



# TOKENLEND

## WHITEPAPER

tokenlend.io  
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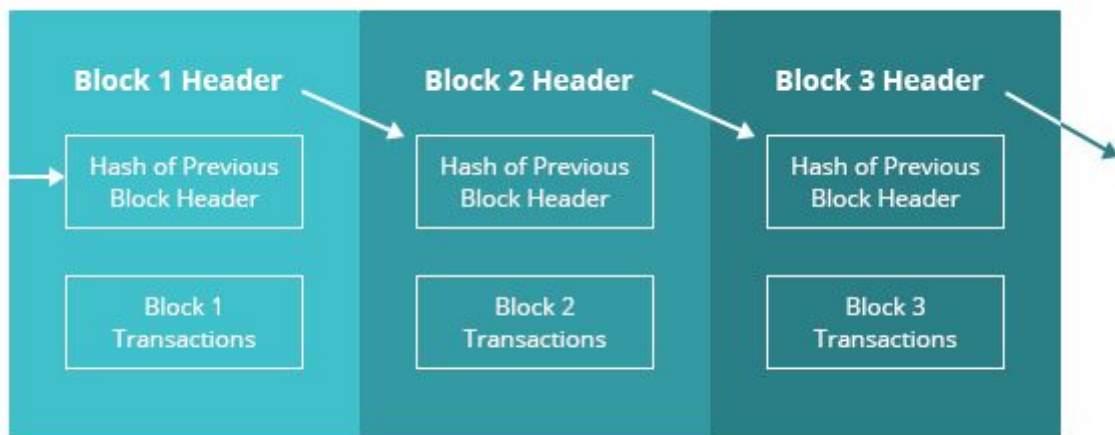
## Preamble

In a modern world full of technology, the Internet erases borders between countries and people. To some extent, the Internet brought equality and freedom but the world is still full of limitations and obstacles.

After its inception, blockchain technology not only took leadership in solutions where data authenticity, consistency and availability are vital. It also fueled the evolution of crowdfunding and fundraising platforms to make them more efficient and accessible.

## Background

**Blockchain** - A type of distributed ledger or a decentralized database, where digital transaction records are stored. All database instances (nodes) are connected to each other via the Internet. Data is synchronized in real time between nodes and visible to anyone within the network.



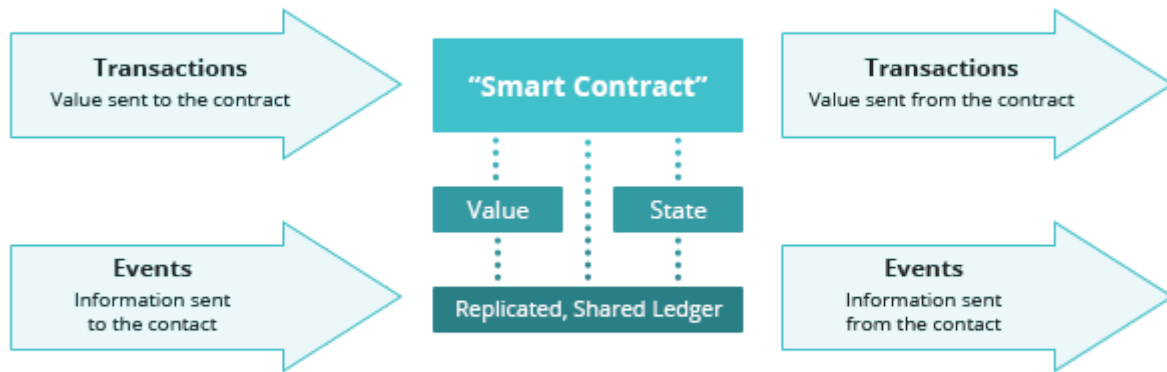
**Simplified Blockchain**

After each digital transaction is processed, it is grouped with other transactions processed at the same time in a cryptographically encrypted block. The block is then cryptographically signed (validated) and added to the blockchain.

The key advantage of this technology is that all blocks are linked to the previous block, forming a chain. The chain therefore contains the entire transaction history from the very first (“genesis”) block to the very last. This gives every member the ability to prove who owns what at any given time.

**Smart contracts** - An embedded tool of Ethereum blockchain. The Ethereum blockchain is essentially a decentralized computer which allows the execution of complex script-based instructions, called “smart contracts”.

## Smart Contract Protocol Overview



These instructions are mandatory for all parties and cannot be circumnavigated because smart contracts not only define the rules and penalties around the agreement, they also automatically enforce the obligations.

