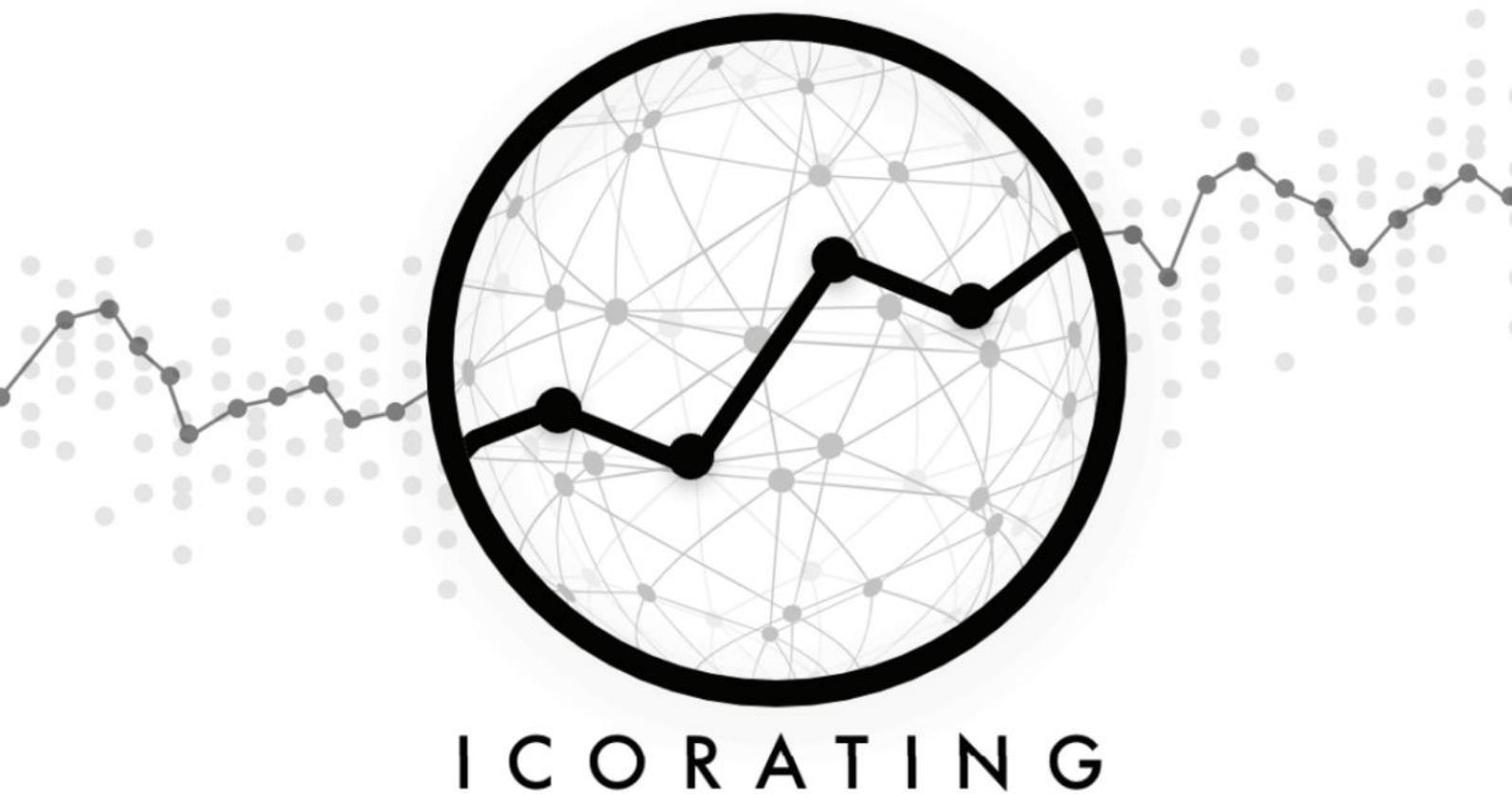


ICOrating

CROWDVILLA Rating Review (<https://crowdvilla.io>)

ICO dates (April 2018 - June 2018)



I C O R A T I N G

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1. Rating

We assign Crowdvilla a Stable rating.

