



coinloan

LOANS SECURED BY CRYPTOASSETS

WHITE PAPER

version: 0.2

Introduction

CoinLoan is an innovative project that combined traditional lending banking system and modern cryptocurrency technology. Our team has studied the problems of interaction between the fiat and virtual currencies. There is an invisible wall between them at first glance, which cannot be overcome. Cryptocurrencies – Bitcoin, Ethereum and similar – are increasingly attracting attention due to their rapid growth and stability. But a person often needs fiat money that is more convenient for settlements.

Selling virtual currency used to be the only affordable solution when there was a need for fiat money. This led to a loss of possible revenue from further appreciation of cryptocurrency and additional costs: financial, associated with fees on exchanges, and temporal – from the moment of cryptoasset sale to the actual receipt of fiat money.

CoinLoan offers a different approach: our users will be able to receive real money in any available currency secured by cryptoassets. The system will select the most suitable option for the borrower from the set of counteroffers for lending

We are convinced that time is the greatest value in the modern world. This is why the CoinLoan system will be fully automated. Loans will be issued without verification of the borrower's solvency, without processing applications by the lending center and other formalities peculiar to the traditional banking system. The user will receive fiat money almost instantly.

There will be no strict division of users into lenders and borrowers in our system – it is not two different poles for us. A borrower can become a lender, and a lender can become a borrower at any time. This will secure flexibility and loyalty of the system.

We preferred the ICO investment to a traditional venture system in our project implementation. Firstly, it will allow anyone who feels like it to become a contributor and pay the service platform fees in CLT. Secondly, it will accelerate the funding process and the launch of CoinLoan, and thirdly, the ICO is a transparent, modern method of fund-raising.

Cryptocurrency

1.1 Story Behind

Cryptocurrency is a kind of virtual currency, issue and accounting of which are based on asymmetric encryption and the use of various cryptographic protection methods. Such currency cannot be counterfeited and has no equivalents in notes or coins.

Cryptocurrency is not regulated by financial institutions – its turnover is supported by a single decentralized network consisting of many computers.

The idea of creating an independent digital currency for online settlements belongs to Timothy May, a former electronic engineer at Intel. He suggested creating a new anonymous currency that would suspend the state from participating in financial transactions and change the structure of large corporations.

May's supporters have been trying to implement his idea for a long time, but the following questions arose: what value new money should be assigned, how to estimate the labor cost of mining money, and how to convince people of the real value of a virtual currency.

These problems remained unresolved until 2008, when some Satoshi Nakamoto offered the concept of Bitcoin.

The first software for cryptocurrency was released and the first Bitcoin was mined on January 9, 2009. However, it had no value at the time, was known only in narrow circles and had virtually zero demand from the public.

Mass distribution of the first cryptocurrency can be dated 2013, when the cost of 1 Bitcoin increased from 31 to 300 USD.

New cryptocurrencies began to emerge on the market, but Bitcoin always remained No. 1.

Analyzing the growing demand from the public and, as a consequence, increase in the value of cryptocurrency, it can be stated with confidence that virtual currencies will not obsolesce, and their value will only grow.

1.2 Cryptocurrency Use

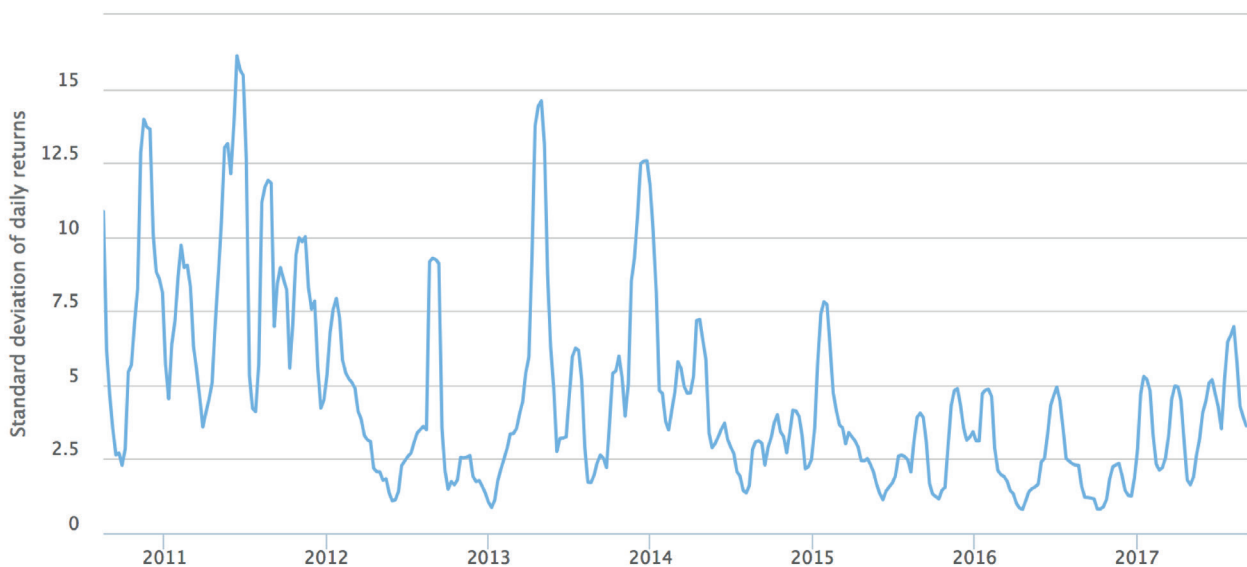
Cryptocurrency was initially intended for online payments only. However, financial operations in this area began to rapidly develop due to the safety of cryptocurrency settlements.

