Green Orange Finance

The World's First Cross-Chain And Aggregated Mortage and Loan Platform

DeFi+DAO+NFT+Aggregative Chain

July，2019

Catalogue

Introduction

Green Orange Finance (token name: GOFi) is the world's first cross-chain converged mortgage lending platform.

GOFi can be understood as a decentralized financial inclusion platform and an open financial ecosystem.

Green Orange Finance will combine the smart contracts of CeFi and DeFi to address the main pain points of users, namely, high fees, poor user experience and high barriers to entry.

It covers the user for decentralized financial needs, including stable assets, liquidity agreement, lending market, derivatives market, finance and investment, such as vision, especially in terms of cross chain polymerization mortgage lending has leading technology advantages, it fully decentralized financial ecology, reduced the participation threshold, let everybody can participate in, everyone has a steady income.

1.Prospects and pain points for DeFi

1.1 What’s DeFi

DeFi stands for decentralized finance, also translated as distributed finance.

To put it simply, compared with the traditional highly centralized financial system, decentralized finance USES the blockchain technology. For example, the development of mobile wallet software USES the blockchain technology, which will integrate all assets and form a global open financial system.

In the system, all run by intelligent contracts and open source code as the center, no camera obscura, no hidden information, no need for review and barriers to entry, everyone can at any time and space for a fair deal, currency exchange, loans, mortgages, etc., so as not to cause the money cost and waste of time and the cost of loss caused by complex of the intermediate links.

1.2 Oracle mechanism

The mechanism for writing external information to the blockchain is often referred to as the Oracle Oracle mechanism.

The function of Oracle mechanism is to write external information into the blockchain and complete the data exchange between the blockchain and the real world.

It USES smart contracts to deal with an uncertain outside world.

This is the only way for intelligent contracts to interact with the outside world and the interface between blockchain and the real world.

1.3 Why do we need oracle mechanisms?

Blockchain is a deterministic, closed system.

Currently, blockchain can only obtain data within the chain, but not real data outside the chain.

Blockchain is separate from the real world.

Oracle must be required to provide data services when the required trigger condition for the intelligent contract is external information.

The Oracle mechanism allows real-world data to be entered into the blockchain because intelligent contracts do not support external requests.

The specific reason is that blockchain is a deterministic environment that does not allow uncertain things or factors.

Smart contracts must produce consistent results wherever and whenever they are run.

Therefore, the virtual machine (VM) cannot make intelligent contracts to make network calls, otherwise the results are indeterminate.

1.4 Market condition

By 2020, cryptocurrency assets will reach $350 billion, and users' digital currency base assets will be further expanded.

A stable currency provides the capital supply for DeFi, with a total size of only $12 billion and a lot of room for growth.

The M1 measure of the global money supply is $30 trillion, while the M2 measure of the broad money supply is $96 trillion.

The total market value of global equities is $90 trillion, equivalent to M2.

If we compare cryptocurrencies to stocks and stable currencies to M1, the total market value of stable currencies would be $100bn.

If you compare the stable money with M2, it would be about 300 billion, and there is still room for growth of 10-30 times.

At present, DeFi's user penetration rate is only 1% and has not yet reached a large number of users.

There are between 5m and 10m active users of encrypted transactions globally.

Industry leader Compound, only 20,000 currency holds address, and about 50% compensation for mining awards.

For now, the number of users who borrow from DEX or DFI remains small.

1.5 Business opportunity

There are many smart contracts with cross-protocols in the market, and the boom in aggregated decentralised finance has spawned many projects.Liquidity taps are piling up.Users need a "guide" product.The aggregate chain decentralization of

finance is currently not standardized and needs to be assessed in a multi-dimensional way in terms of the benefits, risks and security of policies, thus bringing great benefits to the user experience.The complexity of DeFi aggregation is high.

DeFi selection has moved from pure price comparison to the search for intelligent contracts with higher investment value, and the demand for DeFi aggregation automation is also expanding.Mobile mining and commitment requires multi-platform and multi-contract interaction, which leads to substantial miner fees as well as the provision of cross-chain costs, which is difficult to operate in an already slow process, and users' patience is limited.

Therefore, ordinary users have a strong incentive to participate in the construction of DEFI ecology through the DAO protocol, which is a low-cost, time-saving iteration tool, which is also one of the objectives of our project.

2.Green Orange Finance project introduction

2.1 Ecological vision and mission

Green, Orange Finance golf, hereinafter referred to as GOFi, by global developer community, silicon valley technology together to build the world's first team across

the chain polymerization mortgage lending platform, is a global liquidity dig explorer, decentralized financial practitioners and cross chain polymerization mortgage lending pioneer, provide aggregation wallet, DeFi lending, Staking and decentralization in investment and financing derivatives Swap multi-functional service, with complete global ecological system, comprehensive development tools and resources, is committed to the global chain block industry and present a new financial ecological development platform by the user.

Green Orange Finance covered user for decentralized financial needs, including stable assets, liquidity agreement, lending market, derivatives market, Finance and investment, such as vision, especially in terms of cross chain polymerization mortgage lending has leading technology advantages, it fully decentralized financial ecology, reduced the participation threshold, let everybody can participate in, everyone has a steady income.

Green Orange Finance is not only a global liquidity dig explorer, is also the decentralized financial practitioners, in integrating the advantages and disadvantages of reference to other projects on the market, we are more determined to do cross chain polymerization mortgage lending pioneer, combine cross chain polymerization and mortgage lending, to block chain technology architecture and the new mode of financial ecological development.

2.2 Platform leading technology highlights

2.2.1 Contract Algorithm (Debit and credit mining)

The core of the lending pool.The core contract of the loan pool is the center of the agreement, holding the status of all reserves and all assets, handling the basic logic (accumulation of indexes, calculation of interest rates).

