# **SmartCredit.io Whitepaper**

Take back control over your money!

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# 1 Disclaimer

This document is a technical whitepaper that outlines the current and future developments of the SmartCredit.io platform. This paper is intended for information purposes only. Unless expressly indicated otherwise, the products and innovations set out in this whitepaper are under development and are not currently in use. This document provides no guarantees or claims with respect to the successful development or implementation of such technologies and innovations, or the achievement of any other activities noted in this whitepaper, and disclaims any guarantees implied by law or otherwise to the extent permitted by law.

# 2 Vision

## 2.1 Imagine a World

Imagine a world, where citizens of **capital-exporting** countries can easily offer their surplus capital to people who need it.

Imagine a world, where citizens of **capital-importing** countries can more easily access capital to turn their dreams into reality.

Imagine a world, where **decentralized credit** can be offered **peer to peer** from one global citizen to another without intermediaries or high service fees – all in an instantaneous manner.

Imagine a world, where the **principal value** of created **claims is protected** and where **claims are used as interest-bearing money.** 

Imagine a world where **crypto-credit money** is **created decentrally for society without the use of commercial banks.** The world, where the benefits of credit-money creation belong to the many instead of the view.

This world is the vision of SmartCredit.io.

## 2.2 The SmartCredit.io Vision

## Credit money is 97% of fiat money

The current monetary system comprises **base money** that is created by central banks and **credit money** that is created by commercial banks during the loan creation process.

Depending on the respective country, base money accounts for around 2-3% of total money supply and represents legal tender. The remaining money supply – approximately 97-98% – is created by commercial banks electronically during the lending process and it is enforced by commercial law and the competent courts. Most of the global economy today is based on credit money.

# The crypto space does not offer credit money

Presently, cryptocurrencies lack this credit money concept; they only follow the base money concept. In the crypto space, there are no means by which to expand the credit supply if economic activity is increasing, or to contract the credit supply if economic activity is decelerating. There is a concept of inflation in some cryptocurrencies, but this comes without the possibility to expand or contract the credit supply.

## The traditional banking credit creation process is highly complex

Historically, large sums of credit were created by merchants, but this process has since been increasingly taken over by commercial banks. Today, this has resulted in a highly complex value chain, where the value chain participants – commercial banks, payment providers, investment banks, and retail banks – have positioned themselves as "middlemen". Consequently, they receive unjustifiably high rents.

#### Limited access to credit facilities for borrowers and lenders

This "middle man" approach is protected by many regulations and leads to lenders having limited access to borrowers, as well as borrowers having limited access to lending facilities.

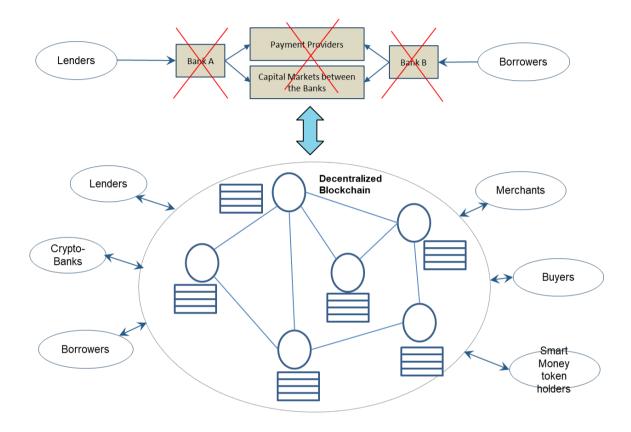
#### The SmartCredit.io vision

The SmartCredit.io vision is to solve the credit money problem in the crypto space by way of decentralized peer-to-peer lending. This results in the creation of decentralized credit money for the crypto space.

SmartCredit.io will simplify today's highly complex credit creation process:

- Borrowers will be able to borrow and lenders lend on decentral global-marketplace.
- It's peer to peer, without intermediaries or "middlemen".

- Lenders and Merchants will receive Smart Money tokens that represent borrowers' or buyers obligations.
- Smart Money tokens can be used to pay third parties, which can pay next parties and so on.
- Merchants will be able to sell on credit to the buyers (no need to use VISA network)
- All credits will be fully protected by **Community Protection Fund**, which receives a service fee for their guarantees.

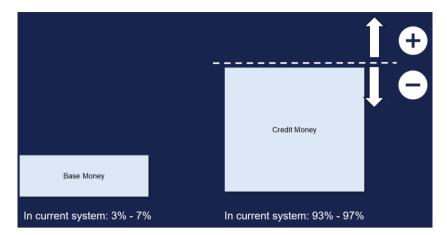


The implementation of this vision will provide decentralized credit money for the crypto space:

- For each loan, lenders and merchants receive Smart Money tokens that represent the obligations of the borrowers
- Lenders and merchants can use Smart Money tokens to pay third parties
- Third parties are motivated to receive Smart Money tokens since they are interest-bearing

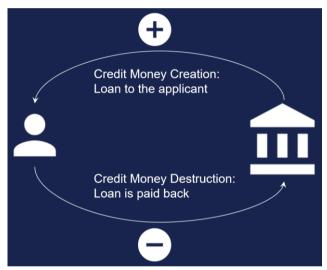
# 2.3 Every lender will become a commercial bank

Monetary systems are actually pretty simple - there is base money and there is credit-money.

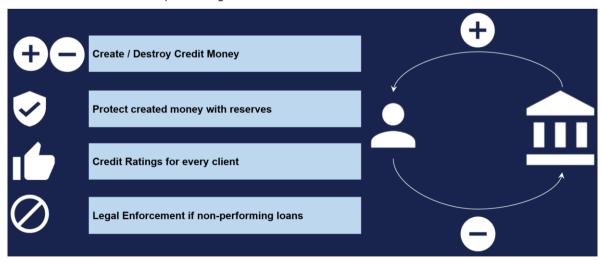


Base money is today created by the central banks. For crypto-sphere the base money are ETH and stablecoins.

Credit money is today created and destroyed by the commercial banks in the lending process. Amount of credit-money is exponentially growing in the fiat money system, just because there is a flaw in the current monetary system design.



Commercial banks do basically following:



**SmartCredit.io solution offers all the same what commercial banks are offering,** but in decentral way and in P2P way.

Every lender will have capabilities of a commercial bank, every lender will become a commercial bank, when using the SmartCredit.io platform.

SmartCredit.io solution will **disintermediate the commercial bank lending**. It will create alternative financial system, which allows 2-Click consumer credit, immediate liquidity for the lenders and VISA / MasterCard disintermediation.

## 2.4 The Decentralized Future

SmartCredit.io believes in **decentralized structures** as opposed to centralized structures. Centralized structures have a limited lifespan, whereas decentralized structures learn, adjust, and adapt.

**The Internet** was created as a **decentralized medium**, however it has developed into a highly centralized network with centralized service providers, who often hold de-facto monopoly positions due to network effects that benefit the few instead of the many.

Introducing credit money based on decentralized peer-to-peer lending to the crypto space will form one of the important steps on the decentralization roadmap. The Internet offers a successful base money concept with Bitcoin and similar cryptocurrencies, but the Internet will also need the implementation of credit money in order to facilitate the activity of most economic actors.

We hope that decentralized blockchain-based ecosystems, including SmartCredit.io, will **allow the Internet** to develop toward its **initial decentralization goals** again.

# 3 The SmartCredit.io Value Proposition

## 3.1 Value Proposition

The SmartCredit.io value proposition is to form the first crypto-credit money system in the world. On the one hand, it allows economic actors to utilize peer-to-peer loans and, on the other hand, it creates interest-bearing crypto-credit money.

The crypto-credit money will be called Smart Money. It is analogous to today's electronic credit money that is created by commercial banks during the credit process and dissolves when the credit is repaid.

SmartCredit.io delivers global decentralized credit and an interest-bearing monetizable debt network:

- A **global decentralized marketplace** for peer-to-peer lending without intermediaries (unlike the traditional banking system)
- Access to global capital demand and global interest rates for lenders and borrowers
- Loan contracts are backed up by interest-bearing Smart Money tokens (monetizable debt)
- Lenders or merchants use Smart Money tokens to pay third parties
- The interest-bearing feature and protected 1:1 conversion to Ether (ETH) incentivize third parties to use Smart Money tokens
- Buyers can buy on crypto-credit, while merchants can sell on crypto-credit
- Loan liquidators and a court system are used for the legal enforcement of crypto-credit claims

In the traditional banking system, credit money is created out of nothing and earns interest for the commercial banks. The benefits of credit money creation are privatized to commercial banks and the interest generated by credit money is also received by commercial banks. This is the model of **privatizing the benefits and socializing the losses** (as was the case, for example, during the financial crisis of 2008).

SmartCredit.io peer-to-peer loans are based on Ether (and later on the stablecoins). The borrowers' obligations in SmartCredit.io become interest-bearing smart money and thus takes the role of credit money in the crypto space. The benefits of crypto-credit money creation will belong to the lenders or third parties who hold the crypto-credit money. This is the model of **decentralizing the benefits of money creation**.

The following describes sample use cases as to how this will work. All these use cases apply today in the traditional banking system; credit money is created and destroyed by traditional banks during this process, but the **benefits are shared among the few**. SmartCredit.io allows for the implementation of the same use cases, but takes a peer-to-peer approach and the **benefits are shared among the many**.

## 3.2 Sample Use Case – Lending Ether to Buy an Ethereum Domain Name

Let us imagine John from the UK; he is a millennial, 30 years old, and a crypto-fluent male. John is expanding his small crypto-business and he would like to buy an Ethereum domain name for his business. Since he does not currently have enough liquid assets / cryptocurrencies, he will register on the SmartCredit.io platform, enter his KYC (Know Your Client) information and other background details. SmartCredit.io calculates John's credit score, and he is then able to borrow on SmartCredit.io.

