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EXPRESS RATING REPORT ON PROJECT ROOTSTOCK (RSK)

Bitcoin powered Smart Contracts

RATING A2

Medium high probability of investments



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PROJECT REVIEW

ABOUT PROJECT

The project of RSK — Rootstock — is a Bitcoin`s smart-contract platform.

This network allows to use the Bitcoin Blockchain-based smart contracts without bitcoin network overload. RSK brings such innovative solutions as instant transaction validation and security hardening to the smart-contract community. Thus, the network allows the smart contracts work with Bitcoin – the first and largest global cryptocurrency.

Technically, Rootstock is a sidechain maintained by the network node with simplified payment verification implemented as the smart-contract. Network users can move their Bitcoins back and forth onto the Rootstock sidechain.

RSK released a source code named Ginger (in other words, the developers worldwide can run Ethereum-style smart contracts on the Rootstock sidechain to the Bitcoin network.)

Ginger adds smart contracts capabilities to the Bitcoin network, greater scalability and a new revenue stream for miners, as RSK Labs states. Ginger allows to try this technology using the some of the first smart- contracts, including those that allow for merged mining, private networks, benefits of scalability, and confidential transactions.

The company raised two rounds of funds, ICO is planned for September 2017.

RSK`s token will not have any value of their own, first of all they aim to move bitcoin speedily therefore enabling smart-contracts of Rootstock.

All actions of the founders of Rootstock are aimed at developing, enhancing and promoting of Bitcoin and strengthening its market position, the stability of RSK is ensured by publicity of its team.

DESCRIPTION OF THE PROJECT

TEAM

The company was founded by experience entrepreneurs (over 3 years of experience), the company and Federation formed for its maintenance are supported by the bitcoin evangelists. Particularly one of the founder — Diego Gutierrez-Z — is a co-founder at Koibanx and president at «Bitcoin Arg & Latam NGOs». Rubén Ariel Altman and Adrián Eidelman are the founders of Kinetica Solutions.

Sergio Demian Lerner supports the company as cryptocurrency expert, IT-infrastructure is maintained by Adrián Garelik.

Partners and mentors of the company are represented by the companies and funds supporting the Bitcoin community (listed in a description of the Federation, chapter “Analysis of the Project”).

None of the company’s team has failed or fraudulent projects.

The team members’ profiles are public and verified.

SOCIAL MEDIA PROFILES OF THE FOUNDERS:

Sergio Demián Lerner

LinkedIn <https://ar.linkedin.com/in/selerner/es>

Diego Gutierrez Zaldivar

LinkedIn <https://ar.linkedin.com/in/diegogutierrezzaldivar/es>

Rubén Ariel Altman

LinkedIn <https://ar.linkedin.com/in/rubenaltman/es>

Adrián Eidelman

LinkedIn <https://ar.linkedin.com/in/aeidelman/es>

Gabriel Kurman

LinkedIn <https://ar.linkedin.com/in/gabriel-kurman-4515497/es>

Adrián Garelik

LinkedIn <https://ar.linkedin.com/in/adrian-garelik-016840103>

LEGAL FRAMEWORK

RSK labs has official legal entity RSK Labs LLC. All team roles are legally assigned.

Details of interaction with investors are not disclosed, however it is known that the company has raised seed capital and pre-Series A funding from the investors (See chapter “Finance”). ICO date, token distribution, token sale and other details will be announced in September 2017.

PR

The Company has a public Facebook page: <https://www.facebook.com/RSKsmart/>, and Telegram: <https://t.me/RSKsmart>

All founders have their own Twitter accounts (See chapter “Team”), there is also the official Twitter account: <https://twitter.com/RSKsmart> (7901 followers).

The investors tweeted about Rootstock fund raising:

<https://twitter.com/NickSzabo4/status/651774200374525953>

Barry Silbert <https://twitter.com/barrysilbert>

More than 10 articles were published (See chapter “References”).

The team regularly participates in Blockchain conferences and Bitcoin Meetups.

The website’s information was last updated in May 2017.

No negative articles about the company were found.

ANALYSIS OF THE PROJECT, FINANCE

ICO DETAILS

ICO date, token distribution, token sale and other details will be announced September 2017.

