YOYOW Token Economy White Paper

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CHAPTER 1 OVERVIEW

1.1 Sustainable Token Economy

● Expectable rate of economic expansion

The YOYO token generated by the incentive each year is determined by the network activity and has a maximum annual limit, and the economic expansion speed can be expected.

● Demand-driven incentive loop

Decentralized network advertising fees and other system operation fees will continue to recycle token liquidity as the YOYOW network becomes more active.

1.2 Token Incentive Mechanism

Each year, the YOYOW network can extract up to 10% of the balance from the token incentive pool for payment of token incentives within the network. The balance of the token incentive pool was 1 billion YOYO tokens when the mainnet was launched in September 2017.

Example:

Year	Token incentive pool size	Annual withdrawal limit
2017	100000000	0
2018	90000000	10000000
2019	81000000	9000000
2020	72900000	8100000

......

Note: The incentive tokens extracted from the token incentive pool each year may not be fully circulated, but will be gradually released as the economic activity of the YOYOW network increases. The tokens that are extracted but not released will be kept in the pool of temporary funds - that is, only if the YOYOW network is active enough, there is enough quality content, and more and more users will be motivated and involved in the incentives, and the corresponding amount of tokens will be released for incentives, and the amount of released incentives will not exceed the annual withdrawal limit. This example is for reference only and does not include the factor of fees.

1.3 Incentive Loop Mechanism

YOYO Token is the basic token of the YOYOW network and is mainly used to pay:

1、Transfer transaction fees

2、System transaction fees

3、Decentralized ad network fees (based on percentage of total advertising)

4、Fees for creating custom token assets

The above fees are collected by the YOYOW network and will be stored back to the token incentive pool. As the YOYOW network becomes more active, the amount of recycled tokens will increase accordingly. The incentive circulation mechanism is a reliable guarantee to ensure the stable and sustainable operation of YOYOW's economic system.

CHAPTER 2 CONTENT TOKEN INCENTIVES

2.1 Content Incentives

On the YOYOW network, users can rate quality content in the range of 5 to -5, and the content platform can simplify the operation to "like" and "dislike" at the front end. Each rating consumes the user's points. Points are generated according to the age of the token, and the age of token = the number of tokens held by the user * the length of time the user holds the token. The maximum limit for each user to rate each item is [1000] points. It is not possible to repeat rating the same content in 【1 year】.

The higher the quality of the content, the more users will participate in the rating, and the more points are consumed, the authors of the content will also receive more tokens from token incentives. The YOYOW network distributes tokens to eligible quality content every 【2】 weeks. Each item requires a total of at least [100] points to qualify for the token incentives.

Token incentive distribution formula:

M = ∑|points| +k* ∑ (user rating*users' consumed points/5)

k = 2

Therefore:

the more points the content gets, the larger the M value;

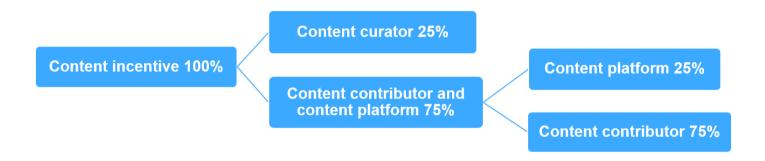the higher the user rating, the larger the M value;

when the user score is negative, the M value may decrease;

Tokens are distributed to all eligible content by the token incentive function according to the ratio of M values.

Note: If the final weighted average of the content rating is negative, it means that the quality of the content is not high, so in the part of content curator token incentive, the token incentives of all users who score negative points can be increased by 20%, and the content contributor's token incentives will fell by 20%.

Content incentive token distribution：

2.2 Content Contributor Incentives

The content contributor is the core of the YOYOW network. According to the 【content incentive token distribution】 example, 56.25% of the tokens generated by each eligible content will be allocated to the content contributors. At the same time, content contributors can also sell their content in proportion. For example, a content contributor can sell 30% of a piece of content to another user at a price of 30 YOYO tokens. The user can get 30% of the token incentives that will be distributed to the content in the future.