Now let us imagine Peter from Germany, an early crypto adopter. Peter is holding (or "hodling") Ether and would like to earn some interest by way of short-term lending on his Ether holding. He registers on the SmartCredit.io platform, enters his KYC information and submits his offers to the SmartCredit.io platform. Peter is a risk-averse person and he therefore chooses to lend only to borrowers with high credit scores. However, he still receives more interest than from the traditional banking system.

John accepts Peter's 3-month lending offer on the SmartCredit.io network and has to pay 25% collateral for this loan. The protection fund protects this loan and receives an upfront payment for this protection from the lender. The better the borrower's credit score is, the lower the credit protection fee charged.

John receives Ether at his address and is then able to purchase the required domain name.

Peter receives Smart Money tokens that represent this loan contract. The loan contract is protected by the protection fund. If John cannot fulfill his obligations, the protection fund will repay the face value to Peter.

When the loan expires, John pays back the principal and interest on the loan. John is returned his collateral. Since Peter is holding the corresponding Smart Money tokens, it is he who receives the principal and interest payments. Peter's Smart Money tokens are automatically destroyed after the loan is paid back.

Here, we have a win-win situation for John and Peter.

# 3.3 Sample Use Case – Lending Ether to Buy Mining Equipment

Alice would like to buy Bitcoin mining equipment, but she does not have enough liquid assets available. She joins the SmartCredit.io platform and Peter also gives her a loan for 25% collateral.

Alice receives a 3-month loan in Ether, which she uses to buy mining equipment. Peter receives Smart Money tokens that represent Alice's obligation.

Unfortunately, one month later, Peter realizes that he has lent all of his Ether and he has no more funds available to pay his web developer. However, since Peter has Smart Money tokens that are face-value guaranteed, he uses the Smart Money tokens to pay his web developer.

The web developer is happy to receive these Smart Money tokens, which are pegged 1:1 to Ether, because they are interest-bearing as well. This means the principal and interest from Alice now belong to the web developer.

Peter is also satisfied because he does not need to take out a loan to pay his web developer and he can directly monetize Alice's debt obligation. Peter loses interest on Alice's loan, but he is still better off than he would have been if he had taken out a new loan, for which he would have had to provide collateral and pay interest.

Before the loan expires, Alice pays back the loan principal and interest, which are automatically transferred to the web developer's Ether address. Alice is returned her collateral. In turn, the corresponding Smart Money tokens are automatically destroyed.

Here, we have a use case with a win-win situation for Alice, Peter, and the web developer.

## 3.4 Sample Use Case – Buying on Credit in an Online Shop

Alice wants to buy a new items from the online shop, but she does not have enough cryptocurrency available. Online shop sells to Alice on credit.

Alice receives the merchandise and has to repay the loan within one month.

Online shop receives Smart Money tokens that represent Alice's obligation.

Alice repays the loan by the end of the month; online shop receives the loan principal and interest in Ether, and the Smart Money tokens are automatically destroyed.

Here, we have a **win-win situation** for Alice and the online shop.

## 3.5 Sample Use Case – Merchant Uses Freshly Created Credit Money

Alice wants to buy a new pair of shoes from the "Beautiful Shoes Online Shop". She has a good credit score and she can buy a pair of shoes from Beautiful Shoes on credit over two months.

Beautiful Shoes is satisfied because they can sell to their key customer Alice. Additionally, they will be able to use Smart Money tokens representing Alice's loan in order to pre-order new jeans from the "Italian Design Company".

The Italian Design Company is satisfied with the pre-order and is happy to receive the Smart Money tokens. A few weeks later, the Italian Design Company uses the Smart Money tokens to pay their freelance designer.

Alice pays back her loan before the expiration date. The freelance designer receives the loan principal and interest at her Ether address, and the corresponding Smart Money tokens are automatically destroyed.

Here, we have a **win-win-win-win situation** for Alice, Beautiful Shoes, the Italian Design Company, and the freelance designer. The use of SmartCredit.io allows economic transactions that would not have been possible otherwise.

All these exemplary use cases are implemented without the traditional banking system, but instead based on **decentrally-created peer-to-peer credit and credit money**.

## 4 Market

# 4.1 Current Market Analysis

Conventional, highly **regulated banks** face high operating costs on the one hand and have a limited offering for global customers on the other hand.

Regardless of these limitations, they succeed in generating high net interest income (also known as lending income) in the current economic environment, which translates into bad financing deals for their customers (the lenders earn too little and the borrowers pay too much).

When looking at the global economy, we see:

- Economies that are in **demand of capital** usually countries with growing populations and a high working population ratio. They exhibit a naturally higher level of demand for capital, which results in higher interest rates in capital-importing countries.
- Economies that have a **surplus of capital** usually countries with stable or decreasing populations and a relatively low working population ratio. Since there is an oversupply of capital in these countries, this results in very low or even negative interest rates in capital-exporting countries.

However, there is no effective, frictionless marketplace between these economies.

#### Customers seek:

- Reasonable interest rates for their assets on the one hand (interest rates on accounts are zero or even below zero in some jurisdictions)
- Reasonable loan interest rates on the other hand (accessibility to lending facilities is limited in the global economy)

However, these goals are difficult to achieve considering the low efficiency of traditional banks, the current zero-interest-rate policy environment and the high profits accrued to traditional banks.

This situation involves:

- Traditional banks generating high net income interest without offering better conditions to their customers
- No effective marketplace between capital-exporting and capital-importing economies
- Unfulfilled customer demand for reasonable lending rates

This leads to the **emergence of alternative financing channels** through peer-to-peer lending facilities, which cut out the "middlemen" in the financing process.

**Peer-to-peer lending facilities** are growing at a rate of 52% (CAGR) and the market is expected to reach USD 460 billion in 2022. Almost all of these lending facilities are for traditional fiat-based monetary transactions.

Let us summarize the trends in the market:

- Growing demand for alternative peer-to-peer lending facilities
- Increasing adoption rate of cryptocurrencies

There is clearly growing demand for peer-to-peer lending facilities for cryptocurrencies, which would address the limitations of the existing situation.

However, the ability to provide credit to borrowers is not the only important consideration. It is also important for lenders to have the ability to **monetize the loans they provide** – i.e. to monetize their loan contracts at a guaranteed exchange rate before the loan expiration date. So far, this feature has not been possible in any of the existing peer-to-peer lending facilities.

This results in the market positioning of SmartCredit.io - Instead of using the existing, complex value chain involving several intermediaries:

- Clients will have the opportunity to conclude direct peer-to-peer loan agreements on a global decentralized marketplace
- Peer-to-peer loan agreements will be backed up by monetizable debt tokens (also known as credit money), which can be used to pay third parties
- Monetizable debt tokens (also known as credit money) have protected face value and are interestbearing
- The Smart Money ecosystem results in the emergence of a decentralized credit and credit money network

#### 4.2 The Historical Structure of the Credit Market

Most economic value creation is based on credit. There is a simple reason for this; if we look at traditional production processes, agriculture, or trade, investments in goods and services have to be performed at time T, but the goods and services are not paid for until time T+N, where N is usually greater than several months (or even years in the case of larger projects).

In the world today, most credit is received from the banks. But this has not always been the case for a simple reason: Banks, as we know them, began to emerge in the 16-17<sup>th</sup> century – first as unregulated entities before becoming increasingly regulated.

Each merchant can give credit to another merchant; each farmer can receive credit from their buyers, and each producer can receive credit from buyers and merchants as well. Before the rise of banks, credit was provided from the economic actors to each other, without the involvement of any intermediaries. Trade, production, or agriculture in medieval Europe or Asia all took place despite the lack of banks at that time.

However, as trade started to develop in medieval Europe and, as the projects became greater and greater in scope, banks started to emerge as financial intermediaries. They became entities which collated and held assets, performed credit scoring and risk management, and lent money to selected projects. This was completely justified for larger and more complex projects on the one hand and, on the other hand, for the depositors who received some interest for their deposits.

But the economy does not consist solely of large projects that span long time periods. Most economic transactions are small and are conducted between consumers and SMEs (Small and Medium-Sized Enterprises). In OECD countries, self-employed people and SMEs employ 80-85% of workers, corporations provide employment for the remaining 15-20% of workers.

Most economic transactions are executed not between corporations exclusively, but with SMEs or consumers accounting for one of the parties involved. However, mutual credit financing – in the form it was once practiced before the emergence of the banks – is no longer as prevalent.

Banks, as profit-driven institutions, are focused on providing financial intermediary services to larger economic actors, rather than SMEs and consumers.

This raises the following two questions:

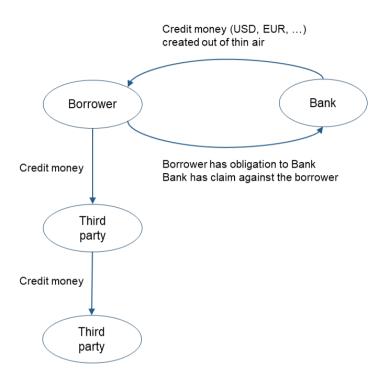
- Which means do SMEs and consumers have at their disposal today to fulfill their credit requirements?
- Which means do lenders to SMEs and consumers have at their disposal to monetize the loans they provide?