Now cryptocurrency can be used to make purchases in online stores, buy airline tickets, cars, real estate, travel trips, and some companies offer discounts when paying with cryptocurrency. This list expands every day.

1.3 Growth Outlook for Cryptocurrencies

Henry Brade, a Bitcoin expert, co-founder and CEO of Prasos, is sure of the further growth of the cryptocurrency value, Bitcoin in particular. He carried out an analysis that revealed that Bitcoin volatility has significantly decreased, and it has proved to be a stable financial vehicle over the past three years.

The Bitcoin volatility chart (August 16, 2010 – September 8, 2017)



You can compare it with the Ethereum volatility chart (September 29, 2015 – September 9, 2017)



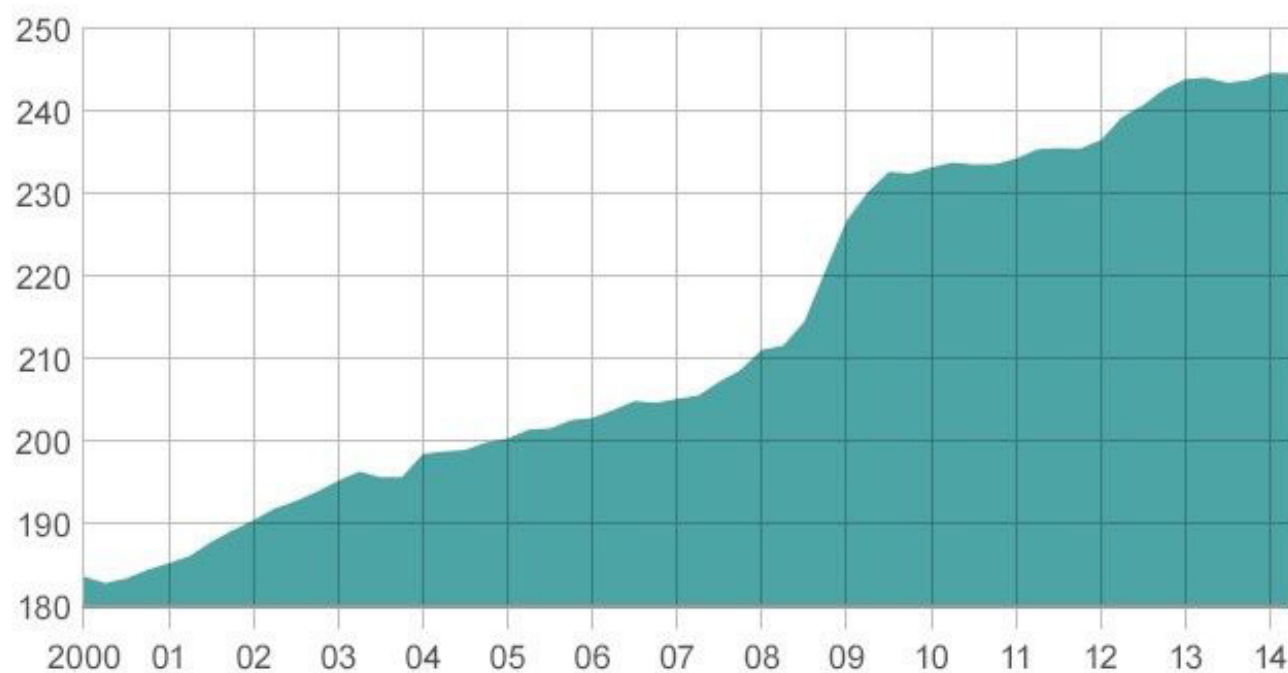
Source: buybitcoinworldwide.com

«Historically large price increases have always been preceded by a stable period and now we've experienced the most stable period so far,» Brade says.

Another result of its research revealed that the economic situation in the world is losing stability. He recalls that in 2008 the economy collapsed due to unsustainable debt structures but what many people don't understand is that debt has only increased since.

Global total debt outstanding

Percent of GDP, GDP weighted average



Source: Institute of International Finance

Statistical data show that keeping money in cryptocurrency, which is strongly correlated neither with the stock market nor national currencies, is economically viable and reasonable.

Idea and Outlook

2.1 Idea Behind CoinLoan

Having carefully analyzed cryptocurrencies and their growth in relation to fiat money, we came to the conclusion that this market lacks lending vehicles.

The most popular way to get a fiat currency for a cryptoasset is to sell the asset on the exchange. This is economically unfeasible, since the value of cryptocurrency can significantly increase literally within a week, after which the holder will lose an impressive amount.

The CoinLoan project offers an alternative. Using our system, a cryptocurrency holder can get a loan in fiat money on the security of his/her cryptoasset. Before the end of the loan period, the security deposit will remain in the protected CoinLoan system. Once the loan and the interest are paid within the agreed period, the pledged asset will be returned to the borrower in full.

The CoinLoan platform will provide an opportunity to instantly issue virtual or plastic payment cards supporting Apple Pay¹ and Samsung Pay².

Using Apple Pay and Samsung Pay, you can make payments around the world where contactless payment is enabled. It is convenient and beneficial, as the user of such services does not pay additional fees.

Besides, the platform users will be able to order a debit card with worldwide delivery. Borrowers will be able to instantly receive credit funds in the fiat currency or use it depending on their needs – cash out funds in ATMs, pay through terminals, shop online.