2.3 Content Curator Incentives

YOYOW will distribute token incentives to content curators. The sooner users who rate quality content are quality content curators, so they can get more token incentives.
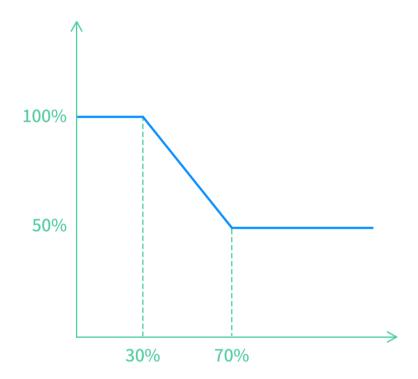
Content Curator Token Incentive Distribution Calculation:

In each content rating loop (【2】 weeks):

The top 30% of the rated points are 100% weighted;

30%~70% of the points are weighted from 100% to 50% linearly;

70%~100% of the points are 50% weighted;

Abscissa: the proportion of the voting order of the rated points；

Ordinate: the calculating weight;

2.4 Content Platform Incentives

The content platform can get incentives when the content contributors contribute content on the selected content platform. According to the 【Content Incentive Token Distribution】, the 18.75% of the token generated by each eligible content under the content platform will be allocated to the content platform.

CHAPTER 3 BLOCK PRODUCER TOKEN INCENTIVES

3.1 Consensus algorithm adopted by YOYOW: POS+DPOS

YOYOW uses a hybrid consensus algorithm combining POS (Proof of Stake) and Delegated Proof of Stake (DPOS) in the consensus algorithm layer. The POS consensus algorithm has the characteristics of high processing efficiency and being energy saving, while still maintaining the characteristics of decentralization and democracy. There are two types of block producers in the YOYOW network: POS block producer and DPOS block producer.

3.2 POS Block Producer

The POS block producer calculates the chance of processing the block by using the ratio of the number of tokens pledged on the YOYOW network to the total supply of the token on the YOYOW network. The more tokens the block producer pledges, the more chance there is to process the block, and thus the higher the income. To become a POS block producer requires at least 500,000 YOYO tokens to be pledged. The following example shows the token incentives that a POS block producer can obtain by processing a block:

Total POS block producer pledge token (10 million)	production rate of pledging each token	The number of YOYO tokens distributed to all POS block producer each year (10 thousand)
< 1	25.00%	\
1	19.53%	195.32318
2	18.08%	361.54128
3	16.75%	502.43778
4	15.54%	621.54368
5	14.44%	722.1375
6	13.45%	807.24528

7	12.57%	879.64058
8	11.77%	941.84448
9	11.07%	996.12558
10	10.45%	1044.5
11	9.90%	1088.73138
12	9.42%	1130.33088
13	9.00%	1170.55718
14	8.65%	1210.41648
15	8.34%	1250.6625
16	8.07%	1291.79648
17	7.85%	1334.06718
18	7.65%	1377.47088
19	7.48%	1421.75138
20	7.33%	1466.4
21	7.19%	1510.65558
22	7.06%	1553.50448
23	6.93%	1593.68058
24	6.79%	1629.66528
25	6.64%	1659.6875
26	6.47%	1681.72368
27	6.27%	1693.49778
28	6.04%	1692.48128
29	5.78%	1675.89318
30	5.47%	1640.7
31	5.11%	1583.61578
32	4.69%	1501.10208
33	4.55%	1501.10208
34	4.42%	1501.10208
35	4.29%	1501.10208
36	4.17%	1501.10208
37	4.06%	1501.10208

