FuturoCoin

Peer to peer electronic cash system
for instant transaction
To cope up with this fast progress of the economy we developed an extraordinary idea of “FuturoCoin”. The market is demanding faster and more secure coins which can be utilized for all market transactions and are time and security sensitive. Since FuturoCoin aims to remove the current barriers in the cryptocurrency, it will open new doors in the economy which makes this a perfectly timed coin and technology for the market. We developed a user-friendly and secure digital currency to create a world which is faster and smarter which uses cryptography to secure the transactions, do not need any institution which settles the transactions and is borderless.

We have used Dash as a codebase for FuturoCoin. Dash is a cryptocurrency which aims to become an on-chain scalable currency and is the first currency which is decentralised & have autonomous system.

FuturoCoins exceptional idea for the impending future of cryptocurrency is to combine proven solutions with innovative technology. We are proud of ourselves to be in this sector where we can shape the world by making it smarter and secure. FuturoCoin have a clear vision of the future plans and will emphasize on building a strong team from your support to create a world more opportunistic and organized.

“Crowd is Powerful”

During dictatorship people were not happy because of their king’s dominating and selfish attitude. In that scenario people had least control over their finances and lives. So, people replaced dictatorship with democracy where they will have power to choose governing authority which can give control on their lives and they can choose main operational authority as government. So that, across the world government can manage finances of people across the globe responsibly. In this era, people are not happy even with the government because it is corrupted and again taking the shape of dictatorship. So, people have decided to take direct control of their finances and operational activities by the use of blockchain and its currency.
Bitcoin and other cryptocurrencies use a distributed network and database system called the blockchain to acquire consensus across all system participants. This approach requires time needed to confirm all pending transactions in the queue to protect against double spend attack. A double spend is the situation where an attacker tries to send a transaction to a merchant and at the same time sends the other one with the same coins to himself.

Confirmation time varies across hundreds of cryptocurrencies in existence. In Bitcoin it takes at least 10 minutes on average, but the number of confirmations needed depends on merchant security. It is assumed that to be fully certain one needs to wait for an hour which is about 6 confirmations.

Today e-commerce undoubtedly cannot wait for such a long time with delivering the goods. FuturoCoin is created for resolving this problem and guarantees instant transactions with the constant fees at the competing level.
Mission

At FuturoCoin our aim is to make digital cash easy to use and accessible to all users around the world. Every human on earth should have the right to use the full potential of the blockchain, store the value, join our payment network and get access to fast and cheap transactions in everyday payments.

Vision

Our vision is to make a change in the fundamental structure of world’s economy and banking systems by transacting, investing & spending FuturoCoins in same way as any other traditional currency but in a much faster, transparent and secure way.
Background and introduction

Cryptocurrency VS FuturoCoin

Before knowing and understanding FuturoCoin, we first need to focus on cryptocurrency and how FuturoCoin fits well with all the features of cryptocurrency.

“Cryptocurrency is totally P2P version of digital cash which encourages online payments from anywhere in the world within two parties without the intervention of third party.”

This is how Santoshi Nakamoto described cryptocurrency in his first Whitepaper of a cryptocurrency named Bitcoin. It sums up the features and the basic principle on which cryptocurrency was invented. In 1995, Tim May announced the call to the Cypherpunks group and asked them to invent a decentralised digital currency. Amongst other members of the group who responded to the call was Nick Szabo, Hal Finney, Adam Back, Tim May and a few more others. They started some projects like Hashash, Bmoney, and BitGold but didn’t gain much success. In 2007, right in the middle of the economic crisis, Satoshi Nakamoto appeared out of thin air and introduced the blockchain idea which connected all previous concepts in a brilliant way. SHA-256 was used as a cryptographic hash function, as its proof-of-work scheme. On January 3, 2009 the revolution began with the mining of first Bitcoin block or genesis block. Bitcoin source was published so that it can maintain transparency. This move changed the cultural and technological paradigm, which ultimately modified the way people used to transfer currencies and after that many other blockchain projects came into existence. The current scenario is that blockchain is not only used for transferring currencies but also helps to resolve many real time problems.

To sum up, every public cryptocurrency to be called by such name must meet the following conditions:

- its source code must be published and publicly available
- the ledger containing historical transaction must be unalterable
- is decentralised
- cryptography should be used for security purpose
- is digital
- no authority should be given the power to interrupt the process
- there is no institution which settles the transactions
- no one has control over issuing its electronic tokens
- transactions are borderless
- every person in the world should be able to access it
Now, we will discuss how FuturoCoin fits well with the features of cryptocurrency.

