YouSwap: An Interoperable Multi-chain DEX Based on AMM Model

YouSwap Team

March, 2021

Abstract: This article introduces the new generation of DEX platform, YouSwap, which realizes multi-chain sharing of digital assets by constructing a multi-chain ecological deployment system. It improves AMM model (Automated Market Maker Algorithm) and provides liquidity effect with high security by accessing Chainlink Oracle Protocol. YouSwap provides technical services as four-chain cross-chain aggregation transaction function to integrate cross-chain liquidity in finding the best transaction path for users, derivative services in risk hedging, and so on. Meanwhile, these technical services can be applied on Ethereum net Layer 2. Compared with decentralized exchanges in other chains, YouSwap has many advantages, such as wide investment range, low slippage, reduced exposure to impermanent losses, high scalability, real-time trading, low gas fee and so on. In the later period, YouSwap will continue to strengthen R&D investment, explore the real decentralized cross-chain technology, realize the intelligent scene of integration of multiple public chains, and create the seamless exchange and interoperability application of multi-chain primitive assets.

1. Industry Status

Since 2020, the blockchain industry has undergone significant changes, and DeFi has grown wildly. At present, thousands of DeFi projects have been initiated, ranging from stablecoin to decentralized token exchange platform, lending and payment. Up to now, the scale of on-chain assets locked by various DeFi protocols has exceeded 40 billion US dollars. With the growth of locked on-chain assets and the opening up of registration of off-chain assets, some professionals have predicted that the scale of assets locked by DeFi protocols will exceed 100 billion US dollars in 2021. Driven by various mining waves and profit-seeking funds, new exchange protocols such as Uniswap and Sushiswap have rapidly emerged.

Although DEX, represented by Uniswap, won the limelight in 2020, there are still some problems and deficiencies. 1. Risk of impermanent loss. Providing liquidity AMM will automatically carry out abnormal trading behavior when the market price changes, that is, buying at lower prices and selling at higher prices, which will make the value of withdrawn asset lower than that when deposited in the wallet, thus causing asset losses; 2. Large swap slippage. When the depth of the working fund pool is insufficient, the market impact cost of swap will be particularly high; 3. Restricted by the TPS performance of Layer1 on Ethereum chain, most DEXes are subject to obvious technical bottlenecks in the number of deals completed per second; 4. Paying a Gas fee of US$ 890 per swap will invisibly raise the entry threshold for small and medium-sized asset users; 5. Lack of truly decentralized cross-chain interoperability makes it impossible to introduce large-value blockchain primitive assets for cross-chain swap, thus hindering the development and growth of various DeFi protocols. The above five points are the common pain points faced by most DEXes at present.

2. Brief Introduction to Project

2.1 Design Principle

- Safety. In terms of market making, YouSwap learnt Uniswap's AMM model (Automated Market Maker algorithm) and reduced the risk of impermanent loss. In terms of asset management, YouSwap does not engage in funds trusteeship, and the funds are controlled by the users in their wallets with private keys, so funds are safe and can be used in real time.

- Profitability. In order to reduce the slippage of swap, YouSwap developed the aggregate transaction engine to find the optimal swap path. YouSwap provides liquidity reward pool, trading pool, invite mining and other functions. Meanwhile, in the aspect of liquidity pool subject to smart contract, it is added with the functions of customization and automatic execution, which potentially enhances the ROI from all aspects.

- Scalability. YouSwap processes a set of exchange protocols based on Zk Rollup technology, which is a technical solution based on Layer2. This efficient scalability can realize instant exchange, charge a lower gas fee and carry the operation of various derivative contracts.

- Inter-operability. Because different blockchain networks are isolated from each other as a value system, there is a development trend of value isolation. As a value hub, YouSwap technology can deliver to multi-chain interaction between different public chains, making the primitive assets on

different public chains freely merge and circulate.

2.2 Technology Base

2.2.1 YouSwap V1

- **AMM Model + Chainlink Oracle Mechanism**

YouSwap is a DEX trading protocol based on "fixed product" of AMM mechanism. For example, users can create a fund pool by providing a certain proportion of ETH and any ERC20 assets, and each fund pool stores a certain proportion of different assets and provides liquidity for the exchange of these assets. However, in order to prevent the difference of spread data between exchanges in the event of larger fluctuations, YouSwap adopts the mechanism of Chainlink Oracle price feeding to guarantee the price of currency pair in the liquidity pool. For example, Chainlink will transmit YOU price to the blockchain through YOU/ETH price feeding to ensure the consistency of prices between on-chain and off-chain, and reduce the risk of impermanent loss of LP liquidity providers.

- **Creating Fund Pool**

In YouSwap, each trading pair has a fund pool, which is generally created by the first liquidity provider. For example, a liquidity provider creates a fund pool of ETH-YOU, and then can start adding liquidity. The number of ETH deposited initially is X_0, the number of YOU deposited is Y_0, and $X_0 * Y_0 = C_0$. Among them, YOU is a token issued based on multiple public chains.