CoinLoan will accept the following collateral for the loan since its launch:

- Bitcoin
- Ethereum
- Litecoin
- Ripple
- Monero
- Zcash
- Dash

1 Apple Pay is a mobile payment system from Apple corporation. It was presented on September 9, 2014. Using Apple Pay software, users of iPhone 6/6+, 6s/6s+, SE, 7/7+, Apple Watch can pay for purchases using the NFC («near field communication») technology in combination with the Wallet and Touch ID software. It can also be used for online payments.

2 Samsung Pay is a mobile payment service created by Samsung Electronics and allowing users to carry out payments using phones and other devices of the company. The service supports not only the contactless payment technology using the NFC technology, but also payment using Magnetic Secure Transmission (MST) technology, which allows paying through terminals that support only cards with magnetic stripe.

A list of fiat currencies in which loans will be issued immediately after the release is defined:

- USD;
- EUR;
- GBP;
- CNY;
- JPY;
- RUB;
- CHF;
- PLN;
- CZK.

Both lists will expand as the platform develops – we are going to cover all popular fiat and cryptocurrencies.

Compared with traditional financial institutions that issue loans, CoinLoan has a number of advantages. In the traditional collateral scheme, the lender is forced to do a huge amount of work in order to secure the deal: maintain a credit center that verifies the borrower's solvency, arrange the collateral assessment, transfer and store the borrowers' assets.

It may seem that the lender's work should not be of interest to the borrower. However, one should remember that all costs are included in the interest rate, which results in a rise in the loan price.

CoinLoan solves this problem. Our system guarantees repayment of funds in full together with interest for using the loan and dispenses the lender from additional actions and risks. As a consequence, the borrower will receive the lowest interest rate and will not spend time on signing papers, going to the bank, waiting in a line and carrying out the property assessment.

There is no need for a credit center with this approach. This gives advantages to both parties in the deal: the lender does not need to independently assess the risks, the borrower receives a loan regardless of the credit record.

In the traditional system, one needs to have a sufficiently solid startup capital and know the subtleties of the profession to become a successful lender. CoinLoan allows absolutely any individual or legal

entity that has fiat funds to become a lender, and it assumes risks associated with the loan repayment. A user who offers to lend funds sets the interest rate, amount of the loan and its term on his/her own, and our system seeks the borrower in the database, who is interested in such terms.

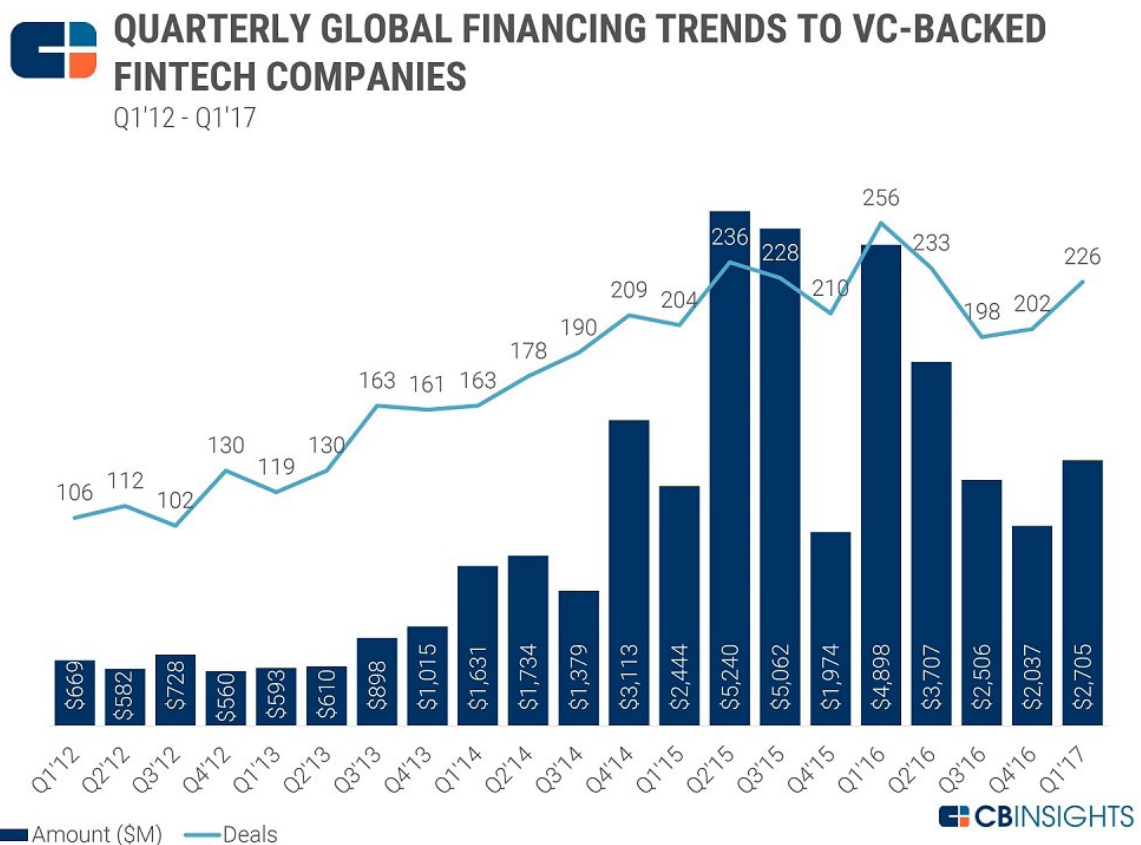
2.2 CoinLoan Outlook in the Field of FinTech Technology

The CoinLoan project is part of the FinTech industry, which is rapidly developing globally.