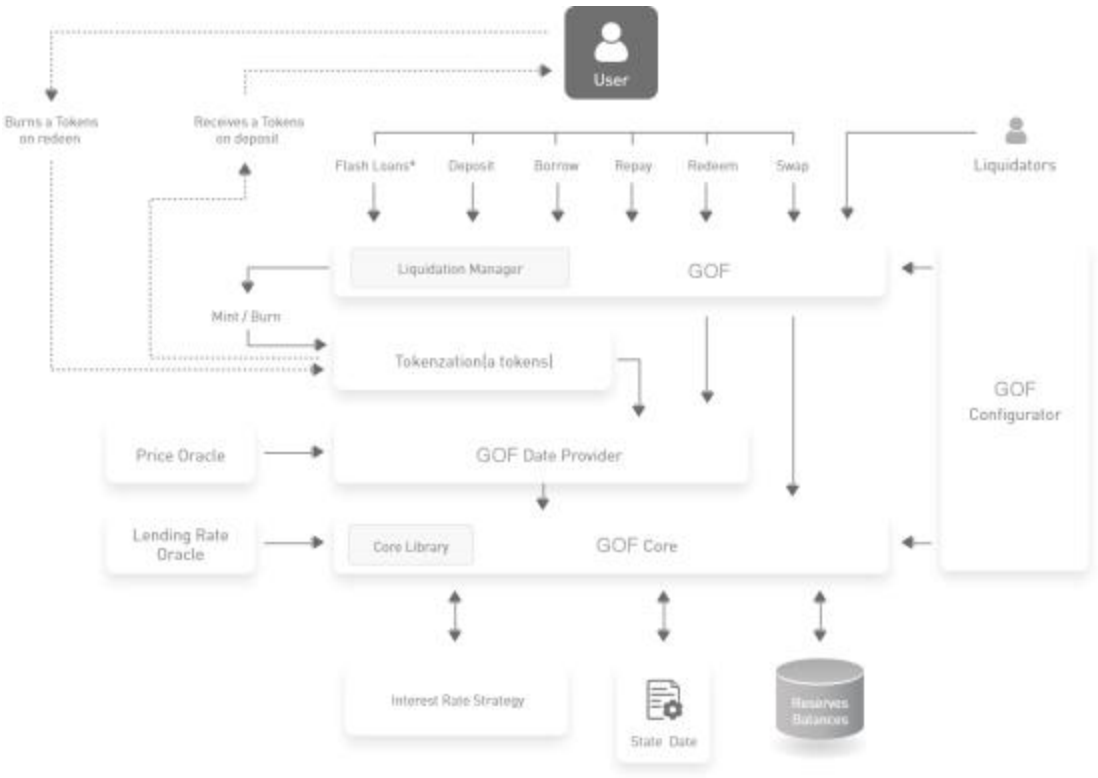
Loan pool data provider.The loan pool data provider contract performs calculations at a higher level of abstraction than the core of the loan pool and provides data for the loan pool.Specifically,Calculate the user balance (borrowing balance, collateral balance, liquidity balance) to assess how much the user is allowed to borrow and health factors.Aggregate data from the core of the loan pool to provide a high level of information for the loan pool.Calculate the average loan value and average liquidation ratio.

The loan pool.The loan pool contract USES the core of the loan pool and the provider of the loan pool data to interact with the reserves through the following operations: deposits, borrowing, interest rate swaps, and clearing.

An advanced feature implemented in loan pool contracts is the marking of loan positions.When a user deposits money in a particular reserve, he receives a corresponding number of tokens, which map the liquidity held, and accrue the benefits of the underlying assets held.

Loan pool configurator.The loan pool allocator provides the main allocation functions for the loan pool and the core of the loan pool: reserve initialization, reserve allocation, allowing/prohibiting borrowing on reserves, and enabling/disabling the use of specific reserves as collateral.The loan pool configurator contract will be integrated into the loan agreement governance.

2.2.2 Independently developed pricing technology of prediction machine



The core goal of the prophet is to be a bridge between the two environments.

Below we describe the architecture of each predictive unit.Initially built on a wave-field network, the prophesy machine will support all advanced intelligent contract networks for down-chain and cross-chain interactions.In both the

on-chain and off-chain versions, the seer is designed with modularity in mind.Each piece of the predictive machine system is upgradable so that different components can be replaced as better technologies and competing implementations emerge.

In order to ensure the security and credibility of data, a strict agreement mechanism for check is implemented in THE GOFi network, that is, only after a certain data has been signed by 2/3 of the nodes in the data supplier network, will the data be sent to the chain for application on the chain, while the Coordinator Node dominates the whole check process.

Coordinator Node is a special identity in the GOFi network.

As a special Node in the GOFi network, the Coordinator Node is responsible for receiving data requests from the consumer, which are parsed, transmitted to the data provider Node, and then returned to the consumer after a series of rigorous process checks.

Unlike the browser, the process takes a decentralized approach and incorporates an economic game mechanism to effectively motivate the entire network to generate trusted and secure data sources.The specific process is that after the coordinator receives a data request from the chain, it will parse the request and forward it to all relevant data provider nodes. The data provider node will return the corresponding

data according to the request and send it to the coordinator node.The coordinator node then consolidates the data (Aggregation) and sends the consolidated data back to the individual data provider nodes, which sign them one by one.Finally, the coordinator node needs to collect the signed final data from each data provider node again, and check to confirm whether the number of signed nodes reaches more than 2/3.If the check node reaches 2/3 or more, the coordinator will send the data to the intelligent contract of the data set on the chain, and the other intelligent contracts on the chain can read the latest out-of-chain data from the intelligent contract of the data set.

Through the mediator's adjusting role in the chain and under the chain, the prediction machine of GOFi network can play the function of self-pricing and coordination.

Chain architecture

As an Oracle service, the seer node returns data requests or query responses initiated by or on behalf of the USER contract, which we call request contracts and are represented by user-SC.The on-chain interface of the seer request contract is itself an on-chain contract, represented by the seer -SC.

After the foreseer -SC, the foreseer has an on-chain component consisting of three main contracts: the reputation contract, the order matching contract, and the

aggregation contract.Reputation contracts track performance metrics for Oracle service providers.The Order Matching Smart contract takes the recommended service level agreement (SLA), records the service level Agreement (SLA) parameters, and collects order information from the Oracle vendor.

It then selects the order using the credit contract and finalizes the Oracle SLA.

