

Toktok: The First Fans-Creators Incentive Crypto Social Short-Video Platform

I. Background

This paper introduces Toktok a new social network platform which enables everyone to buy coins of good short video creators through \$TT, the token of Toktok platform. Fans can hold their favor short video creators' coin, and share the value of the token appreciation with the success of them.

1. The Rise of Short-Video Platform

Currently, with the gradual iteration of social media, the user penetration rate in the field of video is close to 97%, especially in the field of short video. Compared with static text and picture information, diversified and dynamic short videos can carry richer and more attractive content. Among all the short video platforms, Tiktok occupies the leading position with absolute advantage.

(1) TikTok Users

The latest TikTok statistics show that as of January 2021, the platform has 689 million monthly active users worldwide. This makes TikTok the seventh-largest social platform in the world, surpassing other older platforms such as Snapchat, Pinterest, and Twitter. It's worth noting that it took Instagram six years and Facebook four years to reach such number of active users, while TikTok took less than three years.

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TikTok Monthly Users



TikTok has

**689
MILLION**

**active users
worldwide.**

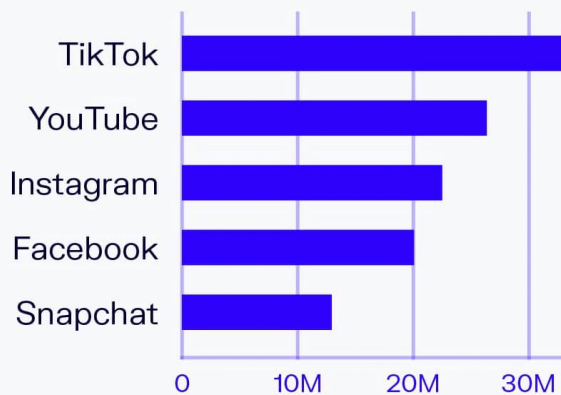
(DataReportal, 2021)

(2) TikTok Downloads

As of Q1 2019, TikTok was the most downloaded app in the Apple App Store, with 33 million downloads in a single quarter. Strongly defeated YouTube, Instagram, WhatsApp, and Facebook Messenger, the latter ranked in the top 5. More importantly, this is the fifth consecutive quarter that TikTok has become the most downloaded app in the Apple App Store. This means that not only has TikTok been able to maintain its existing user base, but it is also evolving to attract new and growing users.

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TikTok is the Most Downloaded App on the Apple App Store



It ranked as the **top most downloaded app** in Apple's iOS App Store for Q1 2019, with more than

33 MILLION

downloads.

(SensorTower, 2019)

However, behind the prosperity of short video platforms, excellent creators have few ways to monetize themselves, mainly in the form of advertiser services, live streaming with goods, knowledge payment, etc. Data shows that at least 50% of short video creators across the industry do not break even. The difficulty of monetization has caused great damage to short video practitioners and the short video ecology, limiting the output of excellent content. Toktok platform is launched to solve the problem of difficulty in realizing cash for creators, and to create a talent-based creator economy.

2. What is Toktok?

Toktok is a new type of decentralized short video social platform similar to TikTok. By introducing \$TT and Creator Coin, the financial investment behavior is combined with social short video content creating, fans can buy and sell tokens of excellent creators through \$TT, and gain wealth through token appreciation, creators can accumulate wealth through the increase of token value, realizing dual economic incentives for creators and fans, providing a new way of content incentive for creators.

This is a stage to showcase talent, not a platform to project social status on the internet. Toktok gives creators opportunities to start from scratch, showing their talent in a more intuitive form, and using creator coins to create wealth.

II. The First Fans-Creators Incentive Crypto Social Short-Video Platform

1. How to join Toktok?

Unlike the centralized TikTok, the accounts on Toktok are stored on blockchain, and each user has complete control over their accounts, that is, the private key that controls the account is saved by users, neither the chain nor any node keeps this private key, and the user's Toktok account is also the address for receiving tokens on their chain. When a user creates an account with the private key on Toktok, the address is similar to addresses in Bitcoin, Ethereum, etc. It is composed of a long series of meaningless numbers and letters. Users can use this address to send and receive \$TT. However, to use the social functions on the chain, users must create a profile, used for allowing fans to perform various actions on Toktok.

2. What Are the Functions of Toktok?

Users can post, comment, like, share, forward, follow, and favorite short videos. Users can also associate their accounts with various social accounts (such as Facebook, Instagram, Youtube, Twitter), and can forward the content uploaded on Toktok to them. \$TT can be used to buy and sell Creator Coin. Moreover, users can use \$TT or Creator Coins to purchase Creators unique NFT in the future.

