# The Largest News and Information Platform Based on Blockchain in Southeast Asia

# White Paper

V1.0

Content

# Summary :

Berita Saku is an excellent local information app and the first kind of information product based on blockchain technology in Indonesia. The product mainly provides users with news and interesting information. In addition, users will be rewarded with certain advertisements when reading or sharing it. We are committed to breaking the monopolistic mode of traditional Internet, fully respecting the value of users' contribution. There is a personalized recommendation module with accurate algorithm in the system, which is able to realize precise recommendation for users, gathering current news, entertainment gossip, funny and humorous vide, etc, and   and recommending fun, interesting and practical APP for users in real time.At the same time, users can make money by watching the news, beacuse various ways of making money and claiming a prize are provided for the users, making each reading more meaningful and valuable.

With the advent of the blockchain era, this disruptive technology will revolutionize our lives. Berita Saku r&d team is an innovative team which specializes in Internet product development. Based on Ethereum technology, Berita Saku will issue the ERC20 contract token, UVT (User Value Token). As an important medium in the ecological construction of Berita Saku, UVT will connect advertisers, content creaters and ordinary

users, promote every parties to complete the ecological system of Berita Saku, so that the Berita Saku ecology will keep developing and the personal interests will maximize. Ultimately, Berita Saku will become a decentralized news platform which is self-driven, self-organizing and self-optimizing.

# 1 Design Background

## 1.1 Industry Background

Over the past few years, active users and the creators and disseminators of quality content have served social networks like Facebook, Twitter and Reddit and UGC (User Generated content, bringing in huge volumes of traffic and tens of billions of dollars in profits. However, users of these content do not have full control over the content they create, nor do they own full benefits.

Facebook, for example, is a technology company with a market capitalisation of more than $500 billion and the world's fifth largest company by market capitalisation, but the wealth belongs to Facebook's share holders and has nothing to do with ordinary users.

Two billion users form a global social network by focusing on each other.When a user browse the latest updates of friends or read their subscription every day, $36 billion worth of advertising appear in the user's private screen, while no user can share any earnings.

Content creators will publish their works and accumulate fans through Facebook's personal homepage. A large amount of literature, music, video, games and other content will emerge and transmit in social networks. However, Facebook is only using content for commercial monetization, without providing any financial support or return to the

authors;

Forwarding and sharing of users are the filter and transmission channel of content, filtrating the premium content from the vast amounts of information for more peopleto read. However, just like the content creators on Facebook, the value generated by the user's forwarding and sharing cannot appear.

If Facebook is regarded as an economic entity, all users are free to input value to the economy, but the benifit only belongs to shareholders of Facebook.
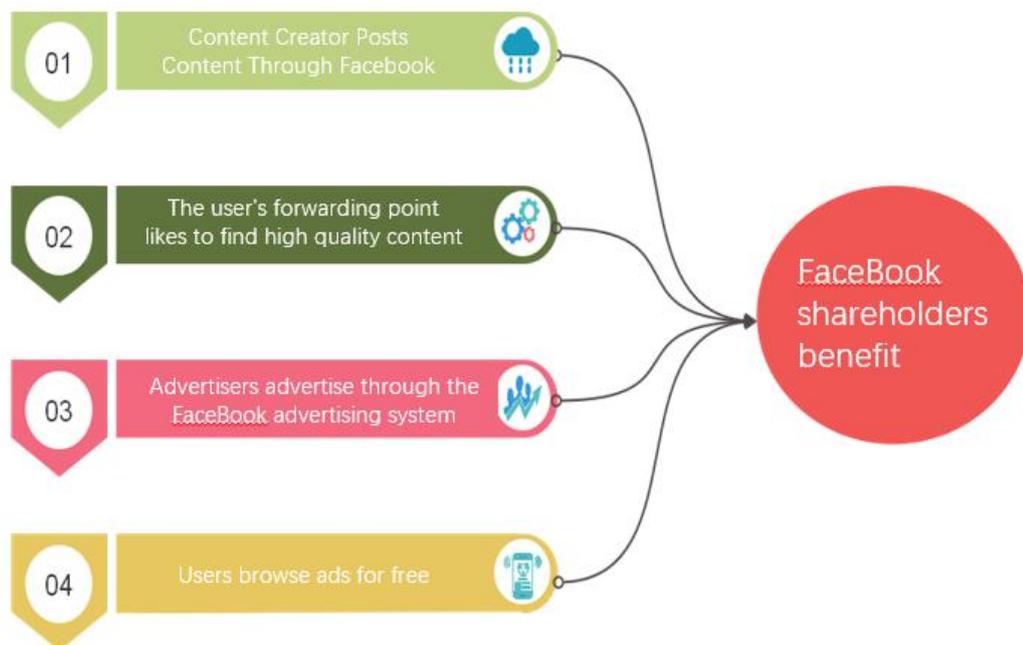