The aggregation contract collects the Oracle provider's response and computes the final aggregation result of the prophesy machine query.It also feeds oracle vendor metrics back into reputation contracts.The predictive machine contract is designed in a modular manner, allowing users to configure or replace it according to their needs.The workflow on the chain has three steps: 1) Oracle selection, 2) data reporting, and 3) aggregation results.

Oracle selection: The Oracle service purchaser specifies the requirements that comprise the Service Level Agreement (SLA).A SLA includes details such as query parameters, the amount of Oracle required by the purchaser, and so on.In addition, the Purchaser specifies the credit and aggregation contracts to be used for the remainder of this Agreement.

Using the reputation maintained on the chain and a more robust data set gathered from the logs of past contracts, buyers can manually sort, filter, and select Oracle by linking the following table services.

Our goal is to have the seer maintain a list service that collects all the logs

associated with the seer and validates the binaries of the oracle contracts listed.

We will further detail listing services and reputation systems in Section 5.

The data used to generate the list will be extracted from the blockchain so that other Oracle list services can be built.The purchaser will submit a service-level agreement (SLA) down the chain and agree on a service-level agreement before it's finalized at the chain.

Manual matching is not always possible.For example, a contract might need to respond dynamically to an Oracle service based on its request load.An automated solution solves this problem and increases availability.For these reasons, the predictor provides automatic Oracle matching by using an order matching contract.

Once the buyer has specified their SLA, they will submit the SLA to the order matching contract instead of contacting Oracle directly.The protocol submitted to the order matching contract triggers the log so that Oracle providers can monitor and filter based on their capabilities and service objectives.

The predictive machine node then selects whether to bid according to the agreement, and the contract only accepts bids from nodes meeting SLA requirements.When an Orale service provider bids for a contract, they promise, in particular, the amount of the penalty they will lose due to their misconduct as defined in the SLA.

Bids are accepted throughout the bidding window.Once the SLA has received enough qualified bids and the bid window closes, the required number of Oracles will be selected from the bid pool.Fines provided during the unselected Oracle bidding process will be returned and the final SLA record will be created.When the final SLA is recorded, it triggers a log notifying the selected Oracle.Then, these Oracle perform the tasks specified in the SLA.

Data report: Once a new Oracle record is created, Oracle executes the protocol and reports it up the chain.See sections 2.2 and 4 for more details about the interactions below the chain.Aggregation of results: Once Oracle reveals its results to oracle contracts, their results are fed back to the aggregation contracts.The aggregation contract computes the aggregation results and calculates the weighted results.

The validity of each Oracle response is then reported to the credit contract.Finally, the weighted result is returned to the specific contract function in user-SC.Detecting boundaries or incorrect values is a problem specific to each data feed and application.For example, for numerical data, it may be necessary to detect and reject boundary answers before averaging, but not boolean-type.Therefore, there will be no definitive aggregation contract, but a configurable contract address specified by the purchaser.The predictor will include a standard set of aggregation contracts, but you can also specify custom contracts if they conform to a standard computing interface.

2.2.3 Governance framework for community Contract voting

GOFi operates itself through the DAO (distributed autonomous organization) governance model, and the key to this model operation is the community contract voting governance architecture.Blockchain is the second Internet revolution, but its value will be ten times that of the Internet. It establishes both a trust mechanism and an underlying technology that is fast, safe and cannot be tampered with.

By completely eliminating fault and trust issues, it achieves an unprecedented level of collective coordination that forms the technical foundation for the distributed Autonomous Organization (DAO).

The distributed Autonomous organization (DAO) maintains its operation through intelligent contracts, encodes transactions and rules on the block chain, and realizes open justice, unmanned intervention and autonomous operation.

DAO is an open, self-organized collective that coordinates through economic incentives and self-executing guidelines and cooperates around common goals.
There is no clear identity division among members, such as investors, developers, collaborators, operators, consumers, etc., all of them will become a part of DAO and participate in THE construction and decision-making of DAO due to the holding of THE pass.

Supported by network effects, DAOs provide a revenue model and incentive mechanism for the production of open, shareable resources such as open source code and music files.As more open resources are established, DAOs will be able to scale indefinitely while maintaining their agility and consistency, and in many cases surpass existing corporate structures.

The DAO attracts top talent in the blockchain field and delivers on the promise of a more effective and flexible organization.Under the framework of smart contract, the community votes through smart contract, thus realizing the governance of the project.

2.3DeFi cross - chain & aggregate mining

2.3.1 DeFi cross-chain

The concept of cross-chain can be said to address the further development of DeFi specifically.Blockchains that cannot be connected to each other are interconnected through cross-chain as a bridge, connecting blockchains into a complete Internet network.

The realization of cross-chain will solve many problems encountered in the current

blockchain development, especially the problem of large-scale landing application. As the most important application of blockchain, DeFi will also enjoy the development opportunities brought by cross-chain.

First of all, cross-chain is able to link each block chain, all users on the individual chain will be connected, and DeFi application is able to free flow and switch between all users, achieving large-scale growth on the user base.

Secondly, the assets on the chain can be freely circulated and traded without the need for conversion through the centralized exchange. The abundant circulating assets can promote DeFi's richer development scenarios and patterns, which is conducive to the popularity and activity of DeFi.

Thirdly, cross-chain can realize the interaction at the contract level. No matter which mode of ecology will achieve interoperability, realize the greater value flow of DeFi, and make the transfer between assets and circulation easier and more convenient.

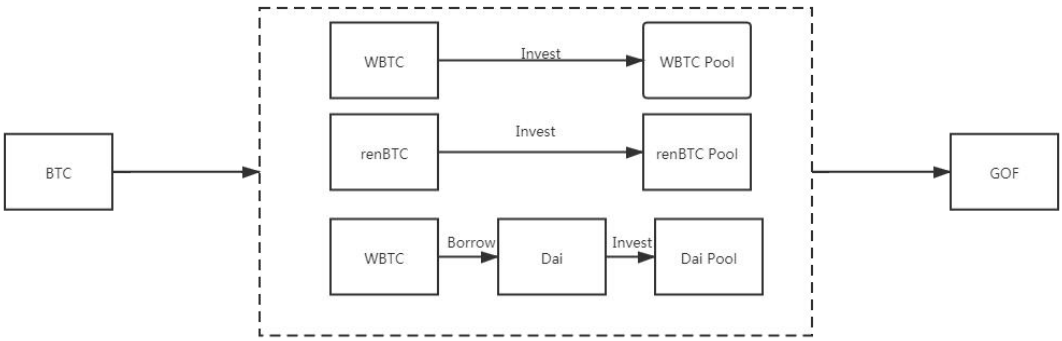
Cross-chain technology will play a critical role in expanding DeFi's ecosystem, improving asset liquidity, and addressing the performance constraints of a single blockchain system by enabling more intelligent contract-based mortgages and mutual recognition between assets, creating a broader ecological foundation for

DeFi.The implementation of cross-chain technology will usher in the DeFi ecosystem explosion.