As blockchain technologies develop, technological projects in the field of financial services are also actively evolving. The FinTech industry is considered one of the most promising and demanded areas.

Below are five traditional areas of financial services, where a significant amount of innovation occurs:

1. payments and money transfers;
2. borrowing and lending;
3. capital management;
4. insurance;
5. currency.

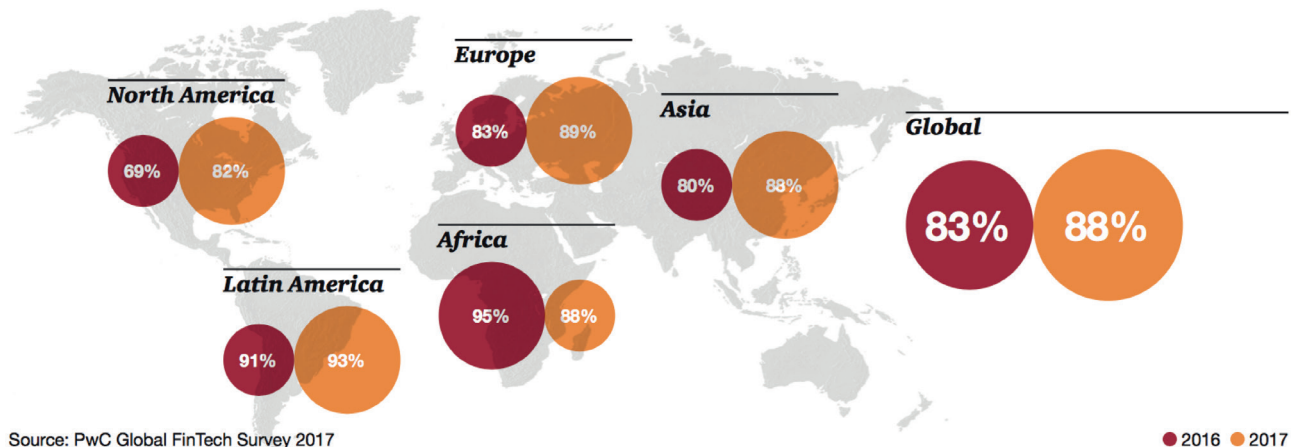


The scale of investment in this area is worth noting. According to CBInsights in the Global Fintech Report, global VC-backed Fintech startups raised \$2,7 billion in 226 deals in the first quarter of 2017: Asian startups raised \$826 million in 42 deals; European startups raised \$667 million in 73 deals; American sponsors raised \$1.1 billion in 90 deals.

According to the new global report of PwC Global FinTech Report 2017, the majority of global

Figure 2: Percentage of incumbents who believe part of their business is at risk

Do you believe that part of your business is at risk of being lost to standalone FinTech companies within the next five years?



financial companies are going to expand FinTech partnership, as 88% express concern that part of their business is at risk due to technology projects.

This suggests that innovation in the field of finance is a relevant task.

The CoinLoan project will make its contribution to the FinTech global development. We implement a platform to enable each cryptocurrency holder to keep his/her virtual assets and get loans on favorable terms, if necessary.

This will be a new step in the development of the entire lending industry.

Figures and Geography

Coinloan is an innovative technological project, the activities of which will have no territorial restrictions. The system will be launched in the countries of Europe and the CIS, and the coverage of the countries will expand along with the development progress. CoinLoan will operate as a legal payment institution, licensed in Europe.

The platform will work with large and small loans. The minimum loan amount will be 50 USD. This will attract not only legal entities but also individuals to the platform.

The time for which a loan can be issued is not defined. Borrowers and lenders determine the optimal duration of the deal for themselves – from 1 day to 60 months (5 years). Such a flexible approach will ensure the convenience and interest of users.

Lenders and borrowers determine the best interest rate for themselves. To keep lending within the existing market conditions, the CoinLoan system will calculate the recommended values of interest rates, which will be lower than in any other lending institutions. More loyal terms will be achieved due to the absence of costs associated with collateral property and competition between lenders.

The system will be fully automated: orders will match and execute instantaneously. The borrower can withdraw the received funds in any convenient way – SWIFT, SEPA, instant transfer to a bank card (Visa Money Transfer and MasterCard MoneySend).

Theory of Operation

The theory of CoinLoan operation can be considered from two sides – lenders and borrowers. But it should be understood that the system does not restrict users in using the project. A lender can become a borrower, and a borrower can become a lender at any time.

4.1 Lender

Any individual or legal entity with fiat money can become a lender on the CoinLoan platform. No additional permissions for conducting activities within the project are required. To give a loan, the user needs to deposit fiat money into his/her personal account in any convenient way – SWIFT, SEPA, Sofort, bank card. As the platform develops, the ways of replenishing the account and withdrawing money will expand.

The lender creates an application for a loan, which indicates:

- Loan amount;
- Currency;
- Interest rate within the current market conditions (the recommended limit will be provided by the CoinLoan system);
- Loan term;
- Additional parameters: possibility of early or partial repayment, the lowest amount for one loan (the loan amount indicated by the lender can be distributed to several borrowers interested in the terms proposed).

The lender will be able to check out the real market offers in order to define conditions that will allow for faster order execution. CoinLoan will have sections with statistical data, charts, executed deals and valid offers.