## 1.2 Demands and Pain Spots

We believe, based on the advantages of blockchain technology like

decentralization, open accounts and incorruption, it is able to greatly reduce the cost of trust in social economic activities, reconstruct all the economic organization form, and bring subversive revolution to finance and science and technology industry. However, the industrial chain of the real economy is very long in the society, and the history is long and the stakeholders are numerous, thus, the wide use of blockchain technology will be an extremely long process.

The UGC platform is a network reflection of real society with all the social attributes of human being. If the content creators are considered as producers, the content of the reader as consumers, the UGC platform would be a typical market supply and demand model, and an excellent scenario for large-scale applications of blockchain technology.

In the traditional UGC platform, the user outputs the value for free and the platform enjoys all the benefit. Content creators hope to show their value by sharing their high quality content, many of which are excellent and professional. However, in the existing centralized UGC platform, due to the lack of effective and incentive mechanism, when the platform develops to its later stage, the traffic flows is partial to the well-known verified accounts, while the new members of platform can hardly have a chance to display themselves. The ultimate means of motivating a content creator to serve long term lies in benefit. If content creators cannot get benefits on the platform, there is no power for them

to output contents.

If ordinary users can obtain incentives of the platform through foward, sharing and clicking the like button, this mechanism will arouse the enthusiasm of the ordinary user to create premium content better and faster, maximizing the transmission. Besides, the user will have the right of screen gain and data gain, which is the unrealized function of the current UGC platform.

For Berita Saku ecology, advertisers is an essential part. They have the right of advertising push through paying the Token to platform, which is a one of the main resources for ordinary users to transfer Token to legal currency. The advertiser can also make accurate putting to the user through the advertisement platform in the ecology, while they should pay for it.

## 1.3 Mission and Vision of Berita Saku

Blockchain is a decentralized value network. Besides plenty of innovation in the aspect of content evaluation and distribution of rights and interests, Berita Saku will not only build a platform for the verbal content, but also a decentralized ecosystem for contributing comments and allocating rights and interests of the content production.

Berita Saku is a decentralized news platform made up of content creators, users and advertisers. Through the incentive mechanism with

token, it will make good content creators stand out and get a matchful returns, let the creators without creating ability have no space for living and let users who are good at discovering great content have rich reward, so that advertisers are also free to customize display advertising and advertising costs, finally the platform will form healthy value of ecosystem. Advertising system can greatly promote the liquidity of token in Berita Saku ecology, advertisers can take advantage of the advertising platform to promote their goods and services, while the platform builder will also benefit from the advertising. In the medium-term development plan, the Berita Saku platform will provide a self-service advertising system for advertisers.

