# HyperLending

HyperLending aims to build a lending platform with digital assets as collateral, holding a convenient, safe and low-cost loan while enjoying the bonus of digital asset appreciation.

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#### Abstract

#### AIM

This technical white paper is intended to provide a technical overview for the HyperLending service platform and basic understanding of blockchain will be helpful to understand this article.

### RANGE

This technical white paper provides a technical overview of the HyperLending platform, a platform for building the world's first digital asset collateral loan service. This article describes its core components and details its architectural design and key component design details.

This document only provides the necessary information for the outside to understand the system. We may make modifications or improvements to the product, system architecture, or program without prior notice.

This document is a Chinese translation of the English technical white paper. Although we try our best to ensure the accuracy, we may still slightly deviate from the English version. This document is based on the English version where the content of this article is different from the English version.

#### **RELATED DOCUMENTS**

Official website: <u>www.hyperlending.com</u>

#### FOREWORD

The current market size

The total size of the digital money market has accelerated its expansion

According to statistics from CoinDesk, as the most representative digital currency bitcoin broke the \$ 2,000 mark in early May 2017, breaking the \$ 3,000 mark for the first time in June and setting a record of \$ 3,360.87 on August 5, 2017. The value of bitcoin in 2017 has increased by 200% with a total market cap of over \$ 50 billion.

Meanwhile, the price of ETH blockchain ecosystem of ecosystems hit 12% soaring on August 5,

2017, and then rose 7% to \$ 270.07 on August 6 with a market cap of \$ 25.2 billion. Since 2017, the scale of digital money has started to accelerate. As of August 2017, the total value of digital currency has exceeded \$ 134 billion, an increase of 700% from the beginning of 2017.

The digital currency credit market is in urgent need of filling

In 2018, the scale of credit of 33 trillion is approaching, and the long tail of customers and the diversification of scene have become the trend. There are great Among them, the demand generated around the Bitcoin market is very large, while the demand for digital currency collateral loans varies. For example, miners need more money to expand their production; users who already hold bitcoin in high positions are hoping to store more coins; ordinary users and miners don't want to sell bitcoin and want to have more bitcoin, but there are also short-term consumer demand for life; In addition there are some companies in the industry raised capital in the form of digital money, needing for short-term use of legal currency to turnover.

### About HyperLending platform

HyperLending is a platform for cash lending services to digital asset holders. At present, the value of digital assets has not been widely recognized by traditional financial institutions, so it is difficult for digital asset holders to directly obtain the value of the digital assets in circulation. HyperLending aims to build a lending platform with digital assets as collateral, holding a convenient, safe and low-cost loan while enjoying the bonus of digital asset appreciation.

The design concept of the HyperLending platform takes full account of the borrowing requirements of digital asset holders, as much as possible to improve the security and transparency of the platform.

#### Advantage of HyperLending platform







### **Design Principles**

HyperLending platform has developed a program of loan contract management agreement. The agreement writes loan and lender borrowing agreements into smart contracts to automatically track and enforce the terms of the agreement. The agreement mainly includes:

Secure Storage and Automated Management of Collateral Digital Assets: Borrowers' digital assets are securely stored in wallet protected by multi-signature throughout the loan process. Its advantages are:

The management of digital assets is completely transparent, which would greatly reduce counterparty risk.

No cost for the management of digital assets, which greatly reduces the cost of the whole process.

The larges cale makes management more convenient.

Automatic Execution of Lending Relationship Smart Contracts: Borrowing agreements written into smart contracts will be executed automatically in accordance with the agreed terms and should not be tampered with. At the same time, the smart contract will automatically track the value of the digital asset. The smart contract will automatically remind the borrower to make the appropriate action when the guarantee clause is triggered or within the specified repayment date. It is characterized by:

Transparency: Smart contracts are completely transparent, borrowers and lenders clear terms of the loan.

Automation: Automatic execution of smart contracts reduces the risk of manual errors.