Token will guarantee the transfer of funds between blockchains during bitcoin transactions and secured by the Federation of Leading Bitcoin companies. Audience of token holders gets in line with end-users of the product.

The company's budget information is not publicly available. Though there is a white paper on site <http://www.rsk.co> available for download, that gives a description of monetization model of the project.

The company has a formalized strategy that has been covered by the founders in the media multiple times (See chapter "PR").

The description of Rootstock was originally released at the laBitconf conference in December of 2015.

In March 2016 RSK Labs raised \$1 million seed funding round. The investments were made by Bitmain, Coinsilium (a blockchain ecosystem investment fund) and Digital Currency Group (a venture capital company focusing on the bitcoin ecosystem, run by its founder Barry Silbert). The value of the company was estimated at \$5 million at that stage.

In May 2017 the company \$3.5 million pre-Series A funding from Anthony Di Iorio (Decentral and Jaxx CEO) and other bitcoin companies, including Bitfury and Bitmain.

According to RSK, the new funds are planned to be allocated for further research on RSK Blockchain security.

Ginger is now available to the public and the developers offers users to create and run their own smart contracts.

RSK Labs plans to add three-tiered networks on top of Bitcoin to scale transactions to new levels (It is claimed that using Ginger, smart contract users can already make up to 20 000 tps using Lumino).

In future RSK plans to create Bitcoin-based smart-contracts with minimum unit of account pegged to Bitcoin, that afterwards can be exchanged for Bitcoin at the same rate.

If the company sticks to its roadmap, the development of this technology will probably boost the bitcoin value. Rootstock plans to provide an additional income stream for miners and to discharge the bitcoin blockchain from some volume of transactions. The whole cryptocurrency ecosystem will benefit If the company succeed.

COMPETITORS

Competitors of the company — other suppliers of the cryptocurrency smart-contracts, such as Counterparty, and the systems functioning on top of bitcoin with the same limitations. The advantage of the project, as RSK states, is in its ability to combine flexibility of Ethereum with security of the Bitcoin network.

Competitors:

- Ethereum <https://www.ethereum.org>
- Counterparty <https://counterparty.io>
- QTUM: <https://qtum.org/en/>
- BOSCoin: <https://boscoin.io/en/home/>
- Tezos: <https://www.tezos.com/>

USE

The platform can be used for smart-contracts in every sphere: for micropayments (and here it has an advantage over the bitcoin network where commission fees increase regularly; for any express payment; for lending; for peering exchange trade; internet-gambling and predictions.

RSK claims that it takes smart-contracts to the bitcoin blockchain. They are already available, for example, using a multi-sig, though this setup requires approval of two or three users to unlock the funds for payment. Whereas RSK offers Turing-Complete Virtual Machine compatible with Ethereum decentralized applications.

The required level of security is achieved through the bitcoin merge mining. However, the maintaining of it needs at least 50% of bitcoin network hashing power. The company claims that 30% of miners have already supported RSK and the merged mining is planned for coming months.

TECHNICAL ADVANTAGES

In addition to availability of smart-contracts for Bitcoin, the platform Rootstock has a variety of other advantages. The biggest one is the security provided by merged mining with bitcoin.

The platform can generate new blocks in less than 20 seconds and initially can make 300 tps scalable to 1000tps.

One more feature of Rootstock is that it will allow to run Ethereum smart-contracts by Turing Complete Virtual Machine backward compatible with Ethereum.

Rootstock attracts new miners promising them to maximize revenue if the fees for Rootstock smart-contracts make the significant part of RSK income.

Rootstock works as a Bitcoin sidechain. In other words, it is separate blockchain, existing independently of the main Bitcoin blockchain, and providing transfer of funds between two chains. Several bitcoins can be transferred into the sidechain, and then transferred back to the main chain, when we no longer need them. In particular, Rootstock provides the Bitcoin security and works without its own currency or minimum unit of account.

Minimum unit of account RTC is pegged to Bitcoin and used for paying fees for transactions in Rootstock. To make a transaction in RSK we need to transfer some amount of BTC into sidechain where it gets locked and the same amount of RTC is unlocked in Rootstock. To transfer back the process is repeated in reverse. Some RTC get locked and the same amount of BTC is unlocked. “Locking” and “unlocking” are absolutely automatic processes.