Crowdvilla is an ecosystem for the tokenization and sharing of recreational real estate properties. The funds raised during the crowdsale are used to purchase real estate. Tokens will be used to pay for staying in the property. In fact, the proposed mechanism strongly resembles that of timeshares.

The project is managed by a team familiar to us from the REIDAO project, the ICO of which was planned for autumn 2017 but did not take place. The team is strong, however, given their parallel employment in several projects, there are fears that their amount of participation in Crowdvilla will not be sufficient. Indirectly, this fact is confirmed by the team itself, with their promise to hire a management team in Crowdvilla after the ICO.

Three kinds of tokens will be present on the platform: CRV tokens will allow owners to generate CROWD tokens. CROWD tokens will be used to pay for the time spent in the property. The participants of the ICO will also be credited with REI tokens, which can be used to obtain discounts on the platform. REI tokens, from our point of view, will have more of an investment/speculative potential.

In our understanding, the key risk of the project, is that real estate will be acquired with the funds raised from the ICO, but without agreement with the token holders. The team (for legal reasons) does not allow token holders to vote and decisions will be made by management. This raises risks associated with both making the wrong decisions and possibly overstating the prices of transactions in the acquisition of real estate.

2. General Information about the Project and ICO

Crowdvilla is a decentralized platform for the tokenization of real estate properties and using them on the basis of shared benefit and the separation of types of property rights. Funds raised during the ICO will be used to purchase real estate for recreational activities, which can be used by all crowdsale participants in proportion to the investment they made.

According to the legal interpretation, the right of ownership includes a whole range of rights. The most important of them are the right of possession, the right to use and the right of disposal. Crowdvilla proposes to divide these rights into two groups: use and possession/disposal, denoting the investors' share in each of them with tokens.

Crowdvilla is characterized by a very high legal explanation. The company introduced a good disclaimer, explained the investment risks in great detail and determined the mode of operation of the legal envelope.

Legally, the company will exist in the form of a non-profit organization (NPO) with limited liability registered in Singapore. This jurisdiction determines the timing and procedure for the publication of regular reports to the investors, the methods and nature of assessing common property and protects the investors in terms of the risk of recognizing tokens as securities. The legal consultants of Crowdvilla include names such as Allen & Gledhill, Kaynex, DWF, Rajan & Tann and Ashurst.

Blockchain technology guides the concept of Crowdvilla on the division of rights and the booking of recreational real estate. This is precisely why the Crowdvilla founders are staging the ICO.

The external partner of Crowdvilla is REIDAO. REIDAO creates tokens secured by real estate with unique identifiers and stores smart contracts on them as well. Each token identifier has its own set of available tokens with unique characteristics. REIDAO is also a platform that provides representation of real estate and rights.

Crowdvilla is planning to create two types of tokens as a result of the ICO:

- Crowdvilla Token (CRV Token) CRV – a secured token.
- Crowdpoin Token (CROWD Token) CROWD – a utility token.

Each Crowdvilla token (CRV) owner will be provided with the right to use the property for a certain period of time and Crowdpoin tokens (CROWD) will be used for the reservation of real estate. Thus, the combination of CRV and CROWD tokens will provide each with a specific purpose when booking.