- **Multi-chain Deployment**

YouSwap supports the deployment of multi-chain architecture (e.g. ETH/TRON/BSC/HECO), and the protocol is completely open-source. The system construction of YouSwap V1 will take the lead in docking on the Ethereum public chain (the deployment of YouSwap on other public chains will be launched in the new version of V1). YouSwap also accessed mainstream wallets such as MetaMask and DApp browsers in a short time, thus providing users with safe and convenient decentralized transaction services. YouSwap connects the ecology of various public chains and brought the traffic in the ecology of various public chains to YouSwap. YouSwap has its own independent ledger data (i.e., block data) in each chain, and transactions in different chains are executed in parallel without affecting each other.

- Making YouStarter Incubator

YouStarter is not only an open source smart contract, but also a decentralized project incubation platform focusing on token creation and issuance as well as auction and fund-raising of quality projects. YouStarter supports the token distribution of cross-chain assets and project crowdfunding on multiple public chains including Ethereum, TRON, BSC and Heco. Early seed capital will be granted to the projects with innovative development model of blockchain through YouStarter Incubator. YouSwap team will provide multi-dimensional support such as smart contract ICO application, capital, community and marketing for the construction and development of quality blockchain projects and the start-up of liquidity pool. These projects will also launch their trading pairs on the YouSwap platform in the future.

2.2.2 YouSwap V2

- **Multi-chain and Cross-chain Aggregation Trade Function**

At present, YouSwap's aggregation trade technology integrates all kinds of DEX liquidity and pricing with DEX service providers in multiple public chains, compares the optimal prices in different exchange protocols, and provides users with optimal trading and minimum slippage. For example, when a user enters a trade, YouSwap first finds a DEX platform with this currency. When the user submits the trade, YouSwap backstage may split the order into multiple orders. For instance, 70% of them are completed on Uniswap, and the remaining 30% are completed on Sushiswap. Moreover, when the aggregator finds that the trading pair selected by the user has insufficient liquidity in most DEX, it is also possible to complete the trade through trade bridging.

- **Smart Liquidity Mining System**

Customization of liquidity pool. The liquidity pool has a public pool and a smart pool. All the parameters of the public pool (such as token weight) have been set when the liquidity pool was created, allowing anyone to provide liquidity to the pool, such as DEFI project and Polkadot ecological project. YouSwap smart pool is controlled by smart contracts, allowing the controller to respond to real-time data on the blockchain, and customize the currency, proportion and exchange fee (0.0001%-5%) of the liquidity fund pool.

Automated liquidity mining. YouSwap is an unmanaged intelligent automation platform for DeFi applications, on which the liquidity parameters of deletion, addition, sale and withdrawal can be set in advance. When the price is triggered, the trade will be executed automatically. For example, when the value of LPtoken drops to a certain value, it will withdraw from the fund pool.

2.2.3 YouSwap V3

- **Layer2 Scalability Technique**

YouSwap transfers all ERC20 tokens to Layer2 using Zk-Rollups technology, and ensures the consistency of Layer1 and Layer2 states based on the constantly generated zero-knowledge proof, so that all exchange takes place on Layer2. This high-performance scalability can realize instant exchange and low gas fee.

- **DeFi Development Program YouTreasury**

YouTreasury is a service launched by YouSwap integrating DeFi lending protocol based on V3 version to meet the financial management and investment demands of users. Apart from lending protocols, YouTreasury is able to serve other protocols. For instance, anyone can build an extension based on YouSwap lending fund pool. YouTreasury can also provide leverage liquidity mining function, lending aggregator service and functional service of bridging YFI yield aggregator to increase financing yield.

2.2.4 YouSwap V4

- **Derivative Service on Layer2 YouDerivatives**

YouDerivatives is a completely decentralized, secure and highly customizable Layer-2 DeFi protocol being built by YouSwap to support various derivatives, such as decentralized perpetual contracts and decentralized option products.

- **NFT Market Segment**

NFT, with its full name of Non-Fungible Tokens, is characterized by indivisibility, irreplaceability

and unique scarcity. YouSwap will provide all-round services in the circulation, sale and purchase of NFT, lending with NFT as collateral, and NFT mining, to bring NFT into DEX field, thus creating benefits for YouSwap users and providing rich and diverse experiences.

2.2.5 YouSwap V5

- **Development and Exploration of Polkadot Underlay Cross-Chain Technology**

Another highlight of YouSwap platform is cross-chain. With the slot auction of Polkadot Parachain, YouSwap team believes that the prosperity of Polkadot ecology cannot be underestimated in the future blockchain encryption world, and YouSwap team will explore the Parachain and Relaychain of Polkadot to solve the expansibility and scalability issues. YouSwap platform will first support four kinds of blockchain cross-chain protocols including Ethereum, TRON, BSC and Heco, and will also gradually access Bitcoin and support the cross-chain of Polkadot Ecology, so as to help users of YouSwap participate in multiple public chain ecologies with one click and trade token assets on different public chains.

