[ANTA VIRA]

BLOCKCHAIN CREDIT RISK MANAGEMENT PLATFORM

White paper

Version 0.14

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Introduction

1 Throughout our life, we constantly use loans in order to assist ourselves with accomplishing major life goals. We seek additional funds to purchase desired goods, cars, real estate, pursue higher education or start our own business.

2 However, prior to receiving money, each potential borrower undergoes a credit assessment procedure. With the help of the credit assessment, the lender makes a decision - to issue a loan or to reject the application.

3 All over the world, lenders spend astronomical amounts of money on credit risk management, and each year these amounts grow constantly. The reason for this growth is a constant degradation in the quality of borrowers, increase in market competition, and pressure issued on lenders by regulators.

4 To survive in such a confined market, lenders are forced to increase their budget on credit risk management. Subsequently, these expenses result in a loss of profit for lenders.

5 As a result of these emerging issues, we have created a concept of a blockchain-platform which will change the industry of credit risk management. It is based on three main principles: risk-free lending, automatic quality control and transparent ecosystem.

6 Our team has been working in this industry for more than 15 years, and now we are setting a new standard of quality of credit risk management in 5 countries. We believe that with our skills, experience and knowledge, we will be able to implement this project. We believe that our concept can change the world for the better.

We suggest that you change it with us
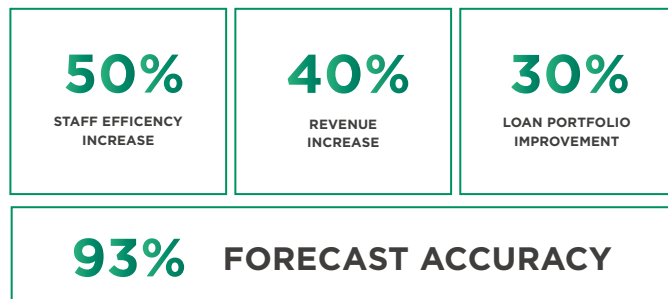
Experience and background

Reputation that can be trusted

ANTA VIRA

130+
Clients

5+
Countries

500,000+
Credit decisions produced monthly

PROFITABLE IN 18 MONTHS
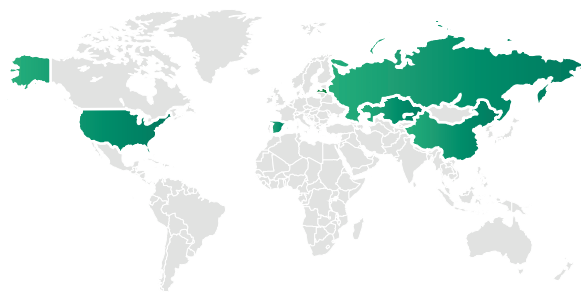
Currently, there are 30 professional risk managers, data analysts, mathematicians, software engineers and business managers with an average of 10+ years of experience in the industry that are part of the SCORISTA team.

That's why we know all the problems of credit risk management market players. And that's why we know how to solve those problems.

Due to this unique experience, SCORISTA and its technology have numerously become award winners of prestigious FinTech awards and are constantly invited as guest speakers at the largest events in the credit risk management industry.

BEST STARTUP
Innotribe Challenge, 2017

BEST TECHNOLOGY
Golden Ruble Award, 2017

MICROSOFT SELECTION
Startup of the year, 2017

TOP ENTREPRENEURS
Tech Tour, 2017

APEC SPECIAL AWARD
InnoVex, 2017

BEST SCORING
Bank Review, 2017

OFFICIAL SPEAKER
Sibos, 2017

1. Credit risk management market

Endless global expenditure

[ANTA VIRA]

$3 TRILLION

+30% every year

The overall volume of global expenditure on credit risk management in 2015

The global retail lending market is constantly growing. According to the consulting company - FinAccord[1] , the total volume of issued retail loans in 2015 was $42.2 trillion. Compared to 2011, the market demonstrated growth of 3.3% per year.

To issue that amount of money lenders spend about $3 trillion for borrower assessments and credit risk management. The growth of credit risk management market surpasses the growth of the lending market by 10 times and is growing by 30% each year.

The credit risk management market includes the following players:

▲ **Lender** - a party that issues loans to borrowers. The main client of the credit risk management market.

