

# BTCCredit

## Whitepaper

### Overview

Blockchain is making history by shifting power from centralized entities into the hands of the consumers. It has empowered people to manage their own assets without the intervention of any banks, brokers, or institutional monitors.

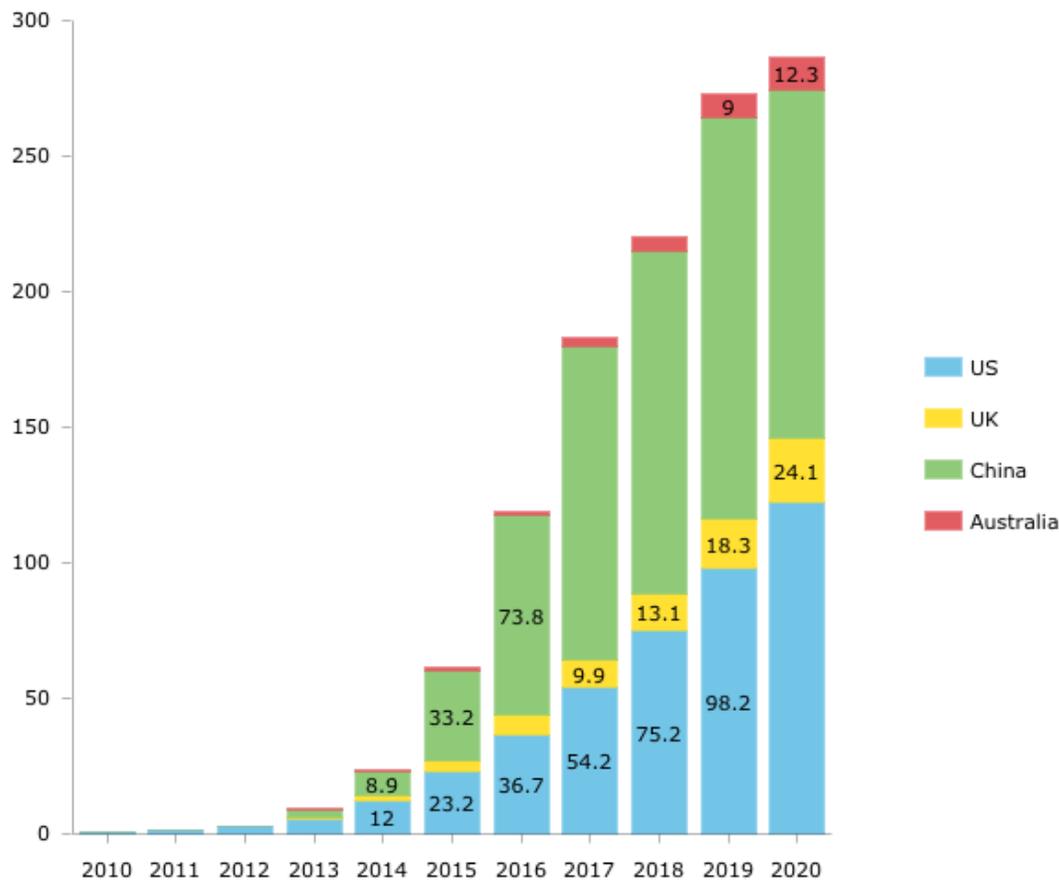
This is a welcome necessity since people risk too much today by allowing their crypto assets to be controlled by a central entity. They don't realize that it is not them but Wallets, Exchanges, & Lending Platforms that are controlling their assets. Hence, they have given up control of their identity, privacy, and money because they believe that they don't have a choice. But not anymore. We aim to be the access point that provides people with this choice.

BtcCredit is an all-in-one decentralized wallet which gives you complete control of your Blockchain asset to Hold, Exchange, Lend, Borrow, Invest, and Stake.

This document outlines the design of a Decentralized Next-Gen Banking Ecosystem that is powered by decentralised multi-currency wallet, decentralised p2p lending, and decentralised p2p Exchange capabilities.

### Market Analysis of P2P Lending

It is cited, that "According to Morgan Stanley, the market for Global Marketplace Lending may reach \$290bn. by 2020, with an expected Compound Annual Growth Rate of 51% from 2014 to 2020."



2010-2014: Compound Annual Growth Rate of 123%; 2015-2020: Expected CAGR of 51%  
 Source: Company Data Morgan Stanley Research

The BTC Credit team is trying to showcase the potential of this market, in order to explain that their truly innovative peer-to-peer wallet solution holds great potential.

