

*Community Draft – Subject to Change*

# CREDITO: The Future of Credit Intelligence

[credito.io](https://credito.io)

## Executive Summary

Credito is a decentralized credit intelligence network providing credit scores, transaction scores and lending marketplace powered by Ethereum blockchain, Smart Contracts and IPFS, bringing enhanced transparency and reliability.

Credito brings **Financial Inclusion** to the "**Credit Invisibles**" by providing accurate and reliable credit scores. A relatively high proportion of young people were credit invisible or unscored. That's not surprising, since they haven't had much time to build a credit history. For some, however, not building credit as a young adult could be setting the stage for a lifetime of credit invisibility. People who don't have a credit score or credit history may find it more difficult to rent an apartment, buy a car, purchase a home, and, of course, get a credit card. In short, it shuts them out of many common financial transactions.

Credito is building a **Credit Intelligence Network** for the credit industry to prevent **Credit Risk** by identifying fraudulent transactions as they happen, allowing the industry to take well informed decisions. Although financial institutions are normally known as one of the most strictly regulated sectors, they are still a target for fraudsters. The consequences of fraud are not insignificant, resulting in financial distress for both banks and customers. While the financial institutions are active in the quest to identify fraud and reduce costs of fraud, they still lack a **true global intelligence** of all known frauds and compromises.

Credito is introducing a decentralized **collateralized lending marketplace** and enables connections between lenders and borrowers located anywhere in the world. This removes physical constraints and reduces the traditional lending costs and management fees, thus creating a better credit marketplace than anything available today.

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## 2 Problem overview

Despite the efforts made by banks, card issuers, and merchants, credit card fraud continues to grow faster than credit card spending. Data breaches have resulted in more card details being compromised, and the growth in online shopping has led to more opportunities for ecommerce fraud.

According to a 2016 report by Nilson<sup>1</sup>, losses from credit card fraud amounted to \$21.8 billion in 2015 that's an increase of 162% from the 2010 figure which was \$8 billion. The losses for 2016 are already estimated at over \$24 billion, and these losses are expected to reach \$31 billion by 2020.

The total value of credit and debit card transactions was \$31 trillion in 2015. So, nearly 0.6 percent of the value of all transactions was lost to fraud. While the total value of credit card transactions is growing at close to 7 percent a year, credit card fraud is growing at over 16 percent every year.

According to the same report, gross fraud losses accounted for 6.9 cents per \$100 spent. That was up from 5.7 cents per \$100 in 2014. Credit card issuers bare 72% of these losses, while merchants and ATM operators share the other 28% of the losses from card fraud.

These losses occur throughout the system, including at the point of sale, at ATMs, and during online transactions. While EMV chip technology has reduced the incidence of in store fraud, it does not help with online fraud.

On the other hand, peer to peer (p2p) platforms are among the fastest growing segment in the financial services space. The market for alternate finance gained popularity in recent years. A finding by Transparency Market Research suggests that "the opportunity in the global peer-to-peer market will be worth \$898 billion by the year 2024, from \$26 billion in 2015. The market is anticipated to rise at a CAGR of 48% between 2016 and 2024."<sup>2</sup>

While the growth projections for p2p lending are promising, one of the major challenges is providing a system to reduce fraudulent and high risk activities, as they result in loss of investor confidence and trust.

While the p2p platforms continue to face the risk of default, and fraudulent practices, the growth prospects of this segment remain strong, especially in times when the banking sector continues to struggle with lingering damages. Thus, a decentralized and transparent Credit Intelligence platform offers great opportunity for Lenders, Borrowers, and Financial Institutions to reduce their risk.

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<sup>1</sup> [https://www.nilsonreport.com/upload/content\\_promo/The\\_Nilson\\_Report\\_10-17-2016.pdf](https://www.nilsonreport.com/upload/content_promo/The_Nilson_Report_10-17-2016.pdf)

<sup>2</sup> <https://www.transparencymarketresearch.com/pressrelease/peer-to-peer-lending-market.htm>

## 2.1 Monopoly

The global credit intelligence is controlled by a handful of credit bureaus, and it has been alleged many times that their scoring models are outdated, flawed, and not portable as they are specific to a country or a region. “More than one in five consumers have a 'potentially material error' in their credit file that makes them look riskier than they are, and consumers contacted one of the big three credit reporting agencies to dispute information Eight million times an year”<sup>3</sup>.

## 2.2 Security

The recent Equifax hack exposed 140 million+ identities and personal information to the hackers and termed as the worst security breach in US history.

There were over 15 million victims of identity theft or fraud in 2016 with the total amount stolen being \$16 Billion.

## 2.3 Centralized Information

The data collected by credit bureaus is centralized. It is a common misconception that these bureaus exchange information automatically, which is not true. These agencies are separate businesses providing similar services for a fee.

## 2.4 Portability

As the credit scores are not portable, a low risk borrower may be denied access to credit when they move internationally, having to rebuild his credit worthiness from scratch.

## 2.5 Outdated Analytics and Incomplete information

As the information becomes more centralized it becomes monopolised and incomplete. This leads to decisions being made without all the available information at hand, significantly increasing the associated risk. Moreover, the credit scores are not updated in real time, with the delay prejudicing millions of consumers and businesses as their current credit history is not factored into the decision making process.

