

Cashbery Coin (CBC)

White Paper

Cashbery Coin © 2018

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<https://www.cashberycoin.com>

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Introduction

Cryptocurrencies have entered into our lives and become increasingly important. Many people were attracted by the impressive market growth in 2017; we can notice a positive trend on any long-term period through many indexes. However, each of the five cryptocurrencies with the biggest capitalization has some major setbacks as of the first quarter of 2018 which make them inefficient as a payment system; developing new solutions is very slow.

Ethereum-like networks have been created for the smart contract using which makes them even more unusable as payment systems. Some networks, Ripple-like, have been developed as centralized venture startups, that's why we can't consider them as protected way of transferring of the value. The Bitcoin Cash and the Litecoin are derivatives from the Bitcoin network. They appeared as upgraded and advanced versions of the primary network, however, they have an arguable reputation because of the informational noise, accompanying to their launching and development, and distrusting from many Bitcoin users.

So, despite the global interest in cryptocurrencies, there are no technical solutions, that is decentralized and independent from third parties, which can fully provide safety of transactions and confidence in blockchain-based payment systems on the market. The **Cashbery Coin** is intended to be such solution, using **PoW/PoS** algorithm for providing decentralization, safety, speed and low transaction costs.

Cryptocurrency definition

Cryptocurrency is a digital currency that uses encryption (cryptography) for the provision of emission and transaction verification. Transactions are enroll in a decentralized registry called the blockchain. Mining issues currency units.

Cryptocurrency market overview (according to 2017-2018 data)

- The total capitalization of all cryptocurrencies increased from \$18 to \$800 billion in 2017. The market grew up by **3,550%**.
- Bitcoin - the first cryptocurrency ever - had \$972 rate on the January 1 and **\$13,411** rate on the December 31. Moreover, the maximum rate was in the middle of the December - **\$20,000**.
- Litecoin - popular Bitcoin derivative - rose up by **5,300%**.
- Ether cryptocurrency, used in the Ethereum network and intended for the smart contract using, had a growth rate of **10,000%**.
- Ripple, created for international transactions, rose by impressive **43,000%**.

Despite the fact, that there was significant cryptocurrency market growth in 2017, the current total capitalization is **\$264,000,000,000**, which is a comparably low amount for the conservative currency system. We can conclude, that there still will be great cryptocurrency market growth against the aggressive investors and customers' interest background. At the same time, there is a number of obstacles on this way, and many of them are due to the imperfection of cryptocurrency systems themselves.



Current cryptocurrency market problems

Low speed of transactions

One of the main cryptocurrency disadvantages is the low speed of transactions in whatever current algorithm is using. Blockchain technology, developed as the solution that provides high-speed of transactions, mostly cannot compete with traditional ways of payments.

It is obvious today that those problems associated with scalability are the prime cause of the low speed of transactions. The number of cryptocurrency network participants grows; the number of transactions waiting for validation multiplies too. It is a high-cost occurrence for the highly volatile cryptocurrency market. Traders working with cryptocurrencies often incur losses because the transaction has been delayed and did not take place in time.

There are only a part of cryptocurrency market problems listed above, however, they can affect the efficiency and stable growth of the market, and trading. The progress is necessary for every cryptocurrency system, and it could be provided only by a solution sensitive to market tendencies and problems.

High transaction costs

Transaction fees are very high in the majority of peer-to-peer networks. Through the Bitcoin network example, we can find that the price of the fastest transaction is calculated using following formula - 10 Satoshi for 1 byte. Statistically, the average size of the transaction is 225 bytes, therefore average transaction fee is 2250 Satoshi or \$0.15 at the current exchange rate (1 Satoshi equals 0.00000001 BTC), while the highest average transaction fee had reached \$32 in early 2018.

The Ethereum network calculates transaction fees amount taking into account difficulty of the smart contract. Average transaction fee varies from \$0.17 to \$4.15 according to the statistics for the 2018 year that is much bigger than what traditional payment systems have.

PoW algorithm (Proof-of-Work)

Description

Proof-of-work (PoW) is a protocol with the main goal to prevent cyber-attacks, such as DDoS.

This conception had existed before Bitcoin appearance, but Satoshi Nakamoto applied it for his digital currency, which led to a drastic change in traditional transaction system.

