

Tornado Whitepaper

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Executive Summary

The Inquest into the mainstream adoption of cryptocurrencies provides us with intriguing answers. The world is aware of the fact that cryptocurrencies are ruling the economy. However, not many are attentive to the actuality that the exchanges are faced with drawbacks. The cryptocurrency exchange is similar to the shares in a company. The exchange has no access restrictions. As the number of exchanges keeps increasing, the limitations do too. Some of the challenges pertaining to the exchanges are:

- The global cryptocurrency exchanges do not provide deposit and withdrawing options on a single platform.
- Most of the global exchanges are crypto-crypto platforms and provide the option to buy cryptocurrencies with a single fiat.
- The sign-up process is lengthy.
- Country-specific local exchanges provide minimal options to deposit and withdraw in a single day.
- High fees for trading cryptocurrencies and fiat currencies.
- There are few global exchanges that offer advanced technical analysis and auto trading facilities.
- No exchange provides tools to build basic as well as high-end algorithmic trading bots.
- No exchange provides trading from the chart and single click trading options
- There is no option of trading from the price ladder with single click buy and sell options.
- There is no provision of auto pattern recognition and auto pattern trading facilities.
- Very few exchanges provide the facility to list the ICO tokens and trade with fiats.

Cryptocurrencies, the dominant digital assets, are the future. With the use of blockchain technology, these assets have the potential to replace fiat currencies. The complication arises when the cryptocurrencies fail to be used to the optimum. To change this scenario, Tornado aims to build a one-stop currency exchange at global levels. This exchange will list and trade all types of cryptocurrencies and blockchain utility assets.

The insights into the market showcase that only a limited number of exchanges provide a platform to make advanced technical analysis, and develop algorithmic trading bots. We realized there is a vast potential to provide options and fulfill the void that the other exchanges have created.

Tornado will build a highly secure, cutting-edge and high-speed cryptocurrencies/Fiat, crypto-crypto, tokens to Fiat and Tokens to Cryptocurrency exchange. The company aims to build user-friendly, powerful, highly responsible and scalable matching engine with a various set of applications.

The exchange will support more than 300 cryptocurrencies.

The exchange will support all the mainstream fiat currencies (AUD, USD, EUR, GBP, JPY, NZD) for buying and trading. The traders will be able to trade with a variety of base cryptocurrencies like BTC, ETH, NEO etc.

Legal Disclaimer - * **Please provide the details for this section***

Glossary:

Address - A secure identifier marked by a unique string of characters that enables payments to an individual or entity via blockchain transactions. It usually requires a private key to exclusively access the funds. For example, Bitcoin addresses are alphanumeric strings that begin with a 1 or 3; Ethereum addresses begin with '0x'.

Altcoin - A cryptocurrency or a category of cryptocurrencies that are an alternative to bitcoin. Many altcoins project themselves as better alternatives to bitcoin in various ways (e.g. more efficient, less expensive, etc.)

blockchain - A decentralized, digital ledger where transactions made in Bitcoin or other cryptocurrencies are recorded chronologically and publicly. The block contains information that, once it goes into the blockchain, it becomes part of the permanent and immutable database, connecting to other blocks in the blockchain like the links in a chain.

Cryptocurrency - A type of digital currency that is generally decentralized and uses cryptography (i.e. data is converted into a format that is unreadable for unauthorized users) for added security, making it difficult to counterfeit or manipulate.

Decentralized - A state where there is no central control, power or function, or in reference to infrastructure, no central point of failure. See Vitalik Buterin's definition of decentralization.

ERC-20 - A type of token standard for Ethereum which ensures the tokens perform in a predictable way. This allows the tokens to be easily exchangeable and able to work immediately with decentralized applications that also use the ERC-20 standard. Most tokens released through ICOs are compliant with the ERC-20 standard.

Ethereum - An open source, decentralized platform based on blockchain technology created by Vitalik Buterin in 2013. It runs smart contracts on a custom built blockchain that allows developers to create markets, store registries of debts, and so on. For more information, please visit the Ethereum Foundation website or read their whitepaper.