# 2 Solution
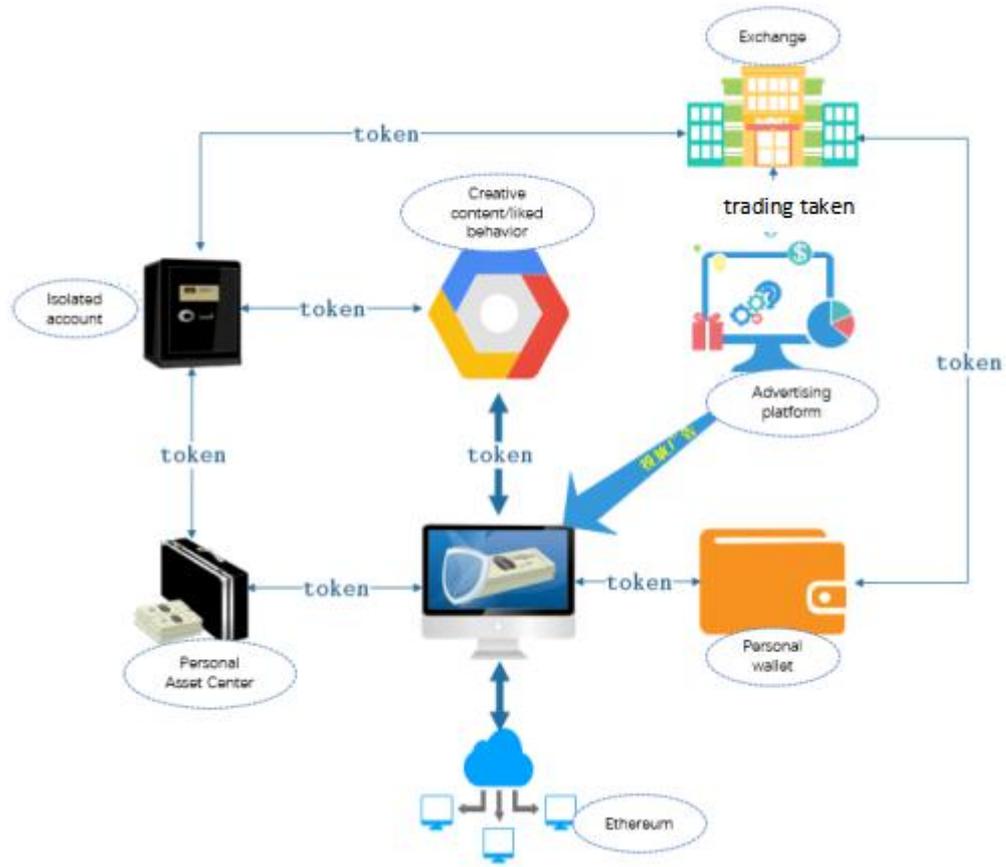


## 2.1 What is Berita Saku

According to data from statista, the online digital advertising market of Indonesia in 2018 reached $21.38 billion, and it is expected to maintain a surprisingly high growth rate over the next few years. With excellent products and efficient service, Berita Saku will occupy

the large enough market share to gain abundant advertising revenue, most of which will be assigned to content creators and users through unique incentive mechanism in Berita Saku. The products are mainly to provide users with news and interesting information, in addition, the users who read or share products will get some reward, breaking the traditional monopoly pattern and fully respecting the contribution valueof users. The platform has already had 5 million registered users within half a year, and has already started to get rich advertising revenue. In the future, Berita Saku will focus on the development of users and smart advertising and encourage original authors to enter and establish a self-media system. It is planned to complete the target of 20 million users and 10,000 authors in Q4 of 2019, and the platform will become the largest information client-side in Indonesia.

The design of Berita Saku has learned from various Internet news products and information platforms, including all kinds of blockchain and non-blockchain high quality information platform like Yahoo News Digest, Instapaper, StackOverflow, Steemit, etc. Starting from the actual needs o f users, it respectively sets up the content of the video, funny pictures, jokes, and so on. Berita Saku's native token (UVT) system encourages users to discover high-quality content and to monetize high-value content and promote value delivery and

appreciation.

Berita Saku has digged the most popular content creators through the system algorithm, and ensures that it will not do evil through the token incentive mechanism, nor reducing the content quality to push more advertising information. Any contribution of the members carried out on the platform have equal opportunities to be found, at the same time, any discovery and excavation of its users also can get the token profits, prompting the benign interaction and development platform.