Traditional credit bureaus need a borrower’s lending history to calculate a credit score, which a lot of people simply haven’t accrued. In the US alone about 26 million American adults have no histories with national credit reporting agencies such as Equifax, Experian, and TransUnion. In addition to those so-called credit invisibles, 19 million people have credit reports that are so limited or out of date that they are unscorable<sup>4</sup>. In other words, 45 million American consumers do not have usable credit scores, as a result many credit-worthy people were denied access to credit.

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<https://www.cnbc.com/2017/09/27/the-real-problem-with-credit-reports-is-the-astounding-number-of-errors-equifax-commentary.html>

<sup>4</sup> [http://files.consumerfinance.gov/f/201505\\_cfpb\\_data-point-credit-invisibles.pdf](http://files.consumerfinance.gov/f/201505_cfpb_data-point-credit-invisibles.pdf)

### 3 Solution

As a solution to the above problems, we have created the **Credito Network**, or simply **Credito**. A decentralized network based on Ethereum blockchain coupled with smart contracts and Interplanetary File System (IPFS<sup>5</sup>) providing Credit Intelligence and Decentralized Lending Marketplace.

Credito encourages the expanding and proficient operation of the credit industry by permitting both fiat and digital resource loan specialists to broaden credit to people and establishments with underdeveloped or a juvenile credit framework. The ecosystem provides solutions to enable any verified lender to safely and securely issue credit to the verified borrower.

Decentralization provides more security and trust. It is a method to organise anything in a way that does not require trust on third parties. The trust is eliminated by executing code that does not require centralized governance, management, or servers. By decentralizing lending, we do not require banks or any other intermediaries for conducting a loan transaction.

Decentralization through the use of Smart Contracts also removes any trust requirement between borrowers and lenders, providing a trustless and transparent lending environment unavailable in today's market.

Smart Contracts achieve this through their pre-defined parameters removing the need for trust between participating parties. They are also entirely transparent and viewable by anyone using an Ethereum blockexplorer<sup>6</sup>.

#### 3.1 Credito is Transparent

Today when you make any transaction through the banking system, you do not have access to the ledger. Ethereum network provides an immutable ledger, where every transaction is recorded and is always open for inspection. Any transaction that is deployed on Ethereum blockchain could be explored through block explorers. The transparent ledger removes the trust that normally one would need to have when making a transaction between two banking institutions. In a banking system, the sender has to trust the receiver and vice versa. One needs a receipt of payment to confirm payment. However, such receipt is not protected against forgery. Therefore, you cannot check whether your counterpart has received the transaction which can create friction and uncertainty.

Credito leverages the transparency that the blockchain ledger provides by monitoring the activities of borrowers and lenders to prevent either party from overextending themselves. For example, it would be used to prevent a borrower from obtaining multiple loans from different lenders which he would then be likely to default on.

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<sup>5</sup> [https://en.wikipedia.org/wiki/InterPlanetary\\_File\\_System](https://en.wikipedia.org/wiki/InterPlanetary_File_System)

<sup>6</sup> <https://etherscan.io/>, <https://etherchain.org/>, <https://ethplorer.io/> to name a few

### 3.2 Credito Loan Agreements are Smart Contracts

Credito Loan Agreements are self-executing contracts with the terms of the agreement between Lender and Borrower, directly written into lines of code which brings enhanced transparency and reliability. The code and the agreements contained therein exist across a distributed, decentralized blockchain network. Credito Loan Agreements permit trusted transactions and agreements to be carried out among disparate, anonymous parties without the need for a central authority, legal system, or external enforcement mechanism. They render transactions traceable, transparent, and irreversible.

### 3.3 Credito is “Trustless”

Credito will avoid risks that are associated with third parties, and also removes the need to trust the counterparty. When the borrower places the loan request on Credito Network, the counterparty cannot manipulate or halt the loan request once the loan is deployed. Removing the counterparty or third party risk is vital to avoid any unfair and unwanted behaviour.

## 4 Credito Analytic Engine

Credito scores aim to derisk the investor's investment and the borrowers' credit score. Credito scores are generated by Credito Analytic Engine, a self-learning algorithm using a continual feedback loop with the help of Big Data analytics, Machine learning, and Artificial Intelligence, offering a score which acts as a dynamic marker of a person's probability to repay a loan amount, which evolves with the client's record of loan repayment.

### 4.1 Identity Verification

Registration and Identity Verification is a prerequisite to access the services provided by **Credito**. Complete documentary evidence of their identity is required, with the information used to do a Know Your Customer (KYC) and Anti-Money Laundering (AML) screening. The identity will be verified against various public and private sources like

- Data feeds from centralized Credit Agencies
- Public records
- Social media
- Professional profiles

This cross verification disables duplicate registrations by the same user and secures the Credito network. Once the identity has been verified, it is hashed and stored in the IPFS by linking the individual's credit score. Storing the data in IPFS makes it permanent and reusable, removing the need for customers to verify for each new loan application, thereby speeding up the entire process.