[Website](#)

[Whitepaper](#)

Token:

- CRV (ERC-20 standard)
- CROWD (ERC-20 standard)

Feature	Token	Point
Logo		
Official Name	Crowdvilla Token	Crowdpoint Token
Symbol (Ticker)	("CRV")	("CROWD")
Contract Address	crvtoken.eth	crowdpoint.eth
Type	Asset Backed Token	Utility Token
Purpose	Enables generation of Points. Reflects the owner's share of time-value of Crowdvilla properties	Enables booking of Crowdvilla properties and services
Lifespan	In perpetuity	Single use. Points are destroyed after use.
Initial Supply	Depends on initial token sale	Depends on quantity of Crowdvilla tokens
Future Supply	Depends on future token sale(s)	Generated in perpetuity by Token owners
Fundamental Value	Crowdvilla asset value net of liabilities divided by the number of Tokens outstanding	Extrapolated from rental prices in Points and fiat market price
Divisibility	8 decimal places	8 decimal places

Platform: Ethereum

Token distribution:

- Crowdvilla Community – 80%, REIDAO – 20% - initial token sale.
- Crowdvilla Community – 95%, REIDAO – 5% - future token sales.
- **Round 1:** Private sale. Price: 5,200 CRV per 1 ETH.
- **Round 2:** Public sale. Price: 4,800 CRV per 1 ETH (1st month).
- Price: 4000 CRV per 1 ETH (2nd month).

Minimum Buying Transaction: 1 ETH

Main token: CRV

Generating tokens: CROWD (depending on the selected allocation period), REI (Bonus)

Soft Cap: 10,000 ETH

Hard Cap: 50,000 ETH

Accepted currencies: ETH

Funds allocation: 100% towards assets acquisition.

Additional:

- AML/KYC procedure must be passed to participate in the ICO.
- CROWD TOKENS are burned after the stays are completed.
- CRV holders can choose to lock-up their CRV for a 1-month, 3-month or 6-month period.
- CRV and CROWD will be tradeable on the exchanges.
- Restricted areas: Australia, Malaysia.

3. Description of the Services and Scope of the Project

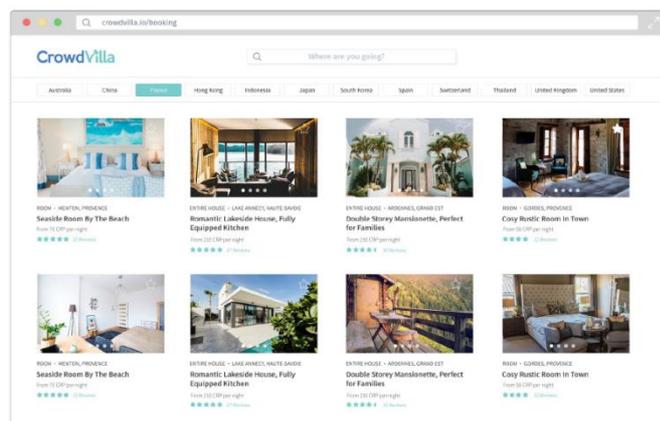
Crowdvilla is an ecosystem for the tokenization and sharing of recreational real estate properties.



Participants of the ecosystem:

- Crowdvilla platform - acquisition and management of real estate, support of investor relations, observation of overhead and tax expenses, mutual settlements with vendors.
- REIDAO - supplier of tokenization technology, the blockchain and operating infrastructure.
- Investors - earn generated tokens which can be used for reserving real estate or they can exchange the tokens on the exchanges.
- External participants (Public) - pay for rent with fiat money on which the platform purchases tokens for distribution among the investors.
- Vendors - third-party service providers.

Crowdvilla is a service for the acquisition and management of recreational real estate, using blockchain technology to attract investors, as well as providing a special option for use of the real estate (bookings) by the investors.



The booking system in the submitted partnership is implemented by REIDAO. This circumstance carries an additional external risk for the implementation of the project.

To purchase real estate, Crowdvilla is planning to analyze the real estate market, the risks and prospects for each property, as well as apply a comprehensive algorithm for registering rights to the real estate. The execution of transactions of real estate is possible with fiat, tokens or a combination of assets. The work on the acquisition and maintenance of real estate is planned to be implemented by a project team using vendors. There will be no voting system for the token holders of the project.