Perhaps, the Proof-of-work is the most valuable idea in the Satoshi Nakamoto's Bitcoin White paper, because it let reach the distributed consensus under low confidence. It means that participants would not depend on any centralised transactions verifying institute in systems using such algorithm; the system will be stable in spite of losing some participants.

Proof-of-work consensus algorithm showed its efficiency in the early stages of the first blockchains: Bitcoin, Litecoin, Ethereum, etc. However, there was some serious disadvantages and limitations found which do not enable them be an appropriate instrument in transferring of values, comparing to the traditional payment systems, like VISA or MasterCard.



PoW algorithm problems

Mining

Every blockchain transaction should be validated for being successful. There is a group of network participants that is in charge of transactions accounting, called miners. A cryptocurrency mining suggests the presence of powerful computers for solving rigorous equations. Solving these equations, miners compete for a capability of generating next block in the chain and taking the reward for that: new coins in the network. They also could get fees from transactions added to the block.

Different microchip manufacturers started producing special devices for cryptocurrency mining after the demand had increased. The previous generation of these devices became useless after the new one came into use.

With the decentralized consensus reached by the Proof-of-Work algorithm, miners consume a big amount of electric energy. In 2015, each Bitcoin network transaction spent half more than a usual daily electricity consuming of the US household.

All electric consumption spending are paid in fiat currency (USD, EUR, etc.), that leads to constantly increasing pressure on digital currency rates.

Some experts had concluded in recent researches, that Bitcoin network transactions would consume the same amount of electricity as countries like Denmark.

Many developers raised concern about that, and some of the communities, like the Ethereum Foundation suggest using Proof-of-Stake (PoS) algorithm for providing cheaper and ecologically safer reaching of the distributed consensus.

Centralization

Decentralisation means the distribution of the network, by which transaction must pass third-party verification on the condition to choose a third party for it.

Centralization technically implies that transaction should pass verification by fixed third-party, however, this term usually uses for naming the network with a limited number of current intermediaries. Thus, we can consider banking system as centralized one, because of the necessity to cooperate with banks to work inside such system.

Bitcoin and Ethereum themselves are peer-to-peer networks, not centralized; nevertheless, they both rely heavily on such groups of participants like miners and mining devices developers. At the same time, the majority of high-performance mining pools are in China because of the cheaper or even free price for electric powers. We can make a conclusion that Chinese government influences miners hugely since the most of them are under the Chinese firewall. The Chinese government can limit mining if cryptocurrencies will be a threat to RMB - official Chinese currency.



PoS algorithm (Proof-of-Stake)

Proof-of-Stake is an alternative way of transaction validation and reaching of decentralized consensus. PoS is a peer-to-peer networks algorithm with the same goal as PoW, but it uses a different approach.

For the first time, Proof-of-Stake conception was proposed at the Bitcointalk forum in 2011, the first cryptocurrency using this algorithm was Peercoin in 2012, as well as Nxt, ShadowCash, BlackCoin, Qora, NuShares/NuBits, and Nav Coin.

With the Proof-of-Stake algorithm, a new block miner is chosen depending on the number of coins in the account (Stake), unlike Proof-of-Work algorithm, where miners are rewarded for solving mathematical equations aimed at transactions validation and new blocks adding; miners can even have no cryptocurrency in the network where verified transactions with the PoW algorithm. It means that miner working with the PoW algorithm have no motivation for supporting network durability because it is possible to choose any cryptocurrency for mining without limitations.

Validator selection

Systems with the PoS algorithm require that the validating person (forger) owns some amount of coins in a wallet, it is chosen by a random-looking way depending on the number of coins in the account.

In most cases of using PoS, units of cryptocurrency generate with system launching, and their amount is fixed. That way, the transaction fee, instead of cryptocurrency units used for rewarding a validating person. New coins instead of the fee created in some cases.

The validator should freeze some amount of own coins called stake for transaction verifying, and for adding a new block; a person will forfeit stake in cases of approving a fraudulent transaction, also will not be able to approve transactions. In theory, this individual will engage in fair and valid transactions.