# 4.3 How Credit Money is Created Today

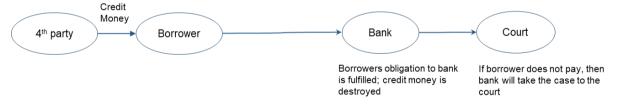
Today, most of the credit, as described above, is created by the banks as electronic credit money. This is achieved through the following process: The borrower receives credit money from the bank and has the

obligation to the bank to repay it with interest. The borrower uses freshly created credit money to buy services and goods.

Electronic credit money is as widely accepted as base money, however only base money is legal tender in most jurisdictions. Electronic credit money only acts as a kind of legal tender in practice.



The destruction of credit, in contrast, works as follows: The borrower receives credit money from a "fourth party" (either by selling services, goods or labor). The borrower pays the principal and interest to the bank. The borrower's obligation to the bank is fulfilled and the corresponding credit money ceases to exist. If the borrower does not fulfill his obligation, the contract will be taken before court and enforced by law.



Most people think that only banks can provide credit to the economy. However, it is important to distinguish between two concepts:

- Credit money can be created by banks only
- But credit can be given from any economic actor to any other economic actor

The SmartCredit.io vision is to focus on credit that can be given from any economic actor to another, where both parties interact in the crypto space.

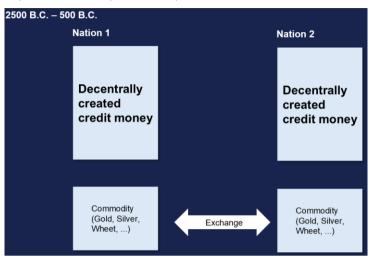
# 4.4 History and Future of the Monetary Systems

This chapter is not essential for understanding SmartCredit.io, however it helps to understand strategic positioning of SmartCredit.io.

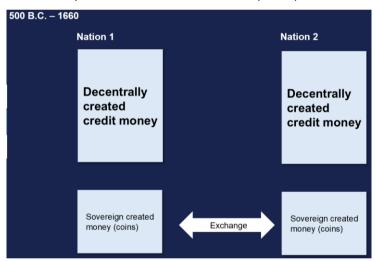
Monetary systems started with commodities based base-money and on decentral credit-money. The first instances of credit money are known from Mesopotamia, 5'000 years ago. The credit money was then created

in the peer to peer transactions. The lender received the bearer note (yes, the bearer notes were already used in Mesopotamia) and the lender could pay next parties with this bearer note. On the end of loan the borrower had to pay to the person who presented the bearer note.

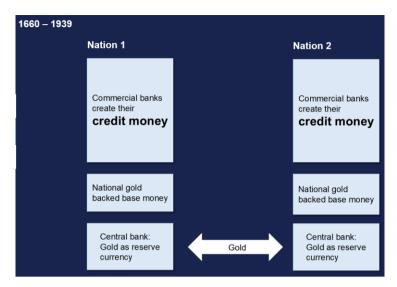
Interestingly the base money was mainly the grain –coins were created 2'000 years later. The advantage of commodity based money is that it's not "printable" by the influential actors in the societies.



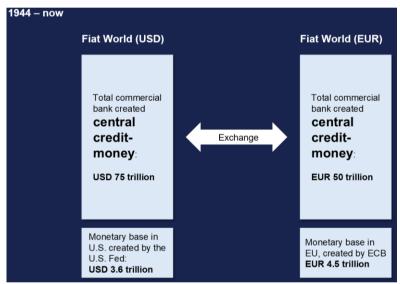
Around 500 B.C. the kings needed to finance their standing armies and sovereign created coins become base money. However, the credit money was still created in decentral way on top of these sovereign money.



And then, 350 years ago the central banking and commercial banking system started to emerge:



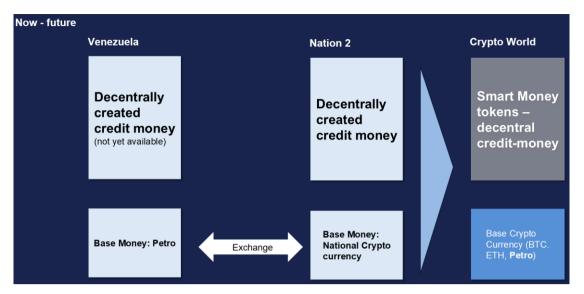
And around 1944 we entered the Bretton Wood system, where U.S. Dollar was the only currency bound to the gold. Other currencies were bound to the U.S. Dollar. The link to the gold was broken in 1971 and since then we are in the pure fiat money system:



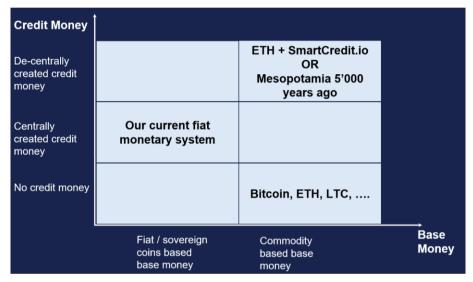
None of the monetary systems has survived without the credit-money. Credit-money, which has existed for the last 5'000 years, is however missing in the crypto-sphere.

Our forecast for the future is following:

- the credit money will be created again de-centrally
- the base money will be either in form of national crypto currencies or global crypto currencies (BTC, ETH, ...)



We can describe all monetary systems on the following two-dimensional matrix as well – one dimension being which type of the base money is used, and the other dimension being which type of the credit money is used.



The credit-money was first created in Mesopotamia ca 5'000 years ago. Our forecast is that the future monetary system will be not so different from the Mesopotamia's monetary system.

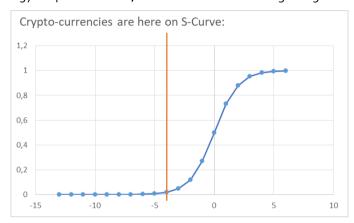
SmartCredit.io is not only a P2P borrowing / lending system – it's a system with a fully new paradigm, with the foundation for the fully new monetary system, where the credit-money will be created in decentral way. It provides alternate financial system, capable to exist in parallel to the fiat monetary system.

## 4.5 Who are SmartCredit.io users?

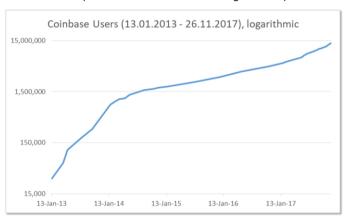
Our analysis shows following numbers of crypto users in 2018 October:

Region	Users (in millions)
China	42,0
Europe	40,0
USA	26,0
Turkey	6.4
Philipines	4,0
Japan	3.5
Korea	2.67
India	2,0
South America	1.5
Romania	1.2
Total	130,0

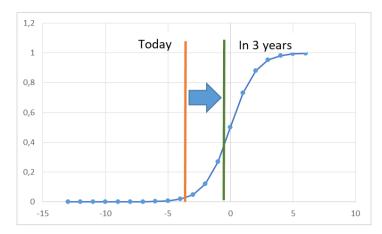
If looking on the technology adaption S-Curve, then we are still on the beginning of the crypto-S-curve:



However, the user growth has been exponential – here is the user growth by the Coinbase exchange:



Our thesis is that the crypto S-Curve will mirror the Internet penetration S-Curve. Interestingly the usage and BTC price data points match the Internet S-Curve very well. This thesis translates into continuing growth:



Our key users will be millennials, which are as well the key users of crypto. 40% crypto-millenials are using crypto as mean of payment. 20% of them will use crypto as mean of financing – that's the SmartCredit.io market segment – 5.3 million users now, but exponentially growing.

Parameter	Value	Comment
Ratio of Millenials from Crypto users	55%	
Ratio of U.S. Millenials in Crypto by end of 2018	33%	ratio is growing
Ratio of them using crypto as mean of payment	40%	ratio is growing
Ratio of them using borrowing / lending	20%	ratio is growing
Millenials in U.S. and in Europe (in Millions)	200,0	
Potential millenial clients in U.S. / Europe by end of 2018 (in Millions)	5,3	

Our aim would be to have the following SmartCredit.io user growth as described in the following table:

Model Parameter		Quarterly Growth	Yearly Growth
Initial users on the platform	5.000		
Year 1		40%	284%
Year 2		36%	242%
Year 3		31%	194%
Year 4		28%	168%
Year 5		26%	152%
Users after 5 years	1.309.318		

We are aiming on **1.3 million users in 5 years**. The founders of SmartCredit.io worked both 10 years for Credit Suisse in Zurich, Switzerland. Credit Suisse has **1.3 million clients** in Switzerland. Our aim is to reach the same number of clients in 5 years.

# 5 Strategy

SmartCredit.io is developing a decentralized peer-to-peer global lending marketplace by connecting lenders and borrowers without intermediaries. Lenders can offer their funds and borrowers borrow the funds on the global marketplace.

However, lending on the blockchain is associated with the **issue of enforcement** – how can one party ensure that the other party will fulfill its obligations?

Some projects in the crypto space try to use the **fully collateralized lending approach**, where the borrower has to submit collateral to the lender before receiving the loan. However, as these approaches are based on using higher collateral than the loan principal, it is not fully clear why the customer should use collateral-based lending at all.

Our project will interlink the lending ecosystem with the traditional **court ecosystem**. This may limit the service offering in some countries, where the contracts cannot be enforced in the court system. However, some collateral (yet not more than 100%) would need to be used in these countries.

SmartCredit.io introduces the role of **credit liquidator**, who takes over non-performing loans and handles the matter in the respective courts. The idea is to have jurisdiction-specific credit liquidators. The project team will take over the initial role of credit liquidator and will facilitate the development of the credit liquidator network.