Let’s end this with Crypto Anarchist Manifesto quotation: “Just as the technology of printing altered and reduced the power of medieval guilds and the social power structure, so too will cryptologic methods fundamentally alter the nature of corporations and of government interference in economic transactions”
## Competition analysis

<table>
<thead>
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<th>Features</th>
<th>Bitcoin</th>
<th>Dash</th>
<th>FuturoCoin</th>
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<tr>
<td>Network Layer</td>
<td>Bitcoin works on the principle of one-tier network where there is only one layer of nodes.</td>
<td>Dash works on the principle of two-tier network where the second layer of node is master node.</td>
<td>FuturoCoin also works on the principle of two-tier network in which master node acts as the second layer of node. It will be more efficient than other 2 coins.</td>
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<tr>
<td>Rate of Transaction Verification</td>
<td>Bitcoin takes around 10 minutes to verify the transaction.</td>
<td>Since it uses two-tier network it takes sum of seconds to verify the transaction.</td>
<td>FuturoCoin hardly takes few seconds (and sometimes even less than a second) to verify the transaction and is much faster as compared to Dash and Bitcoin.</td>
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<tr>
<td>Mining</td>
<td>Bitcoin requires a lot of resources for doing the mining process.</td>
<td>Dash mining is extremely difficult and complex because it requires solving a lot of complicated math problems.</td>
<td>FuturoCoin mining procedure is same like mining of Dash.</td>
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<td>Transaction Fees</td>
<td>The transaction fees are quite high in Bitcoin.</td>
<td>Dash tries to minimize the transaction cost.</td>
<td>In FuturoCoin, the transaction fee is fixed and negligible as compared to other two coins.</td>
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Problems of current market

Problems of current traditional centralised banking system and its fiat currencies:

Government intervention - Banks have a disturbing amount of command over people's personal data and fiat currencies which ultimately troubles people.

Centralised Banking - When bank confiscates the account of a person for any reason, the procedures and process takes a lot of time.

Under-resourced economy - The inefficient and ineffective distribution of resources between people and economy is a current problem.

Financial Exclusion - According to a report published in 2018, it shows that there are more than 2 billion people of the adult community in the world who are either not accessing any the facilities by traditional banking system or are able to access only partial facilities.

Unsatisfactory systems and unfair practices - The current banking systems are not created to support local or global micro-economy, nor do they encourage financial inclusion.

Restricted numbers of clients - The number of clients is limited by country and system barriers.

Speed of Transaction - It takes several days and depends on the bank to bank relations.

Scalability - It is expensive and slow.

Transfer Values - The transfer values are limited and restricted by law and order.

International Transfers - It is restricted, slow and expensive.
FuturoCoin solution to all market problems

The solution to above problems is FuturoCoin. FuturoCoin will make the digital cash easy and accessible to all users in a much faster and secured way where no authority will be given in a single hand. It will promote digitalisation and decentralisation where people’s privacy will be respected and every human on earth can freely connect to its network.

Here are some solutions provided by FuturoCoin

**Fraud-proof:** When FuturoCoin is created, all confirmed transactions are stored in a public ledger. Identifications of coin owners are encrypted to secure the legitimacy of record keeping. Because the FuturoCoin is a cryptocurrency it is decentralized, you own it. Neither government nor bank have any control over it.

**Instant Settlement:** Ease of use is the reason why FuturoCoin will be in high demand. A smart device and internet connection is all you need for instant payments and money transfers.

**Accessible:** There are more than two billion people who have access to the Internet but don’t have the rights to use traditional exchange systems. These individuals will be able to use FuturoCoin without any restrictions.

**Identity Theft:** Blockchain technology used by FuturoCoin ensures secure digital transactions through encryption and “smart contracts” that make the entity virtually unhackable and void of fraud.

**You are the owner:** Your privacy is respected while using FuturoCoin and you don’t need to rely on any third party.
According to the chief executive of a top digital currency exchange, the entire cryptocurrency market will reach up to $1 trillion this year. There are more than 250 exchanges and around 4500 cryptocurrencies in the market. Whereas, the world is moving towards e-commerce and its growth is commendable.

In 2017, retail e-commerce sales worldwide amounted to 2.3 trillion US dollars and e-retail revenues are projected to grow to 4.88 trillion US dollars in 2021.¹

Currently, the world is looking for a solution which combines cryptocurrency and ecommerce market. Looking at the growth rate and potential of both the markets, we came up with the solution as FuturoCoin which will satisfy all the market requirements. According to a survey by Coinbase, cryptocurrency will hit the mainstream as a way of paying for services and goods within the next decade as many of those students surveyed by Coinbase became part of the working world.