● **Risk manager** - a party that creates credit scoring models for lenders in order to review borrower assessments and make decisions on approving or denying loan applications.

◆ **Credit analyst** - a party that allows the lender to see the current business performance and assess the quality of the risk manager's work.

■ **Data provider** - a party that collects, stores and sells information, which can be used by risk managers to assess borrowers.

2. Problem

The industry is waiting

30% **from the overall profit in a lending business is the credit risk management expenses**

There are several reasons for this:

1

Due to the consistent decrease in the quality of the borrowers, it is required to constantly increase the effectiveness of credit assessments to improve forecast accuracy.

This leads to an expansion of the credit risk management department and further expenses on purchasing additional data on borrowers.

Both of these factors mean a significant increase in operating costs for lenders.

Despite all these expenses, lenders cannot insure a high quality of their employees' work, and are forced to continue with solely bearing all of the financial risks.

2

It is difficult for a lender to find suitable specialists.

In order to check the competence of a data scientist candidate - risk manage, mathematician, credit analyst, or data miner, the lender has to wait for a long period of time, which can lead to disappointing consequences and wasted expenses.

Replacement of inefficient specialists can seriously complicate the process of issuing loans and lead to a temporary halt of the entire business.

3

Data scientists can't simultaneously work with multiple clients while their intellectual property is under scrutiny - any customer can easily claim their work.

Specialists are compelled to compensate for their risks by constantly increasing the cost of their services, which affects the limited choice of available specialists in the job market.

Reasons listed above explain a high demand for improving the existing tools for credit assessments and general need for changing the principles of credit risk management.

3. Solution
The way to change the industry

There are two approaches of improving the credit risk management services: scaling and disruption. The first solution entails to an increase in operating costs and quantity of employees. The second approach requires a fundamental change in the principles of credit risk management. We have chosen the second option.

ANTAVIRA blockchain credit risk management platform is a project that is designed to completely change the industry and is based on three key principles:

Risk-free lending

Lenders should be able to receive reimbursements for their losses at the expense of risk managers who made the wrong decision while assessing a particular borrower.

Automated quality control

Each member must guarantee the quality of provided services, and in return, receive an assurance of payment for the completed work.

Transparent ecosystem

All market participants should have the same opportunities to conduct business and be provided with the protection of their intellectual rights.

## Blockchain and smart contract technology allows us to implement these principles.

1) A smart contract guarantees the execution of all set agreements between parties.

2) Blockchain ensures that any party will not be able to obtain a project that requires more resources than it currently has.

4) A decentralized system guarantees equal access to all participants, regardless of any external factors.

3) Information on any collaboration between participants is protected from manipulation and falsification through a distributed storage and verifications. Intellectual property rights are protected by automatic registrations of all sources.

4. Platform structure

For the professionals by the professionals

The structure of the ANTAVIRA platform consists of the following elements:

- **Participants on the platform.** The basis and main asset of the platform. People and businesses that offer and buy each other's services.

- **Miners.** Calculate transactions and ensure the functionality of the platform with through the processing power.

- **Smart contracts.** Technology that allows for automation in all transactions between participants: Starting from the cost and assigned dates to the terms of additional payments or refunds.
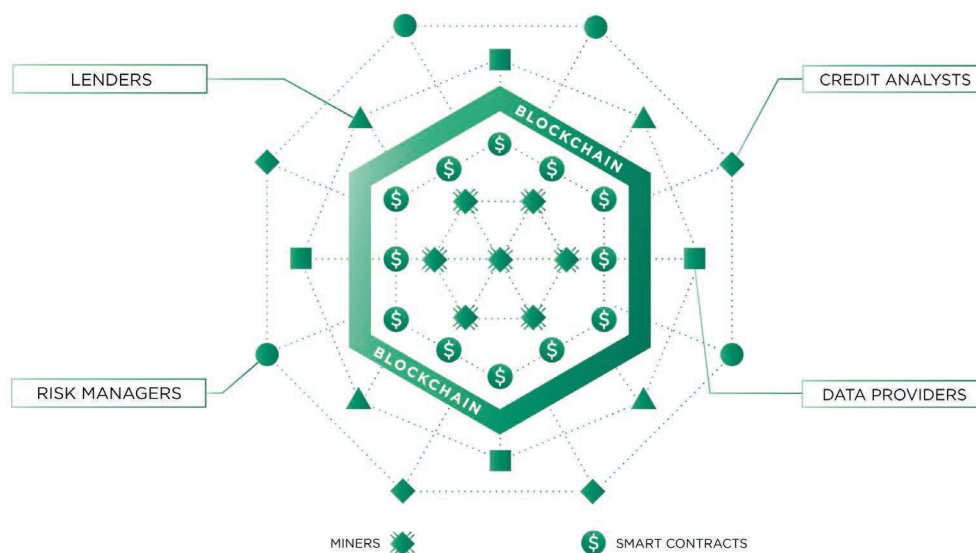
There are two types of ANTAVIRA smart contracts:

01 SMART CONTRACT OF A SIMPLE EXCHANGE

Example:

- A purchase of a data for credit scoring by a risk manager from a data provider.

- A purchase of loan portfolio analysis by a lender from a credit analyst.

02 SMART CONTRACT OF COMPLEX EXCHANGE

Example:

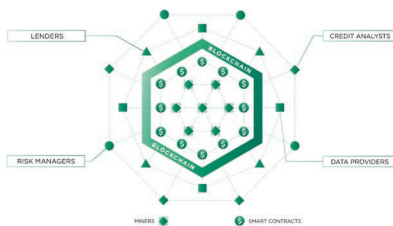- Step-by-step payments from the lender as the risk-manager fulfills each part of the contract. In these type of contracts, special accounts will be created for automatic accumulation of funds from both parties to ensure prompt payments and reimbursement of lost assets.

ARMT or **ANTAVIRA Risk Management Token** will be the only tool that's utilized in smart contract settlements and transactions on the ANTAVIRA platform.

5. Benefits for market players

Designed to become an undoubtable necessity

Market players	Traditional credit risk management system	ANTAVIRA
Market players		
Lenders	■ Carry full financial responsibility for mistakes of risk managers. ■ Difficulty in finding quality specialists. ■ High costs of risk management. ■ Replacement of a specialist can lead to enormous losses and a possibility of suspension in the loan issuance process.	■ The ability to reimburse losses in case of loan defaults. ■ A convenient platform to test the quality of risk managers prior to employment. Rating system integration. ■ Reduction of expenses in the risk management department by compensating the need to hire more risk managers. ■ Instant and seamless replacement of old employees and an easy integration of new one's.
Risk managers	■ The effectiveness of specialists only partially affects the level of wages. ■ Lack of ability to simultaneously work with multiple clients. ■ The complication of only being able to work with clients near the specialists vicinity. ■ Absence in any protection of intellectual rights - anyone can take scoring models and another IP without any consequences. ■ Presence of significant limitations in the development of new scoring models and credit assessment technologies. Firstly, the lack of easy access to necessary data.	■ Ability to work with clients on the profit share model. ■ Simultaneously work with multiple clients. ■ Ability to sell services to a global market of lenders. ■ Intellectual Property Protection. ■ Develop and test new credit assessment methods with the help of various data sets.

5. Benefits for market players

Designed to become an undoubtable necessity

Market players	Traditional credit risk management system	ANTAVIRA
Credit analysts	■ The absence of a unified reporting standard significantly slows down and complicates the work of a specialist. ■ Lack of ability to simultaneously work with multiple clients. ■ The complication of only being able to work with clients near the specialists vicinity. ■ Absence in any protection of intellectual rights - anyone can take reporting methods and another IP without any consequences.	■ Consolidated and unified analytical reports. ■ Ability to sell services to a global market of lenders. ■ Simultaneously work with multiple clients. ■ Intellectual Property Protection.
Data providers	■ Finding and securing new customers is a complex and expensive process. Individual approach to each client greatly reduces profitability of the business. ■ The lack of a single market for scoring data monetization. ■ Absence of a data enrichment solutions.	■ Fast and cheap integration for new clients. Unified protocol. ■ Ability to sell data to a global market of clients. ■ Data enrichment trough work with a global market of clients.