Immobilization: Smart contracts cannot be tampered with, avoiding the risk of fraud in the loan process.

#### **Loan Process**

On HyperLending, lenders post the amount and term of loan they are willing to provide. Borrowers select appropriate loans by searching on the platform, to reach an agreement with the borrower. The specific process is as follows:

1.Borrowers and lenders are required to register on the official website of HyperLending as a member to complete the authentication, including providing real name, ID number, bank card number, cell phone number and other relevant information, and upload photos of ID card, passport, driving license and other photo of valid ID issued by legal government.

2.The lender publishes its own loan product on the official HyperLending website "www.hyperlending.com".

3.After the borrower completes the product selection, official customer service sets up a

"3-co-management" wallet, which now uses an open source, multi-signed Copay wallet that will ensure that borrowers collateralize digital assets in a secure and transparent co-management environment. Official customer service will share the address with both the borrower and the lender.

4.Borrowers transfer digital asset token collateral, such as bitcoin equivalent to the loan product of their choice, to a "3-co-management" wallet provided by the HyperLending customer service.

5.The lender needs to inform the HyperLending customer service after confirming the digital currency that transferred into the Copay wallet by the borrower. HyperLending customer service will lock the "3-co-management" Copay wallet once receiving the message from the lender. At this point, the borrower's digital currency will be in a safe state called "3-co-read". In addition, the borrower still owns the digital currency in the "3-co-management" wallet and the bonus of digital currency during the lock-up period.

6.The lender transfers legal currency to the borrower's account provided by the borrower to complete the lending of the legal currency.

7. The borrower should repay on time, or all the digital currency locked in the wallet will be transferred to the lender.

8.If the collateral digital currency devaluates and triggers the collateral rate limit, HyperLending will start the protection of close positions. At this point, all the digital currency locked in the wallet will be transferred to the lender.

#### To explain the loan process, we take the following scene as an example

First, lender A publishes loan information of \$ 10,000 on the platform and stipulates that the annual interest rate is 12% and the repayment method is equal to 12 months' principal.

Borrower B decides to apply for a loan from lender A after comparing more loan information.

HyperLending directs Borrower B to transfer the full amount of digital assets to an address protected by multiple regulatory and multiple signatures after lender B issues a loan application. HyperLending will send a message to the lender and lead the lender to transfer the legal currency to the borrower's bank account once the digital assets collateralized are determined.

The loan agreement signed by lender A and borrower B is automatically executed in the form of smart-contract, after HyperLending customer service confirms the successful bank transfer.

During the loan process, Borrower B needs to repay the loan on time and at the same time Borrower B has the right to repay the loan balance in advance.

The digital assets are returned to Borrower B after the loan is paid off.

#### **Digital Assets Collateral**

HyperLending sets the following terms to protect the benefit of the lender:

# **Collateral Rate**

HyperLending sets the collateral rate at 30% -50% to protect the benefit of the borrower. That is, for every digital asset valued of \$ 100, the borrower can apply for a loan of \$ 30- \$ 50.

#### Protection of Close Position

When the market capitalization of the token collateralized by the borrower devalues to 37.5% of the initial market capitalization or less, all the tokens will be transferred to the lender's wallet. For example, Borrower A collateralizes tokens with a market capitalization of \$ 100 and applies for a loan product with a collateral rate of 30% for a sum of \$ 30. When the collateral depreciates to \$ 42.86 (at which point the collateral rate is 70%), HyperLending will remind Borrower A margin call. Borrower A will need to replenish the token with a market capitalization of \$ 57.14 (at this moment, the pledge rate will be reduced to a normal level of 30%). Otherwise, when the collateral depreciates to \$ 37.5 (at which point the collateral rate is 80%), HyperLending will terminate the collateral and transfer all the collateral token to the lender's wallet.

Default Mechanism

When the borrower defaults (overdue repayment), system will trigger the close position automatically with a fine.

