

# BitCash Analysis

January 21, 2019 Version 1.0.0



## 1 Overview



BitCash project aims to be a global cryptocurrency that aims to solve issues in user experience, compliance with legal structures, and integration with financial applications. It has big ambitions for a hyper-competitive market while remaining as an open-source effort.

#### Website

choosebitcash.com

#### Paper

choosebitcash.com/whitepaper.pdf

#### Explorer

explorer. choosebitcash.com

#### Blockchain

**BitCash** 

#### Consensus Mechanism

**Proof of Work** 

#### Algorithm

**Cuckoo Cycle** 

#### Genesis Date

July 17, 2018

#### Maximum Supply

~100,000,000 BITC

#### **Current Supply**

~15,100,000 BITC



A1 Rating: BBB

# 2 Summary

BitCash is not attempting nor claiming to solve previously unsolved difficult technical problems in blockchains. Rather, its approach is designing and building a cryptocurrency that people can use with ease, without needing to understand the underlying technology. Further, the project aims to implement or integrate with the contemporary financial and legal software tools for mass adoption.

Providing a much-needed user experience and simplicity, BitCash could potentially become a widely adopted payment mechanism that it strives to be. Ease of use has always been an issue in the cryptocurrency space, where even the most popular blockchain projects fail to relate to the end user.

In its founder, Christian Kassler's own words: "We'll never reach mass adoption unless people can spend, earn, and manage cryptocurrencies just as easily as fiat." [7]

As it stands, BitCash is currently on its mainnet with more than 250 thousand blocks mined, with no critical flaws or issues reported.

# Market Opportunity **Adoptability** Security Technology Community Team **Usability Monetary Policy** Legal



# 3 Analysis

#### 3.1 Market

What does this project aim to solve? Why will people use it? If they have competitors who are they and how do they compare to this project?

BitCash is meant to be a real-time global medium of exchange.

This market is already occupied with centralized payment processors and cryptocurrencies. The expectations from a medium of exchange are different among various exchange segments, geographies, and use cases.

The global medium of exchange of the World has previously been mostly gold. After the Second World War, USD has replaced gold in this role. [10] With the rise of blockchain technology and the dynamics of political relations, USD could potentially be replaced by another medium of exchange as well.

#### 3.1.1 Competition

The market BitCash aims to capture the currency vertical of the cryptocurrencies market. This market is the original and the most competitive of the verticals of the cryptocurrencies market. Bitcoin, Ripple, Bitcoin Cash, Stellar, Tether, Litecoin, and Bitcoin SV are currencies from top 20 by market cap at the time of writing. These projects possess a combined market cap of USD 89 billion. Apart from these well-known projects, there are hundreds of competitors to BitCash with similar goals.

In real-time payments market, BitCash would be competing with centralized payment processors as well. The size of this market was estimated to be USD 6.8 Billion in November 2018 according to a report of Markets and Markets. [8] According to the same report, real-time payments market is expected to grow to USD 25.9 billion by 2025, with the highest growth expected to be on person-to-person transactions volume.

With this huge market, comes a variety of competent alternatives. Any project that is aiming to build a global currency will face fierce competition and BitCash is no different. BitCash's greatest challenge might be to successfully acquire and maintain a spot in the market.



## 3.1.2 Competitive Advantage

BitCash's plan in entering this market is to provide an unmatched user experience (UX) among cryptocurrencies to their users. With their simple to use wallets, user handles, and upcoming features that are described in the Usability section of this document, the project could potentially achieve wide adoption.

The project also aims to support its adoption by allowing authorities to track transactions and financial interactions.

#### Market Score: 6 / 10

BitCash increased its market score by two aiming a big and well-defined market, and having a viable approach for its market. It has decreased its market score by having fierce competition. Starting from the baseline score of 5, BitCash's market score is 6 out of 10.



## 3.2 Opportunity

Is the potential reward justifies the risk? What makes this project an opportunity for A1 Exchange right now?

#### 3.2.1 Product Market Fit

BitCash is a good potential fit for the instant payment processing market. Its desktop wallet is a very easy to use payment processing application. The team is planning to integrate with financial software to help potential users transition to BitCash.

With an upcoming novel feature detailed in the usability section, BitCash users will be able to transact and store BitCash in a way that gives the advantages of stable coins.

We believe that BitCash could possibly become a decent alternative in the market.