### Fixing the Lending Market

Today the inflation-adjusted interest rate in different countries varies based on the available liquidity. In high liquidity market, Europe, interest rates are between 0.5-5 %, in Russia 12-15 %, in India 12 % and in Brazil 32 %. This shows a clear inequality in the way access to the lending market is distributed across the world. We believe that this inequality between the borrowers should be flattened and huge market value can be created in the process, especially through opportunities of Arbitrage.

Banks charge 5-12% interest on loans and compensate you 0-1% for holding your assets with them. With the rise of crypto-currencies and Blockchain, you can now become your own banking institution. BtcCredit makes this a reality for you. Not just this, you decide whom you want to lend your money to, on which interest rate, and in what mode. All of this is available thanks to Blockchain technology, on which the Wallet of BtcCredit relies on.

## Traditional P2P-Lending

Traditional P2P lending is similar to institutional lending, where some measure of credit history and creditworthiness of the borrower is taken into account. The creditworthiness of the borrower decides the type of loan deal he/she is offered.

The method to calculate the risk/credit score is managed through proprietary algorithms/artificial intelligence. The differentiation is also maintained through how defaults are handled, and penalties are imposed.

## Crypto P2P-Lending

There are some existing Crypto lending platforms which are following different business models. On one end they are a just like a traditional p2p lending platform with the ability to accept cryptocurrencies as collaterals. On the other end, they deploy the entire loan contract on the blockchain and execute events on the loan agreement through smart contracts.

The blockchain technology, with its fully transparent and incorruptible transaction ledger, forms the ideal system for managing the loan with its parameters like tenure, interest rate, crypto collateral, etc.

There are many platforms that offer crypto lending:

- Sofin
- Everex
- Ethlend
- Lendoi
- Btcpop

## Competitive Analysis

P2P Lending Platforms can be divided into three main categories:

1. **Traditional P2P** - Lending within the same country and in that country's currency
2. **Cryptocurrency without Smart Contract** - Lending globally with cryptocurrencies like Bitcoin
3. **Cryptocurrency using Smart Contract** - Lending using Blockchain Smart Contract as an intermediate.

## Notable Competitors

**Lending Club (Traditional P2P)** - Lending Club is a US peer-to-peer lending company, headquartered in San Francisco, California. It was the first peer-to-peer lender to register its offerings as securities with the Securities and Exchange Commission (SEC) and to offer loan trading on a secondary market. Lending Club operates an online lending platform that enables borrowers to obtain a loan and investors to purchase notes backed by payments made on them. Lending Club is the world's largest peer-to-peer lending platform. The company claims that \$15.98 billion in loans have originated through its platform up to December 31, 2015.

**BTCPOP (Cryptocurrency Loan without Smart Contract)** - BTCPOP Ltd. was founded in 2014 and

has developed into an established peer-to-peer lending site. BTCPOP's peer-to-peer lending is based on reputation and not on credit score. Users can get loans from other members or make money by lending - all by using Bitcoin. The BTCPOP solution doesn't offer Smart Contracts.

**ETHLend (Cryptocurrency Using Smart Contract)** - A fully decentralized peer-to-peer lending platform using Smart Contract on Ethereum Blockchain for lending Ether by using tokens as a collateral. But ETHLend does not generate scores, nor does it offer any Compensation Fund to protect lenders. Lately, they have added a section to their WhitePaper about oracles and insurance, but it conflicts with their approach of using tokens as collateral, so the situation is unclear.

**SALT (Fiat Using Cryptocurrency as Collateral)** – Centralized fiat currencies loan platform for loan amounts higher than \$5000. It uses the Smart Contract only for depositing cryptocurrency as collateral. Their target market is borrowers with cryptocurrencies who do not want to liquidate their cryptocurrency into fiat currencies. Only accredited investors and qualified financial institutions can become lenders on SALT.

## How the System will Function

### The LDT Token

The system will use an intervening ERC 20 token to manage the repayment through token offset. The token will follow the loaned amount into the wallet of the borrower and will be returned as the borrower repays the instalments.

### The Lender's Pride

The Lender's Pride platform proposes to enable a loan marketplace with some unique features. The system being proposed will form a forum for lenders and borrowers to check loan and loan request offerings including the loan parameters being offered. Based on their own risk perception ability to repay interest, the lenders and borrowers will “handshake” with each other to create a loan agreement on the blockchain.