6. Business model
Attractive for everyone

The ANTAVIRA platform has 4 sources of income:

SETUP

Upon registering on the platform, participants pay the setup fee in ARMT tokens.

TRANSACTION

Participants pay a small amount of ARMT for each transaction. Similarly to Gas in Ethereum.

DEPOSIT

Each participant needs to deposit ARMT tokens into his personal account in order to work on the ANTAVIRA platform. The number of deposited tokens depends on the amount of transactions performed on the platform: for example, in a personal account, the participant must deposit a certain number of ARMT tokens to be able to receive or provide services of the equivalent amount.

SMART CONTRACTS

Participants pay for the creation of services with individual terms in relation to the development and deployment of new smart contracts.
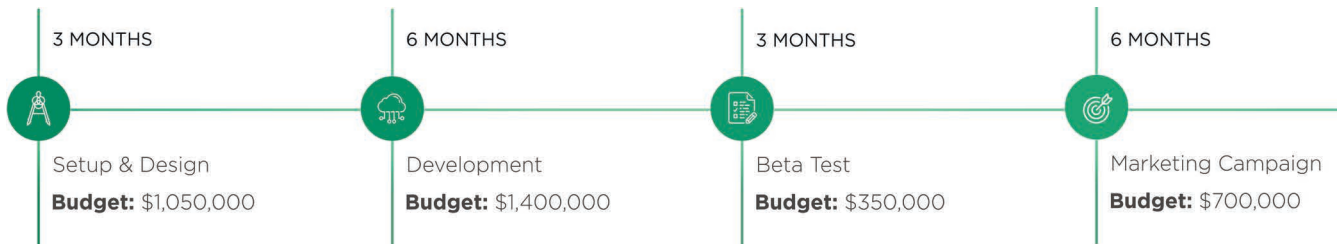
7. Roadmap
Plans and budgeting

Currently, there are 4 possible scenarios for developing the platform. The choice of the final scenario depends on the amount of funds collected during the ICO.
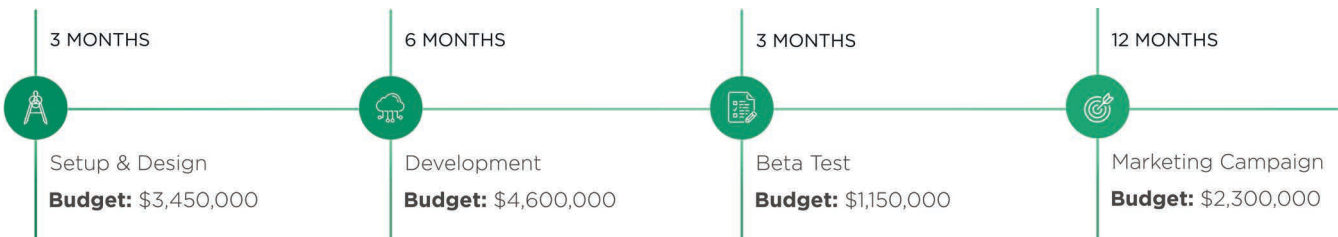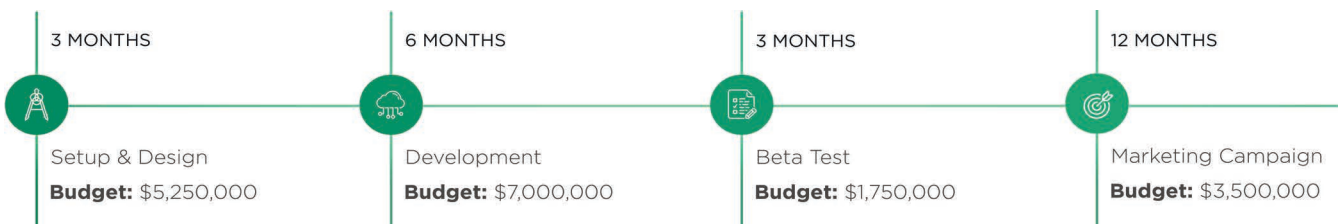
Edition I - BASIS $3,500,000

3 MONTHS	6 MONTHS	3 MONTHS	6 MONTHS
Setup & Design	Development	Beta Test	Marketing Campaign
Budget: $1,050,000	**Budget:** $1,400,000	**Budget:** $350,000	**Budget:** $700,000