### 4.2 Credito Scores

Credito collects anonymized transaction history of the borrower from various alternative data providers. The uses of anonymised transaction data in scoring for credit risk can

increase the predictive accuracy of risk management by identify patterns of behaviour. Transaction scoring helps to gain a deep and clear understanding into their customers' behaviour. As more banks and financial institutions trail the blockchain, Credito could become standard fare in the future for established players such as large corporations, governments, and central banks.

Credito provides smarter scores to third parties like banks and other financial institutions in exchange for anonymized transactional data, with the transactional data, scoring models classifies them with various identified Risk Profiles and Risk variables. Transaction Profiles are adjusted based on a customer's activity relating them to the regional spending patterns, and individualized to each customer Optimized recursive Risk variables.

### 4.3 Risk Variables and Risk Profiles

Risk Variables are the core of the Credito Network's modeling power. It is crucial that an easily maintainable library of Risk Variables is generated. The primary goal of is to increase the overall efficiency of this self-calibrating scoring model.

Risk variables include details such as:

- Patterns of behaviour.
- Location of spending, like merchant info, POS etc.
- Preferred online merchants or websites.
- Recent spending trends and deviations.
- Significant spending activities.
- Repeat purchases and / or attempts.
- Time of the transactions.
- Device information of the transactions originated, like mobile, desktop etc.

Risk Profiles are updated by every transaction. The most recent and relevant information is used to make predictions and informed decisions. Earlier identification of changes in customer behaviour and allows timely scoring decisions. Risk Profiles keep a track of risk variables which are dynamically updated during the scoring process using a feedback loop that tracks the actions taken by the customer correlated to pre-categorized data.

### 4.4 Predictive and Descriptive Analytics

The blockchain ledger includes massive amounts of transactional data. Ethereum ledger data can be processed and interpreted with the use of block explorers for financial decentralized applications.

Artificial intelligence (AI) is growing in the use of financial industry. There are projects where AI is used to assess credit risks. Such analysis can be performed on ledger data and on the past loan history of the lenders and borrowers. **Credito** will provide APIs to access past loan transaction data and the related ledger data for the analysis.

Using regressive and comparative techniques, predictive analytics provide estimates about the likelihood of a future outcome. These statistics try to take the data that you have (Descriptive Analytics), and fill in the missing data with best guesses. They utilise historical data to identify pattern and apply statistical models and algorithms to capture relationships

between various data sets. Predictive analytics can be used to forecast customer behavior and purchasing patterns.

#### **4.5 Profiling and Matching**

Backed by the powerful analytics and advanced data mining techniques of the Credito Network, lenders and borrowers are profiled with their past behavioural patterns and practices. This assists with the instant matching of lenders with borrowers, in turn decreasing the turnaround time for fulfilment of a credit request.

#### **4.6 Credito Transaction Scores**

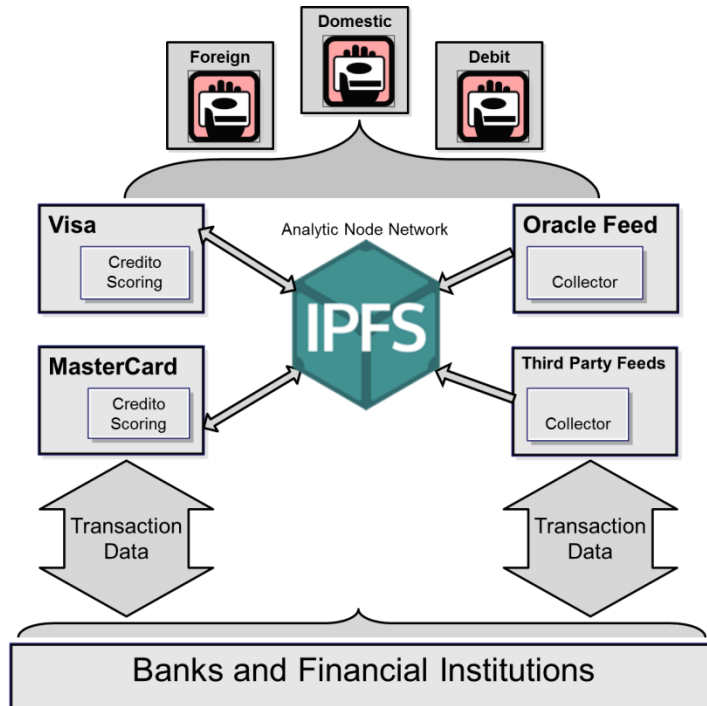
Credito transaction scores are derived from transactional fraud analytics, which combines analytic technology and techniques to help detect potential improper transactions, such as those based on fraud and/or bribery, either before the transactions are completed or after they occur.

These days, nearly everyone engaged in fraud leaves behind a trail of digital fingerprints. This presents a big opportunity to prevent further harm, but it is often only considered after the damage has been done. Credito constantly evolves and learns from the new data breaches identified every day, and incorporates the knowledge in calculating transaction scores.