- **Developing YouPay Service**

YouPay is developed based on the user group's need to exchange and transfer stablecoin. YouPay system is updated through the payment module, which supports the instant exchange between various stablecoins and fiats so that blockchain participants can exchange and purchase cryptocurrency and traditional enterprises can realize cryptocurrency collection. In addition, YouPay can achieve instant transfer, greatly lowering the threshold for C-end users and traditional enterprises to access and accept cryptocurrency.

- **Bridging Synthetix Protocol for Brokerage**

Aggregation trade can help most users locate the optimal swap path and most favorable trading price, but it is difficult to guarantee the asset security and profitability for whale accounts. Therefore, YouSwap will consider cooperating with synthetic asset protocol Syntetix to realize the brokerage of cryptocurrency. For instance, if the user wants to buy WBTC with DAI stablecoin, and the trading price is 50 million US dollars, Syntetix (the swap of SUSD and SBTC has no slippage based on synthetic asset collateral model) serves as a bridge in this process, and DAI will be swapped into SUSD first, then into SBTC, and finally swapped into WBTC. According to the test results of Syntetix protocol fees, the slippage of large-value trades can be reduced by at least 75% compared with other DEXes.

2.3 Technical Advantages

- **Security of YouSwap**

User asset security is the top priority in the design protocol of YouSwap platform. The updated iterative version of YouSwap is completely decentralized, which does not place user assets in custody. All assets are kept on chain, and users have complete control over personal assets. Even the protocol liquidity fund pool of smart contracts can guarantee that users can withdraw their own assets under any circumstances.

If YouSwap exchange enables the On-Chain Data Availability (OCDA) function of governance protocol V1.0, it will provide YouSwap users with the same security level as the underlying multi-

chain blockchain, which means that YouSwap exchange can remain anonymous to a certain extent, for example, it does not provide any customer service and contact information. We believe that trustlessness guarantees more trust. In the field of crypto asset trade, trustlessness will become a new criterion to judge whether the trade is credible or not.

- **Outstanding Performance of YouSwap**

Most decentralized exchanges will encounter performance bottlenecks in their underlying blockchain: Output is too low and cost is too high. Performance bottlenecks make these decentralized exchanges difficult to be welcomed by large-scale users. Many trading platforms have to choose between performance and security. Comparatively speaking, YouSwap adopts the Layer2 scheme of "zkRollup". The throughput of YouSwap will reach 16,400 trades per second starting from V3.0, and the settlement cost will be as low as $0.0001 per trade, while the throughput of uniswap platform is about 12 trades per second, and the throughput of 0x protocol is also about 13 trades per second.

In addition, the cross-chain of most decentralized exchanges is still in the mode of Wrapped Token. These exchanges fail to utilize the main cross-chain platform like Polkadot and Cosmos to realize the true decentralized cross-chain, which is contrary to the original intention of DeFi in blockchain. In contrast, YouSwap will explore and develop the underlying cross-chain technique of Polkadot, and the cross-chain interaction of primitive assets on different public chains can be realized in V5.0 protocol.

- **Diversified YOU Ecology Experience of YouSwap**

The YouSwap team has been providing decentralized spot trading & matching trading mechanism for limit orders on chain, YouTreasury lending and financial management services, YouDerivates derivatives trading on Layer2, YouPay stablecoin exchange and transfer, one-stop launch of YouStarter new projects, invite mining for hashpower rewards and other diverse product experience and update services for practitioners in the global blockchain cryptocurrency industry. Additionally, in terms of community operation, the needs of different users in the community are fed back, and YouSwap DAO's proposal and voting decision are applied to optimize the platform's later governance.

3. Tokenomics

3.1 Token Allocation Scheme

- YOU Token Allocation

YOU is the protocol governance Token of YouSwap platform, with a total supply of 200 million YOU. At present, 60% of the supply is offered in Ethereum, TRON, Heco and BSC as mining rewards, with 30 million YOU for each chain. The allocation proportion of Token is as follows:

— 60% for mining rewards (120 million): Released on a daily basis.

(1) Genesis. 1st-3rd month (3 months) upon the activation of mining: 4% (4.8 million) of the mining part is produced each month, totaling 12%. The produced tokens are allocated on a daily basis, that is, the daily output is 160,000 YOU, including 80,000 YOU from trade mining, with 20,000 YOU from each public chain, and 80,000 YOU from liquidity mining, with 20,000 YOU

from each public chain;

(2) Daybreak. 4th-12th month (9 months) upon the activation of mining: 3% (3.6 million) of the mining part is produced each month, totaling 27%. The produced tokens are allocated on a daily basis, that is, the daily output is 120,000 YOU, including 60,000 YOU from trade mining, with 15,000 YOU from each public chain, and 60,000 YOU from liquidity mining, with 15,000 YOU from each public chain;

(3) Arthur. 13th-24th month (1 year) upon the activation of mining: 2% (2.4 million) of the mining part is produced each month, totaling 24%. The produced tokens are allocated on a daily basis, that is, the daily output is 80,000 YOU, including 40,000 YOU from trade mining, with 10,000 YOU from each public chain, and 40,000 YOU from liquidity mining, with 10,000 YOU from each public chain;

(4) Peace. 25th-61st months (3 years and 1 month) upon the activation of mining: 1% (1.2 million) of the mining part is produced each month, totaling 37%. The produced tokens are allocated on a daily basis, that is, the daily output is 40,000 YOU, including 20,000 YOU from trade mining, with 5,000 YOU from each public chain, and 20,000 YOU from liquidity mining, with 5,000 YOU from each public chain;

(5) Serenity.