Cashbery Coin (CBC) cryptocurrency and its algorithm

Overview

Cashbery Coin is an internal transactional instrument of the new generation. Cashbery cryptocurrency is an ideal value transferring resource for the Cashbery ECOSYSTEM environment due to high speed transaction and low fee. The Cashbery ECOSYSTEM provides decentralized currency for end customers, and the possibility of attracting new participants into business operations and loyalty schemes for a businessperson, because Cashbery Coin is easy to use, safe, and transparent. Application of the distributed registry, in which all data is synchronized with the whole network, almost completely except possibilities of fraud, double charges, chargeback, and unauthorized transactions.

Algorithm of consensus

Cashbery was created for solving different problems of currencies that exist in the market, like Bitcoin and Ethereum, which have no sufficient speed of transaction, are not decentralized enough. Besides, they have a quite high transaction fee due to nature of initial implementation.

Cashbery combines two algorithms of consensus, the Proof-of-Work, and the Proof-of-Stake. The PoW is used for initial coins distribution and for maintaining the security of the network before it will have been highly-decentralized. The PoS will provide scalability and reliability at the later stages of development without forcing participants of the network to use a large amount of resources like electricity for transaction validation.

Mining with the PoW algorithm will be impossible after block, 500,000th, the network will use the PoS algorithm of consensus. To generate Stake blocks, a user should have a non-zero Cashbery Coins balance available for transaction validation. The amount of reward for block creation depends not only on Cashbery Coins balance but also from the duration of the period that coins are holding on the account. Thus, stake weight is calculated as follows:

$$\text{Stake Weight} = \text{Stake Volume} * \text{CoinAge}$$

This formula calculates transaction validation reward for PoS-mining:

$$n\text{CoinAge} * \text{COIN_YEAR_REWARD} * 33 / (365 * 33 + 8)$$

Where **nCoinAge** is an age of the coins in the wallet



CoinAge = **bnCentSecond** * CENT / COIN / (24 * 60 * 60);

bnCentSecond is a sum of Cents multiplied by a transaction age for all incoming transactions for the current balance; 1 Cent = 0.01 CBC.

COIN_YEAR_REWARD = 0.1% of yearly yields; it is a year reward, calculating from the number of coins in the wallet.

PoW is made by a hashing algorithm called Scrypt which is use for transaction validation in such popular networks as Litecoin, DogeCoin, and more than 500 others.

With PoS and PoW methods combined, the target speed of the new blocks generation at the early stages of Cashbery Coin ecosystem development will be:

- 1 block in a minute (1440 blocks per day)

Such combining of consensus algorithms will provide essential advantages compared with the majority of popular crypto coins at the present market whether in fee for the transaction (standard fee is 0.0001 CBC) or in the speed of transaction.

The initial Cashbery Coin issue is 90,000,000 CBC, and the supply limit is 100,000,000 CBC, which means that the creation of extra coins will stop in a certain moment of time; it will allow preventing value decreasing with a network growing slowing down on a long-term outlook.

The Cashbery Coin area of application

For customers

Private users of Cashbery network can use Cashbery Coin in everyday activity, getting all advantages of the new technologies for the cooperation with each other and for mutual payments:

- Cashbery transactions go through the Internet without the participation of third-sides. Therefore, the transaction fee is less than the fee in banks, for example. Cashbery Coin fits to **use for any transactions: big and small ones.**
- Cashbery Coin has no connections with any centralized issuing institute in any country, it means, that coin is **easy to use for international transactions.**
- The Cashbery Coin wallet cannot be frozen; cryptocurrency does not have any controlling organization. That provides **free distribution and circulation of CBC.**
- There is no precedent conditions or banking information requirement for making transactions.
- There are no transaction limits. It is **possible to transfer any amount of coins as many times as it takes.**
- A high level of protection from hacking, fraud, forgery. That is why Cashbery Coin is **perfect for saving and accumulating values.**