3. Why Do Creators Need Toktok?

1. Toktok creates new opportunities for monetization, through the appreciation of personal tokens, creators will be motivated to continue creating. While the incentive for creators will be more efficient due to the immediate feedback effect of personal token prices.
2. Toktok gives creators a more efficient way to start from scratch. The current success of creators on social platforms is often based on real existing reputation, which is not friendly to creators who want to develop from scratch.
3. Toktok gives creators another way to get advertising revenue, advertisers can buy creators' coin to achieve revenue for fans while creators provide ads for advertisers, which is good for improving fan stickiness.
4. For creators, issuing creator tokens is based on the endorsement of the platform, which can gain higher trust from fans, especially for creators who start from scratch.

4. Why Fans Need Toktok?

1. The value of different fans is different, the earlier fans should get more reward as their following creators become successful.
2. Earlier fans can get an opportunity to truly invest in their favorite creators' careers.
3. For fans who hold a large number of creator coins, they will be motivated to grow their business with the creator, enhancing fan stickiness and creating a community of creators.
4. With the timestamp function, creators can provide additional incentives to early fans through the time and number of tokens they purchased, and accelerate the promotion of fans' economy.

5. What Are \$TT Used For?

The specific ways for users to get \$TT include posting short videos, browsing videos, and buying with digital currencies (such as Bitcoin, Ether, BNB, etc.). Registered users are able to get \$TT while browsing videos, and creators are also able to get \$TT after creating videos, thus motivating users to use the Toktok platform. Users can use \$TT to perform various operations on the platform, including:

1. Registering, authenticating or modifying profile on Toktok platform, only registered users can use various functions, which will significantly reduce spam and also generate a large demand for \$TT
2. Purchasing creator coin.
3. Purchasing peripheral products exclusive to creators or NFTs issued by creators.
4. Trade other tokens, such as BNB, ETH, etc.

More function will be added for \$TT in the future.

III. What are Creator Coins?

1. Every Creator Has their unique Coin

Each profile (Creator) on the platform can issue its own unique coin, called “creator coin”. Essentially, these tokens are an objective representation of a person's image in the social platform. The price goes up when people buy and goes down when people sell. When the user purchases, the system will mint the creator coins, and when the user intends to sell, the system will use the lock-up value to buy back from the user and destroy the coin. The initial number and price of the creator coin is 0. So, if you think a creator has potential and his short video will become more and more popular, buy his "creator tokens" as soon as possible, because it will make you a profit.

Creator coins are a new type of asset, associated with individual talents rather than companies or commodities. For example, if a creator creates great content and gains the attention of most people, then that creator's token price should increase.

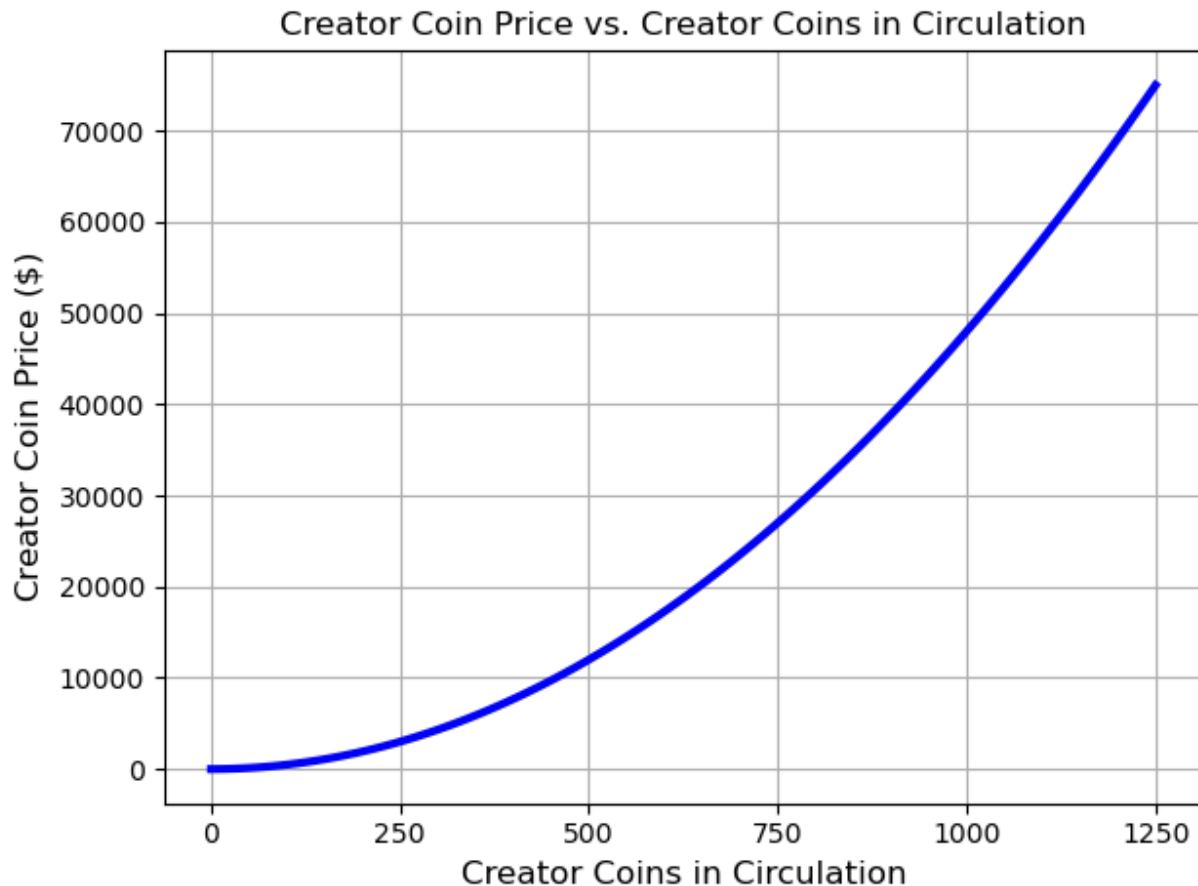
Conversely, if he fails to create great content, then the price of his token should rightfully decrease. Therefore, early fans who believe in certain creator's potential can buy his/her coin and share his/her success