Given the technical partnership with REIDAO, the technical features of the token, the generation of tokens and the implementation of smart contracts, all has been well resolved by Crowdvilla.

Therefore, the Crowdvilla platform, in spite of the obvious complexity of mutual settlements, foreclosure and generation of tokens, is simply and easily built from the point of view of services planned for implementation, as well as the implementation of blockchain technology.

4. Market Review

4.1. Market Analysis

Crowdvilla is an ecosystem for the tokenization and booking of recreational real estate properties by the investors. At the same time, from the point of view of investment analysis, Crowdvilla is actually a real estate fund operating as a manager in the travel and tourism market.

Investors' activity on the global real estate market is still high in 2018. According to the forecast of JLL experts (included in the Fortune 500), the global volume of investment transactions with real estate during 2017 increased to \$700 billion from \$650 billion in 2016 recovering to 2014-2015 levels.

According to JLL, the main real estate investment market in the world is the USA: 16 of the top 30 cities, in terms of direct investment in the real estate sector, are located in this country. The leader of the top 30 world cities in terms of direct investment in the real estate sector is New York (\$33.1 billion). At the same time, the volume of investment transactions in New York is almost double that of London, which occupies the second place in the list followed by Los Angeles, Paris and Tokyo.

According to JLL forecasts, the volume of direct investment in the world real estate market can reach \$1 trillion per year by 2020 which is caused by the following factors:

- Strengthening of control, including less use of debt financing, more stringent standards for assessing the solvency of borrowers and more thorough scrutiny by investment committees.
- The emergence of new sources of capital, primarily in Asia and other emerging economies.
- Increase in direct investment in real estate from institutional investors in developed markets due to low interest rates and improving regulatory framework.
- An increase in cross-border investment from South Korea, China, Taiwan and Malaysia, caused by government attempts to reduce the glut of the domestic market by moving capital abroad. It should be noted that against the backdrop of an increase in interregional capital flows, the share of cross-border transactions, in the total volume of investment activity, may exceed 50% by 2020.

At the same time, the total value of real estate properties estimated in 2016, by Savills Word Research, is 2.7 times higher than world GDP and amounts to \$217 trillion.

There are several classifications of forms of investment in real estate:

- By source of investment (personal funds, borrowed funds, their combinations).
- By legal status (private investor, state investor).

- By the presence of intermediaries (direct investment without intermediaries - active form, investment with intermediaries - passive form).

The form of investment in real estate offered by Crowdvilla is the closest to that of REIT funds. REIT (Real Estate Investment Trust) is a company that is engaged in housing development or purchasing real estate and managing it through collective investment. REIT receives income from both the increase in the value of share and from the rental of the real estate in which the trust was invested. At least 90% of these revenues will be to shareholders in the form of dividends. Most REITs transfer 100% of taxable profit to shareholders and therefore get rid of the need to pay corporate tax.

In this case, the difference between Crowdvilla and the classic REIT fund is only in the way of paying dividends, since Crowdvilla will pay income to owners from the management of real estate by providing tokens or the rights of booking recreational real estate.

REIT funds work as follows: The investor buys the shares of companies which invest in real estate portfolios and / or mortgages managed by professional managers in the open market. In this case, shares of real estate funds are valued in the same way as any other securities or equity interests. In the case of REIT shares, the level of risk of ownership of shares directly depends on the type of investments in real estate.