For business

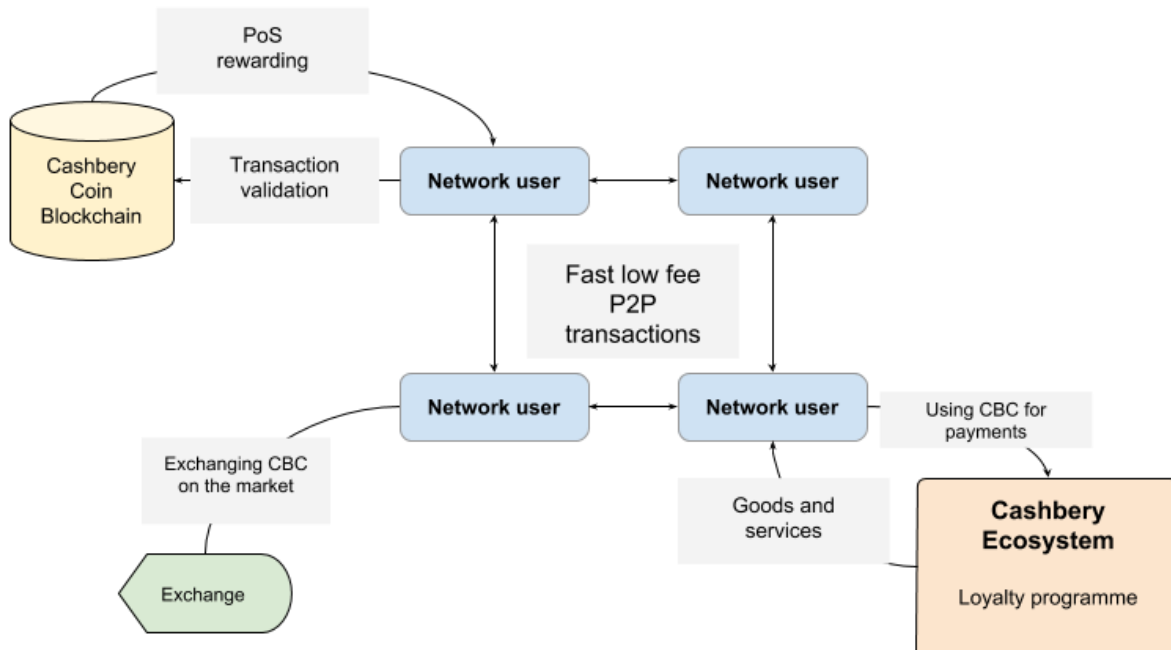
An introduction and using of the Cashbery Coins and Cashbery ecosystem by business companies gives next advantages: low charge for the circulation, strong reliability, and easy scalability.

Companies get the opportunity to operate Cashbery Coins for accounting, providing safety of transactions, and loyalty schemes on every level. Cashbery is an optimal instrument for the small enterprise development. It is a payment system which easily integrates into network exchange, or



into the real economy, starting from online shops, discount providers, delivery services, media, to the banking sector and the real estate industries.

- Because of the low barrier of entry, any business do not need to spend many resources for accepting Cashbery coin;
- It is easier to connect Cashbery payment system to websites and mobile apps.



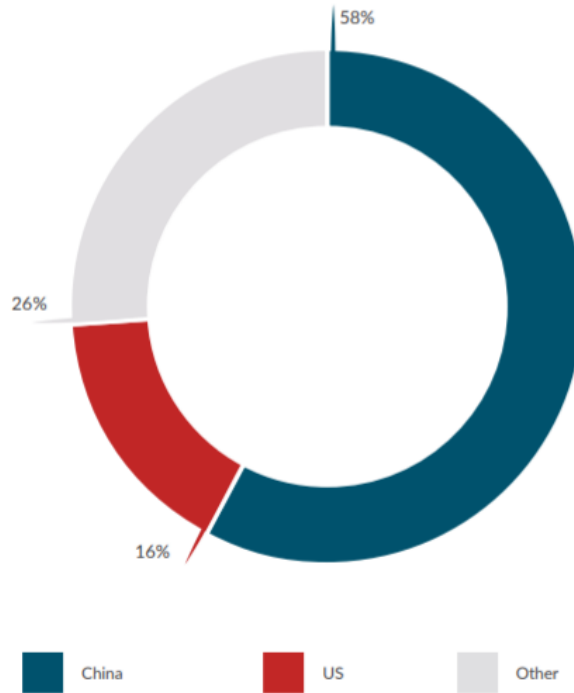
Cashbery Coin advantages

Decentralization

Cashbery is a decentralized currency. **Firstly**, that based on the method of the initial distribution by regulated and transparent selling of coins for the future network participants who are interested in network stability and development. **Secondly**, that based on PoS and PoW combining.