2.3.2 Cross-chain aggregate mining

GOFi plans to integrate wBTC and renVM's coinage cross-chain technology in the cross-chain aggregation mining phase.From a user experience perspective, the process is designed in such a way that the user directly stores BTC into GOFi and binds the Ethereum address, which is used to receive revenue.

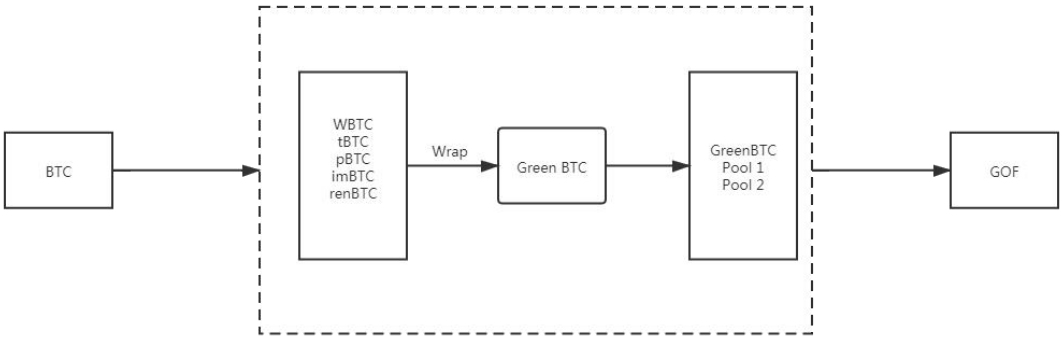
When a user deposits BTC into GOFi, it converts it through wBTC and renBTC into wBTC and renBTC that can be circulated on Ethereum, and then USES it to participate in mining, the proceeds of which are sent to the user's Ethereum account.



The second phase of GOFi introduces GreenBTC.

GreenBTC is the asset of convergent BTC such as wBTC, imBTC, renBTC, etc. It is a

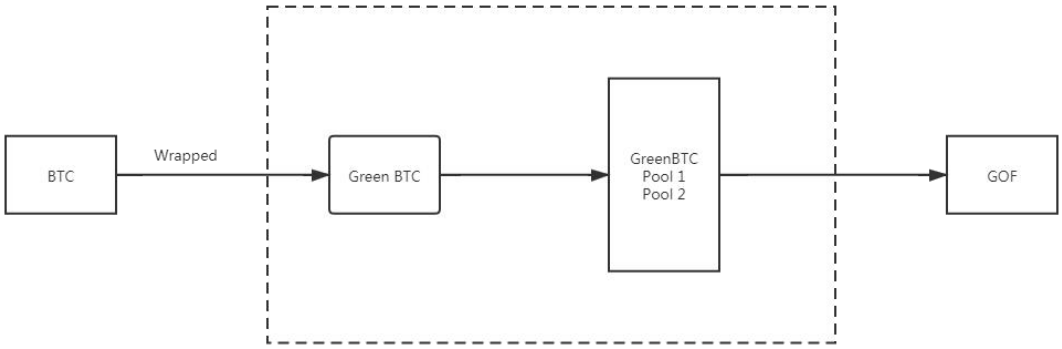
synthetic asset, which is somewhat similar to the aggregation of mStable on current USDT, USDC, DAI and other stable COINS, and also similar to YCRV on Curve.The benefits of this convergence are greater volatility resistance and resilience.



In the last stage, the user stores THE BTC into GOFi and can directly convert to GreenBTC.

In other words, at this stage, GOFi will have its own scribing cross-chain technology. Users will deposit BTC into GOFi, and GOFi will complete the packaging process of BTC through its decentralized node network, and finally form a decentralized scribing asset GreenBTC.

It can be seen from this that the goal of GOFi is to form a decentralized cross-chain of assets and to participate in cross-chain mining on the basis of this cross-chain of assets.



Currently, DeFi has a very high handling charge for mining, and GOFi's approach is to automatically aggregate mining through intelligent contract mode and automate the distribution of revenue, first to address the risk of centralization and second to address the issue of transparency in the distribution of revenue.

At first, when the token deposited by a user reaches a certain scale, it will be deposited into the mine pool, and after the income reaches a certain scale, it will be withdrawn into the income pool. The user can request to withdraw the income from the income pool to obtain the income.

The revenue pool will split the cost of mining equally, so the cost is much lower.
In addition, you can also staking the proceeds from the income pool, and you can also get some additional returns.That is to say, in this case, the user mining is basically only responsible for the transfer and transfer of tokens costs, do not have to bear the high cost of mining.

In addition to aggregating the user's capital to share the cost, another reason to

reduce the cost is that by aggregating the mining model, you can reduce the number of wallet calls, agreement agreements, and so on.For 10,000 people, each user would have to repeat all the mining processes, perform multiple operations such as asset authorization, increase liquidity, etc. If each mining operation required more than four interactions, then 10,000 people would need at least 40,000 interactions and pay 40,000 fees, which could cost as much as $1,000,000.

Aggregate mining, on the other hand, can significantly reduce the number of repeated calls to the wallet and agreement, which can save a significant amount of money.

In addition, to prevent witch attacks on GOFi, the user is required to save money and time, measured by their product (Duration=Amount*LockTime).If the product value is below a reasonable value, the system rejects service or charges a fee in advance.