SmartCredit.io also holds the role of **credit protection**, which manages the risk ratings for borrowers and protects the loans for the lender. Credit protection will be based on the **Community Protection Fund**.

SmartCredit.io offers **only protected loans** on its platform; this will protect lenders and merchants. This both enables and creates the **Smart Money tokens** as part of every loan agreement, which are allocated to the lender.

The lender can use **Smart Money tokens to purchase products and services** from third parties, who in turn can use them to buy further products and services. The Smart Money token holders will be entitled to the principal and interest payment, either from the borrower or protection fund (in case of default).

## 5.1 What do SmartCredit.io Stakeholders Want?

The goal of the SmartCredit.io strategy is to create a credit ecosystem where all stakeholders – borrowers, lenders, merchants, and Smart Money token holders – will have advantages over today's market structure.

## **Borrowers want:**

- Fast access to credit
- Fair interest rates

#### **Lenders want:**

- Fair interest rates
- Payment protection
- Court system protection
- No hassle dealing with borrowers with different credit scores, and no need to analyze the credit scores of borrowers
- No need to create credit portfolios as means of managing credit risk
- Monetizable claims behind the loans, which can be used as means of payment

#### Merchants want:

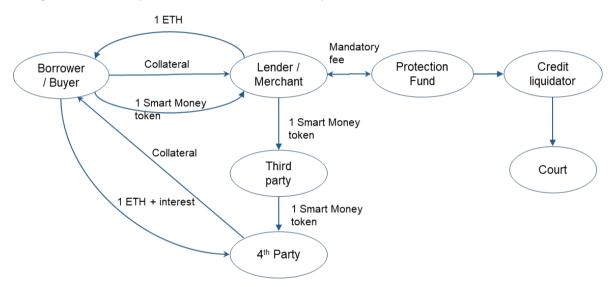
- The ability to sell products and services on credit (currently not feasible in the crypto economy)
- Monetizable claims behind the loans, which can be used as means of payment

## **Smart Money token holders want:**

- Guaranteed 1:1 conversion into the underlying cryptocurrency (Ether)
- Interest-bearing Smart Money tokens interest payment in Ether through the repayment of credit by the borrower or buyer

## 5.2 The SmartCredit.io Model

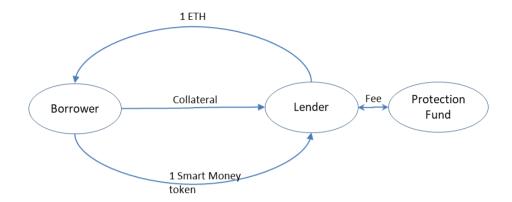
The high-level model, explained in detail below, can be depicted as follows:



The loan supply and demand are kept in the global order book. If a loan request and offer match, a loan contract is created between the borrower and the lender. The loan contact is a legally binding contract, which will be taken before the courts by the credit liquidator in the event the borrower defaults on payment.

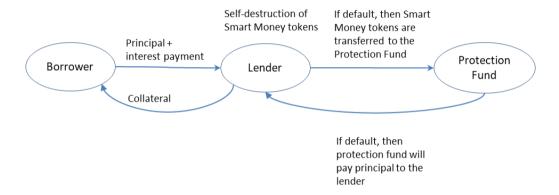
The platform calculates the fee for the credit protection. The better the borrower's credit score is, the lower the protection fee will be, and vice versa. In addition to the protection fees, there is the interest (payable by the borrower to the lender at the end of the contract) and service fee (payable to the platform at the end of the contract).

The borrower will receive the Ether tokens and the lender will receive the same amount of Smart Money tokens, which will be minted at the same moment. Depending on the borrower's credit score and domicile, they may also have to provide collateral. The lender can purchase services and goods with the Smart Money token or they can keep it until the loan expires.



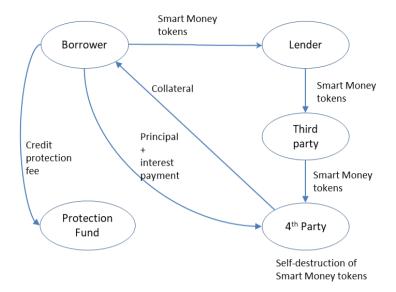
By the time the loan expires, the borrower has to repay the principal and interest; they will also be returned their collateral. The lender's Smart Money tokens will be automatically destroyed at the same time.

If the borrower neglects to settle the principal or interest payment, the protection fund will take over the respective claim. The protection fund returns the principal (without any accrued interest) to the lender.

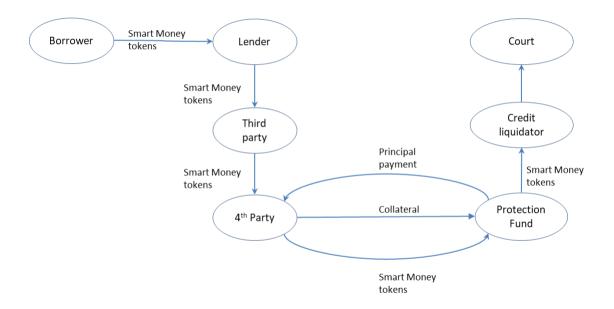


The lender can use freshly minted Smart Money tokens to buy products and services from a third party, who can then pay other third parties with the tokens. In this case, the tokens will flow in the following manner:

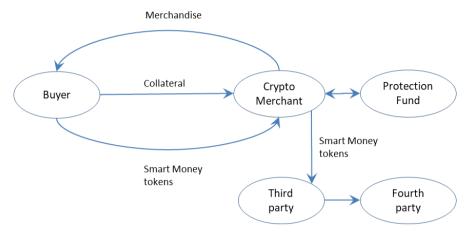
- The lender uses their Smart Money tokens to pay a third party, who then uses these tokens to pay another third party (or "fourth party").
- It is now this fourth party, who has the Smart Money tokens and will receive the principal and interest payment.
- The Smart Money tokens will be automatically destroyed once the loan contract expires and they will be replaced with Ether, in a 1:1 ratio, in the holder's wallet. Additionally, the holder will receive interest in Ether in their wallet.



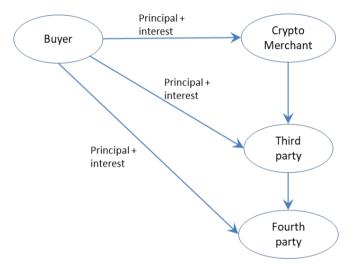
If the borrower does not fulfill their obligations, i.e. the borrower defaults, the owner of the Smart Money tokens is paid the principal from the protection fund, which receives the respective Smart Money tokens. The protection fund sells the defaulted Smart Money tokens to the credit liquidator, who takes the matter to court. The credit liquidator's income is based on recovery fees associated with the court process.



The same process for lending will also be used for merchant integration. The merchant would sell on credit to the buyer and, in turn, receive Smart Money tokens from the buyer. The merchant can wait until the Smart Money tokens expire and receive the principal and interest payments, or the merchant can use the Smart Money tokens in the meantime to purchase products and services from third parties.



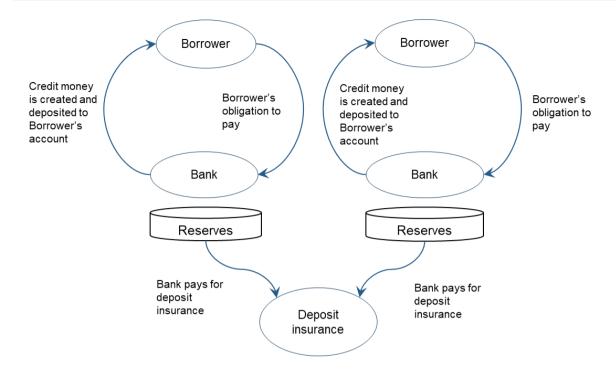
If merchant would for example use his Smart Money tokens to pay the third party, which uses some of his tokens to pay the fourth party, then this would result in the following payments on the end of the loan:



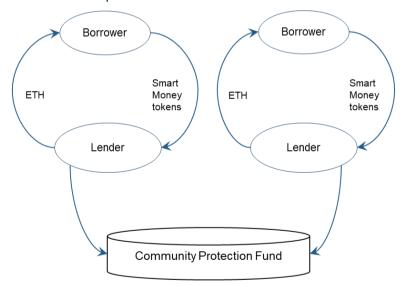
Merchant will avoid in this scenario high service fee payments to the VISA Network and he will be liquid in the same time (through Smart Money tokens).

# 5.3 Bank Credit-Money Creation Process versus the SmartCredit.io Credit-Money Creation Process

The traditional bank credit lending process works as follows: Credit money is created out of thin air and allocated to the borrower. The borrower can use this freshly created credit money to purchase products and services. The claim lies with the commercial bank, who will use the courts to enforce this claim where necessary.



**SmartCredit.io would change this traditional process** as follows: As always, the borrower receives credit in the Ether cryptocurrency. The lender receives the Smart Money tokens, which are created and destroyed simultaneously on creation and expiration of the loan, and the lender can use the Smart Money tokens during their lifetime to purchase additional products or services.



SmartCredit.io is disintermediating commercial banks, every lender is becoming the "commercial bank" on his own and will be able to create new liquidity in the form of the Smart Money tokens.

Instead of government deposit insurance (which actually covers only 4% of the deposits at the moment) there will be community protection fund.

These two processes compare as follows:

Comparison criteria	Traditional bank credit creation	SmartCredit.io credit creation		
Loan	The loan is provided in freshly created credit money.	The loan is always provided in Ether.		