## 2.2 **Composition of Berita Saku**

## 2.2.1Homepage Information Aggregation

Home page provides popular, entertainment, lifestyle, health and other content sections. As the basis function of Berita Saku, this part is designed to let users quickly get the latest and coolest information, which will be recommonded according to users' browse records, residence time, clicking the like button, etc.
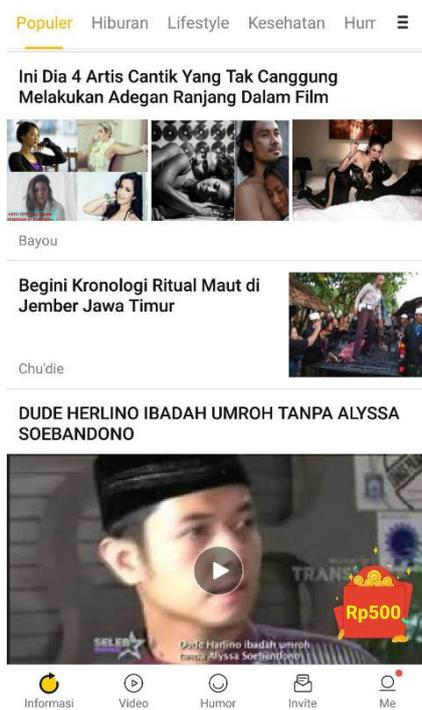
## 2.2.2 Video Content Aggregation

Video is the most popular form of expression.Compared with the other three forms of text, picture and audio, video is more diversified and gives people more sensory experience, which can drive the audience's mood. This aggregation page uses crawler technology to grab the coolest video on the network, and makes intelligent recommendation based on users' browsing habits.