#### 3.2.2 Traction

BitCash has been announced on August 28, 2018. [6] Since then, the community around BitCash is growing healthily. There are over a thousand users on their Discord channel. [5] They have a sizeable following on Twitter and Medium as well.

What has convinced us to give BitCash a point on this is the fact that they haven't done any marketing yet. Christian Kassler is planning to announce BitCash on Bitcointalk in the first quarter of 2019. It is possible that with effort on marketing, the project could grow its user-base.

#### 3.2.3 The Unique Privacy Feature

BitCash transactions are private by default. However, all the transactions could be encrypted by a master key. [3]

The BitCash team sees this feature as an opportunity to gain the authorities and the financial sectors trust in order to get BitCash safely implemented to these legacy systems. This can also be argued as a novel approach in cryptocurrencies and a possible hedge opportunity against the status-quo from the eyes of users or investors if, in fact, it proves to be successful in its claims and goals.

BitCash claims that with this feature they will be able to inform law enforcement agencies with the data they query while cyphering its users' transactions to the public eye.

However, the design of this scheme is vulnerable. The existence of a static master key called "Private Master Key" for decrypting all private transactions in a global payment solution would be unacceptable for many people with privacy concerns. BitCash might need to rethink the way they provide this feature.

We do not consider BitCash as a private blockchain at this time. All transactions made on BitCash should be assumed as public due to how the "Private Master Key" scheme is designed.



### 3.2.4 Early Stage

BitCash project is still in infancy. So far, the team is able to keep up with the community demand, and have been improving the project at an acceptable pace.

We think that BitCash could potentially grow much larger than what it is now. Hence, we consider the fact that BitCash being in its early stages to be an opportunity for A1 Exchange listing.

#### Opportunity Score: 8 / 10

On its opportunity score, BitCash gained points from offering what the market needs, having good traction before any marketing efforts and its privacy solution. These points increased BitCash's opportunity score from 5 to 8. The fact that BitCash is in a very early stage is positive but it is canceled out with the fact that the market is saturated.



## 3.3 Adoptability

How can this project reach mass adoption? Why is it appealing to the end user in terms of user experience? Is it easy to pick up or understand? Are there mechanisms in place for increasing adoption?

BitCash argues that the main factors behind mass adoption are related to user experience (UX) and familiarity with legacy systems.

As stated in their white paper, BitCash offers solutions in three areas: [3]

- Making it simple to buy, manage and use BitCash.
- Giving businesses the banking tools they need to accept BitCash payments.
- Maintaining user privacy while still deterring criminal activities.

#### 3.3.1 Barrier of Entry

Any newcomer could easily download the BitCash wallet client and start using it hassle-free. In our opinion, using BitCash is even easier than registering and using PayPal.

BitCash team has recognized the UX issues cryptocurrencies face and built their product accordingly. The following features in their road-map are currently implemented:

- Named accounts
- Pay anyone
- Encrypted transaction messages

With named accounts, users could register BitCash handles such as @john, and send BitCash to these handles.

The pay anyone feature is where a user could make a payment, and receive a URL in return. Then, whoever claims this URL from a wallet first, receives the amount sent.

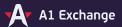
Another feature of BitCash is encrypted transaction messages. As in many other blockchains like Bitcoin, arbitrary messages could be added to transactions sent. In BitCash, these messages are stored encrypted in the blockchain.

The upcoming feature of BitCash Stable could attract the interest of a wide audience that would not consider a volatile cryptocurrency otherwise.

Such features of BitCash could lower its barrier of entry to the market.

## 3.3.2 Integrations

**Financial Integrations:** BitCash team is planning to ease the integrations with the contemporary financial systems. Some features that are explicitly stated in their whitepaper and Discord channel are:



- Recurring payments
- Monthly statements
- Integrations to accounting software such as Quickbooks and Xero

These features could help users reporting their accounting information for taxation or business requirements. Since regulation and taxation of cryptocurrencies have been becoming a reality, having these features could put BitCash in an advantageous spot.

**Legal Integrations:** BitCash's private master key allows the state of BitCash to be as transparent as Bitcoin, but not any further. However, it is possible that Bitcoin and other blockchains could adopt privacy technologies. On the other hand, BitCash is clearly stating that they are willing to work with authorities. The quote below summarises their stance on this topic:

"BitCash is the first decentralized cryptocurrency to work **with** law enforcement, not against it, and we hope this settles the argument for cryptocurrencies across the globe." (Emphasis in the original) [6]

This stance could affect the growth of the community and the project's adoption in complex ways. However, authorities and regulators might be willing to support a cryptocurrency that is willing to cooperate with them.