In extreme cases, such as when asset prices fluctuate wildly, GOFi earns less than fees, which can lead to a loss that makes the system impossible to run.GOFi obtains the expected revenue through the forecast machine and compares it with ethereum expenses. If the revenue is lower than the expenses, it increases the proportion of mining cost or extends the time of mortgage scrip.In addition, by reserving 1% of the proceeds as a safe pool, contracts can be helped to cover running costs in

extreme cases.

2.4 Deflation mechanism

Deflation means that the total supply is constant and the number of issues decreases year by year. This is different from the monetary mechanism of most inflation in the world. This is also the biggest difference between digital money and traditional money.

BTC bitcoin is designed as a deflationary mechanism, with a total set of 21 million bitcoins and production gradually decreasing over a given period, as is GOFi, with a total of 32million bitcoins, which will also be reduced over a one-year period.

3. GOFi team introduction

3.1 Team introduction

The founding team of GOFi, from more than 10 countries and regions around the world, has rich working experience in blockchain

CEO Kavin Tomson

Davies Ward Phillips&Vineberg LLP from 2011 to 2014

In 2015, he stepped into the blockchain field and took the lead in participating in several blockchain projects

BTC early miners and holders

CTO Mark Hill

Majored in computer science from university of Sydney

From 2012 to 2015, he served as the Deputy Director of Technology of Oracle Australia

Ethereum early evangelist

DeFi project specialist

COO Robert Berlinbger

Graduated from National University of Singapore, more than 10 years of experience in Colongate Finance

Have rich experience in entrepreneurship and finance

3.2 Team advantage

3.2.1 Global operational capability

The team members come from many countries around the world and have international backgrounds.The exchange will set up a marketing and research and development unit.

The project technology and governance community is located in important continents and cities in the world, and will conduct differentiated product development and targeted marketing strategies for different markets in the world.

3.2.2 Efficient resource integration capability

Various communities have formed a solid foundation for the future business development of blockchain and TRA with numerous partners in the global financial sector, including but not limited to a variety of financial institutions, venture capital institutions, investment funds, media units, virtual currency mines and pools.

3.2.3 R & D and production capacity

The team members are from the world famous Internet and financial industry practitioners, they all graduated from the world famous universities, they have extremely cutting-edge knowledge system and extremely complete technical reserve.It has a strong R&D ability, can realize the latest technology R&D to the production of the ground.

4. GOFi cross - chain aggregate mortgage lending

4.1 Limitations of DeFi

Despite the fire at DeFi, various blockchain projects have looked at and laid out the DeFi project, however, we also found that DeFi's development was very limited and did not flourish because of the fire.This is closely related to the current development of blockchain technology.Blockchain is currently in its own development process, and chain to chain can not achieve interactive connectivity.

Accordingly, the DeFi ecosystem becomes a single application with no connection to the outside world, with no circulation and interchange between financial products on the chain.

Currently, most DeFi is laid out on Ethereum, which has relatively poor network congestion and scalability to meet the broader DeFi needs.

DeFi USES Token assets on the chain as the only way to circulate, and Token price fluctuations are very frequent. DeFi needs a stable and complete price mechanism, therefore, stabilising currency is the foundation of DeFi.

Stabilisation COINS are currently circulating mainly over Ethereum, and a more widely used stabilisation coin would require a common chain or set of common chains that could be circulated on a wider scale.

The state of single public chain cannot meet this requirement, so it is in urgent need of a network structure that can realize interconnection and interworking to support a wider range of use!

The amount of assets circulating above Ethereum is small, which limits the growth of DeFi.

DeFi is implemented primarily through smart contracts, but smart contracts are not supported on the Bitcoin chain, and assets on other chains are not implemented through smart contracts on Ethereum, so the patterns DeFi can use are very limited. In addition, DeFi is constrained by performance.

Most of the CURRENT DeFi activity in the market is built on the Ethereum network, and ethereum's performance bottleneck has been a prominent issue.Since 2019, DeFi use cases have proliferated, with hot DeFi projects represented by Compound, Prescient, etc., fueled by FOMO sentiment, a flood of new money and a frenzy of users.Since most of DeFi's products are based on Ethereum, the popularity of DeFi has contributed greatly to the frequency of Ethereum transactions, exacerbating the rise in Gas fees.

Congestion on the Ethereum network continues to increase, reaching "unprecedented" levels of congestion as DeFi's participation grows and mining projects come along.Etherscan recently showed that Etherscan network utilization is now over 96%, close to the peak of the bull market in 2018.

In ordinary times, the unit price of Gas in Ethereum network is only 1 Gwei, which is

raised to single digits at most.From Etherscan and ETH Gas Station data, the Gas unit price increases to an average of 200 to 300 Gwei and up to 600 Gwei.We have observed that even transactions above that price are not necessarily packaged by miners.It is clear that ethereum performance issues have become a critical bottleneck in DeFi's risk management system.

4.2 How is GOFi implemented across chains

4.2.1 Opportunities arising from cross-chain

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4.2.2 GOFi Cross chain agreement

The GOFi cross-chain protocol is designed to allow GOFi to seamlessly connect DeFi full ecology, converting valuable digital assets in chains such as BTC, ETH into standard assets on wave field TRON chains via the cross-chain protocol.

Its purpose is to break the isolated value island of blockchain, build an interactive network of cross-chain assets, and provide more powerful basic support for DeFi application ecology, so that every valuable digital asset can enjoy the ecological

services of GOFi full DeFi, realizing true security, freedom and transparency.

Through the GOFi cross-chain interaction protocol, through the standard interface, the block chain with different structures is transformed into a set of common asset types, the internal and external asset interactions of the GOFi ecosystem are realized, and the rich DeFi scheme is provided for mainstream digital assets (such as BTC).

The cross-link protocol includes address mapping, creating multi-signature addresses/creating smart contracts, transaction validation, transaction assembly, transaction broadcasting, signature validation, and additional signatures.

The architecture of cross-chain interaction protocol is designed as follows: Each time the block chain docked, it needs to implement a set of interface protocol components to realize the data interaction between the two chains.

Provides intelligent contract creation and management of multi-signature addresses, verification and execution of transferred assets.