## 2.2.3 Funny Channel

## 2.2.4 User Invitation Page



## 2.2.5 Personal Information Page
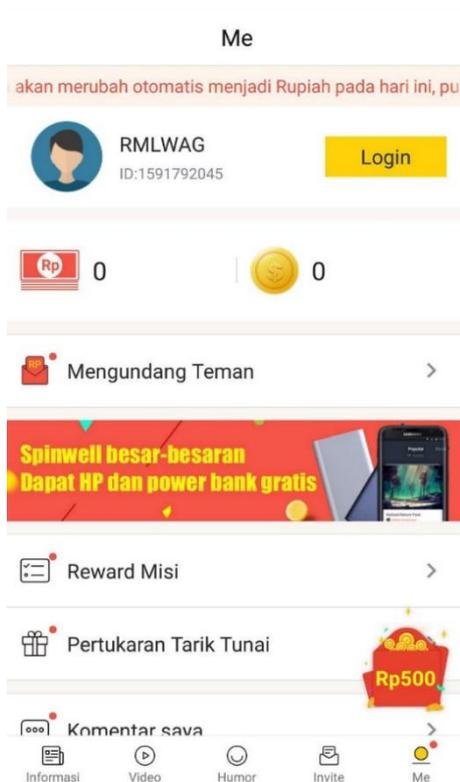
# 3  System Logic

## 3.1 Overall Framework of System
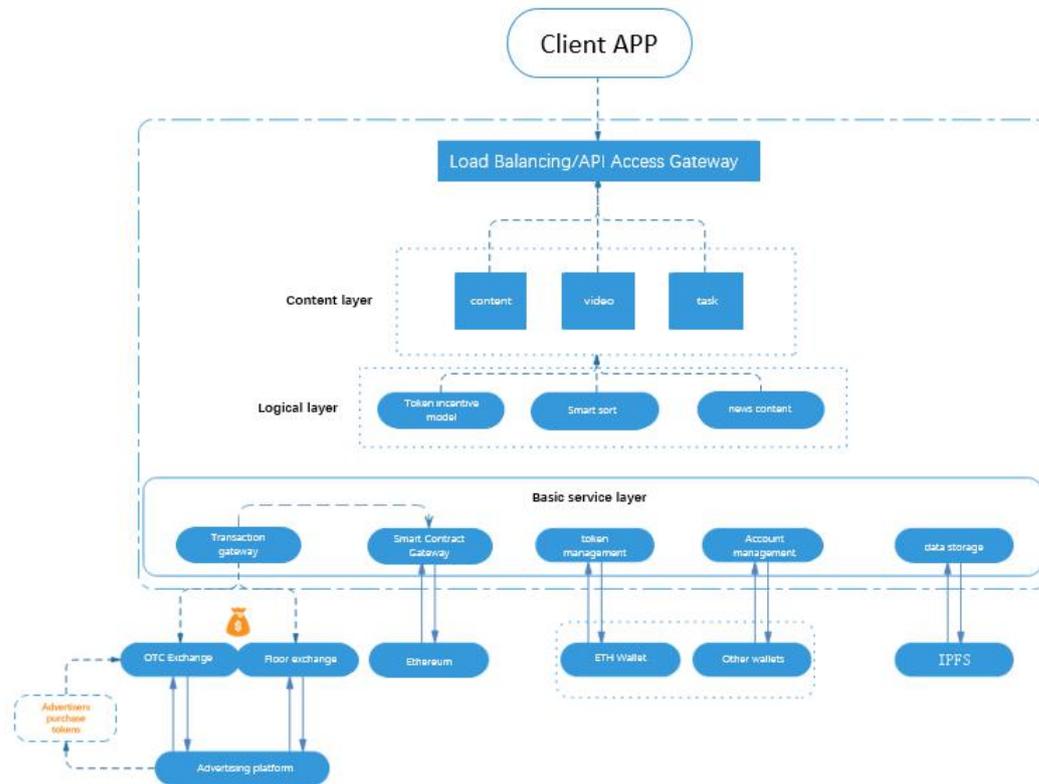


The overall framework of the system adopts a micro-service and SOA architecture, whose basic module is user account, IPFS gateway, smart contract gateway, etc. The business logic layer is crawler, intelligent algorithm recommendation and token incentive model, and the upper layer is the business function module such as news and content, video, invitation task and so on.

## 3.2 Excitation Mechanism

Our definition of motivation mainly includes the following activities: posting, commenting, clicking the like button, clicking the dislike button, and read the paid advertisement, etc. The user will make the following formula according to the following formula:

1）Publish an article

We define that, after the content creator publish a piece of content, the number of tokens that can be obtained through this content is UVT_COUNT,and the number of comment is NA, the number of clicking the like button is NV, and the number of clicking the dislike button is ND, so that the number of tokens obtained by the end user through the issue is:

$$UVT\_COUNT = M1 * \log\left(\frac{NV + KQ}{ND + KQ}\right) + M2 * \log NA + MQ$$

According to the formula, positive earnings can be obtained only after the content has received several replies and likes. And with the increase of the number of comments and likes, the token reward growth will be smaller and smaller, avoiding single content getting huge returns due to network effects and preventing the loss of huge token. Assuming

the number of answers is constant, the token reward that the user can

obtain based on a content is shown in the diagram below:
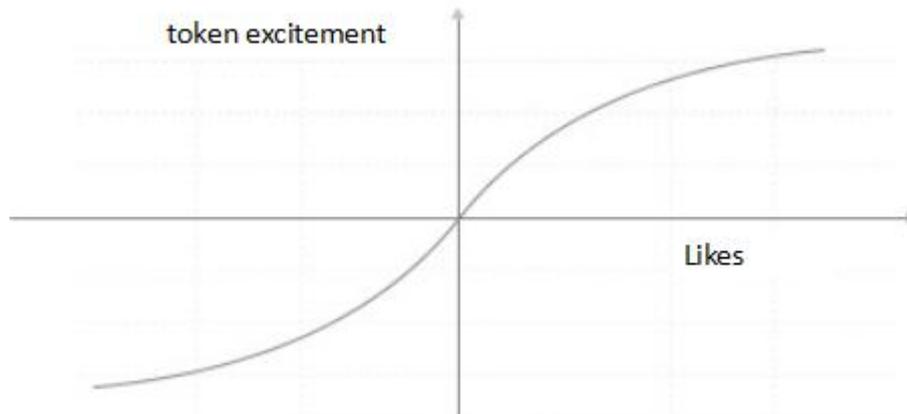


2）Comment the content

We define that, after a user comment on an article, the number of

tokens that can be obtained through this comment is UVT_V, the number

of clicking like to the comment is NV while the number of dislikes is ND.

