suh has a BA in Computer Science and worked at WeMakeThePrice and NVISTA for 11 years. He has been making efforts to move agile and adopt to the fast-changing IT industry providing effective and better services from users' perspective. He is co-working with great colleagues at a great company to achieve his dreams. Currently, he is working at AD4th Insight as Currently, he is working at AD4th Insight as web develop team manger.

### Geony Lee

Geony Lee has a BA in Computer Science and has 5 years of work experiences in NVISTA, Shinsegae I&C, and other companies. He has many experiences in mobile application service development in public sectors in charge of front-end and back-end of development. He also participated in development of main services at Korea Land and Geospatial InformatiX Corporation, Korea Housing Finance Corporation, and CAMKO. He has been participating in various other projects for new service development, maintenance, advancement, etc. At NVISTA, he developed TIMON advertising services enhancing capability in advertising-related works. Currently, he is working at AD4th Insight as mobile team manager in charge of android application development.

## Mobile Development

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### SungWoo Park

SungWoo Park has a Master's degree in Computer Science and worked at miracom technology developing applications even before Smartphones were introduced. As smartphones were introduced, he has devoted himself into Android App development. He also co-founded Dreamplanner having experiences in App development, social commerce, VPN services, etc. After started working at Calyx Software, he could have had deep understanding in Android App development. Currently, he is working at AD4th Insight as Head of Android development.

### Zoe Kim

Zoe Kim has a BA in Business Information and worked as a back-end developer at Trudy Information Technology. At XhiFT, she was in charge of front-end development and android client development. Currently, she is working at AD4th Insight as mobile team manager in charge of iOS client development. "Starting a new thing is always challenging but I have got used to it. I believe that I can do more things as I make more efforts and learn more. It would be the beauty of development work. I want to be a happy developer, colleague, and person. Do what you love!"

## Publishing

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### Seungtae Nang

SeungTae Nang is a professional publisher with designer backgrounds. He has 10 years of work experiences at Twosun Lingle, Kwave, Neo Cyon, etc. Participating in co-founding startups he developed and launched interest-based SNS and participated in development of HANA bank renewal project and shopping mall development for Shinsegae Interent Duty-free shop and ISOI. Currently, he is working at AD4th Insight as Head of publishing in charge of UI development in PC-web and mobile-web.

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# Team

E.I.R

## Woong Kim / Partner

Woong Kim Partner has a BA in Physics from POSTECH and worked as a service planner specializing in App market/point at SKTelecom and SK Planet. He also worked at Lineplus as the leader of Advertising platform team. Currently, he is working as a partner of AD4th Insight and Deblock.

## Yongjoon Chung / Partner

Yongjoon Chung Partner has a BA in Psychology and Sociology from Yonsei University and worked at Naver and Samsung Electronics. He was also assigned to be a vice-president of kakao. He has planned various services and led projects for many products under different circumstances. He has experiences in planning and launching new services, securing many users and operating the services. Currently, he is working as a partner of AD4th Insight and Deblock.

Marketing & Strategic planning

## Jeff Jang

Jeff Jang majored in Industrial Engineering. Prior to joining AD4th Insight, he worked at GE & Samsung Medical Systems, Kakao, Mobile Face, FocusM and FocusM China. He published "Everything about App Marketing" to enlighten more people about mobile marketing. In addition, he founded several companies and involved in both mobile marketing activities and various app services. He is currently chairman of AD4th Insight based on his 22 years of advertising marketing experience in various industries.

## Jeter Park

Jeter Park has a BA in Sociology and has 12 years of work experience in various fields including online digital marketing, business planning, partnership, strategy building, etc. At Daum Communications, he experiences the online digital advertising from A to Z such as DA, SA, commerce advertising, local advertising, social commerce, etc. With the business experiences, he worked at portal business affiliate team. He was also in charge of service marketing strategy building for the growth of portal services, leading the User Leverage TF between kakao and Daum services and other various affiliate marketing tasks. Currently, he is working at AD4th Insight as assistant director of ICO marketing and marketing leader of the weBLoc project.