**Tokens** - The fungible, tradable goods, minted and governed by smart contracts in the Ethereum blockchain.

**ERC-20** - A standard interface that guarantees interoperability between tokens. ERC-20 tokens are a subgroup of the Ethereum tokens that comply to a defined standard. For instance, to comply with ERC-20, the token's smart contract must allow the execution of all the following instructions:

1. Total token supply
2. Account balance
3. Token transfer
4. Spending approval

## Mission Statement

Our mission is to make the loan market available to everyone. That's why we're planning the creation of a blockchain-powered loan platform. We strive to help users across the globe make profits by lending funds with fewer risks and hassles. We believe that by using blockchain technology, we can make the lending process easier and cheaper to use without the bureaucracy of traditional banking services.

# The Problem

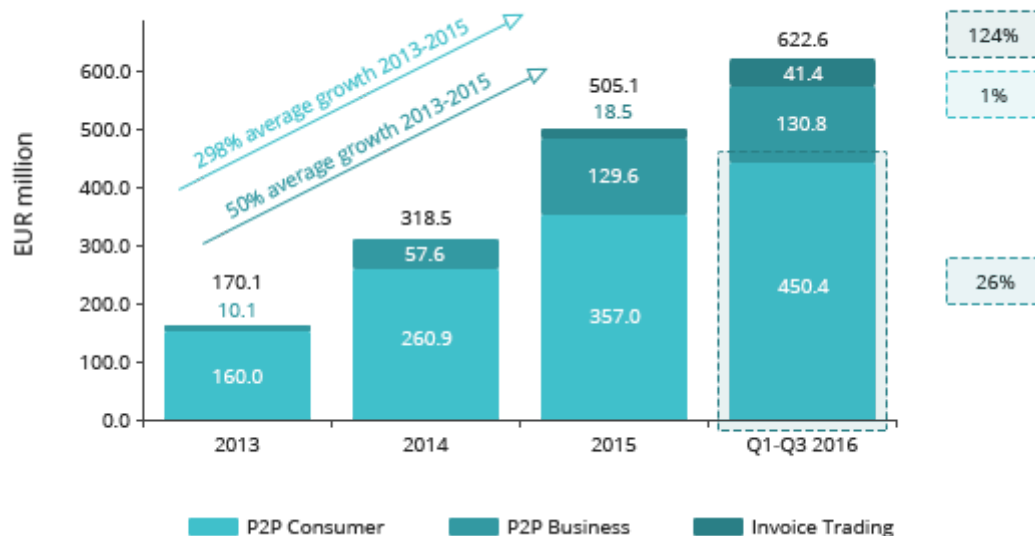
Traditional banking products and services are archaic and slow due to all their red tape and paperwork. In a world of cross-continental currency transfers, decentralised databases and smart contracts, people are still limited by their geographical location and residency. Different legislations, currencies and complex taxation make business activities more complicated than it should and could be. The lack of integration between financial services force people to deal with numerous middleman institutions with their own verification policies, fees and limits. This can turn a seemingly simple operation into a massive headache.

## Market Analysis

The 3rd quarter of 2016 saw the highest loan volumes of the Continental European P2P market in France, Germany and Latvia. Latvia was cited as being the fastest growing market on the continent for P2P lending with an average of 73% annual growth in loan volumes across Continental Europe.

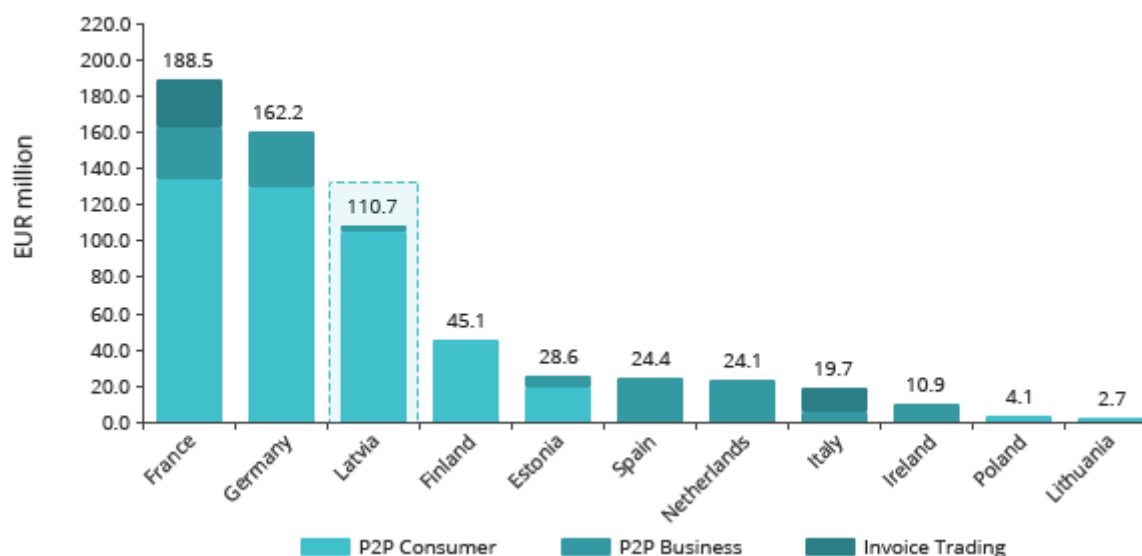
Countries like Latvia and Estonia are in a position to benefit from current common sense regulations that attract investors, developers and loan originators across Europe. Although the European P2P lending market mainly consists of consumer lending platforms with an average lending term of 3 to 5 years; business lending, factoring, real estate and asset finance are all areas where significant volume growth is expected by analysts.