#### **HLD Usage Scene**

HLD is a token issued on the HyperLending platform, one of the usage scenes. On the HyperLending platform, HLD is used to pay membership fees and management fees.

Membership Fee

Users access to the HyperLending platform for loans and lending business need to purchase HLD as a membership fee.

Ordinary Member: 0HLD token/month, collateral rate 30%

Gold Member: 0HLD token/month, collateral rate 30%

Platinum Member: 0HLD token/month, collateral rate 30%

Management Fee

For each successful loan of \$ 1000, the borrower must pay HyperLending 1 HLD token. For less than \$ 1000, 1 HLD token is required.

HLD Excitation Mechanism

To attract more users, we provide excitation mechanism:

The old user will obtain 1 HLD automatically after every successful recommendation of a new user;

To encourage users to participate in HyperLending platform promotion and use, we will carry out integral activities from time to time;

HyperLending will give active users and good credit users some HLD to increase user activity

and expand new users;

HyperLending will regularly take out 40% of the profit repurchase HLD;

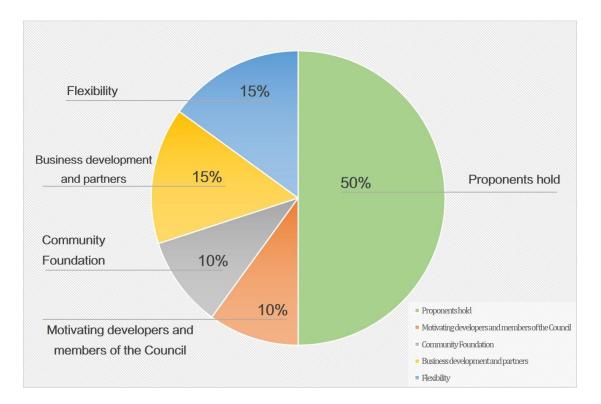
Users can apply loan on HyperLending with HLD as collateral;

The use of HLD mentioned above, the platform's regular repurchase, will increase the scarcity of HLD and thus increase its value.

HLD Distribution

50% of tokens are held in the open market, 15% of tokens are used for business expansion. We expect more users to use HyperLending platform and access more institutional users.

# Detail plan of HLD distribution



# Design

We will develop applications for the Android and iOS platforms and provide the following core features:

New account

Users need to submit personal information (ssn, driver license, date of birth, debit card and other information) to avoid the risk of AML (Anti-money laundry) and KYC (Know your client). Wallet

The first wallet will provide the ability to store bitcoin, with subsequent support for more digital assets. Before lending, users need to put a certain amount of bitcoin or other

platform-backed digital assets into a secure address protected by multiple signatures. Loan

The maximum amount a user can apply for a loan is 50% of the market capitalization of the collateral digital asset (based on the real-time price of an exchange).

Repayment

The borrower can choose legal currency or digital currency for repayment.

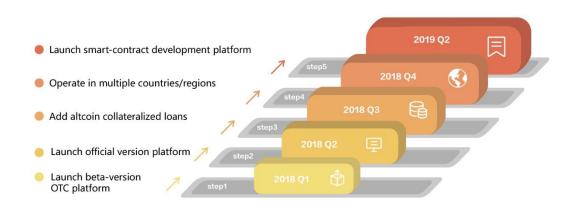
Check the balance

Users can check the remaining loan amount.

Withdraw

Users can transfer the digital assets to other address after the repayment.

### The plan



#### Risks

1. Risk of loss of HLD due to lost wallet

The HLD users purchased will be transferred to the users' digital wallet once they are allocated. If users lost the wallet will result in the loss of HLD, please keep your digital wallet properly.