There are three main categories of REIT: equity, mortgage and hybrid. REIT-funds of real estate have the following advantages over other ways of investing funds:

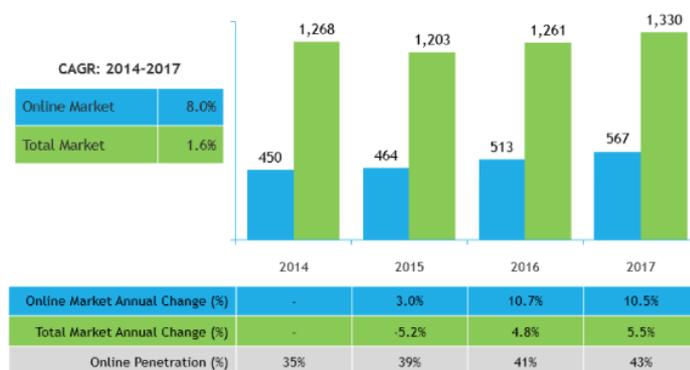
- Liquidity. Investments in REIT shares have an undeniable advantage, liquidity, compared with the direct purchase of real estate.
- Diversification of investments. In order to reduce the risk on the portfolio at a given level of profitability, one need to resort to diversification - including various financial instruments in the portfolio in order to increase profitability and reduce the risk.
- Protection against inflation. REIT provides good inflation protection. The main source of income of investment trusts is rent which, as a rule, is adjusted taking into account the growth of the general price level.
- High profitability. Real estate funds occupy an intermediate position between the shares of large companies and bonds by return.
- Reliability. REIT is much more reliable than brokerage services or investing in shares of large companies that can go bankrupt under adverse market conditions.

According to FTSE NAREIT, all of REITs' equity market capitalization is about \$889 billion, which is about 4.3% of the total US stock market. Currently, the index includes 224 investment trusts of real estate.

Now let us consider the capacity of the travel and tourism market. According to the research for 2017 by the analytical agency PhoCusWright and statistical portal Statista, the volume of the travel and tourism market reached \$1,330 billion (24% of the e-

commerce market). This market increased by 10.5% in 2017. Online sales of travel services accounted for 43%.

Figure 1: Global Online and Total Travel Market (US\$B) and Annual Change (%), 2014-2017



Note: 2016-2017 projected.
Source: Global Online Travel Overview Fourth Edition

Thus, Crowdvilla operates in the world's largest market, real estate, with an annual turnover of \$700 billion and a size of \$217 trillion. In addition, Crowdvilla will receive synergy from participation in the second largest global market, the travel and tourism market with a size of \$1,330 billion per year. Nevertheless, Crowdvilla will have to form competitive offers in the market, close to the market of REIT funds.

4.2. Competitors

Among the tokens, including those traded on the exchanges, there is a cluster of stand-alone and even bewildering tokens that have real or declared security backed by fiat currencies, gold or minerals.

Real estate is the most valuable distributed resource in the world. Taking into account the special economic and social status of real estate, legislators of many countries make special requirements to formalize these kinds of transactions. As a rule, this is reflected in the introduction of the Torrens System - the system of registration of rights, in which the entry of the real estate in the state register guarantees the beneficiary unconditional ownership of the property. The transfer of ownership is made by making changes in the records of the register, on the basis of documents of the transaction. The responsibilities for keeping the register are assigned to state bodies, which should guarantee impartiality and its correct conduct. However, this requires additional checks of the purity of the transaction and adds bureaucratic procedures.

The activities of blockchain start-ups in real estate can be divided into 3 areas: the transfer of the registry to blockchain, the transfer of documents on transactions with real estate to blockchain and the leasing of real estate. The second and the third areas often intersect, offering the client to fix transactions for owning real estate by tokens.

The tokenization of real estate allows for the transfer of the economic value of real estate, the volume of which is estimated at more than \$200 trillion, into a more liquid form.

Receiving even a small part of these funds may have a significant impact on the crypto economy:

- Improve its stability. Prices for real estate are fairly stable, so the value of tokens provided by real estate will not be subject to the same volatility as ordinary crypto assets.
- Increase the capitalization of crypto economy due to the transfer of the equivalent value of real estate.
- Increase the effectiveness of ownership of real estate by involving unused resources in the economic turnover.

However, as it was said above, special requirements made in relation to the turnover of real estate can create certain legal problems, particularly with the implementation of such tokenization. Getting real rights to real estate in countries using the Torrens system requires going through a number of bureaucratic procedures for making changes to the register. This reduces the turnover of tokens thereby losing the attraction of the idea of tokenization.