This is the right time for FuturoCoin to expand in the market where people are eager to use cryptocurrency and adopt digital banking system because at this time what market needs is a cryptocurrency coin which is fast, secure and easily accessible so that it can fill the gap between traditional fiat and advanced crypto.
Product description

FuturoCoin is a cryptocurrency which mainly aims on quick transactions, to protect against double spend attack and to minimize the transaction fees so that every human on earth can easily access it.

Cryptocurrencies like Dash, FuturoCoin and Bitcoin uses asymmetric cryptography to sign the transactions. Eg. Dash use x-11 algorithm which consists 11 different hashes for hashing blocks. It was invented to keep the network more decentralised.

FuturoCoin source code is sub-derived from Dash due to the number of benefits it provides.

- Two-tier network - FuturoCoin works on the principle of two-tier network where master nodes behave as a second layer of nodes.
- Instant Payments - Master nodes are responsible for the correct execution of instant payments. Instant payment allows to improve the speed of the transaction process.
- Low and constant transaction fees - We have introduced the flat rate of all transactions so that every person can easily access it.
- The fee is not dependent on the amount of coins being sent.
- Governance model - In FuturoCoin the block reward is divided equally.
- Advanced Securities - FuturoCoin securities system is inspired by Dash so it prevents from all the latest attacks known.

The above features of FuturoCoin shows that it is entirely decentralised, relying on a ledger of transactions distributed across a worldwide network of computers and is based on a technology called blockchain.

How does FuturoCoin work under the hood?

Asymmetric cryptography

Till 1976, if two parties wanted to convey a message in an encrypted manner, they required to exchange a key, which was used to encrypt and decrypt a message. There was only one way and that was to meet face-to-face or use a trusted courier to deliver a cryptographic key.

In 1976, Whitfield Diffie and Martin Hellman issued the document which gave the description of the algorithm where no secret key is exchanged and the message can still be properly encrypted and decrypted or signed. This technique is called asymmetric (public key) cryptography.

Cryptocurrencies like FuturoCoin and Bitcoin uses this technique to sign the transactions.

The important details about asymmetric cryptography used in FuturoCoin (and other cryptocurrencies)

- every public key is originated from its corresponding private key
- A random 32 bytes number can be assigned as a private key
- FuturoCoins are allocated to public key
- The holder of a public key is the person who controls the corresponding private key
- The owner of FuturoCoin needs to use his/her private key to verify the ownership of FuturoCoins assigned to a corresponding public key
No one should be allowed to control the private key besides the owner. The simplified process of public key creation in FuturoCoin network is described in the schema below.

**Transaction**

Cryptocurrency is a digital currency which cannot be copied nor double spent. It is defined as a chain of digital signatures. If there is a process of transferring a coin, the owner need to digitally sign a hash of the former transaction and the public key of the receiver and affix it to the transaction message. The signature is verified by the receiver to authenticate the chain of ownership. It was described by Santoshi in the following schema:

This process is neither time nor power consuming and assures the receiver that the sender is the true possessor of coins and can make the transactions. But this process does not provide the solution for the double spend attack. The possessor of the coin can send the same coins twice or more times. In current scenario, this problem is resolved in a centralised manner where trusted parties (banks or other financial institutions) keep the accounting books and provides the surity that the coin is not spent twice. So now the only way to confirm the absence of double spend: make all transactions in the whole system visible to everyone and make all system members agree on a single version of history of transactions. This historical ledger is named blockchain.
Mining is created to get rid of double spend attack and it’s the process by which transactions are authenticated and affixed to the public ledger. The proof-of-work also gives the solution for establishing representation in majority decision making. In FuturoCoin network every user has the power to run his node and maintain the network by providing hashing power to generate a new block of verified transactions.

Similar to other cryptocurrencies, all blocks in FuturoCoin are linked in a way that any change in the already existing block would require redoing all the blocks after it. A merkle tree is constructed by all the transactions in a single block. It is done by joining each transaction ID with other transaction ID and hashing them together. In next steps the results are hashed in pairs. When only one hash remains, the process is finished. This is called merkle root.

This decision was made due to the number of benefits provided by Dash cryptocurrency. Some of them are listed below and are incorporated in FuturoCoin system.

The picture below shows the mining process with merkle root.
Two-tier Network

Bitcoin’s uses single-tier network where all the process are executed through nodes while Dash in the other hand introduced two-tier network where masternodes act as a second layer which is responsible for maintaining numerous network services which are not there in cryptocurrency. The servers are connected to mining and all other passing nodes and are always on. Masternodes are not allowed to participate in the mining process because of the rules enforced in the code.