Borrower	The borrower uses credit money to pay third parties for goods and services.	The borrower uses Ether to pay third parties for goods and services.
Lender	The bank acts as lender and has the claim against the borrower.	The lender can use Smart Money tokens to pay third parties.
Interest-bearing money	The credit money holder does not receive any interest. The bank receives interest from the borrower.	The holder of Smart Money tokens (lender, merchant, or third party) receives interest in Ether.
Third parties	Third parties accept credit money as legal tender.	Third parties are incentivized to receive Smart Money tokens since they are interest-bearing debt tokens.
Principal	The borrower has to repay the principal to the bank.	The principal is protected by the protection fund.
		The Smart Money token holder receives the guaranteed principal payment in Ether from the borrower or protection fund. The Smart Money tokens are destroyed once the loan expires.
Loan default	The bank uses legal means to recover its loan (non-performing loans are often sold to liquidators).	The protection fund transfer Smart Money tokens to the credit liquidator, who takes the matter to court.
Credit risk	The bank manages credit risk using borrowers' credit scores, credit portfolios, and liquidators.	The protection fund protects the loan principal (for a fee). Protection fund manages risk portfolios, which are diversified and balance credit risks.
Credit insurance	Deposits are insured by the deposit insurance	Community protection fund simplifies the life of lenders by protecting 100% of loan principals. The credit protection fee is determined by the borrower's credit score.
Credit score	Banks have their own proprietary credit score models that are applied to each customer.	The protection fund calculates credit scores for every borrower. Better credit scores lead to lower credit protection fees, and vice versa.
Interest	Banks have proprietary interest rate models based on customers' credit scores.	The interest rate for borrowers is set on the marketplace. Better credit scores are likely to result in lower interest rates, and vice versa.
Collateral	Traditional banking uses highly collateralized lending, especially for small businesses.	Collateral usage depends on the strength of jurisdiction-specific legal enforcement frameworks.
Credit portfolio	Banks use credit portfolios as means to manage credit risk.	The protection fund uses the credit risk portfolio as means to manage borrowers' credit risk; different risks will offset each other. The lenders' capability to lend is increased as they do not need to form dedicated credit portfolios for credit risk management.

#### 5.4 Products

SmartCredit.io offers the following products:

- Simple peer-to-peer credit 1:1 peer-to-peer credit transactions between borrowers and lenders
- Syndicated peer-to-peer credit 1:N peer-to-peer credit transactions between borrowers and lenders
- Peer-to-peer merchant credit 1:1 peer-to-peer credit transactions between buyers and merchants
- Smart Money tokens

## 5.4.1 Simple Peer-to-Peer Credit

The borrower submits a loan request comprising:

- The amount and type of cryptocurrency coins they would like to receive
- Duration of the loan
- Interest they are willing to pay to the peer-to-peer lender

The Lender submits a loan offer comprising:

- The amount and type of cryptocurrency coins they would like to offer
- Duration of the loan
- Minimum interest

If the loan request and loan offer match in the lending book, the peer-to-peer loan agreement is created. The borrower receives Ether and the lender receives Smart Money tokens that represent the loan contract.

Before the loan expires, the borrower pays the principal and interest in Ether to the lender. The Smart Money tokens will be automatically destroyed; the lender will have Ether instead of Smart Money tokens in their wallet. If the borrower does not fulfill their obligations, the protection fund pays the lender and the Smart Money tokens are transferred to the protection fund.

## 5.4.2 Syndicated Peer-to-Peer Lending

The lender has the possibility to specify which ratio of the loan request he is ready to allocate – for example, 5% of the loan request, but not more than 1 Ether per loan. This allows the lender to create a diversified loan portfolio (although the credit risk will be assumed by the protection fund).

#### 5.4.3 Peer-to-Peer Merchant Credit

In the same way the borrower is able to borrow from a lender – SmartCredit.io will support merchant integration, where buyers can finance their purchases with peer-to-peer credit.

The merchant receives the Smart Money tokens. They can wait until credit expiration and receive the principal payment plus interest. Alternatively, they can use the Smart Money tokens in the meantime to purchase necessary products and services.

#### 5.4.4 The Smart Money Token

The Smart Money token represents the major innovation of the SmartCredit.io platform. It is a representation of the credit obligation. Its value is pegged 1:1 to the value of Ether.

The lenders and merchants can use their Smart Money tokens to pay third parties. Third parties will receive principal payment and interest from the lender or buyer once the credit expires. In the event of credit default, the protection fund will provide the credit principal payment.

The total number of Smart Money tokens increases and decreases depending on economic activity. Increased activity leads to increased credit needs, which leads to an increased number of Smart Money tokens. Decreased activity implies fewer credit contracts, which leads to a smaller number of Smart Money tokens.

The Smart Money token is similar to today's credit money, which is created and destroyed with loan contracts in the traditional banking system. However, instead of credit, which commercial banks create out of thin air, it represents the claim against the lender that is guaranteed by the protection fund.

The cryptocurrency space has been missing credit money until now. By introducing the Smart Money token, we will enable an elastic credit supply in the crypto space.

#### 5.4.5 Additional Features

## Stable-coin based loans

The first version of SmartCredit.io will work based on Ether. Since most of the economy today operates based on fiat currencies, borrowers would also be interested to borrow in fiat currencies. This feature will be achieved through offering stable-coin based loans

The lender and borrower will thus avoid potential Ether price volatility.

## BTC, LTC, other BTC derivatives based collateral

Current implementation is using ERC20 and Ethereum domain names as collateral. This will be extended by BTC, LTC and other BTC based collaterals

#### Loan guarantors

SmartCredit.io limits borrowers' loans in accordance with their ability to borrow. When a borrower approaches the limit of their ability to borrow, the loan protection fee starts to grow very quickly. Since all loans have to be protected on the platform and since the protection fee forms part of the loan interest, the high protection fee will automatically cut off loan offers to respective borrowers.

However, the role of loan guarantors will be introduced, who guarantee the loans of specific borrowers. This enables borrowers to lend more. However, both parties – the borrower and the loan guarantor – will be responsible for loan repayment in accordance with the law (if the loan should default).

#### Loan repayment in installments

Loan repayment in installments will be added in later versions. Although all loans are protected through protection fund, the lenders will prefer installment-based loans as means of reducing the lending risk.

Additionally, installment payments are typical of a disciplined borrower. This means respective borrowers will likely have superior credit scores on the system and therefore also better interest rates.

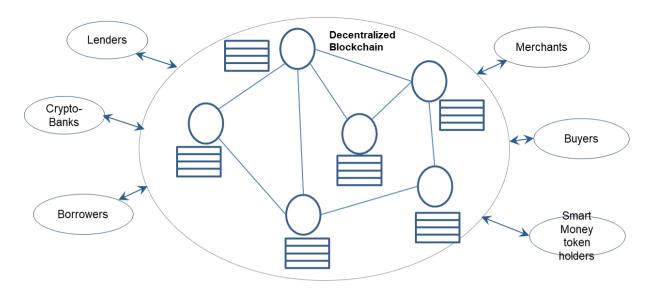
## **Fiat support**

Lending EUR requires PSD2 license in EU, which could be achieved through partnerships with existing PSD2 license companies. Fiat P2P lending platforms don't use usually collaterals and usually there is no principal protection – SmartCredit.io would offer this.

On top of this, we would add as well tokenization of the loans for the lenders – lenders would be liquid, although they have lent out their funds. Lenders would receive their Smart Money tokens for the fiat loans; however these Smart Money tokens can be transferred only to the users, which have been "whitelisted" for the fiat usage.

## 5.5 The SmartCredit.io Value Proposition

The core idea is to create a **positive feedback loop and mutual benefits** between all stakeholders of the SmartCredit.io network:



## 5.5.1 Benefits for Borrowers:

- 2-Click consumer lending for the borrowers
- Total time from starting the loan till receiving the funds in his wallet below 1-minute
- Under-collateralized borrowing as opposed to the over-collateralized Borrowing
- Borrowers have access to global credit supply
- Borrowers have lower interest rates than the alternatives due to the global credit supply
- Borrowers can borrow Ether, if they are in the crypto sector only or stablecoins, if they are in crypto-fiat-crypto sector

## 5.5.2 Benefits for Lenders:

- Immediate liquidity for the lenders the loan creation process creates Smart Money tokens, which lenders can use as means of payment until loan expiration, i.e. the lenders have monetizable debt. For example, if lenders lend their funds and subsequently have unexpected liquidity needs, they can utilize the Smart Money tokens for these needs
- Lenders have access to global credit demand
- Lenders receive higher interest rates than offered in the traditional banking system
- Loan principals are protected 1:1 by the community protection fund
- There is **no need for the creation of loan portfolios**, which lenders would otherwise have to build in order to manage credit risk (i.e. having min different 20 loans for different risk ratings
- Every lender will become a commercial bank on his own

# 5.5.3 Benefits for Crypto-Banks

- Crypto banks can add their free funds into the SmartCredit.io lending market
- This applies as well for the crypto-funds

#### 5.5.4 Benefits for Merchants:

- Consumer financing from merchants to the buyers, disintermediating the VISA / Mastercard network
- Merchants are paying in average 5.5% fees to the credit card providers (service fee + delay in receiving the funds). They will pay 0.5% fee on the SmartCredit.io platform
- Immediate Liquidity for the merchants they can use their Smart Money tokens to pay for required goods and services
- Loan principals are protected 1:1 by the community protection fund, which reduces the risk of lending

# 5.5.5 Benefits for Buyers:

- Buyers have access to Consumer Financing from the merchants
- Buyers can execute transactions either on the Points of Sales or on online shops

## 5.5.6 Benefits for Smart Money Token Holders:

- Lenders, merchants or third parties are holders of Smart Money tokens that represent the borrower's loan obligation
- Lenders and merchants can keep Smart Money tokens until their expiration or they can use them to pay third parties
- Once the Smart Money tokens expire, they are converted 1:1 to Ether. This conversion is performed
  automatically during loan repayment by the borrower or the protection fund if the borrower neglects
  to fulfill their obligation
- Smart Money tokens are interest-bearing and generate interest on expiration

## 5.5.7 Benefits for SmartCredit.io Token Holders:

- SmartCredit.io tokens are part of the platforms reward program
- Increased usage of the platform results in the increased value of SmartCredit.io tokens

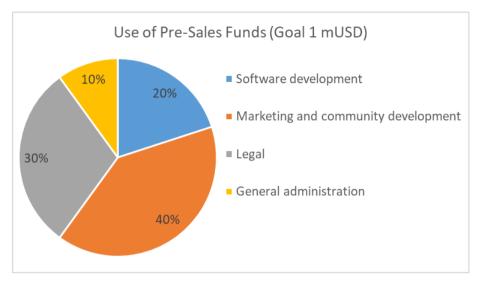
# 5.6 Delivery Roadmap

Our MVP is available. Our focus is now on completing the products and getting required license's.