Take BTC as an example, the cross-chain interaction process is as follows:

Cross-chain deposit assets:

The user transfers THE BTC to a multi-signed account in the Bitcoin chain managed by the intelligent contract. The intelligent contract monitors transactions in the Bitcoin network, validates the confirmation number, prevents bifurcated rollback attacks, assembles the coin creation transaction into the user's KOf-ADDR mapped address, and signs the transaction.

It then broadcasts the trades, collects 66 per cent of signatures from smart contracts, packages the trades into blocks and updates the ledger.

In this way, users own BTC assets in the GOFi ecosystem, while ensuring that the actual BTC assets on the Bitcoin network are not misappropriated.

Cross-chain asset extraction:

The user assembles the roll-out transaction using the destination address of bTC-ADDR's Bitcoin address to sign and broadcast the transaction.

After the smart contract identifies the transaction, it will verify the signature of the transaction and package the transaction approval into the block.

After the block is confirmed, each node will compose a multi-signed transaction.

When the number of signatures is sufficient, the transaction will be broadcast to the bitcoin master network, and BTC will be transferred from the Bitcoin multi-signature account to BTC-ADDR.

After that, the deal is closed.With cross-chain technology, we are able to transfer digital assets on various chains to our GOFi for trading.The cross-chain function has the following advantages: it alleviates the congestion problem of mainstream digital assets trading, solves the liquidity problem of non-mainstream digital assets, satisfies the demand for direct rigid exchange of multiple assets, and solves the problem of large price fluctuations in bulk transactions.

4.3 GOFi Mortgage lending

The lending agreement is one of the most critical functional agreements in the GOFi ecosystem, which provides the interest rate market and attracts liquidity through interest rate dynamics.

The interest rate market for cryptocurrencies is a wormhole that connects two parallel worlds (new world and old World) and allows arbitrage in and out of both systems.The interest rate market is also the most critical infrastructure in modern finance, controlling the allocation of basic capital.

Lending agreements have a strong competitive advantage in capital efficiency due to their interoperability and composability of assets and liquidity.Borrowing creates interest rate markets, which provide the return on capital (the stabilisation currency) and compensate for the opportunity cost of holding capital in open financial networks.

4.3.1 The problem of diversifying the lending platform

The decentralised lending platform implemented by The Ethereum blockchain has failed to generate a large number of transactions due to its inefficient design, which has caused high friction costs for borrowers and lenders.

In particular, these implementations require users to create and market their loan offer or request records on the blockchain (ETH Lend, 2018) (Libra Credit, 2018), which requires lenders and borrowers to pay each time a loan is published,

modified or cancelled.

In most cases, lenders and borrowers cannot modify, suspend or cancel loans even before reaching an agreement with a counterparty.Modifying loan quotes frequently in response to changing market conditions is costly and time-consuming.

In addition to high costs for borrowers and lenders, most decentralized lending platforms can only provide a lending market for digital assets within one blockchain (ETH Lend, 2018) (Libra Credit, 2018). The most popular blockchain is Eethum.The lack of cross-chain lending capabilities limits the use cases and market size of its platform.Some implementations attempt to provide cross-chain digital asset lending services.

But they have positioned themselves as trusted custodians between lenders and borrowers.This centralized approach does not address custodian risk and exposes user funds to theft or cyber attack in a high-risk environment.Most decentralized Lending platforms do not have decentralized governance structures and cannot return the platform's functions to end users (ETH Lend, 2018) (SALT Lending, 2017) (Nexo.io, 2017).

While from a technical perspective, blockchain technology is used as a back-end

service to generate and deploy loan intelligence contracts, its governance structure and business model are no different from traditional centralized entities.The value allocation and key parameters of the platform are controlled by the development team, which contradicts the decentralized core value, which is to release the retained profits and control rights from the intermediaries to the end users, so as to realize the financial democratization.

Most lending agreements are deployed in Ethereum, and the continued congestion on the ethereum network is a potential catalyst for the black Swan event.When the mortgage assets reach a certain amount, if the network congestion causes too many assets that cannot be liquidated in time, the whole system will collapse and face a huge liquidation crisis.Traders with leveraged positions on Ethereum's DeFi platform face the risk of not being able to deleverage during periods of volatility because of ethereum's crowding.

4.3.2 GOFi the advantage of cross chain

Cross-chain compatibility allows integration with different blockchains through smart contract technology, another major competitive advantage of the GOFi platform.This is important because it allows us to offer a wider range of crypto assets for lending (rather than just a single cryptocurrency like Ethereum).Moreover, the GOFi platform will not be the custodian of users, whose assets will be stored on the blockchain in the form of smart contracts.

This means that no one has access to the assets until certain pre-agreed conditions are met, thereby eliminating the custodian's risk, avoiding cyber attacks and reducing transaction costs.The GOFi community introduced premium proof (POP) as a reward and wealth redistribution mechanism.This is the competitive advantage of our platform, which can better motivate and attract users to participate more in the GOFi ecosystem, as they will be rewarded with token GOFi based on the value of the premium generated.

GOFi token holders will also be given governance powers to determine key parameters of the lending network and wealth redistribution mechanism to foster an ownership culture among GOFi token holders.The GOFi platform aims to be the first truly decentralized platform for architecture and politics, and to contribute to the achievement of capital markets automation to better serve the digital economy of the future.

4.3.3 Borrowing architecture

The core of the lending pool.

The core contract of the loan pool is the center of the agreement, holding the status of all reserves and all assets, handling the basic logic (accumulation of indexes, calculation of interest rates).

Loan pool data provider.

The loan pool data provider contract performs calculations at a higher level of abstraction than the core of the loan pool and provides data for the loan pool;

Specifically: Calculate the user balance (borrowing balance, collateral balance, liquidity balance) to assess how much the user is allowed to borrow and health factors.

Aggregate data from the core of the loan pool to provide a high level of information for the loan pool.

Calculate the average loan value and average liquidation ratio.

The loan pool.

The loan pool contract USES the core of the loan pool and the provider of the loan pool data to interact with the reserves through the following operations: deposits, borrowing, interest rate swaps, and clearing.

An advanced feature implemented in loan pool contracts is the marking of loan positions.