2.Risk related to Ethereum core protocol

HLD Tokens are developed based on the Ethereum protocol and therefore any failure, unexpected functional issue, or attack on any Ethereum core protocol may result in the HLD or HyperLending application ceasing to function or function in an unknown manner. Additional information about the Ethereum protocol is available at www.ethereum.org

3. Risk related to judicial supervision

Blockchain technology has become the main object of regulation in all countries in the world. Affected HyperLending or HLD may be affected by regulatory body, such as legal restrictions on the use and sale of digital currencies.

4.Risk related to applications or products do not meet the expectations of HyperLending or the purchaser

HyperLending is in the development stage, and major changes may be made before the release of the official version. Any HyperLending's or buyer's expectation or imagination of the function or form of HyperLending or HLD (including Participant Behavior) may not be as expected and any erroneous analysis or underlying design changes may cause this situation happened.

### 5.Risk of hacking or theft

Any attempt by a hacker or other organization or country to interrupt the HyperLending application or HLD token functionality may happen, including service attacks, Sybil attacks, exploits, malware attacks, or conformance attacks.

6. Risk of vulnerabilities or rapid development of cryptography

The rapid development of cryptography or the development of other related technologies such as the development of quantum computers may cause the cracking of cryptographic tokens and HyperLending platform which will result in the loss of HLD tokens.

7.Risk of uninsured loss

HLD stored on the Ethereum network are generally not insured, unlike bank accounts or other financial institution accounts. There won't be any public organization or individual underwriting your losses at any circumstance.

Other risks and coping mechanisms

Compliance / operational risk

Compliance / operational risk is the risk that HyperLending violates local laws and regulations in conducting business, resulting in an inability to continue operation. The way to avoid risk of compliance / operational taken by operation team is:

Operation team and foundation take a distributed approach that eliminates single-point risk. Employ professional lawyers in the local, design HyperLending business under the legal framework.

The team only focus on the building of HyperLending platform. The operation of the project won't involve the trading of HLD with legal currency and does not interfere with the third party carry out HLD exchange with legal currency business.

Market risk

Market risk means that HyperLending has not been accepted by the market or has not enough users to use it. Its business development has stagnated and there is not enough profit to support it. The hedging method adopted by the operation team is as follows:

Leveraging on the accumulated experience of founding teams in the Internet financial markets, the market demand for collateral loans with digital assets translate into HyperLending's initial users.

HyperLending operation team will regularly participate in industry conferences, share HyperLending concept with the industry, learn from the experience of similar products operating, and improve HyperLending.

Technical risk

Technical risk means a significant issue with underlying technologies that causes HyperLending to fail to achieve its intended function or the critical data has been tampered with or lost. The hedging methods adopted by the operation team for technical risk are as follows:

Based on mature / open source / secure blockchain technology, the HyperLending system was developed using an architecture that has been validated by many users and with long-term, stable operation.

The foundation regularly allocates funds to support the HyperLending community building and engage in deep cooperation with other blockchain communities to ensure the project's technical risks are manageable.

Capital risk

Capital risk refers to the significant loss of project funds, for example: theft of funds, the loss of funds and the drastic devaluation of reserves. The hedging methods adopted by the operational team for capital risk are as follows:

Collateral of digital assets adopts 2/3 multi-signature mechanism, HyperLending is responsible for supervision, the three parties in charge, which can effectively reduce the theft of funds and the risk of being embezzled.

HyperLending team has extensive risk control experience.

#### DISCLAIMER

This document is for transfering informational purposes only and does not constitute any representation regarding the sale or purchase of HLD tokens. This document does not constitute any advice, investment intention or investment induced.

This document does not mean providing any sale or purchase, nor any offer to buy or sell any form of securities, nor is it a formal contract or commitment.

Relevant intention users clearly understand the risks of the HyperLending. Users' participation indicates that they are aware of and accept the risks of the project, and they are willing to undertake all the corresponding results or consequences.

The HyperLending team won't bear any direct or indirect loss whatsoever of any participation in the HyperLending project including but not limited to:

This document provides the reliability of all information;

Any resulting errors, omissions or inaccurate information;

Or any resulting behavior.