#### 3.3.3 Challenges

The powerful competition of BitCash would certainly challenge the adoption of it as a global payments solution. An undeniable network effect is strongly present in such mechanisms, where every additional user of the network increases the value of the network for other users. [14] BitCash is disadvantaged compared to its competitors in regards to network effects since it is a recent project with a very tiny user-base.

#### Adoptability Score: 6 / 10

We have given BitCash an adoptability score of 6. The project gained one point each from the barrier of entry and integration topics but lost one point for the competition.



## 3.4 Security

How is consensus achieved in this network? How secure is this network? What is the hash rate dispersion between miners?

#### 3.4.1 Network Structure

What is the network structure? Is it centralized, decentralized or distributed? Does it have hybrid components? (Such as centralized components in a decentralized network)

BitCash is a Bitcoin Core version 0.16.0 fork, i.e. BitCash cloned the source code of Bitcoin. [4] Bitcoin Core version 0.16.0 has been released on February 26, 2018. [15] There have been 10 minor bug fixes on Bitcoin since BitCash has forked it. It is unclear if BitCash team has applied any of them to their project.

The project has integrated Cuckoo Cycle Proof-of-Work from the Merit project. [4] Cuckoo Cycle is a well known and increasingly popular proof-of-work algorithm. The Cuckoo proof size set is 42.

Being a Bitcoin fork gives BitCash a huge security advantage as Bitcoin codebase is paramount in terms of application security among cryptocurrency projects.

Features such as named accounts, or pay anyone have been implemented in a way that would not negatively affect BitCash's decentralization.

## 3.4.2 Network Security

BitCash uses Cuckoo Cycle which is a memory bound graph-theoretic proof-of-work algorithm. Cuckoo Cycle is claimed to be quantum speedup proof, and is a variation of Cuckatoo Cycle, aiming to simplify ASIC implementations.

BitCash provides a list of mining pools on its website. [12]

The network hash rate is around 180 C/s according to a leading BitCash mining pool Icemining.ca, on 21 January 2019icemining

Corresponding the majority of this hash rate, the current hash rates of all the mining pools listed in the official BitCash website is as follows:

Known Pools	Hash Rate
icemining.ca	88 C/s
tera.tn	44 C/s
bitc.luckypool.io	5 C/s
uberkripto.club	1.5 C/s
youpool.io	0 C/s

As shown in the mining data above, the majority of the hash rate is provided by two mining pools, as the of this writing. Although this is not ideal for overall network security and decentralization,



considering BitCash is still in its early stages, we expect this hash rate concentration to disperse in the following months.

The fact that BitCash could be easily solo-mined using its wallet could distribute its hash power <u>distribution slightly</u> if the project is adopted widely before ASIC's are made for BitCash.

#### 3.4.3 Private Master Key

By default, all transactions on BitCash are private.

BitCash has a "Private Master Key" that is able to decrypt all the transactions details in the network. Real receiver addresses and the encrypted description fields can be revealed by the private master key.

The BitCash team claims this key will be only known to the BitCash developer team and will be used only if it is needed to fight illegal activities. BitCash team will provide authorities with a special blockchain explorer that will use the private master key to show the real receivers of transactions.

Although the intentions might be to deter criminal activities and help authorities track and prosecute criminals, we view the entire concept of private master key to be a massive hit on privacy and freedom in the BitCash protocol. There are no guarantees that this key will not be abused and a lack of empirical evidence or any verifiable measures to limit/eliminate such misdemeanor.

Moreover, there are no plans to deter possible abuses of the use of the private master key using novel methods, such as

- A multiple signature (multi-sig) implementation of the private master key.
- Ensuring that the private master key could decrypt transactions in a determined timewindow, such as a year in the past.
- A mechanism for generating temporary master keys for block height ranges to be used in the private explorer.
- A mechanism for revoking master keys.

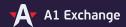
However, the loose confidentiality BitCash provides could satisfy many users' privacy needs.

#### 3.4.4 BitCash Stable

The proposed BitCash Stable feature might have security vulnerabilities. There is not a formal description of the protocol yet. Hence, we could not critique it at the time of writing.