European online alternative lending market volumes 2013-3Q2016



**From 2013 to 2016, the European P2P lending market grew three years in a row and maintains a growing trend.** The total market volume in Q1-Q3 of 2016 was up 23% compared to 2015 and amounted to 623 million EUR. While the leading positions are still held by consumer lending, business lending grew three years in a row. Despite the fact that business lending growth was slower in 2016 compared to 2015, analysts are looking forward to promising results in this sector by the end of 2017.

P2P market funded volumes by country, Q1-Q3 2016



Thanks to the rapid growth of P2P lending platforms in 2016, Latvia broke into the top 3 countries by alternative lending volume size.

The key factor for the future growth of Latvian P2P lending is the ability to enter new markets in Continental Europe where banks offer relatively high interest rates. Countries like Poland, The Czech Republic, Spain, Italy and Scandinavia for example. P2P business lending has plenty of growth potential, but without cutting-edge fintech solutions and proper expertise, it will take far longer for Latvia to compete in these markets successfully.

## The Solution

The idea for TokenLend resulted from a culmination of our investment experience as well as our vast experience in software development.

Our goal is to build a robust and reliable ecosystem that provides a complete fund lending service for all parties involved.

TokenLend will give anyone across the globe the ability to invest in real estate secured loans using various crypto and fiat currencies. Our platform will remove the uncertainties which small investors normally face by helping them build a secured loan based investment portfolio that delivers a competitive, predictable and consistent return.

The platform will contain a list of carefully selected and pre-checked secured loans available for investment. TokenLend will only accept loans from trusted EU loan originators. The presence of a legal entity as a counterparty will allow us to take necessary measures in advance to receive timely payments by the lender and mitigate the risk of default.

TokenLend personnel will re-validate information received by the loan originator, including the borrower's personal details, pledge information, appraisal and LTV ratio. Loans will only be listed on the platform if they meet TokenLend's stringent loan selection criteria.

## TLN Token

During the Initial Coin Offering (ICO) campaign, TokenLend will offer Lend Coin (TLN) tokens for sale. TLN tokens are a digital representation of the right to an exclusive membership on the TokenLend platform. TLN holders have a ability to invest the desired amount of funds from their account into any of the available loans listed on the TokenLend P2P platform. The account balance on the platform represents the number of TLN tokens stored in the Ethereum wallet of the member's TokenLend account at any given time.

TLN tokens will be tradeable outside of the TokenLend platform. Since they are ERC-20 tokens, they will have an inherent value on exchanges.

Tokens purchased during the ICO campaign will provide two types of income for holders. Token holders can use TLN to invest in any loan listed on the platform and receive income like any other platform user. However, only ICO participants will receive a regular share of the income from the platform's operation. Holders of TLN token are guaranteed to receive a share of the company's profits. Each share size will be determined by the proportion of tokens associated to each member's account on the date of the payment.

## The TokenLend Platform

The platform will provide a set of tools for potential investors and loan originators via a user friendly web interface.

The core features of TokenLend will be as follows:

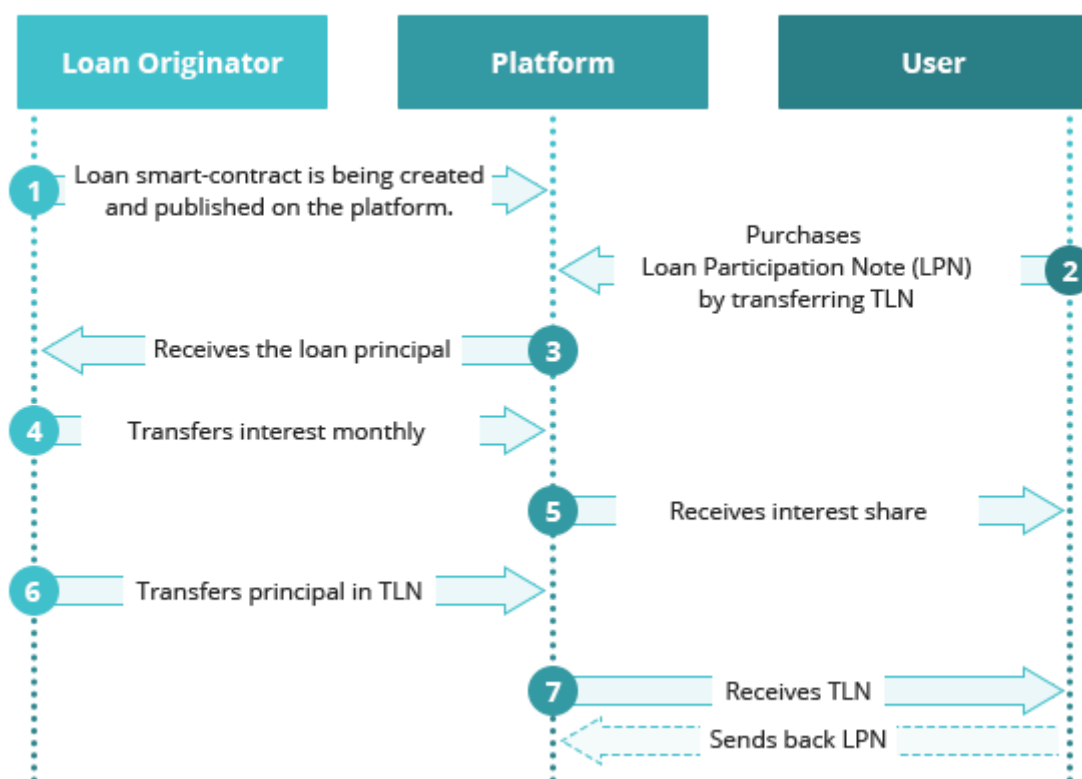
- A loan marketplace where loan originators will offer opportunities for users to invest and receive income.
- A Loan Participation Note (LPN) market (i.e. "Secondary Market") where users can trade ongoing investments for immediate liquidity.
- A payments gateway which will enable users and loan originators to make deposits and withdraw funds from their accounts.

Each Loan Participation Note (LPN) represents the smallest indivisible share of a loan. Users can invest into a particular loan by purchasing any number of available LPNs with funds from their account balance. Funds spent on such purchases will be taken from the user's account and locked into the loan's smart contract. Once the loan term is complete or repaid in full, the corresponding funds will be deposited into the accounts of users who own the corresponding Loan Participation Notes. LPNs will be tradeable within the TokenLend platform so owners are able to transfer and sell their investments for quick liquidity.

Every month, the loan smart contract will issue loan repayments according to the repayment schedule and distribute the payment amounts between the loan's LPN holders. These funds will be deposited to the users' Ethereum wallets according to the number of LPNs owned by each specific wallet address at the time.

Users will be able to withdraw their earnings from the platform to their cryptocurrency wallets or bank accounts. Cryptocurrency withdrawals will be performed at the market exchange rate at the given date and time.

The typical loan lifecycle will look as follows:



1. The loan originator adds a new loan to the system via the Dashboard. After the loan details are validated and successfully verified by platform personnel, the loan smart contract is created and published onto the platform.
2. Users purchase Loan Participation Notes (LPN) for a particular loan by transferring a desired amount of TLN to the loan address. The loan smart contract then generates the LPN contract with a principal value equating to the amount of TLN transferred by the user as well as a personal repayment schedule based on the creation timestamp of the LPNs and loan terms.
3. The LPNs are linked to the user's ETH wallet address as the beneficiary of the interest payments. The total amount of TLN received from all users are transferred to the Loan Originator's account as the loan principal.
4. In accordance with the loan smart contract schedule, the loan originator sends interest payments and principal repayments (if applicable) total to the platform.
5. The Loan Participation Note contract requests the relevant share of interest payment and principal payment (if applicable) from the loan smart contract. The LPN contract then receives the funds and sends it to the associated account.
6. After performing the last transaction by the loan originator, the LPN contract closes the repayment schedule and sends the interest along with the remaining TLN principal to the associated account.
7. The user account receives TLN and sends the LPNs back simultaneously. The loan is then considered closed, the wallet address association is removed and the LPN contract is considered fully executed.



The web dashboard will provide detailed statistics, repayment progress, projected income and other relevant information.