## 5.7 Financial Plan

The financial plan until the ICO phase (anticipated to start 3 months after completion of the pre-sales phase) is as follows:

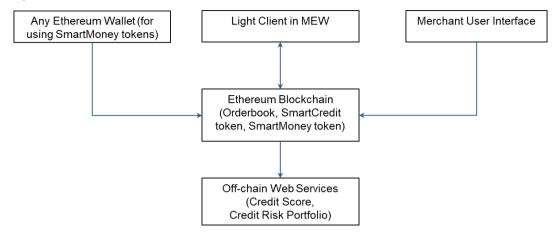


Marketing and community development has been budgeted at USD 300 thousand, however additional funds would allow for the swifter implementation of this objective.

The same applies to software development, where additional funds would allow for the swifter formation of the team, and to the legal issues, where further preparations for law enforcement in various jurisdictions could be performed.

# 6 Technical Architecture

SmartCredit.io uses a lightweight client in MEW, Ethereum blockchain smart contracts and external web services, which are accessible to Ethereum smart contracts via Oracles:



The light client in MEW or the merchant user interface constitute the user entry points. However, if the user has already received Smart Money tokens, they can use any ERC20-compatible wallet.

#### 6.1 Architecture

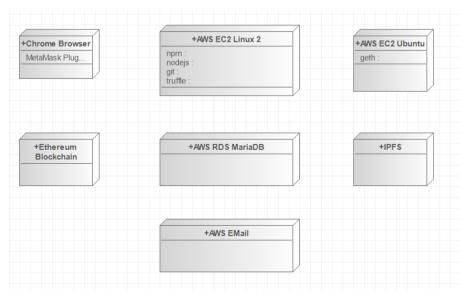
## 6.1.1 Client User Interface

The client is implemented in MEW and is kept lightweight.

Merchant user interfaces are merchant-specific, and the aim is to keep them lightweight as well or to offer implementation API's to our partners

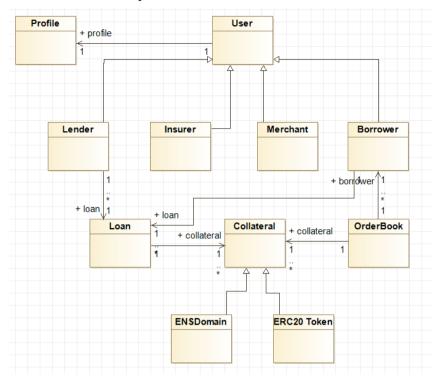
## 6.1.2 Infrastructure view

Our current infrastructure view looks as follows:



## 6.1.3 Business object model

Our current business object model looks as follows:



## 6.1.4 Smart Contracts

Smart contracts are used to implement:

- Marketplace business logic
- SmartCredit.io token business logic
- Smart Money token business logic

# 6.1.5 Off-Chain Services

The protection fund business is based on credit score calculations, which will be computationally intensive and will also rely on the data that is available outside the Ethereum blockchain. Credit score calculations and respective risk models will be implemented as off-chain services.

The protection fund not only needs credit score models, he also requires credit risk portfolio management models; these components will likewise be implemented as off-chain services.

# 6.2 Key Use Cases

## **Account creation**

• Users register themselves on the system

## **KYC (Know Your Client)**

 Users have to submit identifying data (email address, passport copy, and phone number) for KYC requirements  Users have to submit additional data such as Facebook profile, e-bay account, etc. for calculating the credit scores

# Creating a loan offer

• Lenders enter a loan offer

## Creating a loan request

Borrowers enter a loan request

#### **Browsing order book**

• Borrowers and lenders can browse the order book and accept existing offers

## Canceling loan requests or loan offers

• Borrowers and lenders can cancel their open orders

## Reporting

- See open lending/borrowing contracts
- See portfolio performance (if lending) or the costs of financing (if borrowing)
- See lending and/or borrowing transaction history

## Loan payment

- Borrowers pay loan principal and interest in Ether by the expiration date to the corresponding Smart Money token holder
- The respective Smart Money tokens are automatically destroyed and holders receive Ether in exchange

#### Loan default

- If the borrower neglects to fulfill their obligations, the loan defaults and the protection fund pays the Smart Money holder
- Smart Money tokens are transferred in this case to the protection fund

## Sale of non-performing loans to credit liquidator

• The protection fund sells non-performing loans to the credit liquidator, who subsequently takes the matter to the court

# Integration into the merchant platform

- The merchant specifies their credit requirements (required interest, credit score, and duration)
- The borrower can accept the merchant's credit requirements

# 7 Credit Risk Model

Lending is always associated with default risk. The mitigation of this risk is not possible through only a single factor. Instead, a combination of the business model, legal framework, risk management, and technology is required.

These combinations can be jurisdiction-specific, for example, in countries with weaker legal frameworks, borrowers have to use more collateral, and vice versa. Moreover, these combinations can also be history-specific; someone from a country with a weak legal framework can compensate this weakness by way of their previous lending history. Ultimately, different parameters will be combined in order to guarantee the face values of loans on the SmartCredit.io platform.



Every SmartCredit.io user will have to complete the **KYC registration procedure**. It will not be possible to lend or borrow on the system without completing the KYC procedure.

Every SmartCredit.io user will have an automated **credit score** that is calculated based on multiple parameters. The determining parameters are as follows:

- Customer's transaction history the transaction history is transparent on the Ethereum blockchain and will be analyzed with dedicated algorithms
- Additionally submitted ID information for example, uport.me and other emerging blockchain-based identity solutions
- Additionally submitted information from Facebook, LinkedIn, and e-bay
- Lending history on the SmartContract.io platform if the customer is new to the platform and has not taken out any loans previously, the credit score will be accordingly lower, and vice versa

**Collaterals** (maximum one third of the loan principal) are used for reducing credit risks. Collaterals are associated with corresponding Smart Money tokens. If the loan defaults, the protection fund assumes the face value of the loan and becomes the new owner of the collateral.

**Credit protection fund** will offer mandatory credit protection. Different credit scores will entail different credit protection fees; low credit scores results in higher protection fees, and vice versa.

Credit protection fee – every lender has to pay a fee to the credit protection fund for each loan contract.

**Credit risk portfolio** – the protection fund manages the credit risk portfolio, which balances their lending risks. The aim here is to diversify lending risks. If a certain group of user's exhibits a high concentration on the platform, this leads to an increased credit score for the respective users, which translates into higher interest.

Credit risk models are used for managing credit risk portfolios. These are computationally intense and they will therefore be implemented as off-chain web services. Initial risk models will be rules-based. The aim, however, is to replace rules-based risk models with artificial intelligence / deep learning-based risk models that would become self-learning models. This will be possible after the initial set of transactions is executed on the platform (some thousand credit transactions), because deep learning will also require historical transaction data for calculation purposes.

**Credit liquidators** form the interface to the legal court system. Protection fund sells the non-performing loans to the credit liquidators, who subsequently use the collateral of corresponding Smart Money tokens for legal fee payments.

**Legal enforcement** of peer-to-peer lending contracts is specific to the respective jurisdiction. There are some jurisdictions with stronger law enforcement, and vice versa.

**Ability to borrow** – SmartCredit.io calculates for every participant their ability to borrow based on their blockchain history. Participants cannot borrow more than their ability allows.

**Guarantors** are added to the system so that users can increase their ability to borrow. Guarantors will face legal consequences asserted by credit liquidators if the loans should default.

# 8 Competition

The aim of SmartCredit.io is to come up with a solution, where we address the weaknesses of our competition and leverage the strengths of our solution.

Since peer-to-peer finance is a developing market, we are more than happy to have competition:

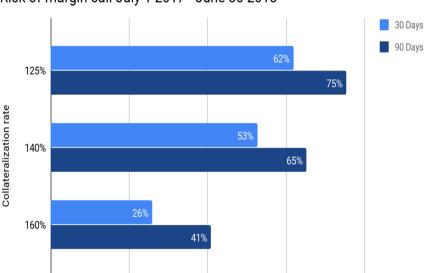
- This gives all of us the opportunity to educate the market together
- This gives customers the opportunity to choose the best products for them

Crypto lending is currently possible on cryptocurrency exchanges like Bitfinex or Coinbase (or Cryptolend, which aggregates over multiple exchanges). Users can lend their cryptocurrencies to short-sellers, who pay a fee for this to the lenders. SmartCredit.io is not in the **margin lending business**; our focus is on serving the peer-to-peer lending community as opposed to serving oligopoly cryptocurrency exchanges.