## Security Score: 6 / 10

Being a Bitcoin fork provides confidence in BitCash's security, therefore makes it gain 1 point. Comparing it to other cryptocurrencies at the same stage, BitCash's adequate mining support awards it another point. Due to the questionable implementation of "Private Master Key", we deduce 1 point. Therefore, the security score of BitCash is determined as 6.



## 3.5 Technology

What is the current progress and how does the codebase look so far? Is the technology properly outlined and explained?

BitCash is a fork of the Bitcoin codebase. It was forked from Bitcoin Core version 0.16.0. Basic functions such as a working wallet implementation, mining with CPU or GPU are possible. These features are fairly trivial to implement for a Bitcoin fork and we do not take them into account in our assessment.

The BitCash protocol has an average of 1 minute block time where the block reward is 21.5 BITC, of which 10% is deduced as developer fee.

BitCash has a working nicknames implementation for addresses. Users can choose a nickname and use this nickname to easily receive payments. Every wallet is allowed to have 1 nickname and its not possible to change them once registered and they exist forever. However, these nicknames are free to register by anyone, therefore such design could eventually lead to "name squatting" issues since there are no measures implemented to prevent it.

BitCash uses a stealth address concept (one-time keys) defined in Monero's whitepaper [13, pp. 7–8]. Only the receiver and whoever possesses the "Private Master Key" can compute the real receiver address and the description fields of a transaction. The "Private Master Key" does not exist in the Monero implementation and is an addition introduced by BitCash.

BitCash has not presented any documentation on any of its technology so far other than basic explanations. This includes their whitepaper where they only address how stealth addresses are created in a non-scientific fashion. The mathematical notations outlined in this section are unusual and extremely vague.

BitCash also introduces a novel difficulty retargeting approach. BitCash proposes a new algorithm called VTR "Virtual Timespan Retargeting" where difficulty is computed after each block depending on how long it took to mine the last 24 blocks.[17] Their claim is that this algorithm will adjust the difficulty within a small number of blocks, without having to overcompensate in either direction. While this offers a simple solution to a difficult problem, the network is not mature enough to say whether this is a good solution or not.

Overall, BitCash has not chosen to tackle difficult computer science problems. Most of the features they offer are relatively achievable with ease, although some have caveats that come with them.



#### 3.5.1 Scalability

How scalable is this project?

It's clear that BitCash will face the same scalability issues as Bitcoin since the core protocol implementation is almost identical. The most concerning issue in BitCash's scalability is its choice of block size. Currently, BitCash has a block size of 36MB, which is rather concerning since BitCash has an average block time of 1 minute. [16] Assuming all blocks were full of transactions, a full node in the network would have to sync at least 36 MB of blockchain data every minute.

#### Technology Score: 6 / 10

BitCash's use of battle-tested technology from well-known projects adds 1 point. Although there are issues regarding its scalability, this is not a big concern for a project is in infancy. Therefore, we do not deduct any points for it at this time. Adding 1 to the baseline score of 5, BitCash has been given 6 for its technology score.



## 3.6 Community

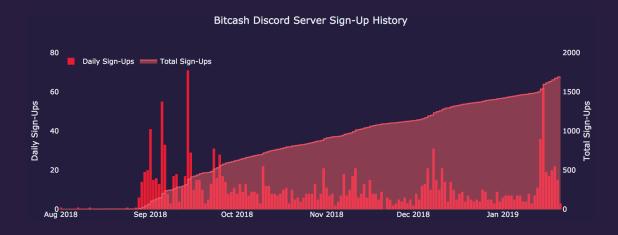
Is there a community? Who contributes to this and why? Is controlled by a corporation or is it open source?

BitCash is not controlled by any form of corporate entity and is an open source project.

#### 3.6.1 Community Support

Despite not having announced the project in major channels such as Bitcointalk, BitCash has a decent following compared to other early-stage projects in the space. BitCash has a couple of Twitter personalities and influencers supporting the project.

At the time of writing, there are over 1200 users on the official BitCash Discord server. [5] The Discord server has had 1650 users signed up in its lifetime. The sign-up trend for BitCash Discord server could be seen in the chart below:



Upon our analysis of their Discord channel data, results indicated a healthy growth.

### 3.6.2 Engagement

BitCash team actively engages with its community and utilizes them in their decision-making process. They have allocated a portion of the pre-mine to their bounty programs, which are already helping the project grow further.