38	3.95%	1501.10208
39	3.85%	1501.10208
40	3.75%	1501.10208
41	3.66%	1501.10208
42	3.57%	1501.10208
43	3.49%	1501.10208
44	3.41%	1501.10208
45	3.34%	1501.10208
46	3.26%	1501.10208
47	3.19%	1501.10208
48	3.13%	1501.10208
49	3.06%	1501.10208
50	3.00%	1501.10208
51	2.94%	1501.10208
52	2.89%	1501.10208
53	2.83%	1501.10208
54	2.78%	1501.10208
55	2.73%	1501.10208
56	2.68%	1501.10208
57	2.63%	1501.10208
58	2.59%	1501.10208
59	2.54%	1501.10208
60	2.50%	1501.10208
61	2.46%	1501.10208
62	2.42%	1501.10208
63	2.38%	1501.10208
64	2.35%	1501.10208
>64	\	1501.10208

3.3 DPOS Block Producer

The DPOS block producer is a trusted node that is recommended by the YOYOW community. The more votes the DPOS block producer gets, the higher the ranking. The nodes on the top 【11】 are DPOS block producer, and the rest are DPOS standby block producer. The probability of the DPOS block producer processing the block is fixed, and the probability of processing each block by the DPOS block producer is 1/11 when the DPOS block producer processes the block by runs. DPOS block producer can get more chances to process blocks than DPOS standby block producer. Each DPOS block producer can get 0.5 YOYO token for processing each block.

3.4 DPOS Standby Block Producer

The probability of DPOS standby block producer processing blocks: the ratio of the number of votes that DPOS standby block producer gets to the total number of votes. Therefore, the more votes the DPOS standby block producer gets, the more chance there is to process the block. Each DPOS standby block producer can obtain 0.5 YOYO token for each block processed.
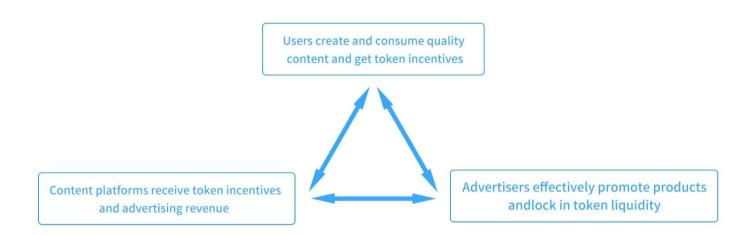
CHAPTER 4 INCENTIVE LOOPS

The incentive loop mechanism is built in for most successful crypto token projects in the market. YOYOW realizes the incentive loop through the content incentive and decentralized advertisement function, thereby realizing the organic growth of the YOYOW blockchain network.

4.1 Decentralized Advertising Network

Advertising is a means of realizing traffic on today's content platforms. YOYOW's decentralized advertising network can increase revenue for the content platform, remove community links through community autonomy, and greatly reduce the cost of operations and middlemen. With the decentralized advertising market as the entry point, the content platform can publish different types of time-based advertising slots, and advertisers can directly purchase advertisements for the content platform in the advertising market. For each order of the advertising orders, YOYOW network will charge 0.1% of the total order price as a handling fees. The fees will be stored back to the token incentive pool. As the content network activity and quality continue to increase, the tokens that are recycled to the token incentive pool through advertising fees are also increasing, and YOYOW's economic system tends to be economically balanced under self-regulation.

YOYOW's incentive loop:

Users create and consume quality content and get token incentives

Content platforms receive token incentives and advertising revenue

Advertisers effectively promote products andlock in token liquidity

4.2 Decentralized Advertising Market

The YOYOW Foundation will build a decentralized advertising market in the wallet developed by the Foundation. With the built-in decentralized advertising network, advertisers can directly use YOYO tokens to purchase paid ads that are billed by ad duration on different content platforms in the decentralized advertising market.

* Note: The data mentioned in this paper is the data set by the test network in April 2019 and the data may change when the mainnet is released. In the subsequent operations, the community and the committee may also adjust according to the actual situation.