Master-nodes uses a series of protocol expansions such as Masternode ping message and Masternode announce message to be able to disperse around the network. Regular peers and masternodes are common in their connection behaviour and form a classical P2P network. FuturoCoin ecosystems are responsible for fast transaction, management or administration with low and consistent transaction fees. In future, we will describe this calculation.

Instant Payments

Dash introduced the distinct feature of instant payment. Because of this feature instant transaction is possible around the world. This kind of payment is taken care by only masternodes. When it happens, inputs to particular transaction are locked and authenticated by agreement of the masternode network.
After a successful agreement of masternodes a message is transmitted over the network after which all clients will respect lock of tokens and this is how the problem of double spending solved without waiting too much for a confirmation time, which is required in other cryptocurrencies such as Bitcoin.

Instant payments provides the solution for the issue related to waiting for confirmations when sending the transaction and merchants can deliver their goods right after the transaction occurs. FuturoCoin presents an additional feature where an instant transaction may include more inputs and outputs in one transaction. This quantity is set to 10 for outputs (plus address change) and any number of inputs. Additionally, all transactions are instant. This special quality of FuturoCoin requires additional level of security besides masternodes locking mechanism. Every input needs at least 6 confirmations (6 mined blocks) to become usable.

**An illustration of transaction:**

1. Bob sends a transaction of 10 FuturoCoins for a software from merchant X using a “locked transaction” message.

2. The transaction is distributed throughout the network and achieves a set of elected authority nodes from the masternodes list.

3. The authority nodes form a consensus about the validation of the transaction and each sign “consensus transaction” message which sent to the network.

4. When a node finds the agreement messages, it considers the transaction confirmed.

In Dash masternodes accepts an additional fee for processing instant transactions. In FuturoCoin no additional fee is needed for this kind of operation as all transactions are instant.

**Low and constant transaction fees**

Dash gave a new solution to retain the transaction fees at the lowest point possible. With FuturoCoin we have introduced the flat rate for all transactions. Fee model totally depends on the number of inputs applied in a transaction. Most commonly this number is less than 10. For the purpose to prevent flood attack, we need to introduce security measures. When the number of inputs exceeds 10, base fee is multiplied by 2 and so on. It can be presented by the formula:

\[
\text{fee} = \max \left( \text{base_fee}, \left\lceil \frac{n}{10} \right\rceil \times \text{base_fee} \right)
\]

where \( \text{fee} \): final transaction fee

\( \text{base_fee} \): constant fee value

\( n \): number of inputs

The fee depends on the amount of coins being sent. Base fee can be modified or altered by the spork functionality.

**Governance Model**

Dash is the first digital currency which is a decentralised & have autonomous system. It is influenced by Sybil proof decentralised and funding model. This system, known as Decentralised Governance by Blockchain (DGBB) is an approach of coming to a consensus on intended alterations to core functionality and is used to fund development of Dash. 10% of each block reward is sent to the treasury. It is also used to hire other employees, fund conferences and everything what is related to marketing and integration with other systems like exchanges. Each masternode operator receives one vote and when the project is presented they vote independently on how to spend the money from the treasury.
As we can observe, masternodes grants essential functions, which are not present in other cryptocurrencies. In Dash the block reward is divided between miners and masternodes. Each group earns 45% of block reward. 10% goes into the treasury system.

In FuturoCoin 50% of block reward is given to miners and 50% is given to masternodes. Masternodes are naturally distributed and secured by specialized companies. The creator of masternodes is FutureNet company (BCU Trading LLC) which is responsible for arranging events, developing code, hiring employees, developing and introducing marketing strategies and reward systems. FuturoCoin uses the similar kind of enhanced strategies that are available in Dash. Amongst them are Multi-Phased Forks (“sporks”) which are similar to global variables that can be altered by the team of developers. The example of such a variable is a transaction fee. It can be modified by the FutureNet developers and depends on many economical and technical parameters. The purpose is to have the most competitive transaction fee on the digital currency market. Masternodes also have the ability to force other nodes to upgrade its software.

**Advanced Security**

Dash introduces very refined solutions to numerous types of attacks that takes place in the cryptocurrency world and, particularly, in the Dash ecosystem. Amongst them you can find

- Sybil attacks
- Finney attacks
- Multiple agreement messages
- Transaction lock race attacks.

Their explanation is out of scope of this document. It’s worth specifying that FuturoCoin, as a digital currency based on Dash, has all mitigations safeguarding the network from these kinds of attacks.