Some Twitter influencers seem to be actively supporting the project via Twitter discussions. The rate of Tweets mentioning BitCash are growing over time. There are many good mentions of the project in major social channels.



## 3.6.3 Mining Support

Currently, there are four mining pools supporting BitCash. The project is well known among small-cap mining communities. This interest while the cryptocurrency is not listed on any exchanges is reassuring support.

#### Community Score: 8 / 10

BitCash's community score is 8 since it has a very enthusiastic and healthy community. For the miner support, growing community, and engagement, we have added 3 points on top of a baseline score of 5.



#### **3.7** Team

Who is building this? What is their track record? Is it possible for this team to deliver on their promises? Is the team engaged with the community and do they provide timely updates?

As stated in their Discord FAQ, the BitCash team currently has three official members.

The project was launched by an anonymous GitHub (a popular platform for software development) user called "WillyTheCat". It was later revealed that this person is Christian Kassler, the current core developer (possibly the only one) of the project. [7] According to GitHub, as of January 20, 2019, there was no other person besides Christian Kassler who has contributed to the BitCash Core code base. [4]

The other members are; David Bandtock, who is also involved with the Haven Protocol, and an anonymous community manager named TheLastDon. [1]

Having a team member who is also involved in an established cryptocurrency project is definitely a plus for BitCash. Since Haven has similar features to BitCash, David Bandtock could significantly enhance the success chance of BitCash.

The team makes frequent updates about the project and engages with the community quite often. A good impression we have experienced first hand was when the A1 Exchange development team found a bug in the wallet client and reported it, the bug was fixed in a few hours and our team was notified of the fix.

A possible concern related to the team would be Christian Kassler's endeavors prior to BitCash. His previous failed attempt called "RECO Coin", which held an ICO, was extremely poor in terms of competence. [18] Also his other attempt called "Bitcoin Reference Line" displayed the same poor qualities as RECO. [19] There was a relatively small improvement compared to RECO, but BRECO was still very mediocre and unprofessional nonetheless. Both of these projects have failed. We have limited records from these projects' Discord servers, but they have been closed recently.

Considering the quality of Christian's last two projects, it is admirable that he is leading a project of decent quality like BitCash.

## Team Score: 4 / 10

Christian Kassler's track record with cryptocurreny projects is certainly concerning. Due to this fact, we deduct 2 points. The team has great communication with the community and efforts in improving the project are decent, therefore are adding 1 point to 3 to conclude on a team score of 4 for BitCash.



## 3.8 Usability

What drives the value of this project? Is it a utility or a security? Does it represent something of value? Why will people use it?

Some of the values BitCash offers are described in the following sub-sections.

#### 3.8.1 Payment Processing

BitCash, aiming to become a global currency, offers a medium-of-exchange value instead of being a utility or a security tool. As discussed in the market section, this is an important and valuable market.

#### 3.8.2 User Experience

From an initial visit to the website to accepting a transaction from a friend, BitCash provides an exemplary user experience for cryptocurrencies.

The design choices BitCash made shows they had people who are not familiar with cryptocurrencies in mind. It is relatively easy to pick up and start using it right away.

## 3.8.3 Simplicity

BitCash's "nicknames" and using hyperlinks to send and receive payments features are excellent attempts in achieving mass adoption.

Features such as recurring payments are going to be implemented soon. Many of these features are described under the Adoptability section.

The official BitCash wallet aims to provide most of the business tools and functionalities of to-day's internet banking.

## 3.8.4 Software Integrations

BitCash aims to be able to easily pluggable into widely used accounting software such as Xero or Intuit. This is an important cornerstone in merchant-wide adoption of BitCash and has been a hassle for many cryptocurrencies for a long time.



#### 3.8.5 BitCash Stable

A new functionality BitCash announced, called "BitCash Stable" is said to be implemented in proof-of-concept stage in the announcements channel of the BitCash Discord server. [5]

BitCash wallets will be able to store and transact a new currency: "BitCash Dollar". BitCash and BitCash Dollar will be convertible to each other as transactions on the blockchain. The miners will settle on the BITC / USD rate for each block and make the conversion accordingly. The BITC / USD rate will be provided by API responses from the exchanges BitCash will be listed on.

While this feature could possibly bring a whole set of new problems, it could potentially provide stability for retail users while keeping them on the BitCash ecosystem and incentivizing investors to acquire the potentially volatile BitCash currency.