# Team

## DJ Kim

DJ Kim started his career in service operation at Empas and moved to Naver, having experiences in operation and strategy building of search advertising. He joined the Future Stream Networks supporting Cauly to attract investment, creating monthly reports, and taking responsibility of encouraging application managers to make profit for many years. After experiencing Exit, he participated in venture startup businesses twice and led the entire marketing team at the 10X10, commerce company specialized in design. He also has 15 years of experience in IT service in charge of various works including CRM. Currently, he is working at AD4th Insight as assistant director of service strategy and business development and marketing advisor as well.

## IY You

IY You has a BA in Economics and worked in service planning for lyric translation service of K-POP songs for Southeast Asia. She worked as a supporter of "Just Start Investment" Youtube media channel and the venture capital company Cognitive Investment. Currently, she is working at AD4th Insight as marketing manager.

## Edin Kang

Edin Kang has a BA in Statistics and worked at kako as a data analyst for applied statistic analysis including basic statistic analysis, time series analysis, mining analysis using data visualization (Tableau) and statistic analysis program (R). Currently he is working at AD4th Insight as business strategy manager.

## Lily Baek

Lily Baek has a BA in Information Communication Engineering and worked at the web agency RCtown as UI/UX planner and project manager. She moved to T-On Network and SYL company participating in various projects including CELEB's PICK, Score center, and Get it star application and she was in charge of UX/UI planning for application, running social networking sites, analyzing statistics of visitors, and user CS management. She has 5 years of experiences as project manager. Currently he is working at AD4th Insight as service development manager.

## Bisu Kim

Bisu Kim has a BA in Computer Software and has worked at FocusM. He developed and operated the application "Where to go?", which ranked at the top in the travel category, and made a contract with Korea-ASEAN center managing 10 countries in the ASEAN group for the application development program. As FocusM changed its direction to mobile marketing, he has experienced mobile marketing tasks from A to Z including initial advertising system development and building connection between media. Currently he is working at AD4th Insight as head of business development, making efforts to build a more effective advertising ecosystem by implementing blockchain into the conventional mobile advertising.

# Team

## Jace Yeom

Jace Yeom has a BA in Mobile Media and has worked at FocusM Insight as a manager operating and managing performance-based advertising services including non-incentive and incentive mobile advertising platform services such as NCPI, CPI, and CPE. She could have general understanding in the mobile advertising platform. Currently she is working at AD4th Insight as business development manager operating the mobile advertising platform for the clients of FocusM and supporting blockchain business marketing.

## JD Baik

JD Baik has a BA in Industrial Design and worked as content planner at Sim Entertainment, Yedang Entertainment, J one plus Entertainment, and AM Entertainment (SM C&C). He worked in the entertainment business as content planner, producer, and media promoter. With the faith in the future of blockchain, currently he is working at AD4th Insight as head of media promotion.

## Sunhye Jang

Sunhye Jang has a BA in visual design. She participated in the Samsung Note 4 project while working at UX/UI design agency D-WITH, learning about user experience and team project. She also worked at other companies including T-On Network and SYL company participating in various projects including CELEB's PICK and Score Center Live as UX/UI designer. Currently she is working at AD4th Insight as designer and participating in the weBloc project.

## Steve Cho

Steve Cho has a Master's degree in KOR-ENG Translation and Interpretation and have years of experience as professional simultaneous interpreter for international conferences. He has worked with many companies and projects including KHNP, TÜV Rheinland Group/TKIS, Korea government offices such as Ministry of Government Administration and Home Affairs, 500Startups Growth Hacking program held by GS Shop, Korea Cultural Heritage Foundation, KOICA, OECD Initial Teaching Program, International Association of Athletics Federations, Korea Institute of Construction Technology, Maeil Business Newspaper, Peru Tourism Authority, ChungAng University, etc.