Rootstock follows the trend of current development technologies of Bitcoin, such as SegWit, Lightning Network etc. This attracts attention of key persons of community to the development of the project. But it is important to bear in mind, that a part of community remains skeptical about the idea of expanding Bitcoin functionality beyond its pure cryptocurrency essence as a way of money transfer. Moreover, the achieving of sidechain security requires a centralized model with Federation, that presents a certain risk.

SegWit, adopted by the bitcoin blockchain, optimizes a size of a block, that facilitating the use of the sidechains based on the bitcoin blockchain. Though SegWit is not an inevitable condition for Rootstock, the adoption of it can add positive effect to development of the project.

Every Turing-complete system is potentially vulnerable. Rootstock is a Turing-complete virtual machine too, though it is secured being tied to the bitcoin blockchain, it also has many risks inherent to the other Turing-complete machines. It means that Rootstock can be hacked as Ethereum or Parity Wallet, that can significantly affect authority of the system or crash the rate of currency of the project. It can harm the credibility of the system circumstantially and make application impossible or irrational.

Public consensus on this issue has not being achieved yet and now it is hard to say whether this architecture of blockchain ecosystem as a large supercomputer will survive.

On the other hand, rivals such as Ethereum allows us to say that the probability of mass use and attempts to implement this project in real business processes seems to be quite high and, as a result, may lead to a multiple increase in the value of token and the company's capitalization. And the risk of centralization of the system is not a highly aggravating factor, but, on the contrary, it will be perceived by business community as a certain guarantor of the system security.

TECHNICAL DISADVANTAGES

The transfer of BTC to RTC and vice versa is complicated in practice: since bitcoin did not recognize other transactions in a sidechain, it was necessary to find a workaround solution. The Federation of Leading Bitcoin companies has played a role of an intermediary in this process, securing the transfer of funds between two chains. In exchange for that companies – members of the Federation - take profit from the fees generated by the conducting of interchangeable transactions.

Thus, the confidence in this model is based only on the Federation`s credibility.

In fact, RSK tokens have no value and first of all achieve fast transfer of Bitcoin, extending the functionality of Bitcoin in different RSK smart-contracts.

SUMMARY

Rootstock — is a promising open-source smart-contract platform with Bitcoin 2-Way peg, combining in theory the facilities of Ethereum with security of Blockchain. Being tied to bitcoin through the sidechain, the platform is backward compatible with Ethereum.

The security of tokens (i.e. the connection between unit of account and bitcoin) will be guaranteed by the Federation of bitcoin companies, integrated by RSK.

The source code of RSK is publicly available now. The company has raised two rounds of funds. ICO date is not announced yet.

CONCLUSIONS

STRENGTHS

- In fact, RSK — analogue of Ethereum on the bitcoin blockchain platform, 6 times faster than Ethereum;
- It is claimed that security of Rootstock investing is the same as the security of Bitcoin investing;
- It allows to mine two blockchains at the same time;
- It is claimed that RSK facilitates the implementation of smart-contracts and can be used for any purpose, therefore increasing market share;
- The project is “ideologic” one and contributes to the development of bitcoin;
- The majority of countries recognizes legal status of cryptocurrency.

WEAKNESSES

- Tokens are secured only by the Federation of “leading bitcoin companies” integrated by the company, which is aimed to guarantee the transfer of funds between blockchains;
- Major version of platform has been launched recently;
- Big number of competitors. Firstly, RSK will possibly compete with Ethereum.

Based on the research findings the following rating has been assigned to Rootstock project (RSK) – A2. Medium high probability of investments, sensitivity to market environment.

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The report is based on data from open access.

This report contains conclusions and information relevant to the date of the report.

CONTACTS

WEBSITE

<http://www.rsk.co>

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- <http://cryptmaster.ru/bitcoin-map>

SOCIAL MEDIA

- Twitter: Official RSK account <https://twitter.com/RSKsmart>
- Telegram: <http://t.me/RSKsmart>
- Facebook: <https://www.facebook.com/RSKsmart/>