#### Usability Score: 10 / 10

BitCash is on the right track towards achieving its goals. We have awarded 1 point each for the payment processing use case, its leading UX, features for more simplicity, integrations, adds 1 point. Thus, Bitcash scores an astonishing score of 10 for usability.



## 3.9 Monetary Policy

How much of the supply is controlled by the founders? How dispersed is the economy? How inflationary or deflationary is the currency's model?

BitCash has a limited supply of 100,000,000 BITC. [3] However, with the proposed BitCash Stable feature, this total supply could be fluctuating. [5] Therefore, we have put an approximation sign for the maximum supply in the summary section.

There is a 9.7% pre-mine of the maximum supply by the founders and also an ongoing 10% developer reward from each block mined. [3]

We have calculated that approximately 67.81% of the current supply is in control of the developers:

$$100,000,000 \times \frac{9.7}{100} = 9,700,000$$
 
$$9,700,000 + (15,100,000 - 9,700,000) \times \frac{10}{100} = 10,240,000$$
 
$$\frac{10,240,000}{15,100,000} = 67.81\%$$

It is claimed that a big portion of these developer rewards is awarded to the community through bounty programs. [5] However, BitCash team could be more transparent on these distributions.

The BitCash team has stated that the developer reward will eventually be removed with a hard-fork [5]. However, this trivially simple hard fork, which would likely be accepted by miners unanimously, is not in the road-map as of January 21, 2019.

On the other hand, BitCash Stable project could be sustained without increasing the maximum supply for a long time if the pre-mine could be used for it. This might keep the cryptocurrency's price from dropping substantially, thus protecting its investors.

We view this scheme to be poorly designed. The total amount of coins the founders' control is way too much and there are no guarantees that such power will not be misused. A better design would be either having a pre-mine or block reward but not both. It would possibly be even better if the coins allocated to the team were unlocked through hitting milestones.

Currently, the top 100 addresses control around 98% of the circulating supply. We view this as an unhealthy economic distribution in the network [2].

The allocation of the pre-mine, developer reward, and the unfair economic distribution is a great concern and should be properly addressed by BitCash. It is clear that the team has not given much thought on this distribution.

## Monetary Policy Score: 3 / 10

Starting from a baseline score of 5, BitCash has lost one point for a huge number of BitCash being in control of the team. It has lost another point for being careless on this subject and gained a score of 3.



## 3.10 Legal

How does it look from a legal perspective? Is it possible for governments or authorities to crack down on this?

BitCash is a rather strong cryptocurrency from a legal perspective. It could be one of the last cryptocurrencies authorities could be hindering.

#### 3.10.1 Compliance

The novel "Private Master Key" mechanism is a mechanism that might attract businesses and authorities.

This is one of BitCash's key features as they have stated, in hopes of giving authorities and businesses the confidence to integrate BitCash into their economies.

By enabling its users to make transactions in private, but with the ability of the authorities monitoring them, BitCash could be adopted by a variety of corporations. Authorities and businesses might prefer a cryptocurrency like BitCash over both open blockchains like Bitcoin, and private blockchains like Monero.

While we have raised our concerns about this subject previously in this analysis, there is a slight possibility that BitCash's approach might prove to be a right one for mass adoption.

#### 3.10.2 Accounting

Citizens around the world are responsible for claiming their financial states, and cryptocurrencies are increasingly subject to taxes around the world. BitCash's promised features on helping accounting chores of their users with features and integrations are worth-wile under these circumstances.

#### Legal Score: 8 / 10

BitCash scores 8 under this title. We have added 1 point for the team's approach to authorities, 1 point to businesses being able to integrate with BitCash compliantly. The last point is awarded for accounting integration for BitCash users.



## 4 Conclusion

## A1 Rating: BBB

A1 Ratings are determined by following our methodology described in the next section.

Breakdown of the scores and their arithmetic average is provided below:

Section	Score
Market	6
Opportunity	8
Adoptability	6
Security	6
Technology	6
Community	8
Team	4
Usability	10
Monetary Policy	3
Legal	8
Average	6.5

Averaging all the scores of BitCash, we arrive at a numeric A1 Rating of 6.5, which corresponds to an A1 Rating of BBB.

#### Listing

A1 Rating of BBB allows a project to be listed on A1 Exchange.

Consequently, A1 Exchange has decided to list BitCash on BITC / BTC and BITC / ETH markets.