In the initial five-year mining plan, the platform governance token YOU will be used as mining rewards, and the platform's fee will be distributed to liquidity providers and traders as the subsequent long-term incentives. (LP: 50% of fee, trading user: 50% of fee)

Mining period	Stage	Monthly mining ratio	Mining ratio in each period	Monthly mining quantity (YOU)
Genesis	1st-3rd month (3 months)	4%	12%	4.8 million
Daybreak	4th-12th month (9 months)	3%	27%	3.6 million
Arthur	13th-24th month (1 year)	2%	24%	2.4 million
Peace	25th-61st month (3 years and 1 month)	1%	37%	1.2 million
Serenity	Subsequent mining incentives	Adjusted to fee as rewards. LP: 50% of the fee, trading user: 50% of the fee.		

Mining Reward Table

— 5% for early investors (10 million): The cliff will be for 6 months after IDO.

YouSwap will carry out YOU raising for subscription, and invite investors to participate in early construction of YouSwap ecology, and this part of funds will be used for early operation planning and external safety audit. The target subscription quota is 10 million YOU, accounting for 5% of the total supply. The release of tokens will be in a few stages. In the first stage (1st-3rd month), 4% of the subscribed amount will be unlocked each month; in the second stage (4th-12th month), 3%

will be unlocked each month; in the third stage (13th-24th month), 2% will be unlocked each month; in the fourth stage (25th-61st month), 1% will be unlocked each month. The total amount will be unlocked in five years and one month.

— 15% for team allocation, operation and marketing (30 million): The cliff will be for 6 months after IDO.

founding team members - (5%), operation, technology research and development- (5%) and marketing - (5%) etc. This release of token will take place in four stages. In the first stage (1st-3rd month), 4% of the amount will be unlocked each month; in the second stage (4th-12th month), 3% will be unlocked each month; in the third stage (13th-24th month), 2% will be unlocked each month; in the fourth stage (25th-61st month), 1% will be unlocked each month. The total amount will be unlocked in five years and one month.
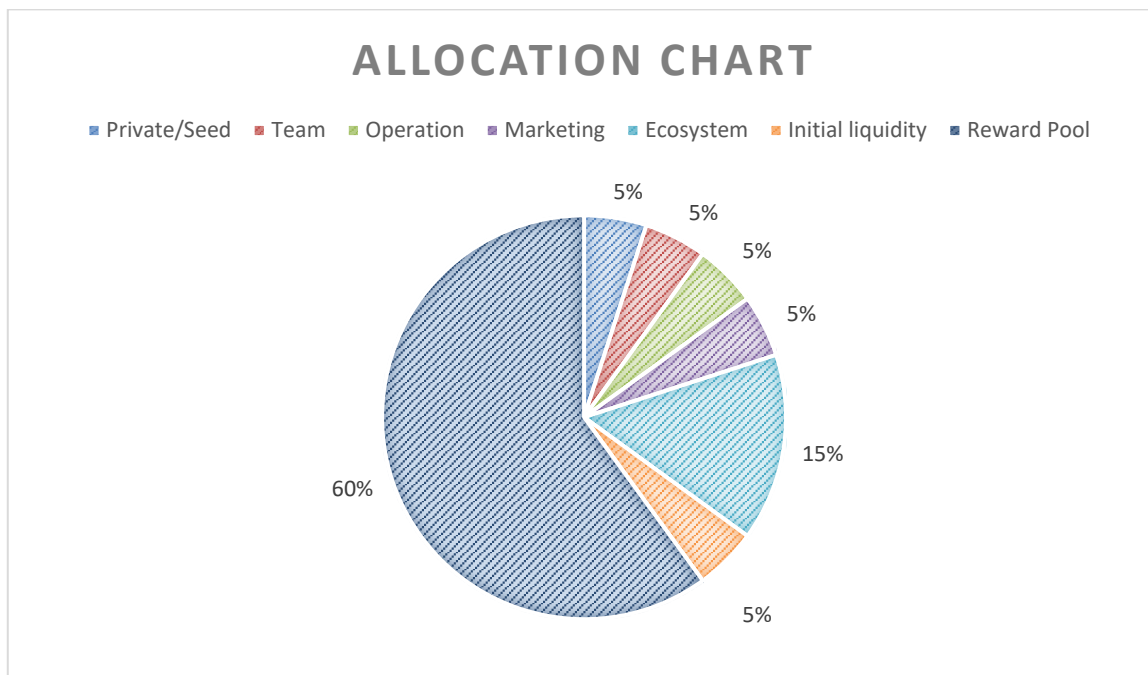
— 15% for community ecological incentives (30 million).