Failure of such registration leads to a lack of real provision of tokens for real estate, so you should be very careful when promising to provide square meters for tokens. For example, in cases where the project collects funds for the acquisition or construction of real estate through crowdfunding and provides tokens pegged to the square meter of this property in return. In such cases, it is worthwhile to ask whether the token holder will really own the property and how it is planned to ensure these rights.

In some cases, an intermediate option is used - the token holder can rely not on the property but on the economic results of its use, for example, on the rental income. It is more correct to say that the token is not provided by owning an immovable asset but by a share of the income the company owning the property generates. In this case, the rights are not fixed through the Torrens system but by other simpler contractual agreements.

In this respect, we can take the example of the Bloquid project which tokenizes the economic equivalent of the value of real estate, using the design of loan and pledge agreements. Tokens are issued after the conclusion of two contracts with the owner of the real estate: a loan token contract and a real estate pledge agreement in order to secure fulfillment of obligations under the loan agreement. The smart contract releases tokens after the state registration of the encumbrance on the immovable property. These tokens are transferred to the owner of the property under the loan agreement. The borrower is therefore obliged to return the tokens, to remove the encumbrance from the real estate. As a result of this legal design, a link is created between the value of the collateral fund and the nominal value of the issued tokens.

On the one hand, the Crowdvilla project is similar to Bloquid from the point of a unique way of tokenizing the economic effect of owning real estate. On the other hand, Crowdvilla is similar to the REIT fund.

Comparison with REIT and Crowdvilla		
	REIT	Crowdvilla
Regulation by the state	Yes (as a real estate fund and as a security)	No (not operated as a security)
Liquidity	moderate	low
Commission expenses for the transaction	up to 30%	0%
Minimum Entry Threshold	usually from \$1000-2500	from 350
Disclosure requirements	high	low

Recently, a number of projects related to the transfer of real estate trade have been launched in the market. We will consider the best of them.

Atlant is a decentralized property market. It was created to implement a way of investing in real estate and its sale by creating a decentralized and transparent platform. Atlant allocates real estate properties that are in individual ownership to Tokens of Property; 1 token = 1 sq. M. m.

InveStore.club together with the Qiwi group and the world's leading consulting company, Deloitte, developed a platform where the world's first commercial token sale has been successfully conducted in November 2017. The current platform has its own four properties, passed through the process of tokenization and available for sale with a minimum purchase amount of 10 tokens. One token is equal to 1 000 rubles.

Bitproperty is a platform for real estate trading through tokenization. Bitproperty has two types of tokens: the BTP platform token and the asset token. BTP tokens are of integral value to the platform and they provide holders with revenue from transactional fees within the platform, in proportion to the amount the holders have. BTP tokens are also paid with the revenue from the sale of energy from the Bitproperty solar farm.

Alt.Estate Group. offers a new solution for property tokenization: protocol and platform. The Alt.Estate protocol covers technology, corporate structure and the legal aspects of tokenization. The protocol will be a ready solution for everyone who wants to own real estate, from developers to individuals. The Alt.Estate platform is a marketplace for real estate trading.

MySmartProperty is an e-commerce C2C and B2C marketplace for real estate, working on the basis of blockchain and creating an ecosystem for the exchange and storage of information about real estate. MySmartProperty, in addition to the functions of the trading platform, evaluates and details the properties on the basis of a patented technology that takes into account 10 basic and 10 additional parameters of the property.

Roofstock is a niche marketplace of real estate, only private households that are rented to families are represented on the website. The card of each object, in addition to general information, also contains data on the income that the house can bring to the new owner. Roofstock is a blockchain-based marketplace for the trading of profitable real estate.

Thus, Crowdvilla operates in the new market of tokenized real estate platforms. Key participants of this market are close to the REIT market in their interaction but have a number of significant advantages.