### How Does it Work?

As a lender, a user enters the system and funds his system generated Wallet with USDTs. The system creates a lending profile where his acceptable loan parameters are recorded. The lender's loan profile becomes a part of a “credit marketplace”.

As a borrower, the user enters the system with his system generated Bitcoin wallet. The bitcoin funds in the wallet form the collateral against the potential loan. The borrowing requirement also becomes a part of the “credit marketplace”.

A system internal logic automatically matches and suggests existing loans and borrowers. A borrower or lender can also manually select from a set of loan offerings or borrower's requirements.

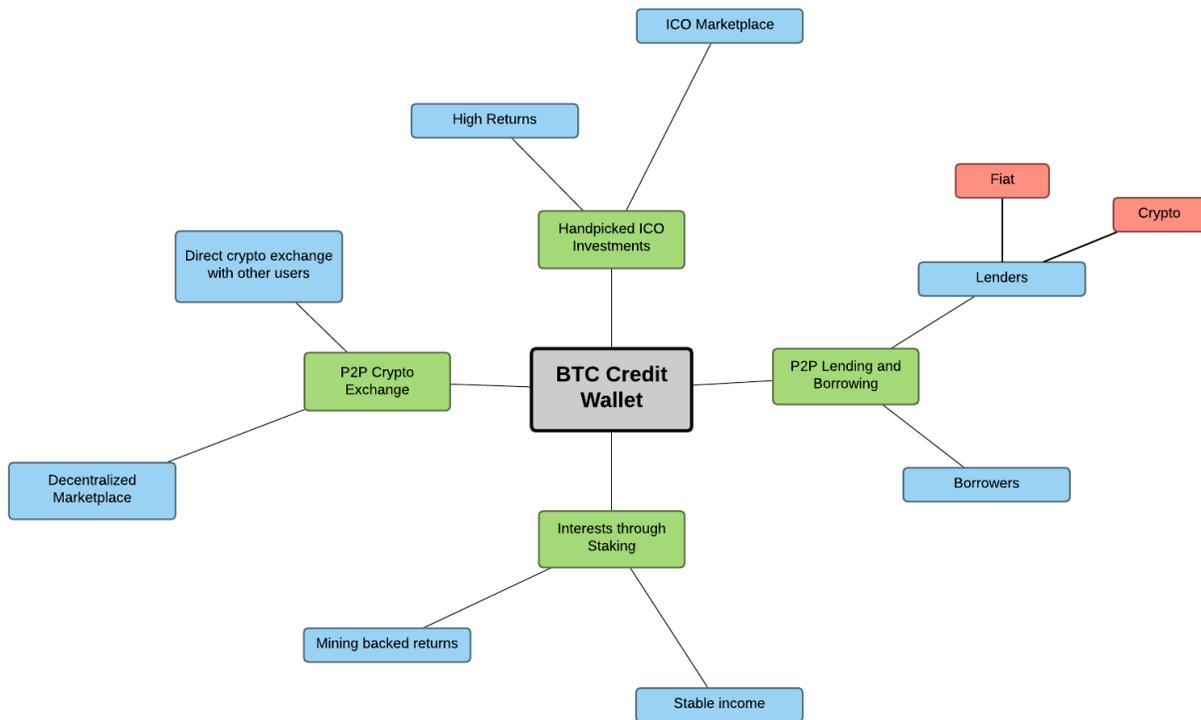
Once a loan is selected, and both sides agree to the parameters on the book, a “handshake” is said to have taken place, which will result in a deployment of a smart contract on the Ethereum network. The borrower's wallet will be funded with the requested USDT and a schedule for repayment gets created.

The repayment is recorded as the borrower deposits the instalment of USDT back into his WSDT wallet. A set of terms and conditions kick in in case the payment is delayed, is not enough or is more than required instalment.