This part will be used for ecological incentive for developers (DAO governance), etc.

— 5% for initial liquidity (10 million).

YOU will start its IDO on Ethereum public chain through YouSwap's official website, and immediately released to the trading platform for providing initial liquidity (YOU-USDT) after settlement.

IDO Round	Whitelist remarks
Round 1 (private pool)	I. Whitelist time: Subject to the announcement of YouSwap's official community broadcasting. II. Whitelist requirements: 1. Follow and retweet. 2. Add the Telegram group. 3. Fill in the whitelist for submission.
Round 2 (open pool)	Open round, no whitelist, possible over-raising, w/ minimum limit, w/o maximum limit.

IDO Table

ALLOCATION CHART

■ Private/Seed ■ Team ■ Operation ■ Marketing ■ Ecosystem ■ Initial liquidity ■ Reward Pool

5%

5%

5%

5%

15%

60%

5%

3.2 Invite Mining Mechanism

On the YouSwap platform, all users have the opportunity to participate in the invite mining mechanism and obtain the invitation mechanism reward.

For the mining Category of YouSwap. YouSwap platform implements the parallel mechanism of multi-chain mining and invite hashpower mining. YouSwap's users can engage in liquidity mining and trading mining in Ethereum, TRON, BSC and Heco, and at the same time, they can obtain higher liquidity mining hashrate by inviting friends at two levels by P2P (the higher the hashrate, the more mining output naturely).

— In terms of invitation mechanism, there are two ways to invite:

(1) Hashpower Sharing: The inviter sends the link to a friend (invitee). When the invitee pays the miner's fee to activate the invitation relation, the invitee will enjoy a 5% bonus from its benefits.

(2) Activate Miner: When the inviter pays the miner's fee to activate the friend (invitee), it gets a 15% hashpower bonus from level 1 friend and 15% hashpower bonus from level 2 friend, meanwhile, its friend will also enjoy a 5% extra bonus from the yields.

The inviter and invitee who activate the invitation relation in the above two modes can get the corresponding invitation reward when the invitee stakes to mine.

The inviter can get the proportional liquidity mining hashpower contributed by subordinates, including 15% of staking hashpower for first 1 friends and 10% of staking hashpower for level 2 friends, that is, invite hashpower = 15% of staking hashpower for level 1 friends + 10% of staking hashpower for level 2 friends. The invitee can get 5% of his own staking hashpower as a bonus.

If User A invites User B and User B invites User C, User B will add LP liquidity mining hashpower at a certain factor to User A, User C will add LP liquidity mining hashpower at a certain factor to User A and B, and User B and User C, as invitees, can add LP liquidity mining hashpower at a

certain factor for themselves. For example:

A invites B, and B invites C

A stakes 1LP, B stakes 2LP, and C stakes 3LP

A: 1 (own staking hashpower) +2*15% (level 1 invitation bonus) +3*10% (level 2 invitation bonus)

B: 2 (own staking hashpower) +2*5% (invitee bonus) +3*15% (level 1 invitation bonus)

C: 3 (own staking hashpower) +3*5% (invitee bonus)

— Calculation of Mining Reward. Each pool calculates individual's total hashpower based on individual staking and invitation hashpower, and the number of YOUs for individual mining rewards can be calculated based on individual hashpower ratio and single pool rewards. Earlier stage: The business party will provide mining time and mining reward for each pool as planned. The multiplier will be determined based on the lowest block reward. Later stage: The community will vote to confirm the pool amount, mining time and daily mining output.

Individual hashpower = staking hashpower + invitation hashpower

Individual hashpower ratio = individual hashpower/total hashpower power

Reward for a single pool: Reward per block * pool multiplier * number of blocks (starting block number - ending block number)

Single-day reward for a single pool: Reward for each block * pool multiplier * estimated number of blocks per day

Total reward for all pools in a single day: (Pool multiplier A + Pool multiplier B+)* Reward for each block * Estimated number of blocks per day

3.3 Burning Mechanism Program

- YouSwap platform will charge 0.3% of the trading volume as the fee, and the platform will use 100% of the fee to repurchase and burn YOU (until the total number of burnt YOU is 100 million), and the repurchased and burnt YOU will be transferred to the black hole address and never circulate.
- 100% of the fee for NFT product trading will be used for repurchasing and burning YOU;
- Other burning scenarios, etc.;

3. YOU's Usage Scenarios

As the primitive protocol Token of YouSwap, YOU not only represents the holder's rights, but also has practical value. Users holding YOU can participate in a series of functions and activities of YouSwap, and YOU can be used in the following scenarios.

- **Governance Token**

YouSwap is a decentralized project led by the community, and YOU is the token of the community's participation in governance:

— Users holding a certain number of YOU can initiate upgrade proposal, such as modifying the fee, the distribution of the liquidity pool, and the long-term incentive plan of YOU;

— All YOU holders can vote on the proposal, and the proposal with the majority consent will be passed, and the YouSwap development team will be responsible for its implementation;

- **YOU's Fee Discount**

YouSwap will charge 0.3% of the trading volume on the platform as the fee, and users holding YOU is entitled to the corresponding fee discount when trading on the YouSwap platform.