The number of tokens obtained by the end user through this comment

is:

$$\text{UVT}_V = M * \log\left(\frac{NV + KA}{ND + KA}\right) + MA$$

According to this formula, the user comment itself does not consume

token, and if the number of likes is larger than the dislikes, the user will

gain positive benefit, otherwise the token will be lost. Similarly, as the

number of likes and dislikes increases, the magnitude of the token

increase or loss will gradually decrease, so as to prevent users from

getting or losing too many tokens at once. The relation of between the rewards of users commentting on an article and the number of likes or dislike is similar to the upper figure. .

3）Clicking the like or dislike button

We define that the number of tokens that a user can obtain by a clikcing like button as UVTV, assuming that the user is the first one to clikc, and the total number of likes is N.

$$UVTV = \left( \frac{M \ * \ \log{(N + KV)}}{i} \right) + MV$$

According to the formula, in the case of the total likes number is certain, the more tokens the user click, the more token he will get, and vice verse. The order of clikcing the like button has the following relationship with the number of tokens:

Token reward

Like the order
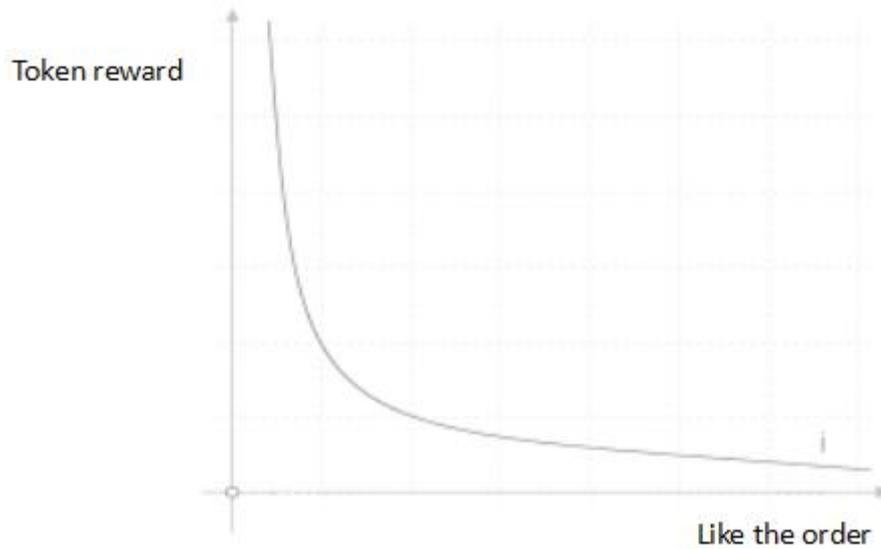
In the case of constant likes, the more people click the like, the more tokens they will get; after that, the fewer people the people click the like, the fewer token interest they get, and the following relationship between the number of clicking the like and the token is presented as follows:



Token reward

Subsequent points of praise
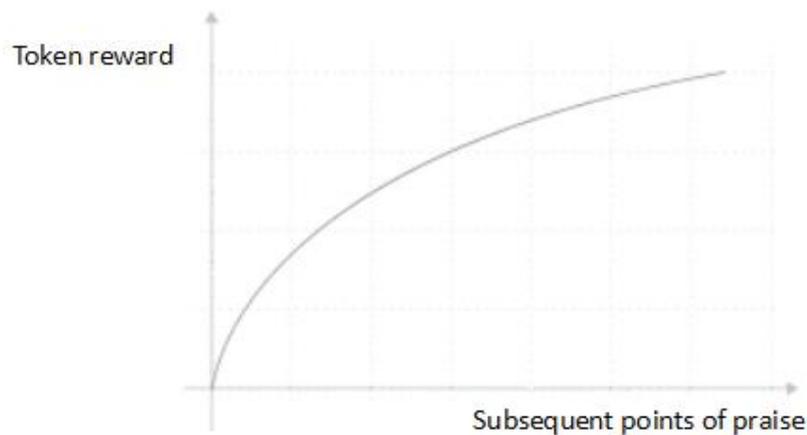
The rule of clicking the dislike button is similar to likes, but the system will automatically reduce the sort of content or comments that have a lot of dislike, so there will be not too much dislike. In this way, the incentive effect that people click the dislike will be lower than the