There are several competitors focusing on **collateral-based lending**. This is indeed what most of our competitors are doing. However, this is significantly over-collateralized lending – 150% and more collateral to loan lending...

Several competitors have added the **margin-call-mechanism** – if the collateral value drops to a certain level, then there is fire-sale of the collateral and the loan contract will be terminated. As the crypto markets are volatile, then borrowers face high probabilities to lose their underlying's.

Following calculation visualizes the probability of the margin call on BTC underlying for 30 and 90 day loans for one year from 1<sup>st</sup> of July 2017. One does not see these calculations on the websites of the respective service providers.

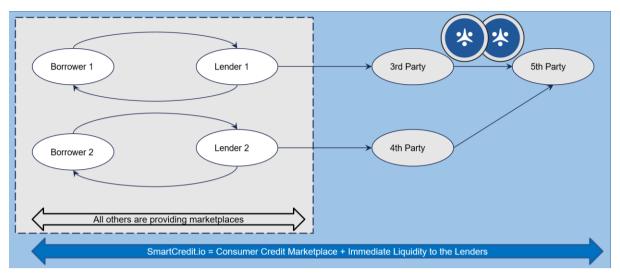


Risk of margin call July 1 2017 - June 30 2018

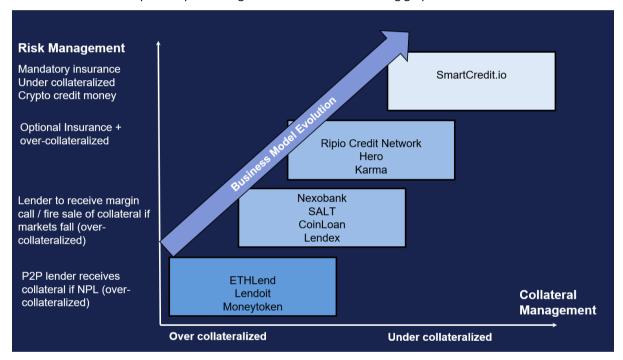
None of our competitors offers **monetizable debt** – i.e. the concept applied by Smart Money tokens. We think interest-bearing and principal-guaranteed Smart Money tokens represent the key competitive advantage with SmartCredit.io:

- It provides a solution to the credit problem in the cryptocurrency ecosphere
- It incentivizes lenders to lend and merchants to sell on credit if they have unexpected liquidity needs, they can always use Smart Money tokens for these needs
- Third party users are willing to accept the Smart Money tokens since they are principal-protected and interest-bearing to the holders

From this point of view SmartCredit.io does not have any competitors – we are the only ones, creating the immediate liquidity to the lenders.



The SmartCredit.io competitive positioning is illustrated in the following graph:



What we see is the business model evolution. The initial, rather technocratic business models, will develop towards real financial services business models.

Half of our competitors control client funds via multi-sign approaches or own wallets. **SmartCredit.io does not control client assets**, or uses multi-signature on the client assets for lender protection or provides yet another wallet. In SmartCredit.io the clients always control their own assets.

Having control over client assets or having possibility to block client assets movement translates however into higher **regulatory requirements** – into the banking licenses, which are required in any client domicile. Having and maintaining a banking license is very expensive business – half of our competitors will need to do this.

However, being **pure P2P platform**, being just intermediary without the control of client assets simplifies the regulatory requirements, which enable easier market entrances. That's why we choose this approach in SmartCredit.io.

The detailed comparison with our key competitor's looks as following:

Company	P2P	Collateral Needed	Loan Time	Credit Insurance	Immediate Liquidity for the Lender
celsius	•	200-500%	Minutes	Partial	No
coinloan	0	140%	Minutes	No	No
ETHLend	•	150%	Hours	Optional	No
LENDO	0	140%	Minutes	N/A	N/A
Lendoit	•	0	Minutes to Hours	20-30%	No
nebeus	0	200%	Days	N/A	N/A
nexo	0	200%	Minutes	N/A	N/A
<b>Ripio</b> Credit Network	•	Custom	Days	Cosigners	No
SΔLT	0	140%	Weeks to Months	N/A	N/A
SmartCredit.io*	•	20-50%	Minutes	YES	YES

SmartCredit.io is the only one:

- Who is **under-collateralized** for the borrowers
- With loan time in the minutes
- With the credit protection
- With immediate liquidity for the lenders / merchants
- P2P platform where clients own and control their assets

Below is analysis of some of the competitors:

# 8.1 ETHLend

ETHLend is collateral-based lending, i.e. the borrower has to put down ERC20-based collateral before lending. We think ETHLend idea is excellent.

However, we notice the following gaps in comparison with our model:

- As the price of the liquid crypto-collateral asset should be higher than the loan principal at the moment of contractual conclusion, the question remains why would the customer not simply sell their liquid crypto-asset instead of taking out the loan?
- ETHLend may make sense for tokenized illiquid real-world assets, like real estate. We are sure that the means for illiquid asset tokenization will be implemented in the crypto ecosphere, however, they are not there yet.

# 8.2 ETHFinex

Bitfinex recently announced a spin-off of ETHFinex for creating a decentralized exchange and lending for ERC20/Ethereum tokens. We like this idea very much and notice the following:

- We like the idea of using distributed hash tables for order book processing outside the Ethereum blockchain and dedicated "workers" for trade execution. This would allow for greater scalability and faster processing of transactions.
- The ETHFinex model looks like an extended ETHLend concept on a more advanced, dedicated architectural platform

## 8.3 Ripio Credit

Ripio credit is a similar service to "ETHLend"; it is based on their existing network. Ripio also introduced the credit insurer concept, which we find excellent, and the legal enforcement of loans.

#### 8.4 Salt

Salt would offer fiat (USD)-based loans against crypto assets. The customer has to use their crypto assets as collateral, and the collateral value has to be higher than the loan principal.

We notice the following:

- The Salt platform will keep customer collateral assets in multi-signature escrow. Margin-call / fire-sale mechanism is used, when there is drop in the collateral value.
- Collateralized lending against crypto assets could make sense for illiquid tokens (such as tokenized real assets), however it is not fully clear why the customer should use their liquid Bitcoin (BTC) as collateral for a loan, when they run the risk of losing the Bitcoin if the collateral value falls or if they are not able to repay the loan.
- This business model makes sense for lending against tokenized illiquid real-world assets. However, we are not currently aware of any means for tokenizing illiquid real-world assets.
- Having control over client assets will translate into higher regulatory requirements in every borrower's domicile...

#### 8.5 Coinloan

Coinloan is a very similar product to Salt; the customer uses their liquid crypto assets as collateral for obtaining a loan in fiat (USD).

We notice the following:

- If the loan principal value increases above 70% of the collateral value, the collateral will be liquidated. The customer therefore runs the risk of losing their collateral.
- Collateral liquidation mechanisms imply higher regulatory requirements in every borrowers domicile

# 8.6 Traditional Peer-to-Peer Lending Markets

Traditional peer-to-peer lending markets are built on centralized systems and they own customer assets in parts of the lending process.

We notice the following:

- Owning customer assets in this process results in higher regulatory requirements facing platform providers – usually, they need to apply for financial intermediary licenses, including all regulations associated with this license
- Owning customer assets in this process entails a central counterparty risk
- Traditional P2P lending systems are usually without the collaterals (exceptions being mortgage loan and car loans). Our business model offer collateral + protection fee, which is missing in the traditional P2P lending systems
- P2P fiat systems are using the fiat payment networks. SmartCredit.io vision is that the borrower should have funds in his wallet **in less than a minute**. In traditional P2P systems it rather the next day due to the dependency to the underlying payment networks.

# 9 Token Structure

# 9.1 SmartCredit.io and Smart Money Tokens

The SmartCredit.io ecosystem consists of two ERC20 tokens:

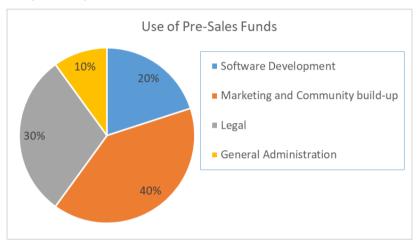
- SmartCredit.io token which is used as mean of payment on the platform.
- **Smart Money token** which is created when loans are created; they are allocated to lenders and destroyed once the principal and interest are repaid to lenders.

SmartCredit.io tokens are pre-mined and they will be the means of payment on the SmartCredit.io platform.

The volume of Smart Money tokens increases when loans are created and decreases on loan repayment – the volume equals the volume of total credit on the SmartCredit.io platform.

## 9.2 Pre-Sales

SmartCredit.io plans a pre-sales phase for the amount of USD 1 million. These funds are to be used as follows:



## 9.3 Initial Coin Offering

The first version of SmartCredit.io will be completed by way of an ICO. The start of the ICO is anticipated to be three months after completion of the pre-sales phases.

25 million SmartCredit.io tokens will be minted. If there are any unsold tokens, they will be burned (and this will be recorded by means of a YouTube video).

We prefer to have many SmartCredit.io token holders, as opposed to a small number of holders with large numbers of coins (based on the assumption that many of the token holders will become SmartCredit.io platform users).

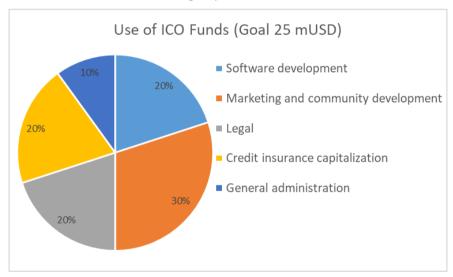
## SmartCredit.io tokens will be distributed as follows:



The ICO goal is to receive funding of USD 25 million in exchange for 20 million tokens that are offered (1 token equals USD 1.25). The other 5 million tokens are allocated for strategic partners, advisors and incentive packages.