Decentralization is the fundament of any true cryptocurrency. Unfortunately, cryptocurrencies with the big capitalization and distribution are not decentralized enough because of the consensus algorithm using. The perfect example is Bitcoin: almost 60% of these network miners are situated in the PRC territory or into its legal competency:





The correlation between miners from PRC and from other countries

Forecasted transaction speed

Another key advantage of the hybrid Cashbery algorithm is providing fast transactions even in conditions of network-critical load. Cashbery Coin is the simple and elegant solution for providing transactions of the new generation.

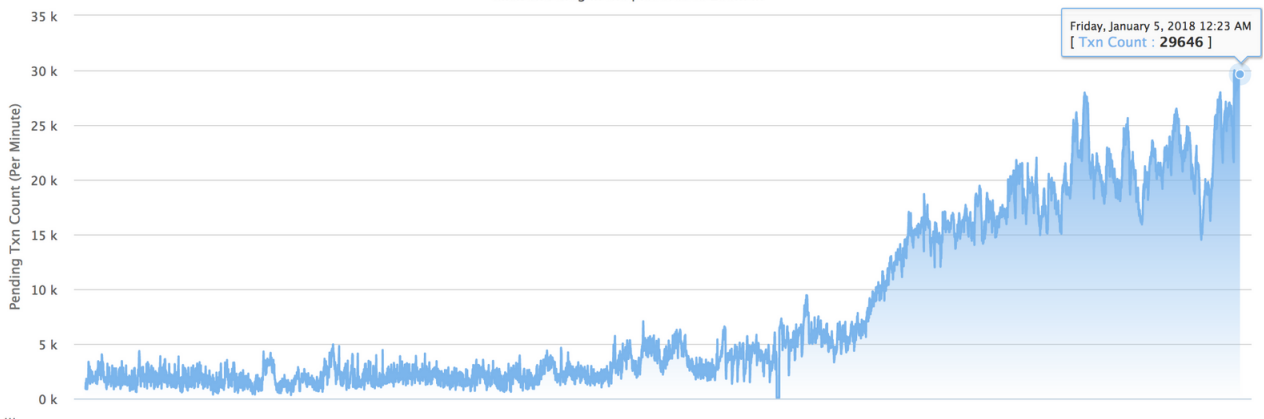
Most of the modern cryptocurrencies show poor network capacity and unpredictability under the heavy parallel traffic condition.

In 2017, there was decentralized game-application created, called CryptoKitties which was developed for the Ethereum network, showed how badly this blockchain is ready for big loads. As a result, there were significant transactions delays inside the Ethereum network, smart contracts malfunctions, and, hence, a loss of trust and value.



Ethereum Pending Transactions Queue - Time Series

Source: Etherscan.io
 (From 12/31/2017 to 1/5/2018)
 Click and drag in the plot area to zoom in



The growth of pending transactions amount, waiting for validation in the Ethereum network from December 2017 to January 2018

Security

Cashbery uses proved cryptography methods - with a separation to public and private keys - for keeping access keys to the account. Many companies, including banks and big exchanges, use same algorithms for information protection. Besides, the Cashbery wallet application is securely protected by a password, even if the hacker gets access to the device the wallet is installed on, money cannot be stolen.

The CBC roadmap

01.03.2018 - 30.05.2018	<ul style="list-style-type: none"> • Preparing of Token Sale
01.06.2018 - 30.06.2018	<ul style="list-style-type: none"> • Token Sale (3 stages of 10 days each)
01.07.2018 and so on	<ul style="list-style-type: none"> • Opening of the Cashbery Foundation offices in different countries for popularisation Cashbery Coin, and increasing the support • Adding CBC at regional exchanges • Further development of the Cashbery Blockchain accordance with tendencies of the cryptocurrency market and blockchain technology