The LPN market will allow users to trade LPNs between one another, this is only available to registered users. Users are not obliged to sell at the original LPN principal price, they can submit sell orders for specific LPNs at their desired price in TLN. Users can also add comments and details about the LPNs to be sold. All transactions will be performed by sending TLN from one address to another. The LPNs will be considered sold once the TLN transaction is confirmed by Ethereum network and at which point the LPNs' owner is changed automatically.

The payment gateway will be released during the public launch of the platform. It will help users deposit funds into their accounts in not only TLN, but also in any acceptable currency. The investment and repayment processes will be the same for ICO and non ICO participants except for the one main difference. Users who do not participate in the ICO will not be able to withdraw the loan principal in TLN but they can still withdraw in any of the other supported currencies.

## Business Model

On average, loan originators in Latvia and Estonia offer real estate secured loans to borrowers with a 10-14% interest rate. At the same time they are open to accept funds from any available sources with a 5-8% interest rate. This is where TokenLend can come in and securely connect both parties.

As a result, platform users have an accessible source of investment opportunities and loan originators have access to affordable funds.

The TokenLend business model will provide flexible pricing for both loan originators and common investors. The exact fees will be determined for each individual loan originator based on their health and value of loan portfolio existing on the platform.

A "sale fee" will be charged to investors for the successful sale of LPNs to other investors on the TokenLend platform. This fee will apply to both common P2P platform investors and token holders.

A withdrawal fee will also be applied for every transaction in fiat currency.

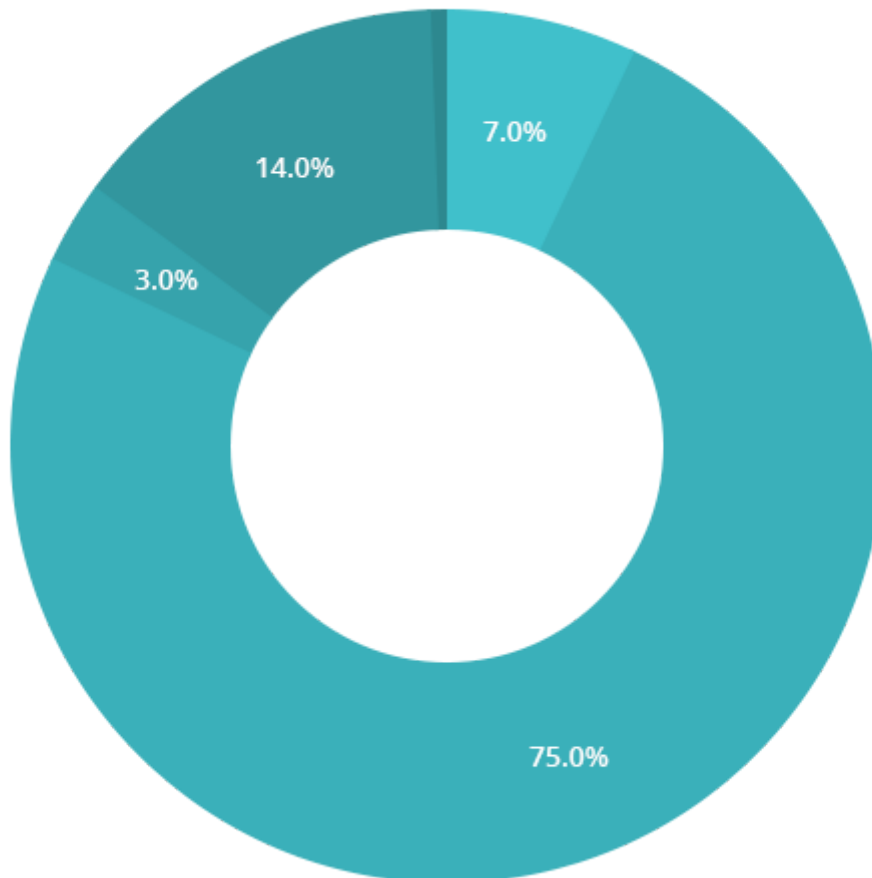
## Token Holder Benefits

Holders of TLN tokens will receive a guaranteed share of the company's net profit paid on a regular basis as well as the ability to use TLN to invest into any loan available on the platform. As all tokens will be created at the token sale stage, the token will not be inflationary. As more investments are made, more LPNs will become active thus lowering the number of tokens that remain in circulation and their availability on exchanges. As TokenLend's cumulative loan portfolio grows, so will the net profit of the platform making ownership of TLN tokens even more profitable. These events, we believe, will lead to an increase in the price of the token on the crypto-exchanges in the medium to long term.