## Defining the BTC Credit Platform

Keeping the competitors in mind and analyzing the market conditions and trends, BTC Credit has been able to identify 4 key verticals when it comes to the services offered by its Wallet:

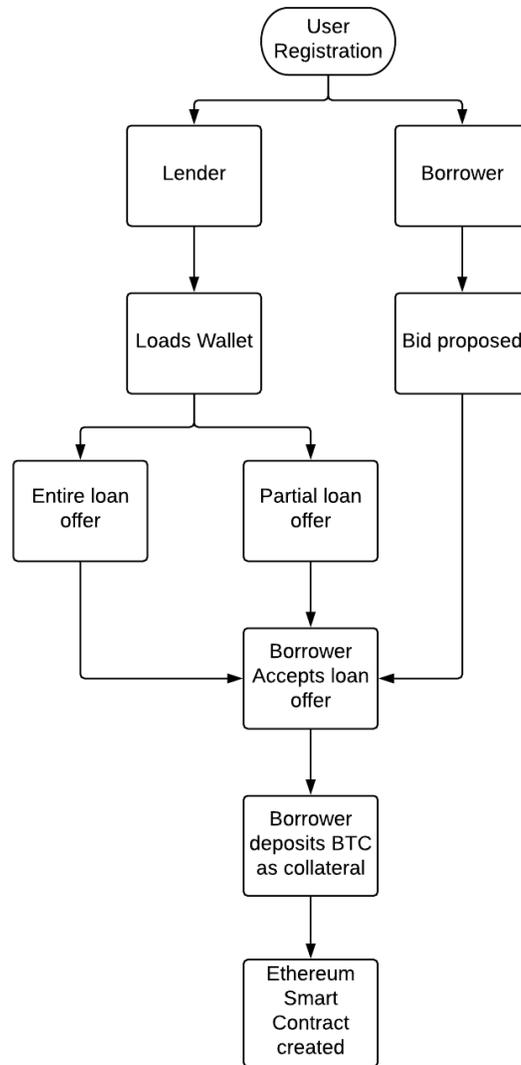
1. P2P Lending and Borrowing
2. P2P Crypto Exchange
3. Handpicked ICO Investments
4. Interests through Staking



All of these services will be offered with the help of a **Wallet** on the platform. Think of the platform as a Bank and the **Wallet** as a Bank Account. Analogous to the Banking System today, the user can load the Wallet with fiat or cryptocurrencies and use the funds to avail services in all the 4 verticals mentioned above.

## P2P Lending and Borrowing

### Operational Workflow of P2P Lending and Borrowing



**Step 1** - The user registers to the front end Web Interface.

He can either be a Lender or a Borrower, For the user to be a Lender or a Borrower, he needs three Wallets - USDT, Ethereum and BTC.

**State 1.0 of the System:**

- Lender's USDT Wallet - 10000
- Lender's Ethereum Wallet - 10000 LDTs
- Lender's BTC wallet - 0 BTC
- Borrower's USDT Wallet - 0
- Borrower's Ethereum Wallet - 0
- Borrower's BTC wallet - 0 BTC

The Lender can:

- Place entire 10000 as a loan offer.
- Place partial loan offers amounting to 5000, 3000, 1000, etc.

These orders may have different rates of interest and duration.

The borrower can accept one of the orders placed by the lender or he can raise his own bid according to his rate of interest acceptance and duration.

Assuming that the borrower accepts the ask of the lender, he has to deposit BTC as collateral, so the front end will redirect the user to the BTC wallet. When the Borrower and the Lender accept on a deal.

Following will be the Inputs for the contract and pushed to an Ethereum smart contract template:

- a) Amount - 10000 LDT
- b) Loan Tenure - 10 Months = 300 Days
- c) Instalment Tenure - Every 30 Days
- d) Interest - 1% - Considered in instalment Pay - 1010 LTD
- e) Admin Fees - 0.15% Deducted upfront  $10000 - (10000 * 0.15\% * 10) = 9850$  LDT
- f) Lenders Identity - Lenders Address
- g) Borrower's Identity - Borrowers Address
- h) Admins Identity - Admins Address.
- i) Pre Closure Fees - 5%
- j) Pre Closure Duration - 3 Consecutive Paid instalment.
- j) Instalment Delay acceptance days - 3 Days
- k) Fine For instalment Delay - 1%
- l) Terminate contract from Borrowers End - 3 Consecutive instalments Missed.
- m) Collateral info - BTC amount.

Now the borrower will deposit BTC of an equivalent amount as USDT as collateral. Once the deposit is detected, the above contract is deployed.

### **State 1.1 of the System**

Now the handshake of the order between the lender and the borrower is of 10000

USDT but the borrower will not receive Ethereum tokens worth 10000 USDT

He will receive  $10000 - (10000 * 0.15\% * 10) = 9850$  LDT Token and the USDT wallet of the borrower will be credited virtually with 9850 USDT.