incentive effect of likes on the whole. At the same time, the incentive effect of the whole system is still positive.

In the above formula, variables starting with M will be dynamically adjusted with the change of token amount in the reward pool.

## 3.3 Advertising Backstage

Indonesia's online advertising market has grown dramatically over the past five years, with online AD spending expected to grow at a compound annual rate of 22.9% between 2017 and 2021. Berita Saku, as a well-known news and information platform in Indonesia, will be favored by a large number of advertisers. The launch of the advertising platform is an important link to improve the ecology of Berita Saku. The advertiser can buy the token of the user to purchase the advertisement placement and get the opportunity to push the advertisement. What's more, the advertiser can set up paid ads for specific users on the platform for more effective promotion.

## 3.4 Floor Exchange

In order to facilitate the flow of user's token, the Berita Saku platform will release the exchange function at the appropriate time. Users and users, advertisers and users are free to carry out token transactions

within the exchange. Floor exchange is the medium of token circulation, which is an important part of token value realization.

# 4 Ecological Construction and Token Issuance Plan

UVT is an ERC20 contract token based on the Ethereum technology. UVT will serve as an important value transmission medium in Berita Saku's ecological construction, and serve as the functional currency of the value information in Berita Saku platform.

UVT will greatly promote the value of Berita Saku platform, and UVT will carry out value flow through the exchange platform or off-site trading platform to promote the development of Berita Saku ecology.At the same time, at the appropriate time, Berita Saku will buy back UVT token and destroy up to 50% of UVT.Guarantee the virtuous circle development of Berita Saku platform token.

The total amount of UVT is 10 billion, of which 40% is for content creators and users, 20% for investors, 20% for community ecological construction and 20% for founding teams.

Token distribution

- Content creators and users
- Investors
- Community ecological construction
- Founding team
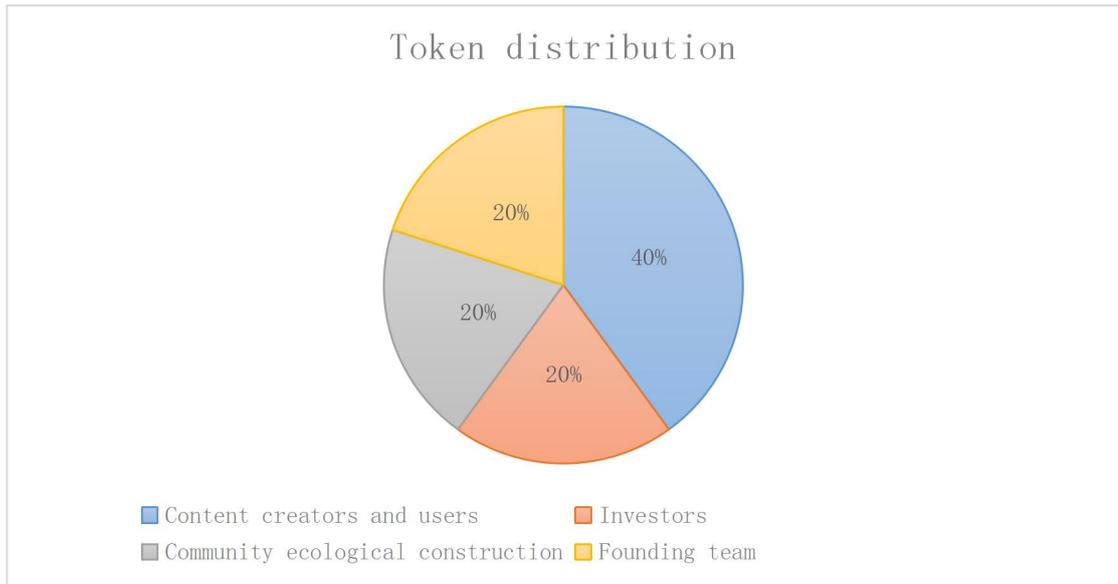
UVT will issue 14.5% of the total amount of the first year, 9% of the total amount of the next year will be issued, after a year issued token will decline 0.5%, total number is in the third year of 8. 5%, 8% for 4 years, and so on.Until 20 years later, the ratio becomes 0, and the UVT token number will not change again, and it will never be issued.