# ICO

Before the crowdsale begins, TLN tokens will be minted by the TLN smart contract. The total amount of tokens will be distributed in the following manner:

Token distribution



**Pre-sale** - 7% of all tokens will be sold during the pre-sale. All pre-sale participants will not only have an opportunity to purchase TLN tokens at special discounts, but will also have the exclusive right to participate in the platform's beta testing phase and receive investment profits before any other token holders.

**ICO** - 75% of tokens will be distributed during the ICO. All unsold tokens will be burned.

**Advisory** - 3% of tokens will be granted to our legal and advisory team for their contribution. These tokens will be locked\* for a 12 month period.

**Team** - 14% of tokens will be allocated to the TokenLend founders and core team. 50% of these tokens will be locked\* for a 24 month period, and the remaining 50% will be locked\* for 48 months.

**Bounty - 1%** of tokens will be allocated for various bounty activities.

*\* "Locking" means that tokens will not be immediately tradable and cannot be used for purchasing LPNs within the platform.*

## Token Sale Details

- ✓ Participants willing to contribute to the development of the TokenLend platform can do so by using cryptocurrencies and other payment methods listed on the Website
- ✓ Total number of tokens: 130,411,585 TLN
- ✓ Contributors receive TLN tokens at the rate of 2,500 TLN per ETH
- ✓ Contributors will receive bonus tokens during the pre-sale and crowdsale as described below.
- ✓ The sale will begin on the 26th of March 2018
- ✓ The contribution period will run for 45 days
- ✓ The pre-sale will start on the 1st of March 2018 and run for 11 days and will be capped at 3,500 ETH with a minimum contribution of 1 ETH
- ✓ During the ICO token sale, there will be soft cap of 5,000 ETH and a hard cap of 41,000 ETH.
- ✓ All unsold tokens will be burned
- ✓ TLN tokens received by contributors will be transferable 7 days after the end of Initial Coin Offering campaign

## Pre-Sale Bonuses

Depending on purchase total, the following bonus tiers will be applied:

- **<5 ETH +20% bonus in TLN tokens**
- **5<=ETH<10 +21% bonus in TLN tokens**
- **10<=ETH<20 +22% bonus in TLN tokens**
- **20<=ETH<40 +23% bonus in TLN tokens**
- **40<=ETH<80 +24% bonus in TLN tokens**
- **>=80 ETH +25% bonus in TLN tokens**

## Token Sale Bonuses

Depending on sale progress, the following bonus tiers will be applied:

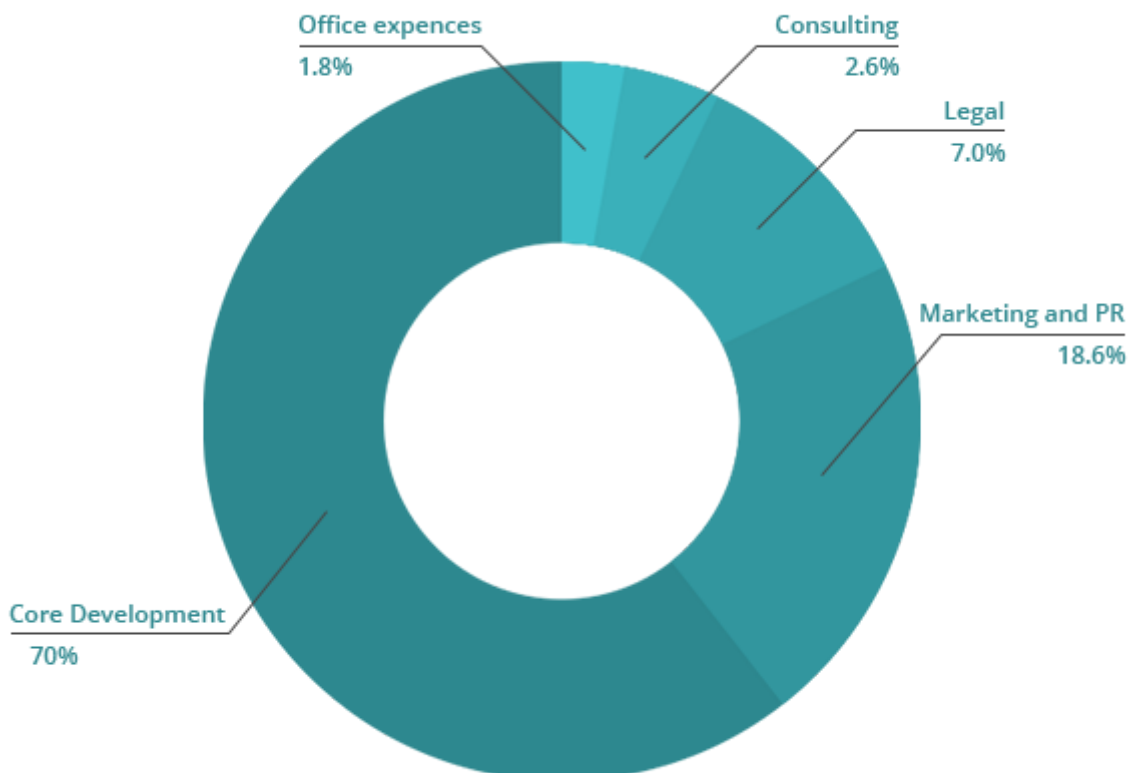
- **Tier 1: 0 >= 1,000 ETH - 10% bonus tokens**
- **Tier 2: 1,000 >= 3,000 ETH - 7% bonus tokens**
- **Tier 3: 3,000 >= 9,000 ETH - 5% bonus tokens**
- **Tier 4: 9,000 >= 21,000 ETH - 3% bonus tokens**