## **Analysis Versions**

This analysis has been published on January 21, 2019.

Updated versions of this analysis will be made available on http://a1.exchange/analyses/bitcash.

All versions of this analysis could be retrieved from the following repository: https://github.com/A1Exchange/a1-exchange-analyses



# 5 Methodology

A1 Exchange research committee analyses cryptocurrency projects for listing the deserving ones on A1 Exchange. To be able to select the projects with the highest potential benefit to A1 Exchange, we follow standardized procedures, as described in this section, to ensure consistent analyses and ratings. Our methodology is developed to be systematic, and rigorous to maintain the high quality of A1 Exchange analyses and their comparability across different projects.

To fulfill our commitment to transparency to our users, and to get feedback on our decision making, we publish these reports with the public.

#### 5.1 Resources

The analysis process starts by obtaining information about the project. The projects considered for A1 Exchange are usually in their early stages, which makes it difficult to find objective secondary resources on them if any. Therefore the research committee usually consumes primary resources while preparing analyses.

Primary resources mostly consist of papers and content written by the project team.

These resources may include public conversations on Telegram, Discord, Slack, Gitter, and email groups. In case the resource of a public conversation used in the analysis could not be referred through a URL, the citations include the relevant quotations with the available information such as channel name and date.

In many cases, we are forwarding our questions to the team of the project or other parties. These conversations could affect the analyses, but not cited unless explicitly allowed.

The research committee conducts a reasonable investigation of data accuracy and fact-checking. However, to a certain extent, A1 Exchange relies on information it receives from sources to be credible.

## 5.2 Analysis Topics

Projects are rated under the following topics: Market, Opportunity, Adoptability, Security, Technology, Community, Team, Usability, Dilution, and Legal. These topics are determined to cover all aspects for a project to be worthy of being listed on A1 Exchange.

Projects are given a rating for each analysis topic. These ratings are used to calculate A1 Rating and A1 Exchange's decision on listing the project.

Each topic rating starts at a baseline rating of 5 and goes up or down from there. A rating of 5 is average. Any rating above 5 should be considered above average, whereas only ratings below 5 are below average.

Ratings are decided unanimously by the research committee and explained in detail for how they vary from the baseline under their topics.



## 5.3 A1 Rating

A1 Exchange rates projects with the following letter ratings: AAA, AA, A, BBB, BB, B, CCC, CC, C, D, and E. These ratings correspond to number ratings from 10 to 0. Since obtaining a rating of 10/10 or even 9/10 is very unlikely for a project in our rating methodology, A1 Ratings are given as letter ratings.

A1 Rating is calculated by taking the mean average of the ratings from analysis topics and rounding the average using half round up method to the nearest integer. Then, A1 Rating is derived from the integer numeric rating.

Only if a project's A1 Rating is AAA, AA, A, or BBB, the project is eligible to be listed on A1 Exchange.

As with everything else in A1 Exchange analyses, A1 Ratings do not constitute investment advice. For more information, read the **Important Disclaimers** section below.

#### 5.4 Updates

A1 Exchange ratings are typically monitored on an ongoing basis. We accept feedback and recommendations for our analyses. Feedback for our analyses through our public GitHub repository issues is welcome. [9]

Analyses are subject to scheduled reviews typically a year after the last update.

Changes in our methodology are applied to both the new and the existing analyses. A review of existing analyses will be completed within six months after a methodology change.

Upon an analysis review, the project's ratings could be updated. In case the A1 Rating falls below the listing threshold, the project could be delisted from A1 Exchange, following the delisting procedure.



# 6 About A1 Exchange

Our vision with A1 Exchange is being the platform only for the best cryptocurrency projects and traders. In order to make this possible, we have several processes that we execute before listing a new project. We focus on the fundamentals when choosing a new project to list on the platform.



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# 8 Important Disclaimers

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To the extent permitted by applicable law, we may record telephone calls and monitor electronic communications to comply with our legal and regulatory obligations and internal policies.

Personal data will be collected, stored and processed by A1 Exchange in accordance with our Company's Privacy Policy. For further information regarding our regional privacy policies please refer to the EMEA Privacy Policy; for locational Asia Pacific privacy policies, please click on the respective links: Hong Kong Privacy Policy, Australia Privacy Policy, Taiwan Privacy Policy, Japan Privacy Policy, and Singapore Privacy Policy.

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