**Instant Transactions**

FuturoCoin is digital currency which has made every transaction instant. Through this system the consensus is achieved by means of masternodes, which lock the inputs and validate transaction correctness.

**Big and growing community of supporters**

FutureNet is a rapid developing community with millions of associates. FuturoCoin begins with a considerable number of users. This feature of FuturoCoin is unique which other starting cryptocurrencies does not possess. Apart from the fact of having such a strong team, it is very important to emphasize the vision and the future plans that go along with FuturoCoin. This feature of the FuturoCoin makes it so different from other cryptocurrency and increases its scope.

**Private send functionality**

PrivateSend functionality is not available in FuturoCoin system due to law and regulations which results in having the same anonymity level as in Bitcoin like currencies, which use pseudonymous anonymity level.

**CoinOFF Mine – A Game to Incentivise Our Customers**

We are also providing an entertainment game called “CoinOFF mine” in which users will attract individuals to our network and they will be rewarded with the mined FTOs for it. This will create high user base, strategic demand & supply of FTOs in our network.
Economics

**Total coin emission**

In present, there will be 100,000,000 FuturoCoins. In consideration with the active progress of the company and the potential carried by over a 2.5 million community engaged in this project, the developers took a decision to mine around 30 million FuturoCoins in the first block after the Genesis Block, which then will be used for advertising and other marketing purposes.

The major aim is to bring FuturoCoin to the top of its category, and this is the reason because of which they have considered important to support and reward active users.

It would be impossible to build a successful and sound brand without people involved. The wide space for everyone that has been developed and the people who will use FuturoCoin will be the best demonstration of this cryptocurrency.

**Emission Rate**

The time required to mine all the coins is fixed to 10 years. Dark Gravity Wave algorithm is used in the case of difficulties retargeted. On an average, every minute the new blocks will be mined.

If we consider all the remaining amount of coins to be mined, 70,000,000 and the time parameters then every block will be rewarded with 13.31811263 FuturoCoins.

The emission rate is consistent - no halving reward blocks or any other events that could alter coins issuance. All blocks are mined by regular nodes only, not by masternodes.

**Block reward allocation**

In Dash 45% goes to miner, 45% goes to masternodes and 10% to the treasury while in FuturoCoin every block reward is divided into a half:

- 50% goes to winning miner,
- 50% goes to masternodes network. FutureNet company takes care of the governance operations as described in Governance model.

**Flat fee for all kind of transactions**

Masternodes play numerous essential roles in FuturoCoin ecosystem. One of them is to maintain transaction fee constant irrespective of the size in bytes or in value sent. The fee can be altered by spork functionality which is the part of the governance model.
Team details

Stephan has an over 25 years of experience as an entrepreneur and is also a leader of widely known MLM projects. He is a well-known face of net marketing. He also has many companies which are located in Germany, Austria and other European countries. Stephan Morgenstern has applied all his knowledge of cryptocurrency and experience in making this project so successful.

Stephan Morgenstern
FTO Creator

Roman has a considerable amount of experience in management and communication which helped a lot in making this project so successful. He is also a well-experienced entrepreneur who looks at business with global perspective. He has many companies running in Sweden, England, Brazil, Colombia, Austria and Cyprus and also a business project located in Ukraine. His hard work and strong vision has made him so successful.

Roman Ziemian
FTO Creator

Paulina Wozniak is a successful businesswoman and the C.E.O at Coders House Sp. z o.o. which is a fast growing IT company in Wroclaw, Lower Silesian District, Poland. She is a visionary and powerful woman with an impressive knowledge of Blockchain Technology and Cryptocurrency. She is a qualified MBA and has done PhD in Cathedral finance and management, outsourcing and contracting. She is also a doctorate in economy. She started her career over 20 years ago, she held various positions including a position of the HR Director of Alma Engineering S.A and now she has a considerable amount of experience in Marketing, Sales and Management. She’s ambitious and strong. Just like FuturoCoin.

Paulina Wozniak
CEO FuturoCoin OU
Conclusion

FuturoCoins exceptional vision for the future of cryptocurrency is both revolutionary and achievable.

Cryptocoin will accredit each person and business within the microeconomy, through a decentralized and all-encompassing financial structure that we have created with passion.

The FuturoCoin has an amazing potential for development and growth that is possible through the FutureNet platform. The world is ready for a cryptocurrency like FuturoCoin, and now we need to ensure that the FuturoCoin is ready for the world.

With the big and growing community of supporters all we are emphasizing upon is the vision and future plans that go along with the FuturoCoins so that we can play a crucial role in the world economy.