This will create competition within the system, which will allow to get rid of economically unprofitable offers from both sides.

The created offer will wait for a counterorder. If the terms of the loan order match the current market situation, it will be executed instantly.

When the orders are matched and the deal is concluded automatically, the borrower's cryptocurrency asset becomes the pledge of obligation fulfillment and is stored in the CoinLoan system. The lender receives repayment in two ways, depending on the loan terms:

1. by monthly scheduled payments, including the part of the loan principal and monthly interest;
2. the entire amount at the end of the contract, including the loan principal and all interest due (only for loans for up to 60 days).

If the borrower failed to fulfill his/her obligations, the pledged asset will be automatically liquidated as debt repayment – the lender's funds are insured and protected from the risks of non-return.

CoinLoan allows to create an order for giving new loans automatically after the old ones are repaid. Thus, the lender's money will be able to work without his/her involvement.

4.2 Borrower

To start working in the system, the borrower must deposit cryptocurrency into his/her personal account.

To get a loan, the borrower creates an application, which specifies the terms on which he/she is ready to conclude a deal. To assess the market situation, he/she will be able to view the history of the completed and active orders of other users, charts and other statistical data. This information will outline a real picture of the current offers and help decide on the parameters to be used to get a loan faster.

During the loan term, its costs as an interest rate can be offset by an increase in the cryptocurrency value. As such, borrowers will be able not only to retain the blockchain assets, but also to earn.

The following is specified in the loan application:

Amount of cryptoasset to secure a loan;

Percentage of the loan amount to the cryptoasset current market value (LTV³). Due to the volatility of virtual currencies, the collateral ratio from 10 to 70% will be set. This means that no more than 70% of the market value of the borrower's asset can be borrowed. Such a restriction will be introduced to reduce risks associated with volatility. The borrower chooses and assesses the possible risks on his/her own, depending on his/her asset and loan term;

- Interest rate under market conditions;
- Term for which a loan is required;

³ LTV (Loan-to-value ratio) is the percentage of the loan principal and the estimated value of the asset, which serves as its collateral. The LTV ratio is usually calculated by dividing the loan amount by the estimated value of its collateral. For example, a 70% ratio requires the amount of debt to be not more than 70% of the collateral market value.

- Additional options: possibility of partial replenishment, early repayment, etc.

Once the application is filled out, the system will begin to search for a counteroffer. If there is a suitable one, the orders will be matched instantly.

The funds can be received in any convenient way – to a bank card, via SEPA, SWIFT transfers, etc.

The loan can be repaid in two ways:

1. payment of the entire debt in one payment (only for loans for up to 60 days);
2. monthly repayment (annuity payments⁴) over the loan duration.

The borrower will be able to pay interest and the loan principal in a fiat currency or a cryptocurrency. If he/she is unable to repay the loan, the borrower will be able to refinance it, otherwise a part of the collateral will automatically be sold to repay the monthly payment.

4.3 Mechanism of Handling Risks

Despite the stability the cryptocurrency has demonstrated recently, it remains volatile. This is why we have developed a mechanism to protect the interests of users from possible risks associated with the fluctuating exchange rate of virtual currencies.

Throughout the term of the deal, the CoinLoan system calculates the ratio of borrowed funds and collateral (LTV). With any change in the exchange rate, the ratio of provided funds to the amount of collateral also changes. When the ratio begins to decline to 70%, the system sends a warning to the borrower about changes in the cryptocurrency rate.

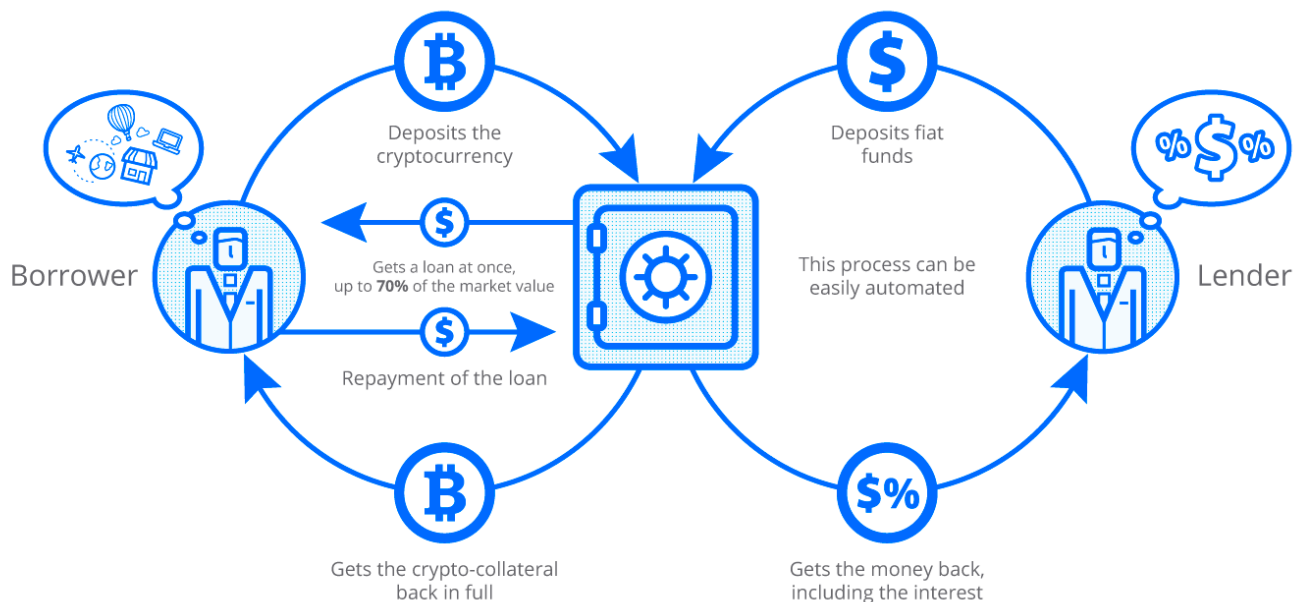
If the ratio approaches 70%⁵, the system will warn the borrower about the need to replenish the balance or sell part of the assets. If the borrower does not respond, the system will automatically sell part of the collateral at the current rate to secure the loan deal.