Currently he is working at AD4th Insight as Head of Global Business in charge of communication and Sales in the weBloc project.

## EunKyung Jeon

EunKyung majored in tax accounting at Kyung-in Women's University. She had worked at Taxation Services Firm where she was in charge of reporting corporate tax, surtax, and general income tax. In addition, she had provided tax consultancy to clientele. Currently, she is in charge of both finance and accounting at AD4th Insight.

## Edward Kim

Edward majored in Business Administration with Marketing Concentration from Fisher College of Business at The Ohio State University. Prior to joining weBloc, he had worked as researcher at GfK Korea where he had involved in many marketing projects in various industries. Currently, he is the manager of Global Business Development team at AD4th Insight. Now he is in charge of global marketing and overseas business development for weBloc project.

# Team

## Woori Lee

Woori Lee graduated from University of California, Davis with a double degree in psychology and economics. As a business development manager at startups/ventures, she had collaborated with various companies. Now she is the manager of Global Business Development team at AD4th Insight. She is in charge of Global Business for weBloc project.

## Kyoungmin Nam

Kyoungmin graduated from Graduate School of International Management at Yonsei University with Master in International Business. She had worked as Account Planner at Cheil Worldwide and had been involved in a wide range of marketing communications including planning campaigns and establishing brand marketing for Amorepacific, Orion, OB Brewery, Gmarket, and Samsung Electronics. In addition, while she was working in the Communication Strategy Team at CJ E&M, she set up a strategy to expand overseas market for content platform. Prior to joining AD4th Insight, she has experienced in various industries including pharmaceuticals and cosmetics as a freelance marketing/brand strategy consultant. After she started to have interests in blockchain that connected with various industries, now she leads Business development/Consulting team at AD4th Insight as Assistant Director.

## Mincheol Jeon

Mincheol majored in Business Administration at Hanyang University. Before joining weBloc, he had co-founded Kidsground, an O2O platform, which provides activities for children as Chief Marketing Officer. After this, he had carried out Brand Marketing of diaper marketing department at Yuhan-Kimberly. He also was in charge of community management of "Just Start Investing". Currently, he is the Manager of Business Development and Marketing at AD4th Insight.

## Hyejoo Kim

Hyejoo Kim majored in Visual Design. She had worked at an advertising agency where she earned off-line design experience, participating in Samsung Electronics' POP Graphic. She had worked on the Nateon/Cymera GUI design and had gained experience on basic user experience. Prior to joining weBloc, she was in charge of Marketing/UI design at 10x10 (Ten By Ten). Now she is Head of Design team of AD4th Insight.

## Jihyeon An

Jihyeon An majored in Communication Design at Hongik University. She had gained basic experiences in web design by working at online shopping mall. Before joining weBloc, she had gained design experience related to both marketing and online at 10x10 (Ten By Ten). Now she is in charge of Design at AD4th Insight.

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# Team

## Elise shin

Elise leads investor relations for weBloc as Head of Business Strategy. Before joining weBloc, she had co-founded a data analytics company which received \$400,000 in seed-round funding from Kakao Ventures, GS Shop and D.Camp, top early-stage VCs in Korea. In her role as co-founder and product manager, she played a key role in leading business and product development. Prior to founding her own company, she served as managing director of a top global education venture. Elise graduated from Yale University with a double degree in cognitive science and economics.

## Changyong Park

Changyong Park majored in Business Administration at Kyonggi University where he gained fundamental HR knowledge. Upon graduating from college, He had work for a subsidiary of Japanese game company in Korea where he was in charge of both general affair and HR. Prior to joining weBloc, he had been in charge of HR management and planning at a subsidiary of Etoos education. Currently, he is in charge of general HR as the Manager of People team at AD4th Insight.