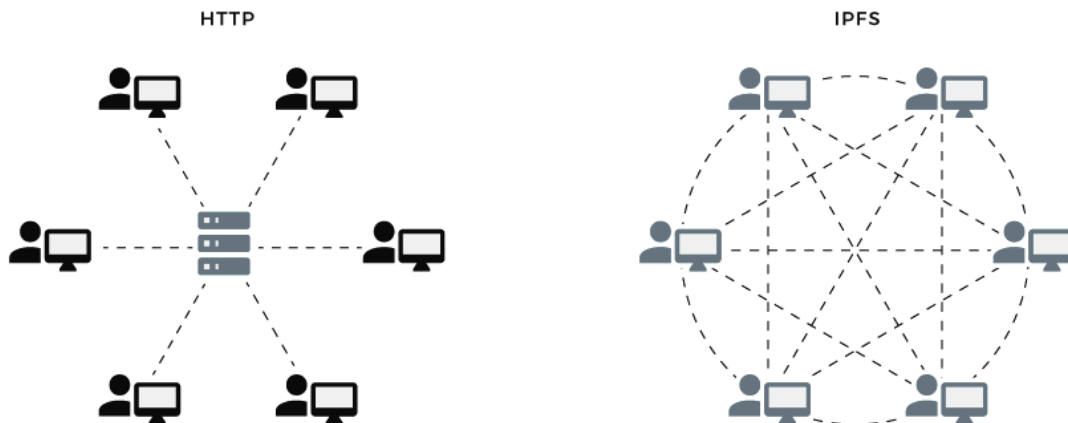
Credito utilises anomaly detection and rules-based methods to combat fraud and corruption. Not only can analytics tools enhance rules-based testing methods, but they can also help measure performance to standardize and help fine tune controls for constant improvement.



#### 4.7 Credito Analytic Engine Architecture



Credito uses IPFS<sup>7</sup> to store the encrypted data. IPFS can work in partitioned networks, and does not need a stable connection to the rest of the web in order to access content. Even if a node fails, it only takes one node adding the content in order to restore availability, removing reliance on a single point of failure. Files on IPFS are content addressed (hash of the file contents) providing versioning guarantees.



Credito synchronizes data across sources, combining merchant data from activity across banks, ensuring account models are complete, continuous offline processing is separated from real-time scoring. Credito Scoring provides real-time transaction scoring abilities and Collector simply passes transactions to the IPFS without scoring.

<sup>7</sup> <https://github.com/ipfs/logo/blob/master/LICENSE>, CC BY-SA 3.0,  
<https://en.wikipedia.org/w/index.php?curid=47787157>

## 4.8 On-demand Decentralized Analytics

Credito Analytic Engine is continually evolving, reporting a detailed insight of the transaction trends and patterns, as well as providing on-demand decentralized analytics to third parties, such as banks, financial institutions, and data scientists.

### 4.8.1 On-Chain Off-Chain Components

Credito maintains two on-chain contracts "**Credito Scoring Contract**" and "**Credito Leasing Contract**" which we refer to as **Scoring Contract** and **Leasing Contract** respectively.

The Scoring Contract has 2 primary functions:

1. Responding to individual credit score requests
2. Validating third party transaction scoring requests. Moreover, it also keeps track of the credits balance and usage metrics.

The Leasing Contract is responsible for monitoring the analytic node network's metrics and allocating nodes to the Scoring Contract requests.

For any given analytic node, the Leasing Contract monitors the following metrics:

- *Total number of assigned requests*: The total number of past requests that a node has agreed to, both fulfilled and unfulfilled.
- *Total number of completed requests*: The total number of past requests that a node has fulfilled. This can be averaged over number of requests assigned to calculate completion rate.
- *Average time to respond*: The timeliness of the node's responses which is an indicator of the nodes efficiency. Average response time is calculated based on completed requests.
- *Node reputation*: The reputation of the node based on previous scored transactions. All nodes verify and vote each other's scores, if the majority of the nodes return an identical value, the node become trustworthy. This reputation system helps to identify and remove faulty nodes from the network.

Third parties interact with the Scoring Contract by requesting an analytic resource allocation with an estimated currency volume to score and lease time. It then calculates the fee for the service reducing further on-chain interactions until the lease time.

On successful resource allocation, the data will be pushed into the Credito Analytic Engine, the off-chain component which encrypts and stores the data on IPFS. Credito Analytic Engine identifies relevant data and examines it for patterns, discrepancies, and anomalies by scrubbing, organizing, indexing, classifying, and patternizing. The findings are then translated into insights with detailed transaction scores that allow us to manage potential threats before they occur, as well as develop a proactive fraud and bribery detection environment. The insights will be reported back as an IPFS resource.