When a user deposits money in a particular reserve, he receives a corresponding number of tokens, which map the liquidity held, and accrue the benefits of the underlying assets held.

Loan pool configurator.

The loan pool allocator provides the main allocation functions for the loan pool and the core of the loan pool: reserve initialization, reserve allocation, allowing/prohibiting borrowing on reserves, and enabling/disabling the use of

specific reserves as collateral.The loan pool configurator contract will be integrated into the loan agreement governance.

Interest rate strategy.

The interest rate strategy contract holds the information needed to update the specific reserve rate and implements the interest rate update.Each reserve has a specific interest rate strategy contract.

Governance.

The permissions of the protocol are controlled by the GOFi token.Initially, GOFi will start with governance on a decentralized chain based on the DAOStack framework, which will evolve into a fully autonomous protocol.The chain means that all votes are binding: the action after the vote is hard-coded and must be performed.

4.3.4 Contract of loan

4.3.4.1 Deposit

GOFi lending protocol is built on the wave field block chain, which can directly run the wave field assets to enter, and other assets on the chain can also enter the GOFi currency market through the cross-chain protocol.

The money market calculates the interest rate according to the algorithm, and the depositor of the asset interacts directly with the agreement, earning a floating rate. The money market records all historical interest rates and historical records.

Unlike peer-to-peer lending platforms, where GOFi aggregates all users' deposits, borrowers operate directly from the pool and have more liquidity than peer-to-peer lending.According to the time and amount of deposit, GOFi will reward the corresponding proportion of token GOFi to each user.

4.3.4.2 Borrow money

GOFi allows users to use multi-chain assets to enter the system as collateral to easily borrow assets from the lending pool.Unlike the point-to-point protocol, borrowing from GOFi only requires the user to specify the required assets;Borrowing is immediate and predictable.

Similar to providing money assets, each money market has a floating rate set by market forces, which determines the cost of borrowing each asset.Each market has a mortgage factor from 0 to 1, representing the portion of the underlying asset value that can be borrowed.

Illiquid small-cap assets have a lower collateral factor, while liquid high-value assets have a higher collateral factor.The sum of the account value based on the scrip balance multiplied by the collateral factor is equal to the user's ability to borrow.

Users may borrow up to but not more than their lending capacity, and the account may take no action, and these loans will increase the value of their lending capacity in total assets;This protects the protocol from default risks.

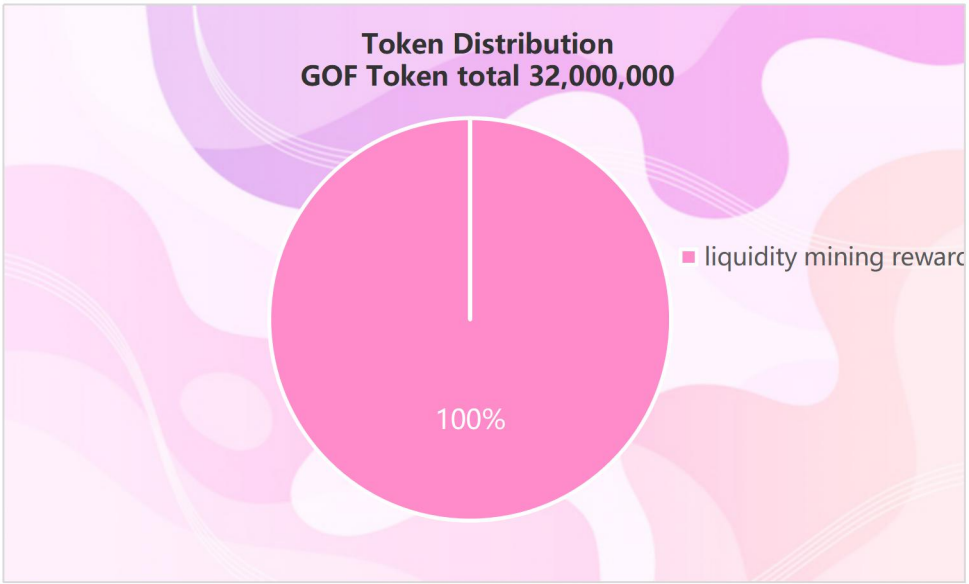
4.3.4.3 Liquidation

If the outstanding loan value of the account is about to exceed its lending capacity, a portion of the outstanding loan can be repaid at the current price of the liquidity price to secure the capital of the lending pool.Clearing is frictionless and does not depend on anything other than systems or orders.

5.GOFi ecological

5.1 Token Distribution

- GOFi Token total 32,000,000, and 100% For liquidity mining reward



5.2 Ecological development cornerstone sector

The ecological construction of GOFi is mainly composed of foundations, developers, governance communities and cooperative institutions

Foundation

Project proposal and release, is the main founder and early operator of GOFi

Developer

The pre-project technology provider, together with the foundation, participates in the technical architecture of the project, and with the governance community, in the subsequent development and construction of the project

Community governance

Responsible for the supervision and management of the project. The community is composed of community members who participate in the supervision and management of the project by voting on the smart contract

co-operating agency

To provide services and products for the project as well as diversified and multi-directional cooperation

Through the project cooperation of these four roles, the ecological development

and construction of GOFi will achieve diversified, high-speed and efficient development.

5.3 Join GOFi DAO

5.3.1 What’s DAO

The DAO is an organization embodied in open and transparent computer code, and its financial transaction records and program rules are kept on the blockchain.

DAO is a completely automatic company, anyone can join and exit at will, while equity (token) becomes the only currency running in the system, making the concepts of income and profit completely disappear. With the development and growth of the organization ecology, participants can make profits through the appreciation of token (token).

5.3.2 What’s GOFi DAO

GOFi Distributed Autonomous Organization (GOFi DAO) was initiated by many early block chain preachers, block chain enthusiasts and other members. It follows the footsteps of Mr. Nakamoto, practices the spirit of Mr. Nakamoto, and realizes the dream of Mr. Nakamoto and many block chain enthusiasts to use science and technology to benefit mankind.

GOFi DAO will gather a group of people who contribute their own value to realize

the common goal through the consensus of values, stand on the shoulders of predecessors and make a contribution to the value Internet.GOFi DAO enables a group of people from different regions and industries to come together and strive for the common goal by realizing the concept of value interconnection.