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# Investors

	 CAPSTONE	
 대성창업투자(주)	 Goldenax	 FocusM China

# Partners

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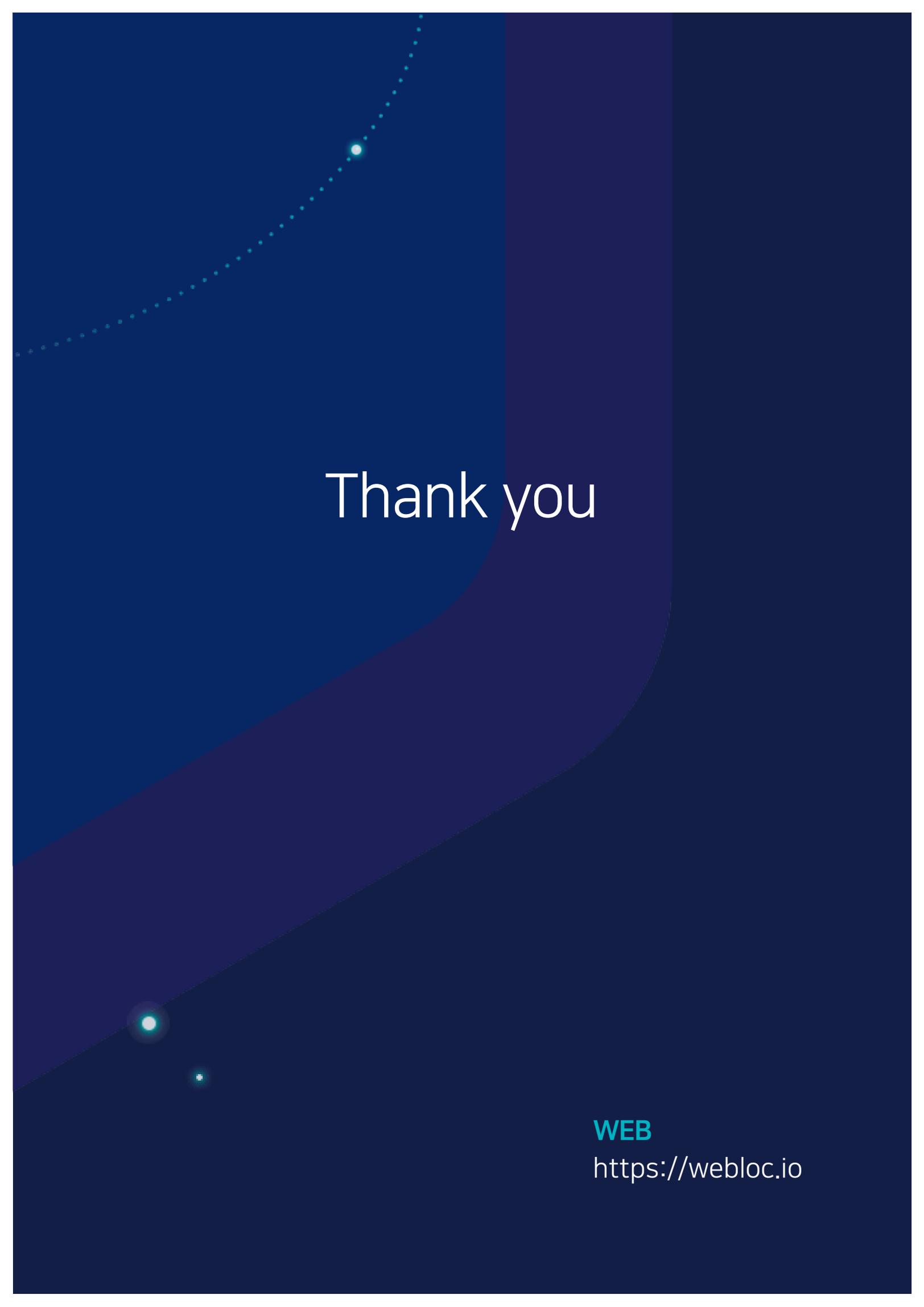
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Thank you

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