- **Voting, Staking and Listing**

YouSwap supports a limited number coins of liquidity pool. In addition to the coins of liquidity pool initially added by the official team, users holding YOU may realize coin listing by voting or staking;
- YOU holders initiate the listing proposal through the YouSwap community governance process, and if the majority of votes are secured, the coil listing will be executed;
- Users holding relatively more YOU may compete for coil listing by staking YOU.
The official team of YouSwap will implement the coin listing according to the result of voting or staking. All users can create a liquidity pool to provide liquidity after the coin listing is completed.

- **Farming "Seeds"**

In the protocol liquidity pool of YouSwap platform, users holding YOU can provide liquidity to obtain mining rewards by adding amount to YOU's pool, and users who trade the trading pairs containing YOU can also get mining rewards. In addition, users holding YOU can also participate in various incentive activities such as airdrop incentives and time-limited mining in the centralized exchange.

- **Lending Collateral**

On YouSwap platform, there is a financial development plan for lending products. For the loyal users holding YOU, YOU can be used as collateral for lending digital assets. In addition, when faced with extreme market fluctuations, debit users holding YOU will be subject to higher liquidation threshold and less liquidation penalty.

- **Unique Products and Services**

On the YouSwap platform, users holding YOU can obtain smart liquidity mining system management, guidance on project auction crowdfunding and development on YouStarter, circulation construction of NFT market segment, as well as trading services. With the later iterative upgrade of YouSwap version, users will also get the firsthand experience of various customized product functions and many other rights and benefits.

Summary

YOU is the protocol Token of YouSwap, and it is the key link to encourage participants to build YouSwap ecology together. In the early stage, 100% of the initial total supply of YOU Token will be allocated within five years, of which more than 60% of YOU Token will be allocated to YouSwap infrastructure providers and users, including liquidity providers and trading users, through mining incentives and community ecological incentives. After that, YouSwap will be allocated as fee incentive according to the volume of burned YOU. Users holding YOU can participate in YouSwap ecology governance, voting, coin listing decision, and various mining incentive activities, and obtain unique products and services such as trading fee discount, lending collateral, NFT mining and

trading transactions. In addition, since YouSwap buys back and burns YOU with 100% of the exchange fee income at each stage (until the total amount of burned YOU reaches 100 million), the circulation of YOU in the market will be scarce, leading to a certain degree of deflation rate.

5. Organization Introduction

5.1 Organization Structure

With the development of blockchain industry, the number of blockchain exchanges and the number of blockchain projects and tokens are increasing year by year, which is accompanied by chaos. Some centralized exchanges make wash sales, freeze withdrawal, fleece the flock in alliance with projects, and use blockchain projects to commit fund fraud. There are also some DEXes allowing anyone to freely issue air coins without an upper limit. The liquidity pool with large slippage is easy to dry up, the user service is worse than centralized exchanges, and there is a lack of incentive care for new users. In order to ensure the long-term sustainable development of YouSwap platform, meet the regulatory compliance requirements of blockchain industry, and improve the quality of platform operation and the effectiveness of platform management, the organizational structure of YouSwap team is composed of founders, policy-making committee, community operation team, technology development team, product & project audit team and compliance execution team. The organizational structure covers the operational procedures and rules for daily work and special circumstances. Organizational structure of YouSwap team includes (as shown below):
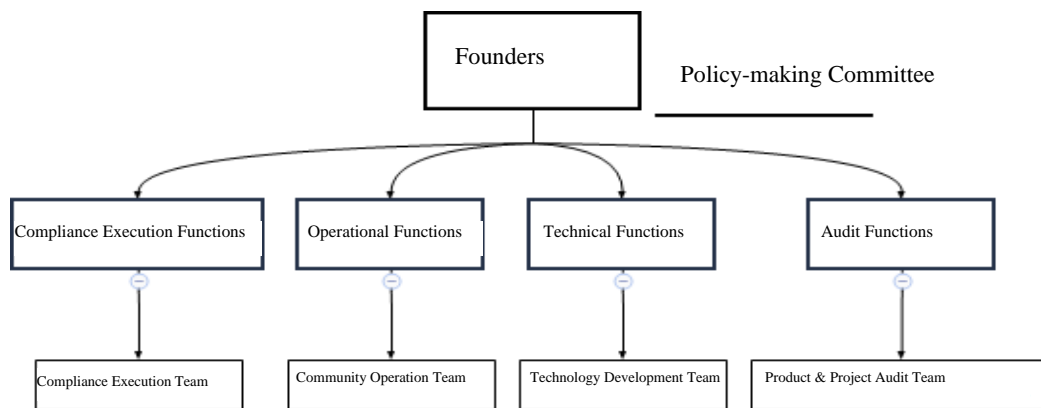
5.2 Division of Functions

5.2.1 Policy-making Committee

Founder: Undertake the business development direction and establishment and development of YouSwap;