2. The Creator Coins Price Bonding Curve

Creator coins are naturally scarce, with typically less than 100 to 1,500 per account, because as more people buy creator coin, the price of coin will automatically increase faster. This means eventually billions of dollars will need to be spent to mint more coins. The formula for determining the price of a "creator coin" is as follows. Please note that creator tokens are bought and sold using \$TT:

$$Price_{inTT} = 0.003 * CreatorCoin_{inCirculation}^2$$

Below is a graph of the price change of a creator token as a function of the number of creator coins in circulation, where TT's price is assumed to be \$16.



When creating a profile, there are initially zero coins in existence and thus the price is zero. If users want to buy coins, the platform will create corresponding quantities of coins and sell them to buyers according to the price curve above. The money users use to buy the coins gets “locked” in the profile in exchange for the coins. On the flip side, if he want to sell coins, he will get the corresponding locked number of \$TT. So buying creates coins will push the price up and locking money into the profile, while selling will destroy coins, push the price down and unlock money from the system. This is often referred to as an “automated market-maker,” and it’s the same concept that powers protocols like Uniswap and Bancor.

3. Creator Rewards

Creator Coin will only be minted when the user pays \$TT for a purchase, depending on the amount of purchases. The creator can set a **Creator Reward**, where each time a user buys Creator Coin, a certain percentage will be collected. If a creator sets the percentage to 10%, then every time a user buys his coin, the creator will receive 10% of

that user's purchases. If a person buys creator coin with 10 \$TT 10% of the purchased creator tokens will be sent to the creator's wallet.

IV. The Lending and Staking of Creator Coin

For outstanding creators, the value of their coins is steadily rising. In order to release the liquidity of creator coins, the Toktok platform will offer a borrowing and lending feature for creator Coins, where fans can get cash by borrowing rather than selling while holding their favorite creator coins and buying other financial products to gain revenue. Since creator coins are priced algorithmically, the value of \$TT locked behind the creator coins held by the user will be used as a benchmark for borrowing activities, such as:

Due to algorithmic pricing, the market value of creator coins and the value locked behind will be different. As shown in the table, when Alice spent \$2 to buy 5 Tom's creator coins, at this time, the issuance of Tom Coin is 5, the price of each Tom Coin is \$1.2, and the market value is \$6. In the process of lending, if the collateral is based on the market value, assuming that the collateral ratio is 50%, Alice can lend \$3. So in this situation, Alice spending \$2 to get \$3. Based on this, a malicious arbitrage situation will arise, so Alice will lend 5 Tom Coins on a collateral basis, in effect using \$2 to lend \$1 under a collateral ratio of 50%.

If at this point Bob spends \$14 to buy 5 Tom Coins, the actual issuance of Tom Coin is 10, and the market value is \$48. Alice and Bob each hold 5 Tom Coins. Each with \$8 in locked-in equity in their Tom Coins, and each can lend \$4 based on a 50% collateral ratio.

Creator Coins in Circulation	Creator Coin Price (USD)	USD Locked in Profile
5	\$1.20	\$2.00
10	\$4.80	\$16.00
20	\$19.20	\$128.00
40	\$76.80	\$1,024.00

80	\$307.20	\$8,192.00
160	\$1,228.80	\$65,536.00
320	\$4,915.20	\$524,288.00
640	\$19,660.80	\$4,194,304.00
1280	\$78,643.20	\$33,554,432.00

V. Tokenomics

Toktok issued a total 1 Billion tokens.

1. 50% for liquidity mining reward;
2. 15% for team rewards;
3. 5% for seed round;
4. 10% for private sale;
5. 20% for ecosystem and business development