We believe that the block chain technology will change the way of human life, the future society of China unicom will be on the basis of existing information interconnection aspirant connected into value, in the chain of blocks to build the trust system, all kinds of people or things transfer self-worth through the block chain network, forming the value of the rich Internet ecosystem, this will greatly improve efficiency of social production.We respect and reward everyone who provides relevant and good advice to the community.

We believe that each contributor is the community's most important asset, and that each contributor deserves its due.We will fairly and openly make GOFi DAO's achievements and gains in the development process, benefit everyone who has contributed to GOFi DAO's development, and bring wealth, happiness and glory to every contributor.

I hope that every fan who is committed to the development of blockchain business will join us, make efforts for the development and benefit of technology together, and share the joy brought by the success of GOFi DAO.

We will follow the general trend of technological development, external environment change and historical development to ensure that the development of the blockchain industry will embark on a virtuous cycle.GOFi DAO will focus on blockchain and its surrounding areas, and will not enter any other industry to make quick money.

Any project we are involved in should be conducive to improving the core management and technology level of the community, giving play to the comprehensive advantages of community resources, and driving the development of the community in the block chain field.

The community will follow the general trend of technology development, the change of external environment, and the general trend of historical development, so that we can ensure that the development of the blockchain industry will embark on a virtuous cycle.We are not shy about seeking a certain amount of revenue.

Without a stable cash flow, it is difficult for the block chain system supported by the community to achieve rapid and long-term development.However, the community does not regard income as the most important goal, but as a means to maintain the normal and stable development of the community.

5.4 GOFi predictor and DEX

5.4.1 Introduction to prophetic machine

Smart contracts are applications executed on decentralized infrastructure such as blockchain.They are untamable, and no party (not even their creator) can change their code or interfere with their execution.

Contracts contained in previous code run in a centralized manner, making them subject to change, termination, and even deletion by privileged parties.In contrast, enforcement guarantees of smart contracts bind parties to written agreements, creating a strong new trust relationship that does not depend on the trust of either party.

Because they are self-validating and self-executing (that is, not tamper-resistant, as described above), intelligent contracts provide a superior tool for implementing and managing digital protocols.Smart contracts represent a powerful new pattern of trust, but they also present a new technical challenge: connectivity.

The vast majority of interesting smart contract applications rely on real-world data from key resources outside the blockchain, particularly data transfer and apis.Blockchain cannot directly access such critical data due to the mechanism of the consensus mechanism underpinning the blockchain.

We propose a solution to the intelligent contract connectivity problem by establishing a secure Oracle network that operates as a fully decentralized network. This decentralized approach limits trust in either party, allowing the untamable quality of the smart contract to extend to end-to-end operations between the smart contract and the API on which they depend.

If intelligent contracts are to replace the current digital protocols, they must be externally aware, that is, able to interact with out-of-chain resources.At present, a large part of the traditional contract agreement of digital automation USES external data to prove the performance of the contract and requires the data output to be pushed to the external system.

When smart contracts replace these old contract mechanisms, they will require highly guaranteed versions of the same type of data input and output.Potential next generation smart contracts and their data requirements include:Smart securities contracts, such as bonds, interest rate derivatives, and many others, will require access to apis that report market prices and market reference data, such as interest rates.

Smart insurance contracts will require Internet of Things data related to insurance events, such as whether the magnetic doors of the warehouse are locked in case of a failure, whether the company's firewall is online, or whether your flight is insured

for on-time arrival.

Intelligent contracts such as trade finance will require global positioning system (GPS) data on shipments, data from the SUPPLY chain ERP system, and customs data on goods being shipped to confirm compliance with contractual obligations. Another common problem with these examples is that intelligent contracts cannot output data to out-of-chain systems.

This output typically takes the form of a payment message and is routed to a traditional centralized infrastructure where the user already has an account, such as bank payments, PayPal, and other payment networks.The GOFi predictor represents an intelligent contract that pushes data securely to apis and various traditional systems, allowing the creation of externally perceived non-tamper contracts.

5.4.2 DEX introduction

In a complete DeFi application ecosystem, asset exchange would be the essential infrastructure.DEX has a better future as a fairer and more transparent solution than centralized exchange.GOFi DEX is designed to be an open exchange that anyone can participate in, and is designed to be traded directly in a balanced pool

.•Assets entry

Anyone in GOFi DEX can create a trading pair on GOFi DEX to trade valuable assets through a cross-chain protocol.

•Transaction pair creation

On GOFi DEX, there are no review licenses and approvals to create trading pairs.

For trading pairs of high value, the liquidity mining award will be decided by community vote.

•Transaction fee

GOFi DEX transactions will be subject to certain transaction fees, such as transaction fees and gas fees.Transaction fees are determined by community voting and gas is determined by the network.50% of the transaction fee will be used for the DIP repurchase and destruction, and 50% will be collected in the community fund and publicized for use.

•Order opening and cancellation

The GOFi DEX order opening and cancellation operations need to be executed by a trade, which will be sent by the user.Subsequent matches or cancellations take effect only after the trade has been successfully packaged into the block.Assets are locked in the process of buying and selling orders.For outstanding orders that have not been executed, the assets in the outstanding order can be unlocked by canceling the order to restore the normal use of the assets.The basic transaction fee is paid to the miners to open and cancel orders

.•Balancer switch function

The cornerstone of the balancer exchange function is determined by a complex function:

$$price = \frac{e^{\frac{a_1}{b}}}{e^{\frac{a_1}{b}} + e^{\frac{a_2}{b}} + e^{\frac{a_3}{b}}}$$

The pricing of a digital asset

The quantity parameter B is related to the liquidity provided by market makers and can be an arbitrary constant: if b is too small, the price change is sensitive, that is, a small trading volume can cause significant price change.

If B is too large, price discovery will be slow, that is, only a large volume of trading can make the price change significantly.

Therefore, for a small and infrequent trading market, B generally takes a small value, and for a large trading market, B takes a large value.

And represent the number of two currencies in circulation in a trading market, which can be increased if there are more than one currency.

6. Disclaimer

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