Here - 0.15% (per month) is the admin fees

10000 is the lending amount

10 is the duration in months we have to take it in days.

1% Interest

Instalment Tenure - 30 days.

Now:

Lender USDT Wallet - 0

Lender Ethereum Wallet - 0

Lender BTC wallet - 0 BTC

Borrowers USDT Wallet - 9750 USDT

Borrowers Ethereum Wallet - 9750 LDT

Borrowers BTC wallet - 1 BTC

When the borrowers receive USDT in his wallet he can withdraw these USDT to external Wallets to fund his loan requirements.

## **Repayment Conditions**

When the Contract is completed or in case of foreclosure the borrower's request for the return of their collateral of BTC deposited they can raise a request for BTC withdrawal and it can be completed.

### **Normal repayments -**

The Admin Pays the Lender instalment regularly and the Borrower pays the Admin Regularly, the system will be notified by the blockchain of the next instalment date of the Borrower.

### **Instalment Delayed -**

If the Borrower Missed the date to Pay the instalment the API Interface will notify the Front-end of the Missing instalment of the Borrower. The borrower gets 3 days of grace period to pay the instalment. if the instalment is paid within 3 days no fine will be charged.

### **Instalment Delayed and Missed -**

If the Borrower missed the date of instalment he will be given 3 days of a grace period and even he misses to pay the Borrower will be fined for the particular instalment.

### **Borrower Defaulter -**

If the Borrower is unable to pay 3 consecutive instalments the system will be notified by the blockchain as the Borrower is Defaulter and the Front end can Confiscate its collateral.

### **Pre Closure Loan -**

If the borrower wants to Pre Close the contract he can close the Contract by paying the Principle + 5% Interest and close the contract but he can do only if he has paid 3 consecutive instalments.

### **Extra instalment Payment -**

Here the instalment Amount is 1010 Every 30 Days, assuming the user deposits 1500 USDT/LTD and he is willing to pay more than the instalment Amount he can do it, but the next monthly instalment amount doesn't change its kind of foreclosure that meant the extra amount will be deducted from the last instalment, so if the amount is greater than the Last instalment then it will consider the Second Last and So on, if the Extra amount is greater than Last 3 instalment he has to either Pre close the entire contract or he can lower the Tenure till 3 instalment.

IF the user is Doing foreclosure he can pay 5% Interest and Close the Contract by paying the remaining Principle and 5% interest.

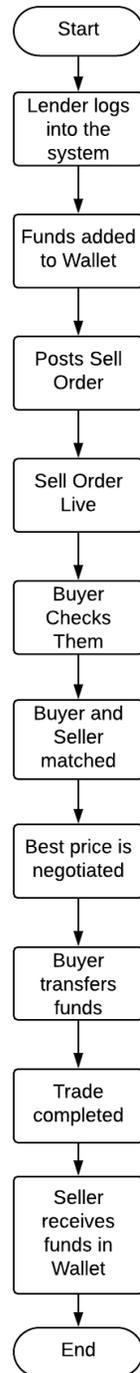
## **P2P Crypto Exchange**

This is the second primary feature of the platform where the aim is to provide users with an ecosystem where they can directly exchange cryptocurrencies with each other in a decentralized p2p marketplace. No third entity will be interfering with the functioning of this decentralized p2p marketplace as it will be directly controlled and maintained by a Blockchain backed software tech. Hence, the current intermediary-based market is disrupted by and all the requirements of human middlemen are done away with.

### **Operational Workflow**

The system will be automatically able to connect the buyers with sellers based on the terms they prefer.

- Lender logs into the system
- Transfers funds to his/her Wallet
- Posts a Sell Order
- Sell Order goes live
- Buyer checks out the range of available Sell Orders
- Buyer and Seller Are Matched
- Buyer and Seller negotiate the most optimum price
- Buyer meets the demand and transfers the funds
- Trade is completed
- Seller receives funds in his/her Wallet



## Advantages of P2P Exchange

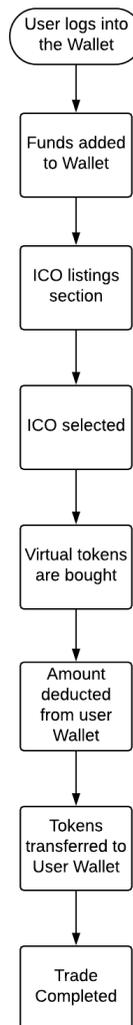
Decentralized P2P exchanges are the future of crypto exchanges as they disrupt the ecosystem and have a lot of advantages over traditional exchanges. Some of them are:

- High resistance to transaction censorship. Users can use the ecosystem as an independent entity with no governing authority whatsoever. They govern themselves with minimal friction from the ecosystem.