The number of tokens assigned to users each day is averaged over the number of days of the year.The number of tokens that each user gets per day is determined by the amount of contributions the user contributes to the platform on that day.All contributors will be assigned each day's token by contribution.Each user's daily contribution will be determined by a sophisticated set of algorithms.

## 4.1The Release Plan of Token Held by Team

In order to ensure that the interests of the product r&d team can be

aligned with the interests of the platform, the long-term view of the team on the product is more expressed.The team will hold toke n each year and the proportion will be consistent with the annual distribution.

## 4.2 The Lock Mechanism and Release Plan of Token held by the Users

In principle, the more users lock tokens, the more tokens such as thumb up will get.The specific algorithm platform will adjust and improve according to the operation feedback, so as to form the rules and patterns that are most conducive to the development of the platform.After completing the real-name authentication, the user can release 10% of the token gained in the week after 10 weeks, and then automatically release 10% again every week thereafter, as shown in the figure below.The token can be extracted to the etheric square wallet to trade freely in the trading market.

# 5 Development Route

From 2017 to 2018, the team will focus on the research and development of focused products, complete the sorting of core business, and constantly optimize the user experience.

In February 2018, Berita Saku1.0 was launched, including operation background, news crawler and other functions.

Launched Berita Saku2.0 in April 2018, including user task system and invitation and reward function.

In September, 2018, Berita Saku3.0 version was launched, and the function of online token incentive was launched.

The platform will release advertising system, floor trading and other functions.

Future tokens will go to the otc exchange and global free trade.

The future platform will select the appropriate side chain, complete the real-time chain of data, and improve the efficiency, stability and security.

# 6 Responsibility Declaration

Berita Saku supporters, please read it carefully Berita Saku white papers and the official website of the relevant specification, to fully understand the chain block, know to buy Berita Saku token of potential risks, and fully assess their risk tolerance and the actual situation, carries on the rational judgment.

The project has failed due to legitimacy, market demand, technical or other uncontrollable causes, and the worst consequences of the project failure may result in all ETHS or other coins that you invest cannot be recovered.

Buyers should understand that Berita Saku items will not be refunded under any circumstances.The project team of Berita Saku will make reasonable use of the collected digital assets and standardize management projects according to the information disclosed in the white paper.Try your best to make sure project in the right direction, but buyers are still exists the risk of loss, at the same time Berita Saku project team also reserves the right to adjust project and schedul e according to actual situation.

- UVT is digital currency, and non-traditional financial products, not as securities in any government entity to register.There is no guarantee that UVT token will always add value without a guarantee

of revenue and profit.

- Risks associated with ethernet workshop systems：UVT is based on the etheric blockchain. As a result, the etheric fang agreement any malfunction could lead to a UVT trading network can't work as expected.

- Regulatory uncertainty：At present, many countries in the world maintain a cautious and negative attitude towards the blockchain.

Policies of any country would affect UVT token price.

- Risk of cycle conversion：There's periodicity in any industry,the blockchain industry is also cyclical, and most projects are affected by the shift from a bull market to a bear market.

- Network security risk：Blockchain technology is also built on the Internet, and hacker attacks can affect project security and lead to customer losses.