Consultant: Provide solutions for the development and construction of YouSwap platform and community operation;

Competitor Researcher: Conduct market research, including the research of industry competitors, project categories and development direction;

5.2.2 Compliance Execution Team

Auditor Specialist: Undertake the follow-up of compliance issues of YouSwap's business, risk pre-warning, improvement suggestions and supervision;

Compliance Specialist: Interpret and control the blockchain supervision policy, and carry out risk management and business compliance implementation;

5.2.3 Community Operation Team

Community Service Specialist: Serve the users making consultation in YouSwap community, and keep good communication with them to learn about the needs of users proactively; Community Activity Specialist: Undertake the promotion, follow-up and implementation of YouSwap community activities and the construction of YouSwap brand image;

5.2.4 Technology Development Team

Chief Technology Officer: Organize, formulate and implement major technical decisions and technical schemes of YouSwap, control the overall technical development direction, supervise technical research and development activities and control the efficiency and quality of the output of YouSwap team, and lead YouSwap team to solve major difficult problems and eliminate various potential technical risks;

UI Designer: Take charge of the UI visual style of YouSwap platform and the overall UI architecture specification design, and control the brand style and creative brand design scheme of YouSwap;

Software Development Engineer: Participate in product development of YouSwap platform, complete the design, development, unit test and document preparation of corresponding software modules, and undertake the design and development of smart contracts;

Software Tester: Assist the development engineer to complete the sorting, archiving and release of test documents, carry out product testing, and submit test reports;

Operation & Maintenance Engineer: Establish a standardized operation and maintenance, data and security system for the planning and implementation of the architecture, deployment, monitoring, governance, optimization and security of each operation system of YouSwap to ensure the stable operation of each product line system of YouSwap;

5.2.5 Product & Project Audit Team

Product & Project Audit Specialist: Undertake the open source intelligence collection of YouSwap platform, server security configuration audit, node security audit, input security audit, business logic audit, cryptography security audit, smart contract audit, hot wallet and DApp architecture security

audit, authentication and authorization audit, etc.;

6. Development Roadmap

March, 2021 Phase0 (Genesis) - Mainnet was launched on Ethereum IDO function was available for YOU on YouStarter Liquidity pool and invitation for mining were available YOU, a protocol governance token, was released	May, 2021 Phase2 (Galileo) Smart mining management system is available Cross-chain aggregation trade function is available	October, 2021 Phase4 (Faraday upgrade) NFT market segment is developed and launched Other protocols of Layer2 are interoperable during the development YouDerivatives is available
April, 2021 Phase1 (Columbus upgrade) Trading and mining functions are available Mainnet is launched on TRON, BSC, and Heco ICO function is available on YouStarter DAO community autonomy	July, 2021 Phase1 (Darwin upgrade) YouTreasury, a financial development program, is launched Get through the Layer2 scalability of ZKRollup	January, 2022 Phase5 (Olympic upgrade) Polkadot underlay cross-chain technology is developed YouPay, a stablecoin transfer service, is available Synthetix protocol is bridged for brokerage

7. Business Model

The essence and core process of business is exchange, and finance directly touches the core of business - "exchange". In the blockchain market, exchanges are an inseparable core in the blockchain field. The service providers of one-stop service such as digital asset trading, asset trusteeship, wealth management and lending, and mining custody, as well as the early blockchain users all deal with CEX. With the development of blockchain and the increasingly urgent need of users for open and transparent on-chain data and self-control of assets, decentralized exchanges (DEX) have taken advantage of the trend. As a decentralized exchange (DEX), YouSwap has its own business development model. In simple terms, it mainly includes the following aspects:

- Automated Market Maker (AMM) mechanism. Unlike the CEX development model, YouSwap, as a DEX platform, implements the AMM algorithm mechanism of constant product based on fund pool, instead of adopting the market maker mechanism of order book. The advantages of AMM are as follows: firstly, the liquidity pool will never be exhausted; secondly, for some small currencies, the cost of listing charged by centralized exchanges is saved;

- Token incentive strategy. Through the implementation of LP and single-currency liquidity mining incentives, inviter hashpower mining incentives, trade mining incentives, and multiple mining mechanisms, the token incentive strategy plays a role in raising popularity and introducing user traffic in the early stage. This incentive strategy is of great function and significance in the early development of the project;

- Diversified innovative commercial products. Currently, DEX projects on the market simply copy the development model of Uniswap with no innovative business model designed to bring forth the new from the old. The YouSwap team has caught this aspect and seized the time window of DeFi wave, and invested numerous R&D resources in its own product system design. In the

future, the products that YouSwap is able to take the lead in launching will include smart mining management system, lending service, aggregate trade, IDO and IFO fundraising and issuing service, NFT investment management, predictable market and derivatives, etc. The YouSwap team firmly believes that the scale of DeFi application has a huge potential, and these commercial products will bring great development space for YouSwap;

- Franchise mode of "long-tail assets". The so-called long-tail assets are those tokens not supported by centralized exchanges. The unsupported tokens are either too small, too risky, or extremely competitive exchange tokens. The unsupported markets are either new trading pairs (e.g. early ETH) or new trading scenarios (e.g. games or applications, such as points, game equipment, and virtual pets). The YouSwap team believes that these markets will become important as the time goes by if they can serve or meet the needs of most people.