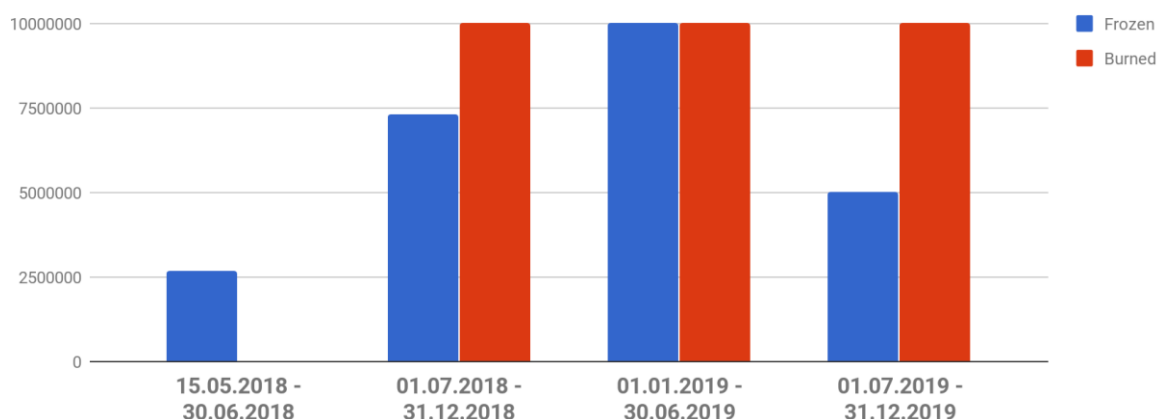
The global expansion plan

	Countries	Exchanges
Russia + CIS	Russia, Ukraine, Kazakhstan	Polyx, Exmo, C-cex, Kuna, Liqui
Latin America	Brazil, Mexico, Colombia	mercado bitcoin, bitcointrade, Bitex Bitso, Volabit, Bitex
Africa	South Africa, Nigeria, Ghana	ice3x, Luno
South-East Asia	India Thailand Indonesia	Unocoin, Zebpay, koinex TDAX IndoDAX
	Turkey Poland the Netherlands Australia Canada Arab Emirates Norway South Korea Japan	BTCTurk Bitmarket BL3P, Bitonic, LiteBit, Bitrush, CleverCoin CoinSpot, CoinTree, Btcmarkets QuadrigaCX, Coinbase, Kraken, Coinsquare BitOasis Bitcoins Norway bithumb, coinone, korbit Bitflyer, Quoinexchange, Coincheck

The initial coin offering (ICO)

Initially, 90,000,000 CBC will be created, and 5% of them (4,500,000 CBC) will be available for sale during the ICO: the remaining amount will be frozen in Cashbery reserve. Burning coins from the reserve would proceed according to a defined schedule:

Frozen and burned currency amount



The primary distribution will be via Cashbery platform (www.cashbery.com)



Such distribution will prevent decrease in the value of the coins while advancing on the open market and will give no opportunity for malicious users to attack the registry by writing invalid information into the blockchain. The rest of the coins reserve will be burned by little pools after reaching the required growth ratio, this will prevent the CBC depreciation and will not allow the lack of liquidity for the big amount of coins free circulation. In addition, the gradual pools burning is necessary for smooth issuing of new coins, which stops CBC volatility rate from rising.

ICO Terms and Conditions

ICO limit for the open sale (%)	5%
ICO limit for the open sale (total)	4 500 000 CBC
Coin price at the ICO stage 1 (USD)	\$1,0
Coin price at the ICO stage 2 (USD)	\$1,2
Coin price at the ICO stage 3 (USD)	\$1,4
Coins rate forecast at entering the free circulation stage	\$1,6