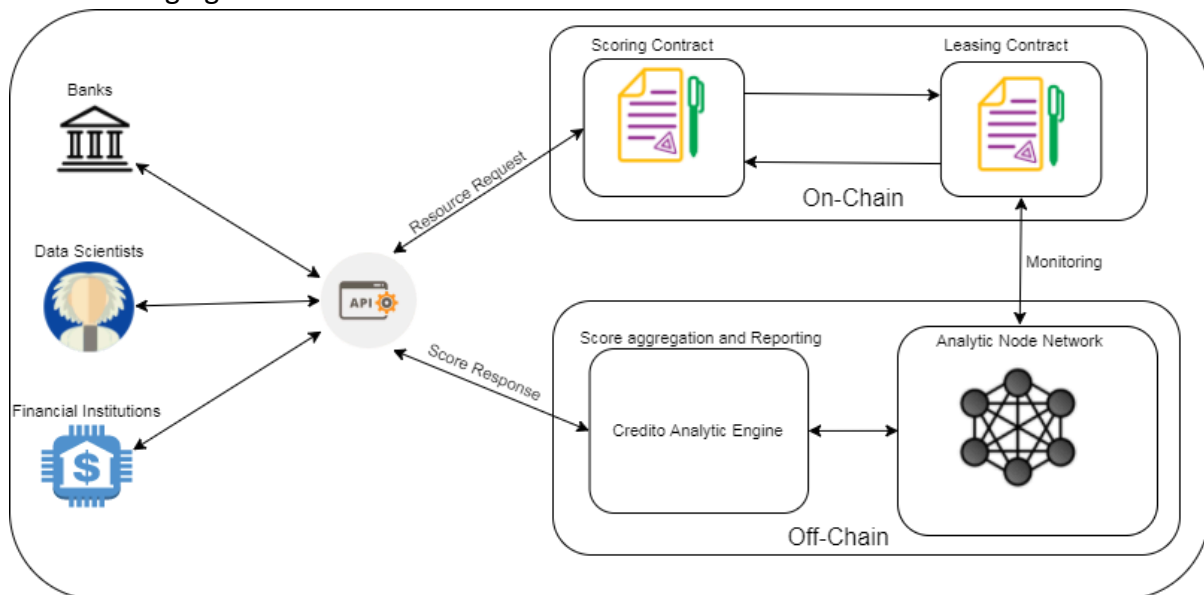
Credito will be a beneficiary of the network effect - each and every transaction will add intelligence and value to the network.

- Credito can be configured to report live transaction scores alongside a detailed report which could be helpful in: Detecting anomalies during transactions.
- Immediately blocking attempts by recognised fraudsters.
- Freezing accounts or cards temporarily until transactions are verified with the owner.
- Protecting against country-specific risks.

Credito provides a third party API for the use of Credito Analytic Engine. This API can be integrated into their existing infrastructure to customize reports, select modeling preferences, and to emphasize risk profiles and variables that need to be weighed

Credito encourages external node operators to become a part of the Credito Network and incentivizes them with credits.

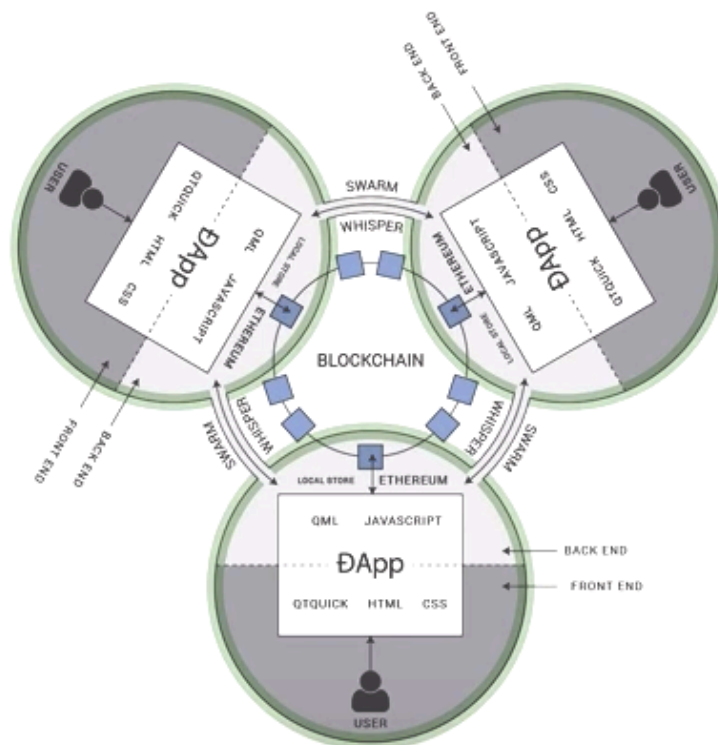
The following figure shows the interaction overview:



## 5 CreDApp (The Decentralized App)

The CreDApp is decentralized marketplace serving as an interface for lenders and borrowers. Unlike traditional applications where the backend code is running on centralized servers, a DApp runs on a decentralized peer-to-peer network. CreDApp guarantees trust and transparency thereby eliminating the need of third party intermediaries. A typical DApp is laid out below<sup>8</sup>.

<sup>8</sup> Source : <https://ethereum.stackexchange.com/questions/383/what-is-a-dapp>



With a vast database of verified and scored applicants within Credito, CreDApp provides a platform for lending that will encourage smaller and online lenders to get up and running in no time, saving them time and effort of identifying and verifying each customer, enabling more competitive loans and products to be provided to customers. CreDApp encourages lending without borders, means that anyone can agree to lend to anyone anywhere. Small and medium investors can combine their portfolio and start lending immediately with zero initial costs.