- P2P Exchanges are cheap to use as they have the potential to offer much better rates than traditional exchanges. This is made possible by negligible or low transaction fees and the ability for users to post their own rates, without a third party governing the prices.
- P2P exchanges are private and extremely secure networks. No third party has access to your data and hence, it cannot be misused at all.
- Since P2P exchanges are decentralized, there is a no single point of error or failure. Authority is distributed equally to all the members of the ecosystem.

## Handpicked ICO Investments

The next feature of the platform will be the ability to act as a leading marketplace of handpicked ICOs. The platform will continuously filter out the ICOs being conducted all around the world and choose the best possible ones that can offer the maximum value to the users. This acts as a unique feature for the platform, making it easy for the users to avail the benefit of a new profit generating vertical.



## Operational Workflow

- User logs into the Wallet
- User load their Wallet with Funds
- User navigates to the ICO listings on the platform
- User picks the ICO he wants to invest in
- User buys the respective token through the funds in the Wallet
- The amount is deducted from the Wallet of the user
- Tokens are transferred to the wallet of the user
- Trade is completed

## Interests through Staking

The final and unique feature of the BTC Credit platform that provides the users with a method to earn a profit on their stack of cryptocurrencies. With this mechanism, the user can stake their funds within their Wallets to BtcCredit and earn a stable stream of profit/interest on them on a monthly basis.

But how is the interest generated?

BTC Credit has devised a mining backed solution to this. At the backend, mining will be used to generate the requisite income for the users and interest will be paid accordingly.

## System's Unique features

Market research filters out some unique features of the system that are not found in other competing platforms:

### I. The Credit Marketplace

The first unique feature will be the implementation of a loan marketplace. The borrowers and lenders that register on the platform will be prompted to declare their requirement set in terms of figures.

A lender will declare parameters such as the tenure, the rate of interest sought, the maximum amount per loan from his corpus amount etc. The borrower will declare his offered rate of interest, the amount sought, tenure for which the loan is requested.

The borrowers and lenders will participate in a loan matching flow much like a stock exchange with buy and sell orders.

### II. Partial bidding on loan offers

The marketplace will also enable partial bidding on loan offers from borrowers

### III. Crypto Collateral

The platform would allow for collateral in multiple cryptocurrencies like Bitcoin, Ethers, Altcoins etc.

There will be wallet support for each supported cryptocurrency and borrowers will deposit the collaterals as per the conversion rates.

## IV. Collateral valuation

The platform will manage the continuous collateral valuation and take remedial measures if collateral value fluctuates beyond certain prescribed intervals. For e.g, if Bitcoin valuation exceeds 100% from the time of pledging it as collateral, there will be a policy of releasing a certain amount of crypto back to the borrower.

## V. Each loan agreement on Ethereum

The platform will follow template based loan contract, which will be deployed on the Ethereum blockchain as an agreement between the lender and borrower. The platform will have a loan contract template that will be translated into an Ethereum smart contract between the borrower and the sender.

The transparency of the agreement will be expressed through a publicly visible deployed contract that will calculate the loan execution parameters through a well-defined, and undisputable computation.

## VI. The USDT

The platform will use USDT as a means to disburse the loans, which will make it very easy for borrowers to convert it into fiat currencies. This will make the loan feasible for any kind of need.

## VII. One Wallet for Everything

The platform will be powered by a wallet that will provide all the necessary features. In this way, a wallet based ecosystem will be created that will function similar to a bank. This will also take away the need for the users to make use of multiple platforms to meet all their crypto related needs by providing them with a consolidated platform that offers all the said features at one place.

## USDT

USDT is a cryptocurrency asset issued on the Bitcoin Blockchain via the Omni Layer Protocol. Each USDT unit is backed by a U.S Dollar held in the reserves of the Tether Limited and can be redeemed through the Tether Platform. USDTs can be transferred, stored, and spent just like bitcoins or any other cryptocurrency. Users can transact and store tethers with any Omni Layer enabled wallets like Ambisafe, Holy Transaction or Omni Wallet.