CoinLoan uses high-frequency monitoring of the market situation on the largest cryptocurrency exchanges. This allows to sell between 71 and 75% of the value of the collateral much earlier than the ratio reaches a critical level.

⁴ Annuity payment is a payment that is set in equal amounts at regular intervals. For example, you pay the same amount each month in accordance with an annuity repayment schedule, regardless of the debt balance.

⁵ The maximum percentage is indicated in the context of this deal as an example. If the borrower sets the ratio of 10% of the value of the collateral, the warning will be sent when the specified value is reached.

This mechanism protects lenders from the loss of their investments, while the borrowers can transfer Bitcoins into fiat money in time, repay the loan and avoid losses in relation to the current rate.



4.4 Application Example of CoinLoan Operation

Let's review an application example from the part of the borrower for a better understanding of how the CoinLoan system works.

The user has 25 Bitcoins, and he/she needs a fiat currency. He/she does not want to sell the cryptocurrency at the exchange, as the rate is skyrocketing.

At the current rate, 1 Bitcoin is worth 4,000 USD, so 25 Bitcoins are worth 100,000 USD.

$$25 \text{ BTC} \times 4,000 = 100,000 \text{ USD}$$

This amount can become a collateral for a loan deal. However, according to the CoinLoan rules, one can get a loan only in the amount of 10-70% of the real value of the borrower's cryptoasset (LTV). Accordingly, the user can borrow no more than 70,000 USD. This LTV restriction is introduced to reduce the risks associated with the cryptocurrency volatility.

10% from 100,000 USD = 10,000 USD

70% from 100,000 USD = 70,000 USD

Let's consider a case with a maximum amount and a deposit of 25 BTC at a rate of 4,000 USD for a period of one year. The amount of collateral is 17.5 BTC (70%), 7.5 BTC (30%) is a security deposit.

Three scenarios for the entire duration of the contract are possible:

1. BTC market value will fall;
2. BTC market value will grow;
3. BTC market value will not change.

What to do if the Bitcoin price drops to 3,200 USD and the value of the pledged asset amounts to 80,000 USD

1. Repay the entire loan amount of 70,000 USD + % and get 25 BTC back.
2. Replenish the collateral with the cryptoasset in the amount of 6.125 BTC to restore the ratio of the loan amount and the value of the collateral (LTV) to 70%.
3. Repay part of the loan in the amount of 14,000 USD to reduce the loan principal and restore the ratio of the loan amount and the value of the collateral (LTV) to 70%.
4. Repay the loan in full through selling part of the collateral. In this case, the system will sell about 22 BTC, and the balance of 3 BTC will be available for withdrawal.
5. Do nothing. If the collateral value drops to 75% (the BTC rate drops to 3,000 USD), then part of the collateral required for restoring the 70% ratio will be automatically liquidated, and the loan amount and interest will be returned to the lender (Depending on the market situation, the sale process will be initiated from 71 to 75%). In our example, the sale of 19.45 BTC for 58,350 USD will be initiated. After the sale, the loan balance will amount to 11,650 USD, it will be secured by 5.2 BTC at a price of 3,000 USD (the total value is 16,650 USD) and equal to 70% of the loan-to-value ratio. This process will be repeated if the market value of collateral (BTC) drops to 2,250 USD

What to do if the Bitcoin price grows to 5,000 USD and the value of the pledged asset amounts to 125,000 USD

1. Pay the entire loan amount in the amount of 70,000 USD + % and get 25 BTC back.
2. Withdraw the excess part of the collateral in the amount of 5 BTC or get an additional loan secured by this amount. The remaining 20 BTC will be retained as collateral.
3. Repay the loan in full through selling part of the collateral. The system will sell about 14 BTC, and the balance of 11 BTC will be available for withdrawal.
4. If the loan is not repaid by the due date, the borrower will be able to pay only interest due and refinance the loan.

What to do if the Bitcoin price does not change and remains at 4,000 USD

1. Repay the entire loan amount of 70,000 USD + % and get 25 BTC back.
2. Repay part of the loan to reduce the loan principal and withdraw the excess part of the collateral.
3. Repay the loan in full through selling part of the collateral. The system will sell about 17.6 BTC, and the balance of 7.4 BTC will be available for withdrawal.
4. If the loan is not repaid by the due date, the borrower will be able to pay only interest due and refinance the loan.

Unlike the traditional system, in the event of a decline in the collateral value and no response from the borrower, everything is resolved transparently and fairly with respect to both parties to the deal. Moreover, the system worries about the well-being of borrowers and informs them about negative changes in the market in advance.

Using CoinLoan for Corporate Purposes

Companies that are already engaged in lending can expand their capabilities and customer base with the help of CoinLoan.