Edition II - BOLD $7,000,000

3 MONTHS	6 MONTHS	3 MONTHS	12 MONTHS
Setup & Design	Development	Beta Test	Marketing Campaign
Budget: $2,100,000	**Budget:** $2,800,000	**Budget:** $700,000	**Budget:** $1,400,000

Edition III - CHIEF $11,500,000

3 MONTHS	6 MONTHS	3 MONTHS	12 MONTHS
Setup & Design	Development	Beta Test	Marketing Campaign
Budget: $3,450,000	**Budget:** $4,600,000	**Budget:** $1,150,000	**Budget:** $2,300,000

Edition IV - MAXIMUS $17,500,000

3 MONTHS	6 MONTHS	3 MONTHS	12 MONTHS
Setup & Design	Development	Beta Test	Marketing Campaign
Budget: $5,250,000	**Budget:** $7,000,000	**Budget:** $1,750,000	**Budget:** $3,500,000

Conclusion

1 Our main advantage is our experience. We were not just witnesses to the development of the credit risk management industry – we were one of those who created it.

2 For 4 years we managed to enter the markets of 6 countries. Each month, we help lenders make decisions on more than 500,000 loan applications, guaranteeing the quality of the work done to each client.

3 We want lenders around the world to have the same guarantee, and we are confident that the technology of blockchain will allow this to happen.
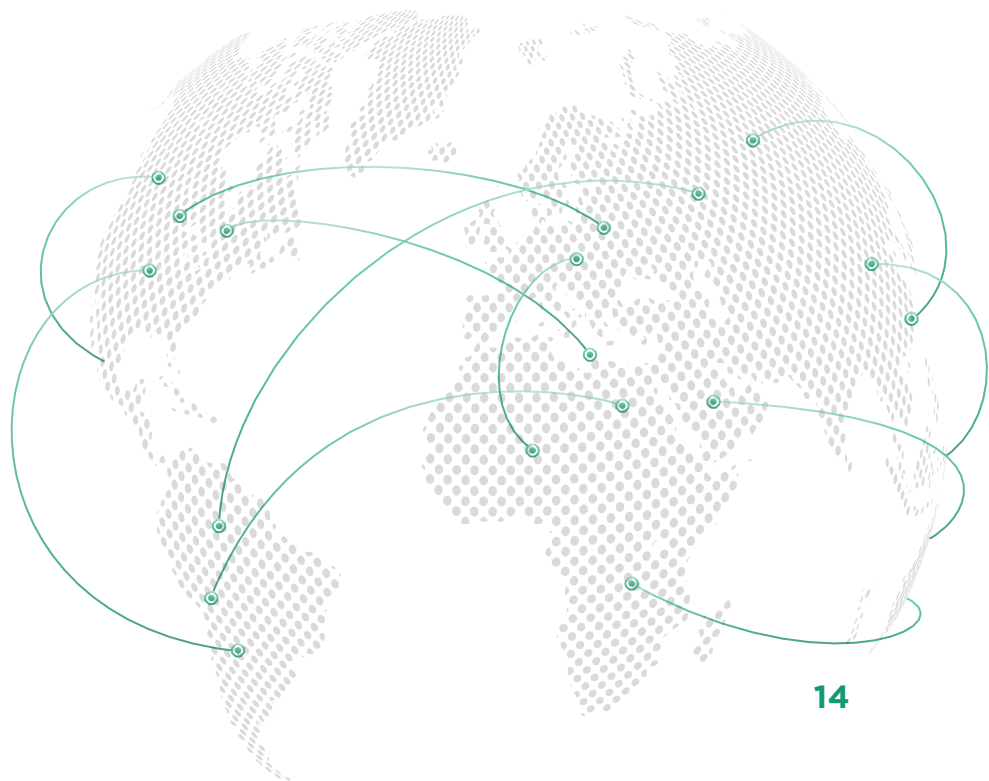
4 We want to change this world for the better, because reducing risks for lenders will make money around the world more accessible.

5 We want you to become part of the ANTAVIRA project, because we believe that working together will lead to incredible results. The results from which will benefit everyone.

Thank you for your attention

antavira.com