## Core Budget

The core budget required to deliver the TokenLend Platform to ICO participants and end-users on time and in accordance with the roadmap, has been calculated. These funds will cover development and deployment of TokenLend platform covering all stages, from the very first sketches to the public launch.

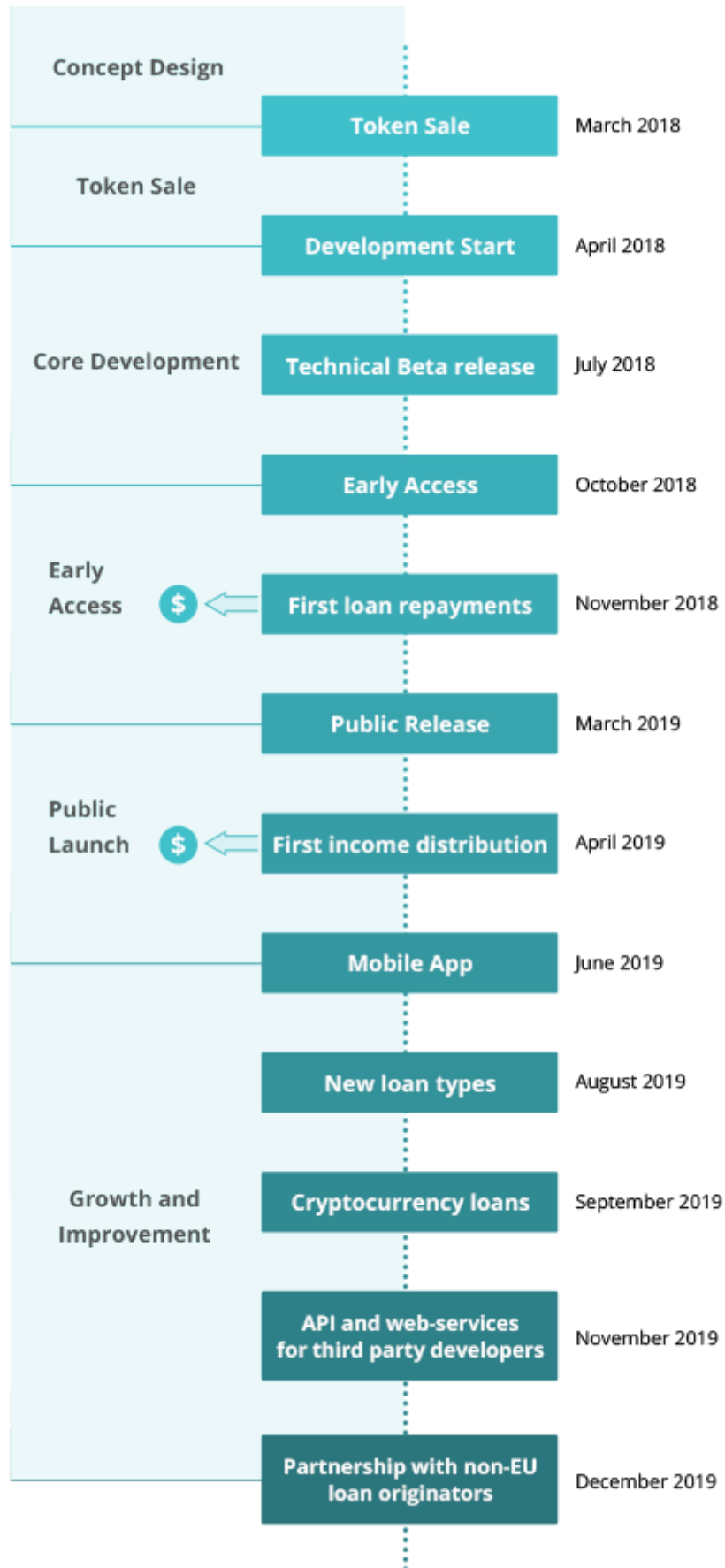
Total amount of funds to be allocated is - **800 ETH**.