5. Team and Stakeholders

The project team is a combination of entrepreneurs from the IT industry and real estate professionals. Most of the team is from the related project, REIDAO. It is worth noting the wide background of team members as the founders of many start-ups. However, it raises some concerns about their ability to run a large number of startups at the same time.

Key members of the Crowdvilla team:

- **NEO Kok Beng** - Co-Founder and Chairman of the Board of Directors at Crowdvilla, Chairman of the Board of Directors at REIDAO, Adjunct Associate Professor of the National University of Singapore, Co-Founder and head of many other projects in the industry.
- **Darvin Kurniawan** - Co-Founder and CEO of Crowdvilla and of REIDAO, experience working in the finance and audit industry since 2003.
- **David Chandra** - Co-Founder and COO of Crowdvilla, Licensed Real Estate Professional & Team Leader at PropNex Pte Ltd.
- **Hendrik Tanjaya Tan** - Co-Founder and CTO of Crowdvilla and REIDAO, Senior Consultant at Nokia.
- **TAN Wee Liang, Prof.** - Legal Advisor at Crowdvilla, Associate Professor at the Singapore Management University, Committee Member of the Singapore Polytechnic.
- **Vanessa Koh** – Chief Product Officer (CPO) at Crowdvilla and REIDAO, specialist in the field of blockchain and digital economy.

Advisors:

- **Paul Chen** – Real Estate Advisor for Asia at Crowdvilla, Head of the Hong Kong branch of the International Blockchain Real Estate Association (IBREA), Advisor at BrickEX and Director of RealFoundations in Asia.
- **Achim Jedelsky** - Real Estate Advisor for Europe at Crowdvilla, Head of Processes/IT at Daimler Real Estate, Founder of Daimler Blockchain Group and Chair of the Berlin Chapter of the International Blockchain Real Estate Association (IBREA).
- **John Dean Markunas** - Real Estate Advisor for the American region at Crowdvilla. He has a wealth of experience in real estate in the field of marketing, sales, business development and branding. He is the founder of the Brazil Chapter of the International Blockchain Real Estate Association (IBREA). He has more than twenty years of experience in real estate in Latin American markets.
- **Federico Folcia** – Advisor in the field of short-term real estate rental. CEO and Co-Founder of Roomorama, MD and Founder of Powerhouse Venture.

The legal consultants of the Crowdvilla project are Allen & Gledhill, Kaynex, DWF, Rajan & Tann and Ashurst.

Project partners: REX, SFA (Singapore FinTech Association), Digix Access industry member, SGtech, Lean LaunchPad Singapore.

Most of the team members are from REIDAO.

6. Token Analysis

The platform will have two main tokens – the Crowdvilla Token (CRV) and the Crowdpoint Token (CROWD). The investors will also be credited with REI tokens during the ICO.

CRV tokens will be sold during the token sale. Holding CRV tokens will let the holders to generate CROWD tokens, which in turn will perform a utility function and will be used to book real estate from the Crowdvilla portfolio. During the ICO, each customer with CRV tokens will be credited with CROWD token in the ratio of 1:1. CROWD tokens will be burned after using.

CRV tokens are supposed to be frozen from 1 to 6 months. The longer CRV tokens are locked, the more CROWD tokens a token holder will get. The mechanism is represented in the white paper:

Option	Choice A	Choice B	Choice C
Lock Up Period	1 month	3 months	6 months
Tokens Locked (CRV)	1,000 CRV	1,000 CRV	1,000 CRV
Base Monthly CROWD Generation Rate*	1,000 CROWD	1,000 CROWD	1,000 CROWD
No of Month(s)	1 month	3 months	6 months
Base Point Generated	1,000 CROWD	3,000 CROWD	6,000 CROWD
Multiplier Rate	1x	1.25x	1.5x
Total Generated Points	1,000 CROWD	3,750 CROWD	9,000 CROWD
Crowdvilla NPO Allocation (50%)	500 CROWD	1,875 CROWD	4,500 CROWD
Crowdvilla Operation Partner (15%)	150 CROWD	562.5 CROWD	1,350 CROWD
REIDAO - Technology Partner (5%)	50 CROWD	187.5 CROWD	450 CROWD
Token Holder's Allocation (30%)	300 CROWD	1,125 CROWD	2,700 CROWD
Distribution (Day 1)	150 CROWD	562.5 CROWD	1,350 CROWD
Distribution (Month 1)	150 CROWD	187.5 CROWD	225 CROWD
Distribution (Month 2)	-	187.5 CROWD	225 CROWD
Distribution (Month 3)	-	187.5 CROWD	225 CROWD
Distribution (Month 4)	-	-	225 CROWD
Distribution (Month 5)	-	-	225 CROWD
Distribution (Month 6)	-	-	225 CROWD

Crowdvilla calls CRV token an asset backed token. However, it is not secured by real estate, as it may seem at first in the documentation but gives the utilization of rights of the property.

Each participant of the ICO will also be credited with REI tokens as a reward at the rate of 1 ETH = 5 REI. REI is a token of the REIDAO ICO, which was planned for Autumn 2017 but never staged. Holders of REI tokens will get the right to have discounts for booking hotels. The more REI tokens on the token holder's account, the greater the discount the token holder can receive:

Membership Tier	REI in Lock-Up	CROWD Rebate
Tier 1	1,000 REI	70%
Tier 2	100 REI	30%
Tier 3	1REI	10%

Therefore, theoretically it is the REI tokens that have the investment and speculative potential. CRV and CROWD are likely to be used more in accordance with their infrastructure functions.

7. Analysis of Factors Affecting the Future Value of the Token

Crowdvilla is planning to begin the process of buying property in June 2018, i.e. two months after the ICO. The legal structuring of the company is planned to be completed by September 2018, the beta launch of apartment booking is planned for January 2019. Thus, CROWD tokens will not be spent until 2019, but the users can start accumulating them in advance. However, it is not clear when the mechanism will be implemented.

REI tokens will also not be needed until the beta launch of the platform, which means that the utility demand for them will not appear earlier than in early 2019.

This means participation in the Crowdvilla ICO is more appropriate, not for speculative/investment purposes, but for those who really plan to use the platform services and trust the team in the choice of assets for the platform. It is important for such participants of the crowdsale to know when the lock-up period will be launched - the earlier, the more attractive the participation in the ICO is.

8. Investment Risk Analysis

In our understanding, the key risk of the project is that real estate will be acquired without agreement with the token holders, using the funds raised during the ICO. The team (for legal reasons) does not allow token holders to vote and decisions will be made by management. This raises risks associated with both making the wrong decisions and possibly overstating the prices of transactions in the acquisition of real estate.

We consider the legal risk to be the second most important risk. The team will have to work hard to legalize the transactions, taking into account the requirements of the legislation of Singapore. The approach of the team seems to us reasonable, which increases the likelihood that the impact of this risk will not be great.

The risk of the amount of funds raised during the ICO is also important for the project. The team set the soft cap at 10,000 ETH, however, the more funds the project raises during the crowdsale, the more real estate they will be able to buy, which means that the users will have more timeshares to choose from and the platform will be more popular.

The documentation of the project provides for future token sales for the purchase of new real estate. However, taking into account the mechanism of token economy, it is hard to speak about the effect this would have on the price of the CRV token in this case.

The information contained in the document is for informational purposes only. The views expressed in this document are solely personal stance of the ICOrating Team, based on data from open access and information that developers provided to the team through Skype, email or other means of communication.

Our goal is to increase the transparency and reliability of the young ICO market and to minimize the risk of fraud.

We appreciate feedback with constructive comments, suggestions and ideas on how to make the analysis more comprehensive and informative.