The goal of the initial coin offering

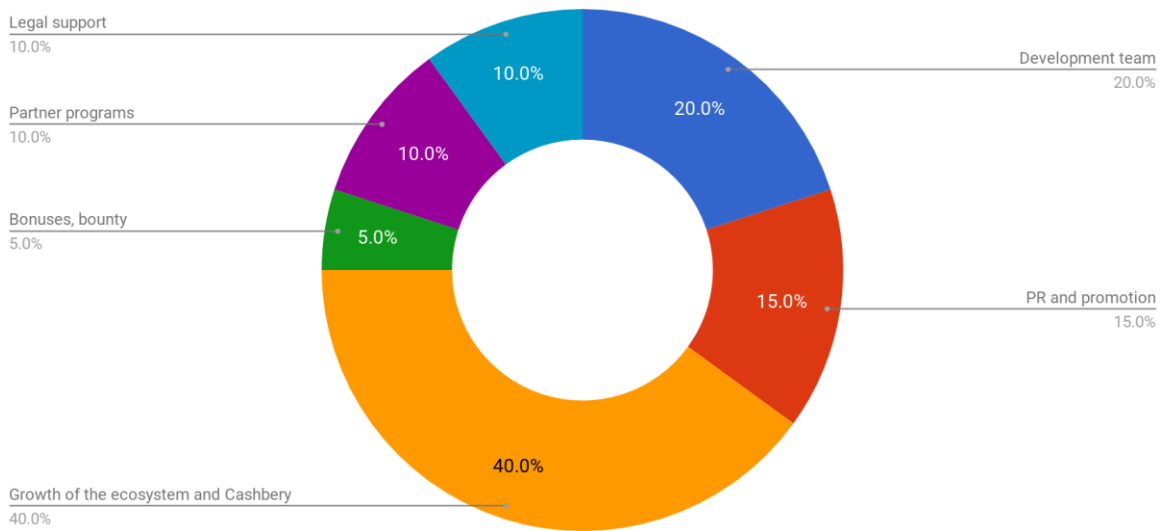
The algorithm which architecture involves supporting the network by participants which is the most concerned in owning and using CBC is the basis of Cashbery. Cashbery network will be built on PoS principle in which the main responsibility for the transaction validation falls on participants holding of Cashbery Coins amount; the reward for block generation is proportional to ownership ratio. Following this principle, Cashbery will implement the primary coin distribution through ICO approach, in which the most concerned participants could join the network at the launching stage. So, the fairest coins distribution in which the most interested network users would get early access by the lower price will be realized, that also will significantly enhance the resilience of the Cashbery economy.

Resources obtained during ICO will be allocated for development of the market, Cashbery communities all over the world, also for attracting and integrating partner programs into the ecosystem.

The application of obtained resources

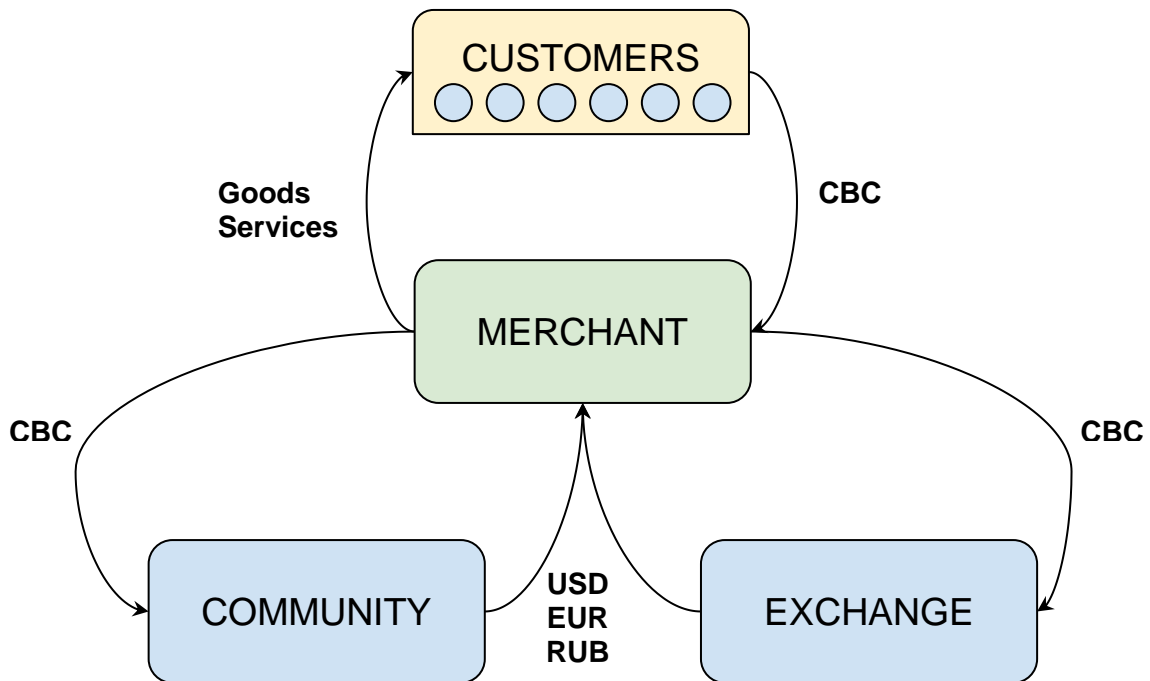
Money getting after initial issue of Cashbery Coins will be distributed by the next way:





The Cashbery ecosystem

Cashbery ecosystem is a flexible and convenient solution which provides high speed of transaction and functionality in partner programs, supports reliability. Thus, new participants could promote loyalty programs and attract users into different sectors supplying goods and services.