The advisors' packages and incentive packages are time-locked: 50% for 12 months and the other 50% for 24 months. The strategic partners will be cryptocurrency payment operators / merchants, who will integrate SmartCredit.io, as well as jurisdiction-specific law firms / credit liquidators.

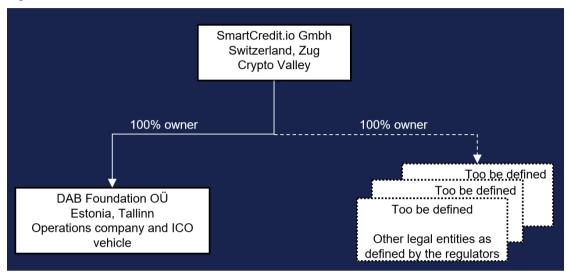
The ICO funds are to be allocated in the following way:



# 10 Organizational Structure

# 10.1 Legal Structure

SmartCredit.io GmbH in Zug, CryptoValley is in the registration process and will become general holding company. DAB Foundation OÜ is operational company. Further legal entities will be created as defined by the regulators:



## 10.2 DAB Foundation OÜ

DAB Foundation OÜ is a limited liability company registered in Estonia with registry number 14347776. The vision of the DAB Foundation is to facilitate the transformation of existing banking services onto the blockchain and to create "Decentralized Autonomous Banks" – blockchain-based, decentralized, autonomous banks without intermediaries.

The DAB Foundation will assume the role of the credit protection on the platform. The DAB Foundation will establish the network of credit liquidators as well.

DAB Foundation OÜ is applying for the following licenses at the moment:

- Wallet license
- Exchange license
- Registration in the AML Office

# 10.3 Team

#### **Martin Ploom**

Co-Founder & CEO – Over the last 10 years, Martin has worked for Credit Suisse, UBS, and Man Investments in Switzerland, and has been leading major strategic initiatives for years. Before entering the financial sector, he led the development and launch of four highly successful commercial products (three of them based on artificial intelligence). Martin has four master's degrees and completed CFA Level III in 2010. He has been a crypto-enthusiast since the end of 2012, and gives blockchain business model lectures and writes a blockchain-themed blog.

https://ch.linkedin.com/in/martinploom

Tarmo Ploom, Ph.D.

Co-Founder & CTO – Tarmo is a Distinguished IT Architect (The Open Group) and banking expert. Peer-to-peer systems have been his passion for more than 10 years. He has 20 years of experience in the financial sector, including 11 years as Senior IT Architect at Credit Suisse Global Enterprise Architecture and one year as Chief Architect of the most prevalent Swiss banking platform. Tarmo has four master's degrees and one Ph.D. degree. He has also earned CFA and CAIA designations. He has been a crypto-enthusiast since the end of 2012, gives blockchain lectures and writes a blockchain-themed blog.

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#### **Lewis Dale**

Communications – Lewis is a communication expert specializing in editing and German-to-English translations in the field of blockchain, gaming, and online business. He has been a crypto-enthusiast for several years.

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#### **Marc Lauper**

**Chief Creative Officer** 

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**Chief Marketing Officer** 

#### **Terence La**

https://www.linkedin.com/in/terencela/

#### Jon Matonis

Advisor – Jon is a Founding Director of the Bitcoin Foundation and his career has included senior influential posts at VISA International, VeriSign, Sumitomo Bank, and Hushmail. Jon is an economist and e-money researcher focused on expanding the circulation of nonpolitical digital currencies. Jon also serves as an independent board director to companies in the Bitcoin, blockchain, mobile payments, and gaming sectors. Jon has been a featured guest on CNN, CNBC, Bloomberg, NPR, Al Jazeera, RT, Virgin Radio, and numerous podcasts. As a prominent fintech columnist with Forbes Magazine, American Banker, and CoinDesk, he recently joined the editorial board for the cryptocurrency journal Ledger. His early work on digital cash systems and financial cryptography has been published by Dow Jones and the London School of Economics.

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#### **Derek LaSalle**

Blockchain Technology Advisor – Derek co-founded Microsoft Biztalk/Workflow Services, co-invented four messaging protocols, and patented WindowsTM secure boot/volume encryption (BitLockerTM). Derek served as Executive Vice President leading integration and information architecture at JP Morgan Investment Bank, concurrent to serving as Convenor/Chair of the ISO20022 Financial Messaging Standards Technical Support Group, member/contributor for FpML, FIXML/FIX Protocol Ltd Swaps Reporting Standard Extensions (v5) and US X9 payment standards bodies. Most recently, Derek served as Solution Architect for Bridgewater and Associates Hedge Fund. As an early adopter of cryptocurrency and blockchain technology, Derek encourages the growth of frictionless commerce and the great disintermediation wave enabled by blockchain and distributed ledger technology.

https://www.linkedin.com/in/dlasalle/

#### **Daniel Mischler**

Advisor – Daniel is a former CEO (Pixelpark, RTC), global CIO (Glencore), Executive Partner of Gartner and supports a number of successful startups such as Pexapark, Laterpay, Starmind, Coresystems, and Crowdsolutions. He also serves as a non-executive board member in private companies and foundations, and holds a degree in computer science from the University of Applied Sciences and Arts Northwestern Switzerland (FHNW).

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# **Christopher Saunders**

Blockchain Business Model and Credit Markets Advisor – Chris is a technology entrepreneur and investment banking executive focused on connecting traditional finance and legal industries with distributed ledger (blockchain) technology. He is the CEO of a firm delivering legal enforceability of decentralised claims and advises highly selected ICOs and family offices. He managed derivatives sales and capital markets teams at Goldman Sachs and Bank of America Merrill Lynch, and holds an MBA from The University of Chicago Booth School of Business.

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#### **Nicolas Genko**

Blockchain Technology Advisor – Nicolas is the Chief Technology Officer of LoyaltyCoin. Nicolas is an early adopter of cryptocurrency and blockchain technology, and has been active in the blockchain community since 2012. Passionate about new disruptive technologies, he founded one of the first Bitcoin consultancy firms in the world, BTC-Consulting.org, in 2013 and has been involved in many cryptocurrency-related projects.

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## Daniel Burgwinkel, Ph.D.

Blockchain Business Model Advisor – Daniel is a professional blockchain and information governance advisor and trainer. He has 10 years of experience in the financial sector and 5 years in blockchain. Daniel wrote his Ph.D. thesis on digital contracts and law many years before the Bitcoin whitepaper was released.

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#### Walter Dettling, Ph.D.

Blockchain Business Models Advisor – Walter is a professor at the University of Applied Sciences in Basel, specializing in financial mathematics and blockchain.

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#### **Norbert Perrot**

Credit Risk Models Advisor – Norbert is Head of Credit Risk at Cembra Money Bank. Norbert has worked as a risk manager for consumer and small and medium-sized enterprise lending for over 10 years and is now Head of Credit Risk for the largest consumer lending bank in Switzerland.

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# 10.4 Regulations

The SmartCredit.io platform does not hold customer assets; all transactions concern direct peer-to-peer transactions between the borrowers and lenders, based on the decentrally hosted blockchain. The SmartCredit.io platform is not subject to financial intermediary law, which would be the case if customer assets were actually held or controlled by the platform.

Both contract parties have freedom of contract and their mutual agreements are based on contract law.

The KYC procedure will be mandatory for all platform users who wish to either lend or borrow funds.

Should further regulations emerge, our intention is to correspond fully to all applicable regulations.

# 11 Additional information

#### 11.1 Risks

## Regulatory

The crowdfunding mechanism of the SmartCredit.io project is not an offer to sell any security. The coins and tokens generated for the sale do not represent any promise of profit, nor do they represent shares in any company.

## Competition

The crypto-economy is a highly competitive, open market. Our project has competitors and we are confident that we are providing a solution with a higher value proposition to our customers than our competitors. However, in the same manner that we define our effective response strategies in relation to our competitors, our competitors will do the same accordingly.

## Slow platform adoption

Great products are not only about creating technology, they are also about user communities. Failure to create a strong user community behind our project will result in slow platform adoption.

#### 11.2 Additional Information

## Project channels:

- 1. Website: <a href="http://SmartCredit.io/">http://SmartCredit.io/</a>
- 2. Medium: https://medium.com/smartcredit-io
- 3. YouTube: https://www.youtube.com/channel/UCBhZiej6Yw-ENAswR3ImjBg
- 4. Telegram: www.telegram.com/SmartCredit Community
- 5. LinkedIn: <a href="https://www.linkedin.com/company/smartcredit-io/">https://www.linkedin.com/company/smartcredit-io/</a>
- 6. Github: <a href="https://github.com/SmartCreditio1/doc">https://github.com/SmartCreditio1/doc</a>

## Background information:

- 1. Global Peer-to-Peer Lending Market to Grow at a CAGR of 51.5% by 2022
- 2. Blockchain Technology: Einführung für Business- und IT Manager (book by the founders)
- 3. <u>How traditional banking business revenues will be impacted with crypto and smart contracts</u> (from the founders' blog)
- How private banking processes will be impacted by blockchain disintermediation (from founders' blog)
- 5. Modern Portfolio Management Approaches for Cryptocurrencies (from the founders' blog)
- 6. <u>97% Owned Positive Money Cut</u> (from the YouTube Channel: Positive Money)