## USDT and Tether Reserves

USDT as a currency of choice for the transfer for off-ramping of the crypto asset is important as it has a one to mapping with USD (US Dollars). Tether limited guarantees the interchange of USDT to USD via their transparency recommendation and bank accounts which are regularly audited and signed off by third-party audit firms. For a very small fee, USDTs can be easily converted into USD.

## Platform Wallets

The platform will generate individual wallets to secure the funds and transfers. The wallets will follow crypto exchange guidelines akin to systems like Gemini.

## ICO Investment coin (BTCC)

This will be an Initial Coin Offering investment tool into the system. After the system is ready to be crowdsourced, the BTCC coins will be made available to the public to purchase. These coins can be traded publicly on exchanges and will provide a link into LDT airdrops.

## Rewards/Airdrops

### ICO BTCC Purchase LDT Rewards

Interest in ICO can come from institutional investors looking to market their lending business on the platform. This can be achieved by buying into enough BTCC to get LDTs at a discounted amount.

## The ICO investment timeline and rewards:

### ICO Status Lending Status LDT BTCC

Live Not Open Purchase through Airdrop 10% of ether/Bitcoins purchased \$ value

Finished Live Airdropped on Every Purchased through BTCC purchase for ether/bitcoin.

borrowers in loan contract.

Finished Live Airdropped with every

loan contract into the

lender and borrower

wallet.

### LDT Airdrops

The investment into ICO by purchasing BTCC will result in airdrops of LDT in the amount a certain fraction of invested amount in BTC or Ethers for the BTCC purchase. This prompts the investors to directly use the ICO invested the amount to fund potential credit requests and grow the investment directly without the need to trade or liquidate their BTCC. Every LDT earned or rewarded results in promoting the use of the platform as an investment service.

### BTCC Airdrops

The BTCC airdrops (which are executed in two scenarios) promote the interest in the platform and increases the sentiment around BTCC and is an added incentive for moving loan requirements to the platform.

Post the ICO, the tradeable BTCC token will carry an exchange rate which will fluctuate based on the potential interest in the platform. All the Ownership of BTCC will directly support the project through proportional exposure to LDTs.

### **LDT purchase BTCC rewards.**

Transferring or initiating loans to the platform can be incentivized by proposing ownership of BTCC which might carry a higher premium for both lenders and borrowers. A borrower who already has a loan plan identified on the platform can choose to invest in BTCC and partially fund his loan instalments through LDT.

### **BTCC token - The loan currency.**

The investor/ post-ICO purchaser of the BTCC token at any point when the project is in the investment stage or live state is incentivized to use BTCC token as a collateral. The platform will offer defined and publicised advantages of using BTCC tokens. The primary objective is to promote the usage of BTCC tokens for maximizing the value held by the ICO investors.

The whole lending platform will be parametrized to promote lending, borrowing and execution of loan through BTCC.

### **Loan Servicing Fee discounts**

The system will charge a fee from the instalment that will be counted towards loan servicing. This fee will be deducted when an instalment is to be paid. For a loan that is pledged with BTCC as collateral, will get discounts/waiver in the admin fee amount. The advantage of pledging the collateral as BTCC will be available in each instalment.

### **Discounts on interest rates for the loan**

On using the BTCC a discount will be offered on the interest rates, the system will bear half the interest to be paid to the lender.

### **Lower value of collateral needed for the same loan amount**

If the borrower chooses to pledge BTCCs as collateral, then the amount to be pledged will be discounted by some amount to enable a cheaper loan deal. The incentive will go on to enable further purchase interest in BTCC coins.

### **Featured placement in the marketplace for lenders looking to lend in BTCC or borrowers willing to pledge BTCC as collateral**

The loan marketplace will have the ability to highlight the loan offerings based on certain parameters that make them more lucrative/promising than others. The option to lend and borrow in BTCC will make the loan offer stand out and appear highlighted. The chances of getting better deals on the loan will increase.

### **Flexible top-up for BTCC supported loans**

The loan repayment on loans with BTCC pledges will have additional flexibility to refill the loan with other supported crypto coins like BTC or USDT. This facility will not be available with USDT/BTC loans, they cannot be topped up with BTCC or the other currency.

### **Late fee discounts (For fee to the lender and system)**

Delays in instalment payment attract delay fee, the system will offer discounts and waivers on the late

fees payments. The system will bear the fee when needed.