Our platform will provide an API that lenders can integrate into their own online services. In this way, the lenders will be able to give loans using CoinLoan technology without offering their borrowers to use the platform directly.

CoinLoan can cooperate with startups, which are focused on the ICO investment. After a successful ICO, the startup usually has cryptocurrency but needs funds in various fiat currencies for the practical implementation of the project. Then, to avoid liquidating its cryptoassets, the startup can use the CoinLoan system and borrow the required amount. The virtual currency can be liquidated in case of necessity.

The CoinLoan platform is also used among miners. Successful mining requires constant improvement of equipment and paying for a large amount of consumed electricity, otherwise the farm will cease to bring the desired result. To maintain the necessary capacity, miners often attract third-party organizations that prefer to accept fiat funds as payment. Then the miners are forced to liquidate their cryptoassets. However, with CoinLoan they will be able to keep cryptocurrency and get fiat funds required for mining.

Initial Coin Offering (ICO)

CoinLoan will issue a virtual currency token called CoinLoan Token (CLT) in the Ethereum blockchain using the ERC20 smart contract during the ICO.

6.1 Why ICO

We preferred the ICO investment to a traditional venture system in our project implementation. Firstly, it will allow anyone who feels like it to become a contributor and pay the service platform fees in CLT. Secondly, it will accelerate the funding process and the launch of CoinLoan, and thirdly, the ICO is a transparent, modern method of fund-raising.

6.2 Token

A single currency – CoinLoan Token (CLT) – will be created for settlements within the system on the CoinLoan platform.

The main task of the CLT is to pay fees for giving or getting a loan.

Investors who purchased tokens at the Pre-ICO and ICO stages will be able to borrow loans secured by tokens without fees to the system. In addition, it will be possible to reduce the interest rate on obtaining a loan by offsetting part of the rate with a CLT.

6.3 Pre-ICO

The Pre-ICO is scheduled for Q3 2017 and will last for 30 days. Investors will be able to purchase CLT tokens under the most favorable terms. Pre-ICO can be completed ahead of schedule in case of reaching the maximum limit of 5 million tokens sold.

The main purpose of the Pre-ICO is to assess the market and geographical distribution of the investor's audience, as well as launching the processes for legalizing the main documents.

At this stage, the token price will be fixed and amount to 1 USD per 1 CLT.

6.4 ICO

The main project funding – ICO – will be carried out within 60 calendar days.

If the minimum for investment raising cannot be reached, the funds will be returned to investors.

The cost of 1 CLT at the stage of the main ICO will vary from 2 to 8 USD, depending on the amount of investment raised.

All unsold tokens will be sold at SCO in limited lots only after the official launch of the platform and at a price not below 10 USD.

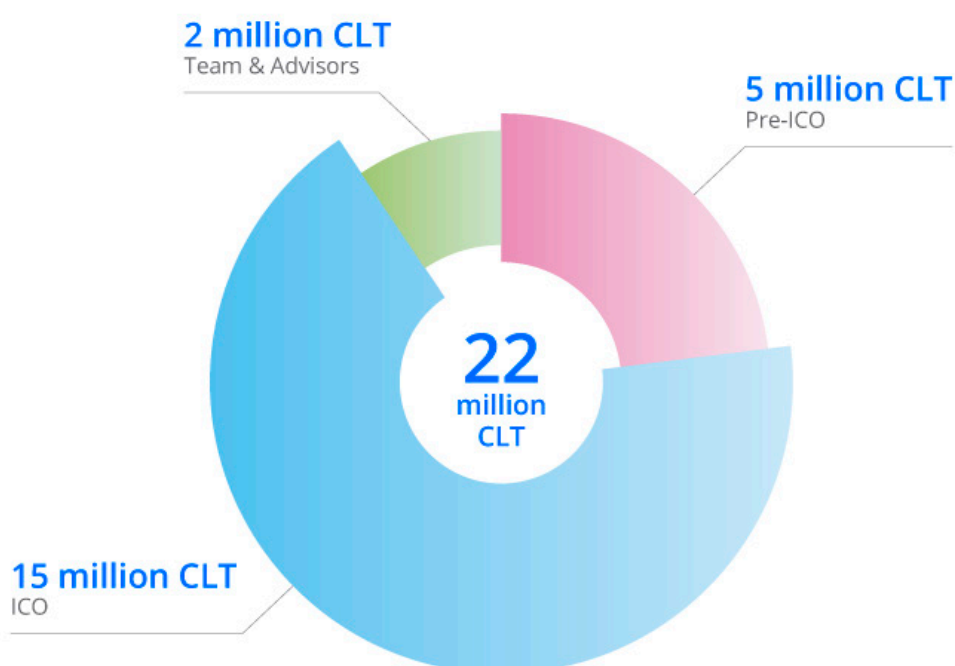
6.5 Tokens Distribution

22 million CLT tokens will be issued over the entire period, which are distributed among the participants of Pre-ICO, main ICO, and the team and advisors of the CoinLoan project.

Tokens distribution will be as follows:

- 5 million — Pre-ICO (Pre-Sale)
- 15 million — ICO (Initial Coin Offering)
- 2 million — Reserve of the team and advisors

The minimum amount to be raised over the entire period is 3 million USD. If the minimum for investment raising is not reached, all funds will be returned to investors.