8. Marketing Strategy

YouSwap is positioned as a global borderless, open and free decentralized financial service platform, so its product marketing mainly adheres to the concepts of decentralization, community management and community autonomy. YouSwap implements three main marketing strategies:

- Strategy 1: YouSwap adopts the concept of decentralized community autonomy in blockchain and follows the principles of fairness, free will and equality. All major decisions on the YouSwap platform will be voted and changed through DAO governance;

- Strategy 2: YouSwap recognizes the DeFi Lego system with DeFi application, multi-directional development path and interactive design of product portfolio. YouSwap will create its own brand highlights in DeFi ecology. On the YouSwap platform, users can carry out one-stop decentralized digital asset business, including "one-click ICO, crowdfunding, public coin listing, automated market making, lending and wealth management, risk control, and project incubation". Therefore, YouSwap is by no means a stand-alone DEX, and YouSwap aims to become a new DEX platform for DeFi All-Eco;

- Strategy 3: In the long-term growth planning of YouSwap, YouSwap attaches great importance to the feedback of community users. In addition, YouSwap is cooperating with other protocol service aggregators to establish a network-wide, wide-ranging and deep-seated blockchain alliance partnership. YouSwap team believes that the consensus comes first in the blockchain world, regardless of whether it is value consensus or application consensus, because we are working together to build a future financial infrastructure characterized by customization, freedom and openness.

9. Risk Warning and Disclaimer

9.1 Risk Warning

1) Systemic Risk

Security is the top priority of YouSwap protocol, and the audit members of YouSwap have invested considerable energy to ensure the security and reliability of the protocol. Related smart contract codes of YouSwap are publicly verifiable, and we also invite external security personnel to find

loopholes in the protocol and grant rewards accordingly.

2) Investment Risk

YOU is an applied governance token issued by YouSwap, which is not an investment product. Before making a purchase decision, the purchaser should carefully consider whether it is suitable for its financial position, purchase objectives and experience, risk tolerance and other relevant circumstances, and should also understand the related risks involved in purchasing YOU.

3) Regulatory Pressure Risk

It is undeniable that in the foreseeable future, countries around the world will issue regulations to restrict and regulate the blockchain. If the regulators restrain or suspend this industry, the investment enthusiasm in DeFi field may decline to a certain extent compared with the hot market in 2020.

4) Vicious Competition Risk

At present, there are a large number of teams and projects in the field of blockchain technology, and the market is intensely competitive with strong pressure of market competition and project operation. Whether YouSwap platform can stand out from numerous quality projects and be widely recognized not only depends on its own team capacity and vision planning, but is also influenced by many competitors and even oligarchs in the market, during which it may face vicious competition.

5) Hacking Risk

In terms of security, hacker attacks in the history of blockchain can be seen. In the platform with a large number of users and the value of digital assets, hackers are most vulnerable to their evil intentions, which puts high demands on the platform's own security for YouSwap. It can be seen from the hacker attacks in the history of blockchain that the platform with a large number of users and aggregation of digital assets is the most vulnerable to hackers' attacks, which puts forward high demands on the platform's own security as far as YouSwap is concerned.

6) Other Unknown Risks

With the continuous development of blockchain technology and the overall trend of the industry, YouSwap may encounter with some unexpected risks in its future operation. Blockchain lovers are advised to fully learn about the team background, and understand the overall operation and management framework and concept before engaging in the operation of DEX.

9.2 Disclaimer

- This document is only for the purpose of conveying information. The content of the document is for reference only, and does not constitute any investment suggestion, instigation or invitation to sell tokens or recommend speculation in the blockchain industry. Such invitations must be made in the form of confidential memorandum and must comply with relevant securities laws and other laws.

- The YouSwap team shall spare no effort to achieve the goals mentioned in the document and ensure that the information in this white paper is true and accurate. During the development process, the platform may be updated, including but not limited to the platform business mechanism and product iterative construction mechanism. Some content of the document may be adjusted in the new white paper with the progress of the project.

The YouSwap team shall release the updated contents to the public by publishing announcements on the community network or in the new white paper. Participants are required to obtain the latest community information or new white paper in time, and adjust their decisions according to the updated contents. The YouSwap team expressly states that it shall not be liable for any losses caused by the participants' dependence on the content of this document, the inaccuracy of the information contained in this document, and any actions caused by this document.

- To the maximum extent permitted by applicable laws, the team shall not be liable for any damages and risks arising from public offering of YOU, including but not limited to direct or indirect personal damages, loss of business profits, loss of business information or any other economic losses.

- The YouSwap platform complies with any regulatory regulations and industry self-discipline statements that are beneficial to the healthy development of the blockchain industry. Users participating in YouSwap platform means that they shall fully accept and abide by this kind of DAO governance protocols.