## **Additional airdrops when the loan contract is entered into.**

The BTCC collateral pledges will result in Airdrops of LDTs and BTCC in both the lender and borrowers wallet.

## **BTCC airdrops to support for Hodling BTCC.**

Additional purchase of BTCC to fund the loan repayment will be supported by Airdrops and discounts.

## **System Architecture.**

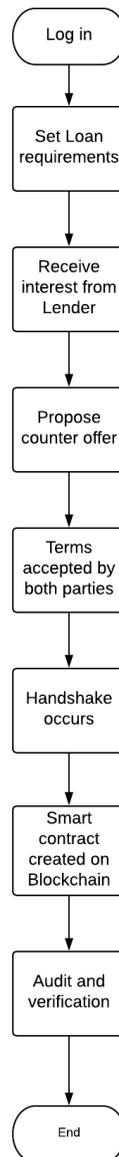
A very high-level view of the proposed system. The primary objective is to decouple three basic parts of the systems - Users, supported crypto ledgers, secure blockchain wallets.

Some features of the system relevant to the users are:

All the wallets will be maintained via a secure vault service within the system. The users can transfer coins to wallets and view balances on external services, but the wallets are secured by the system so no movement of coins from the wallets can be done externally. This will secure the user balances from any external issues like loss, hacking or compromise in security.

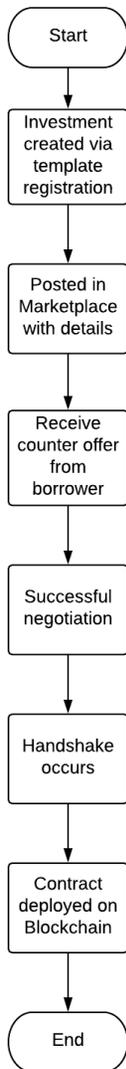
## **Borrowers side of the process**

The borrower will set up his loan on the system through a templated process of defining his loan requirements and setting them up on the system. Depending on how attractive his terms are, he will appear proportionally prominently on the marketplace. A lender who finds his terms acceptable will send his interest, which can be accepted or counter-proposed. On acceptance from both sides, a handshake is supposed to have occurred, and a smart contract with all the details will be created on the blockchain. The contract can be audited and verified externally by both parties.



## Lender's side of the process

The lender will create an investment through a templated registration process, which will appear in the marketplace with all his parameters like amount, expected interest rate, tenure. The borrower will accept the proposition or counter with another one. After the negotiation, a handshake happens and a contract is deployed on the blockchain.



## Token Distribution

BTCC is both the name of the platform and the token. 100 million BTCC will be issued immediately, no more emissions will occur. Of those, 40 million BTCC will be sold in the pre-TGE/TGE phases. The remaining 40 million tokens for future sale

- 20 million tokens are given to the team, escrow, advisors, key employees (without no right of sale as per contract)

## Legal

The foundation of our platform is the legal purity of the loan agreements. We will check the borrower through credit scoring and the full verification system (ergo contacting the borrower, the employer, etc.) and the request of credit histories from the credit bureaus. Depending on the responses received, each borrower will be given a certain ranking. When registering for the service, each client provides scanned copies of their identification documents (Passport, TIN, IAN) and passes verification. We will also check the data that was provided to transfer the funds: for example, verify a credit card. The creditor will be able to select the borrower based on the ranking and recommendations of the platform and will do so at their own risk. However, our platform automatically prepares the documents necessary for the legal design of the loan contract based on the legal system of the country of the borrower:

- A loan agreement relevant to all aspects and requirements of the legislation, is created
- The loan agreement is signed by an electronic signature, which is given to the user when registering (with the relevant documents — an agreement on the use of an analogous and handwritten signature)
- The loan is issued on a previously verified credit card
- The borrower returns the loan to their account by charging money from his credit card
- The loan agreement accounts for the possibility of changing the jurisdiction of the dispute to the place of residence of the creditor in order to minimize the legal costs
- We legally support the creditor in order to recover the loan (in the case of default)

Besides, our platform provides a token-bonding option (cryptocurrency) to ensure that a loan is received. It also undertakes the legal design of the pledge to minimize the risks of the creditor. The service of the Guarantee Fund will be used if necessary. In this case, we will issue the security agreement of the loan. In case of default, the platform will pay the loan amount (or a part of the loan, depending on the selected Guarantee Fund terms) to the creditor, and the bail will be collected, then the reimbursement of the loan will be completed.