The budgeted funds will be withdrawn in full prior to starting the development. They will be distributed amongst various departments and activities in the following manner:

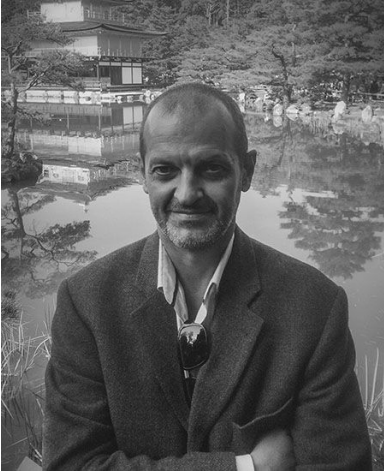


- **70% - Core Development:** The entire development process of the TokenLend platform and its proprietary features.
- **18.6% - Marketing and PR:** The strategic process of attracting investors and loan originators to the platform in order to generate revenue.
- **7.0% - Legal:** Most of the legal funds will go towards developing a strong legal framework for the TokenLend business structure, the remainder will go towards accounting and administration activities.
- **2.6% - Consulting:** For the future consulting services of SMEs. In particular, business domains to gather requirements for the development of new platform features.
- **1.8% - Office expenses:** Rent, utility and other costs.

# Roadmap



# The Team



**Sergei Naiden** [in](#)

## Chief Executive Officer

Robert Morris University, USA:

Master of Science, Banking, Corporate, Finance and Securities Law.

Serial entrepreneur with 25+ years experience in managing large enterprises and 10+ years experience in the ownership and management of an international IT company. Developer and vendor of the world famous software product; DAEMON Tools.



**Ivan Kovtun** [in](#)

## Chief Operating Officer

Business analyst and product manager with 10 years experience in managing international business operations and 5+ years of experience in software product ownership and project management.



**Vitaliy Russkih** [in](#)

## Chief Technical Officer

Senior developer with 12 years experience in developing complex systems and 10 years experience in software team management.



**Alexandr Petrov** [in](#)

**Blockchain Architect/Lead Developer**

Senior developer with more than 12 years experience in designing and implementing enterprise-grade solutions including kernel driver development and embedded systems development.

3+ years experience in designing blockchain solutions for IoT and FinTech.



**Maria Viter** [in](#)

**Chief Marketing Officer**

Industry professional with more than 8 years experience in software product marketing and 5+ years experience in business development of the DAEMON Tools product line.



**Tanya Chuh** [in](#)

**Chief Communications Officer**

Senior specialist with more than 5 years experience in public relations activities, specialising in building PR and Community management strategies for companies operating in stock markets and international software vendors.

## Advisors



**Leo Matveev** [in](#)

### **CEO & Founder at SearchInform, Russia**

Leo started his business from scratch and built an efficient information security company. Moreover, he developed and patented the technologies used by the business. Today Searchinform operates in Europe, Russia and the CIS, Latin America and the Middle East. SearchInform software protects the data of more than 2,000 customers and more than 1,000,000 PCs worldwide.

Leo Matveev's experience in the field of information security, business development and team building will undoubtedly help our project avoid many pitfalls and reach its goals most effectively.



**Maksims Matulevics** [in](#)

### **CEO & Founder at Money Express Credit, Latvia**

Talented entrepreneur and skilled investor, Maksims has extensive experience in the European loan market. His effective management skills and inexhaustible energy brought MEC to success.

Maksims' deep knowledge of background processes and EU legislation coupled with his sincere desire to help us, makes his advice priceless.



**Anton Kolomyeytsev** [in](#)

### **CEO & Co-Founder at StarWind Inc., USA**

Developer, Architect, Visionary, Owner of a world famous IT company, Anton can most definitely be called a "self-made man". His contribution into the development of data storage technologies is priceless. He has also built a successful enterprise-oriented business and is in strong partnership with companies like Microsoft, VMWare, Citrix and Veeam. Anton's advice regarding business relations, technology and data security will surely help us on the road to success.





**Nikolajs Timofejevs** 

**CVO at MONEY EXPRESS, Estonia**

Nikolajs is an experienced specialist in the development of products and services for the financial market. Under his guidance, Money Express Estonia has developed and launched many unique products that customers have embraced.

His invaluable experience in promoting financial products is indispensable to the project.

## Join us



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