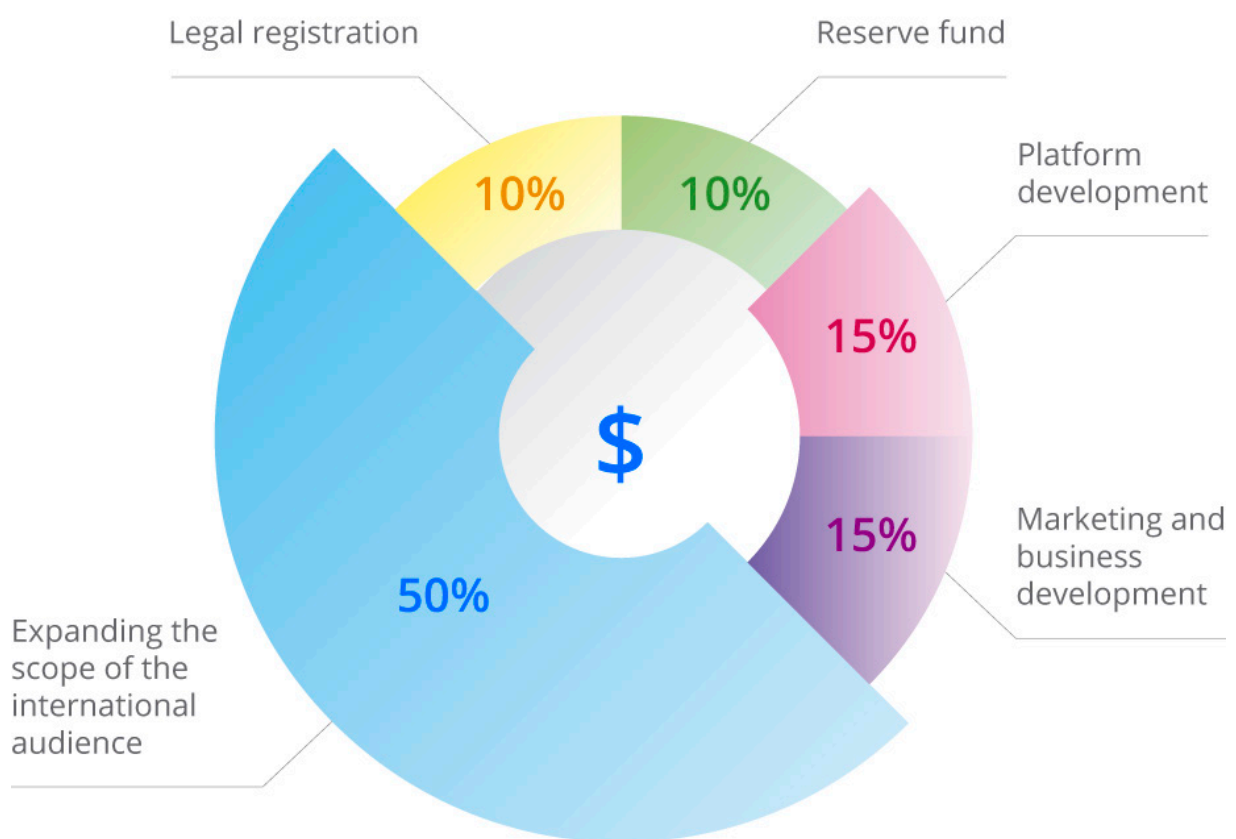


6.6 Funds Allocation

All the funds raised at the Pre-ICO and ICO stages will be used for the successful launch and subsequent intensive development of the project.

Funds allocation:

- Expanding the scope of the international audience (licensing in other countries) — 50%
- Platform development (technical part) — 15%
- Legal registration (licensing and related aspects) — 10%
- Marketing and business development — 15%
- Reserve fund (miscellaneous, unforeseen expenses) — 10%



Roadmap

The CoinLoan project roadmap consists of 7 stages, the implementation of which is scheduled for 3 years. The first stages have already been implemented.

In mid-2018, CoinLoan will be launched in Europe and the CIS. The system will be modernized and improved in the course of the year. Mobile apps for iOS and Android will be created, which will increase the loyalty of existing users and attract new ones.

In 2019, CoinLoan will begin to conquer the markets of other countries

2016 Q4

Generating the idea. Evaluating the market and development potential.

2017 Q1

Launching the development.

2017 Q3

Preparing for the ICO. Performing the Pre-sale.

2017 Q4

Holding the ICO. Expanding the staff. Developing the company's legal structure. Obtaining the required license.

2018 Q2

Completion of developing the platform core. Official launch of the platform.

2018 Q3

Developing mobile apps for iOS & Android.

2019

Licensing and entering the Asian market. Developing API to integrate large financial institutions.

Conclusions

The price of cryptocurrency is growing exponentially. For example, Bitcoin has grown by almost 700% since 2016, the growth of Ethereum over the same period has exceeded 3,300%. Besides, the number of unique users of cryptocurrency wallets is growing: while there were 2.9 million back in 2013, today there are 5.8 million.

Along with the cryptocurrency growth, there is an increase in demand for P2P lending. This is due to low interest rates, which became possible due to the exclusion of financial intermediaries – banks or other institutions – from the deal.

The idea behind CoinLoan is to unite these two promising areas. We will create a platform where fully equal parties will be able to give or get loans in any fiat currency. The cryptoasset of the borrower will serve as a collateral of such a deal – it is an opportunity to conclude safe deals using innovative technology.

The borders between states are blurred in such a system: the lender and the borrower may be located at different parts of the Earth but conclude a mutually beneficial deal in a matter of minutes, where CoinLoan will act as guarantor of fulfillment of obligations by both parties.



coinloan
LENDING LIKE
NEVER BEFORE



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