Cashbery network user can pay directly by CBC for goods and services of ecosystem partners, after that Cashbery coins could return to the circulation right after selling them on the open market. Such solution is an advantage for companies wishing to get access to the growing market of the network. Companies that which provide rental services, carsharing, carriage and flight services, delivery services, hotels booking services need to use safe and verified transaction; users gain a big advantage of fast transactions with low fees without any danger of double spending and charge-back.



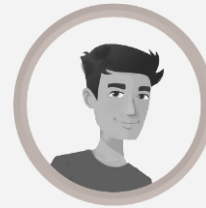
Team Cashbery Coin



Andrew
CEO

- Private entrepreneur
- With the crypto currency since 2013
- Owner of 3 online businesses

The entrepreneur, a crypto-enthusiast, founded 3 successful companies in Digital. Thanks him several companies from small local steel large and entered the international market.



Vasily
CTO

- Expert in Python and C ++
- 6 years of management experience
- Worked in Microsoft

Vasily is a professional in development who has formed a team of cool programmers, and is currently working on improving the CBC platform.



Lada
CFO

- Expert-analyst of leading Russian companies
- Experience of 3 successful ICO projects
- Experience in developing loyalty programs

CFO, has more than 2 years of experience in cryptotrading and more than 10 years of international VC experience; invested in many international projects, participated in the launch of cryptotenes on the market. Aimed at the result, sees a great future for the Cashbery Coin.



Aleksandr

Head of Strategic Development

- Leading blockchain strategist
- Worked with leaders of the blockchain world
- Created "success strategies" for companies over 7 years

Director of Strategic Development, the founder of several successful start-ups, has more than 12 years of experience in senior positions in international companies. This is the driving force of Cashbery Coin. Promotion of the coin and its value - his responsibility.



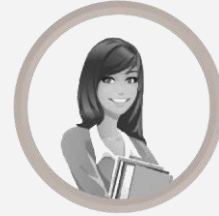


Ivan

Head of Marketing

- In digital marketing since 2005
- Purchased Yandex.Direct by CPM
- Worked in banks and large financial organizations
- Engaged in crypto marketing for more than 3 years

For his experience, he was able to reach record figures for all projects. It is he who heads the most important and necessary part of the project Cashbery Coin - marketing. All that you see in the information space about the coin is his credit.



Margarett

Head of PR

- More than 7 years of work in SMM
- Knows all about reputation
- In the previous experience - government PR
- Launched several PR campaigns with millions of coverage

Great experience with foreign media, as well as with west start-ups. Placement in the press, issues of cooperation, partnership, building communications with customers - all this on Margarett.



Yaroslav

Ecosystem developer

- In loyalty programs since 2007
- Participated in the development of the club Mnogo.ru
- Experience in implementing product analytics

More than 4 years managed the loyalty programs of a major mobile phone operator. Responsible for the development of the Cashbery Coin ecosystem, the attraction of new sites and merchants. He considers the Cashberycoin ecosystem to be ideal for building large loyalty programs.



Alexey

Operating Director

- Works in banks and financial institutions since 2004, operational director since 2006.
- Participated in the development of the crypto exchange

The director for over 14 years worked in financial institutions, built operational processes and financial monitoring. Adapted bank KYC and AML-standards for operations with crypto-currencies. Responsible for the processes and interaction of units.



Advisors



Roman Dumler
Adviser

An entrepreneur with over 10 years of experience in information technology and marketing. Has a huge experience in the supply of high-tech equipment and software.

Investing since 2008. At the current time, ICO projects and the crypto-currency market are the most promising market for investments.



Alexandr Belousov
Ecosystem adviser

2 higher education (economic and legal).

More than 10 years of experience in the business. Expert in insurance and financial consulting. Represented the interests of American hedge funds and large European companies in the segment of life-saving life insurance. Specialist in the field of scaling and partner programs. An investor with a lot of experience. Crypto-enthusiast.