### 5.1 Tokenization and Token Collaterals

Liquidity is the driving force behind traditional asset tokenization. Tokenization provides digital representation of real-world assets like, gold, real estate, company shares, intellectual property, art or commodities. As the world is becoming tokenized, it won't be long until thousands can be moved onto the Ethereum blockchain. In future we will see many real-world assets and cross chain assets such as Bitcoin, Neo wrapped as an ERC-20 Tokens.

Tokenization is growing. Today there are dozens of ERC20 tokens that have significant value and are traded in crypto-currency exchanges. Each week new token crowd sales are launched and more tokens are open for trade.

Secured lending can be achieved with collateral. The trust has already been established by the Credito score with the pledged collateral, the loan contract can be made completely risk free, both for the lender and borrower. The Smart Contract stores the collateral and releases it in instalments until the borrower has repaid the loan and the premium. Ethereum Smart Contracts are flexible to handle any ERC-20 compatible tokens as collaterals.

## 5.2 Smart Collateral Management

Credito smart credit agreement is specifically designed for smart collateral management. The smart contract tracks real-time global market price from multiple data channels to assess the valuation of the collateral, while simultaneously tracking the borrower's loan balance. If the value of the collateral depreciates below a determined threshold, a maintenance notice is issued to the borrower.

In the case of a maintenance notice, the borrower can either add more collateral, make an extra payment reducing the loan balance, or choose not to take any action and the smart contract will automatically initiate the liquidation of a portion of the collateral in order to recalibrate. Liquidation is an automated process in Credito, it utilizes proprietary logic to optimize trade based on a live assessment of available liquidity, order book depth, and price across multiple exchanges via distributed market orders for multiple currency pairs.

Credito smart credit agreement performs several loan servicing functions autonomously. It monitors the origination of the loan, and tracks monthly payments from the borrower to the lender. If a borrower misses a payment, the Credito automatically liquidates a portion of the collateral and gives sale proceeds to the lender as payment on behalf of the borrower. Once the borrower repays the loan in full, the remaining collateral is returned to the borrower.

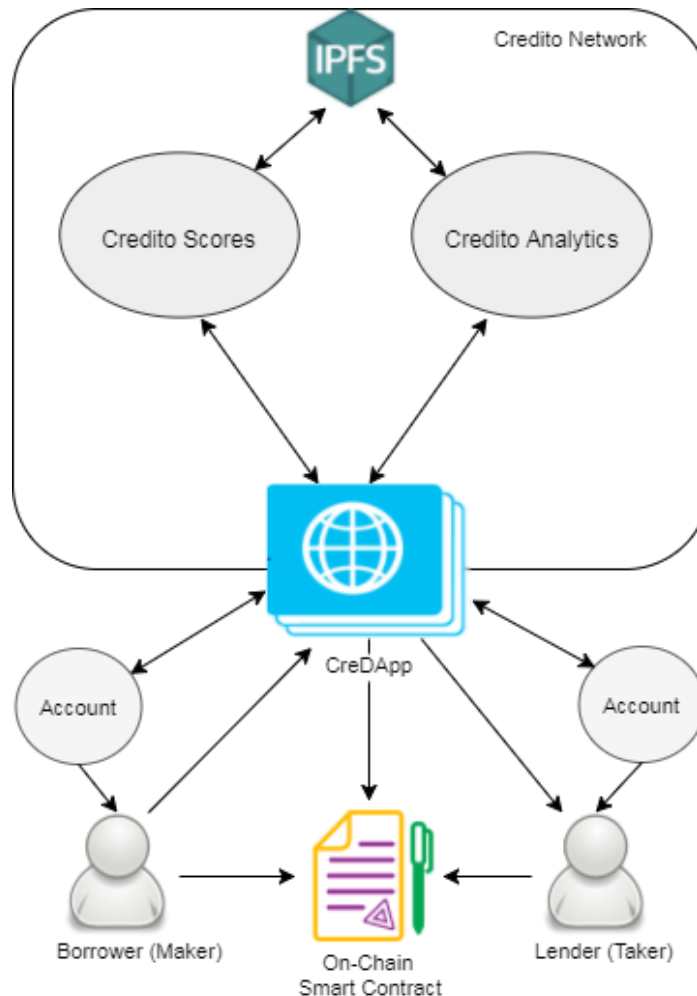
If the value of a borrower's collateral increases, then depending on the terms of the loan, the borrower may have the option to

- a. Add the increased value to the principal of the loan for an additional extension of credit from the lender.
- b. Withdraw excess collateral, available to the borrower depending on the agreed loan terms at the time of loan origination.

Borrowers are not penalised for early settlement of debt. Borrowers who are unable to increase the available principal balance of the loan have the ability to repay the loan in full and re-apply, this is subject to Lender specific borrower eligibility and refinances restrictions. Any appreciation in the collateralized asset is retained by the borrower following the full repayment of all outstanding loan principal, interest and fees.

## 5.3 The Maker-Taker Lending Model

CreDApp implements Maker-Taker model, to complete a loan agreement Smart Contract. It reduces the friction on the Ethereum blockchain as the order processing is done off-chain and the settlement is done on-chain, minimizing costs because transactions only occur when value is being transferred.



The loan agreement process:

1. Maker creates a credit order in the CreDApp requesting a loan by pledging Token A as collateral for Token B, specifying a desired interest rate, LVR, expiration time, and signs the request.
2. CreDApp attaches the dynamic Credito report of the Maker to the request, verifies the Maker has enough Token A and freezes them until the loan is serviced or the credit request expires, and broadcasts the request over Credito.
3. Taker intercepts the request and decides that they would like to fill it.
4. Taker submits the makers signed request to the Credito with his signature.
5. The Credito authenticates Maker signature, verifies that the request has not expired and has not already been fulfilled, then creates a smart collateral management contract by transferring the collateral to the smart contract.
6. CreDApp stores and executes the smart contract on Ethereum blockchain and Token B will be transferred from Taker to Maker.

While it may seem unusual that the Maker (Borrower) is specifying the interest rate, keep in mind that Takers ultimately have control over which loan requests are to be fulfilled. Therefore, Maker must set the interest rate to values that satisfy the Takers associated with Credito.

During the order creation, CreDApp consults the Credito to acquire the risk profile of the Maker and suggests the best interest rate within the network. If Maker wants the loan request to be fulfilled quickly he may create the order with the prefilled interest rate.

## 6 Credits – The Credito Network Token

Credits are ERC20 tokens which serve as the currency, governance mechanism and rewarding system with in Credito. Credito will be able to set prices and receive payment for their services in the form of Credits.

### 6.1 Token Usage

All participants of Credito will need to pay a usage fee in **Credits which will be burned**, over the course of time this could potentially increase demand for the remaining Credits.

The total amount of Credits burned in each transaction is directly proportional to the decreasing supply. It will also depend on the exchange rate(s) set by the network, which will oversee the available supply, market conditions and inform the smart contract of exchange rates at each particular moment of payment.

The borrowers and lenders network fee will vary based on the transaction volume and will be calculated based on the exchange rate, we expect the fee to go up to 0.5%.

Third parties could integrate the Credito Analytic Engine or access it externally and process their online/offline transaction data, in which case the network fee will be based on the currency value of the scored transactions. As transaction volumes increase the network fee decreases, making Credito competitive to any other alternatives.

For example, when Credito is in its infancy, a transaction (both Credit and Scoring) worth \$1000 may burn 5 Credits. However, as the network volume increases due to decreasing supply, the same transaction of \$1000 may only burn 0.0005 Credits.

## 7 Conclusion

We have introduced Credito, a decentralized network for credit scoring, transaction scoring and lending. We have outlined the current issues in the market and how Credito solves the problems by leveraging blockchain and IPFS. We described Credito's unique approach to decentralized lending and analytics. We proposed a novel solution with new features such as security and transparency. Finally, having examined existing lending space solutions and their shortcomings, we have exposed the need today for a system such as Credito.

Credito Design Principles and Values:

**Decentralization**, Decentralization is not only the foundation of the tamperproof properties of blockchains, but the basis of their permissionless nature. By continuing to build decentralized systems, we aim to further enable permissionless development within Credito. We believe that decentralization is a crucial component for a globally thriving ecosystem with long-term sustainability.

**Modularity** for simple and flexible system design. We appreciate the philosophy of building small tools which do one thing well. Simple components can be easily reasoned about and thus securely combined into larger systems. We believe that modularity not only enables upgradable systems, but facilitates decentralization.

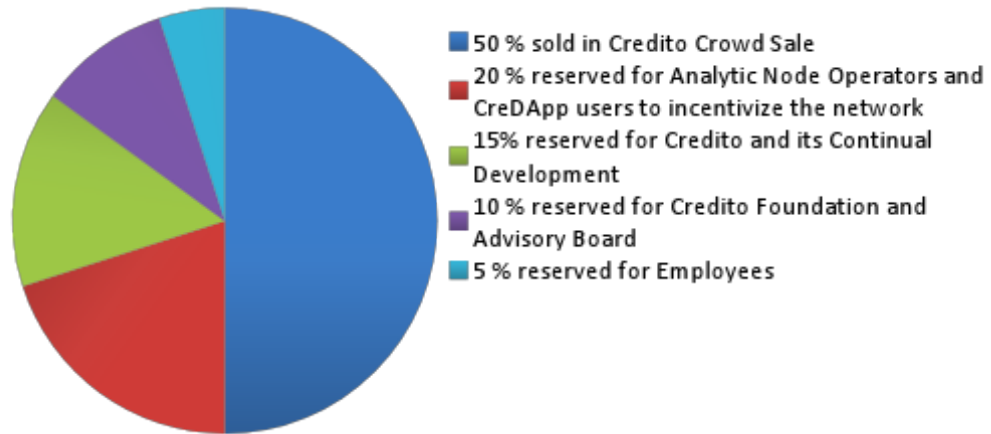
**Secure, transparent and extensible systems.** Credito is built for the community. We value the community and will engage continually with data scientists, domain experts, academics, and security experts for peer review. We encourage testing, audits, and formal proofs of security, all with the aim of creating a platform whose robustness and security can support future innovations.

With these principles in mind, we look forward to extending the reach and impact of reliable analytics, secure and transparent lending as a cornerstone of the Credito.



## 8 Token distribution

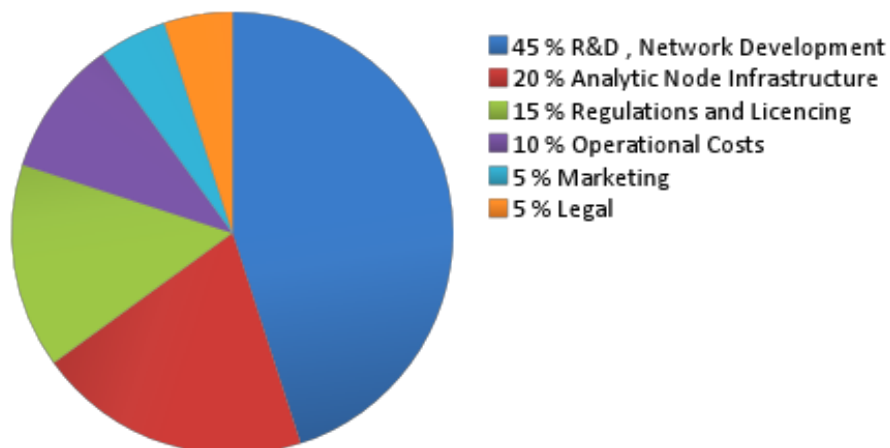
In order to undertake further development, Credito will conduct a one-off Token Generation Event (“TGE”) and crowd sale of Credits, where 50 % of the Tokens will be made available for public sale. The start date of the TGE will be announced soon, and it will allocate a total Credits supply of 1 billion as follows:



\*Employee allocation will have a vesting period of 12 months, 25% vesting each quarter, with a 6 month cliff. Allocation will be proportional to the tenure of each employee by the date of token sale.

\*Credito Foundation allocation will have a vesting period of 12 months.

## 9 Projected use of funds



## 10 Roadmap

Credito will be developed in 6 stages accomplishing a major milestone at each stage.

### Stage1 **Accomplished**

- Concept and Research.
- Credito Incorporation.
- Whitepaper.
- Proof of Concept - High Speed Transaction Scoring System.
- Website Launch.

### Stage 2 **User Registration, Verification and Partnerships**

- CreDApp front end Development
- User Registration
- Automatic ID verification
- Work on partnerships with financial institutions

### Stage 3 **Infrastructure and Intelligence development**

- External API Development.
- Analytic Node Infrastructure.
- Credito Scoring Engine Development.
- Credit Scores generation.
- Transaction scores modeling.

### Stage 4 **Smart Contract Development and Deployment**

- Scoring and Leasing smart contract development.
- Smart contract Audits.
- Integration of smart contracts with Credito Analytic Engine and Node Infrastructure.
- Launch on Test net.
- Test net trial delivering live scores to the partners.

### Stage 5 **Launch**

- Main net Launch.
- Complete Decentralized Credit Intelligence available for partners.
- External Analytic node Operators joining the network.
- Marketing and new partnerships.

### Stage 6 **End-to-End lending protocol on Main net**

- CreDApp and Mobile App development
- Credito Smart Credit Agreement development and Audit
- CreDApp backend with Integration of Credito Smart Credit Agreement
- CreDApp on Test net and progression to Main net

## 11 Team

### *Founding Team:*

#### [Sikar Govindarajula](#)

Sikar is Creative and Entrepreneurial, backed by his strong technical expertise, a technology enthusiast, and avid believer of blockchain, decentralization. He designed and developed several High Speed Transaction Processing Engines and Scoring Engines for low latency systems. Demonstrated over 10 years of experience in delivering cutting edge technology products across domains like Finance, Data Communications, Medical and Embedded systems.

#### [Narendra Allam](#)

Naren is Technology Expert. He founded Bang Music Factory to standardize, improve, and globalize the music production process by publishing it through secure Mobile apps. He is part of architecture team for in-house trading system and responsible for code quality compliance at Bank of America, He has vast experience in building algorithms for various domains including finance and banking and passionate on Blockchain, Network and distributed technologies. As an Expert in C, C++, Python and having mentored experienced professionals, Naren brings in his vast experience from organisations like Microsoft, Cisco and Bank of America in to Credito.

#### [Haranadh Gavara](#)

Haranadh is an Entrepreneur, Data scientist, Fintech Specialist and Vice President of UangTeman.com. He founded PH Technologies. He did Masters in Machine Learning from Indian Institute of Technology, He has an international publication on machine learning which is in a best paper race. His professional research experience covers service in Defence Research and Development Organisation Statistical Analysis Group and many areas like Cryptanalysis, Operating systems, Storage and Virtualization. His recent focus is on identifying and building systems to assess credit risk in Banking domain, especially in the area of unsecured loans and conducting several studies to identify surrogate variables to assess credit risk and match and exceed traditional banking practices by building credit risk algorithms with-in data science platform, big data analytics.

### *Advisors:*

#### [Dale Hawkins](#)

Dale has extensive experience in Strategic planning. He is an Executive Manager, Group Advisory at Commonwealth Bank. He led national level projects at National Australia Bank. Having worked with two of the Big Four banks in Australia, Dale brings his extensive knowledge of banking, finance and strategy in to Credito.