Hard cap - The maximum amount that an ICO will be raising. If an ICO reaches its hard cap, they will stop collecting any more funds.

Initial coin offering (ICO) - An unregulated means by which a cryptocurrency venture, typically early stage, can raise money from supporters by issuing tokens. It is often referred to as a crowdsale as ICO participants may potentially earn a return on their investments (as opposed to crowdfunding, where supporters donate money to a project or cause). Ethereum is currently the most popular platform for launching ICOs.

Maximum supply - An approximation of the maximum number of coins or tokens that will ever exist for a cryptocurrency or crypto asset.

Smart contracts - An automated mechanism involving two or more parties where digital assets are put in and redistributed at a later date based on some preset formula and triggering event. The contract can run as programmed without any downtime, censorship, fraud or third-party interference. For more information, see Vitalik Buterin's terminology guide.

Soft cap - Generally refers to the minimum amount that an initial coin offering (ICO) needs to raise. If the ICO is unable to raise that amount, it may be canceled and the collected funds returned to participants.

Token - Crypto tokens enable the creation of open, decentralized networks, and provides a way to incentivize participants in the network (with both network growth and token appreciation). This innovation, made popular with the introduction of Ethereum, has given rise to a wave of token networks (e.g. prediction markets, content creation networks, etc.) and token pre-sales, or ICOs.

Wallet - A store of digital assets such as cryptocurrencies, analogous to a digital bank account. Crypto wallets can be divided into two categories: hosted wallets (e.g. wallets store on exchanges or third-party servers) and cold wallets (e.g. hardware wallets such as the Ledger Nano S, paper wallets and desktop wallets).

Whitepaper - An informational document that generally informs readers on the philosophy, objectives, and technology of a project or initiative. Whitepapers are often provided before the launch of a new coin or token.

Highlighting the problem

The problem arises when the exchanges do not provide a fair share. The cryptocurrencies are suppressed by a number of limitations. As mentioned above, the exchanges do not provide all the necessary options for the traders. The barriers will be overcome only when the crypto exchanges become flexible. The major problems barricading the cryptocurrency industry are:

- The global cryptocurrency exchanges do not provide deposit and withdrawing options on a single platform.

- Most of the global exchanges are crypto-crypto platforms and provide the option to buy cryptocurrencies with a single fiat.
- The sign-up process is lengthy.
- Country-specific local exchanges provide minimal options to deposit and withdraw in a single day.
- High fees for trading cryptocurrencies and fiat currencies.
- There are few global exchanges that offer advanced technical analysis and auto trading facilities.
- No exchange provides tools to build basic as well as high-end algorithmic trading bots.
- No exchange provides trading from the chart and single click trading options
- There is no option of trading from the price ladder with single click buy and sell options.
- There is no provision of auto pattern recognition and auto pattern trading facilities.
- Very few exchanges provide the facility to list the ICO tokens and trade with fiats.

January 2018, witnessed almost 120 standalone cryptocurrency exchanges and more than 1000 individual markets. The daily trading volume is equivalent to \$20 billion and the market cap is \$700 billion. The exchange platforms are highly fractured due to poor execution, speed, pricing and security.

Some of the other problems are:

- **Insecure platform:**

Exchanges are prone to hacking and it's mandatory to invest in a secure platform. There are many exchanges that were hacked and eventually shut down. Tornado is tested and built to provide the best and high quality services. It strives to ensure the highest security possible.

- **Low liquidity**

The issues of liquidity have been persisting and to deal with it there has to be a highly skilled team and in-depth knowledge about the platform and industry resources. Tornado makes sure to fulfil the requirements to eliminate the low liquidity issues.

- **Poor Technicalities**

The exchanges are often operated by inexperienced people that lead to insufficient security and efficiency. To make sure this does not happen, Tornado consists of a team who has the highest experience in the field.

- **Bad Customer Service**

The slightest of delays in the exchange are the most dangerous and annoying for the traders. The traders are the real wealth of the system and must be provided attention whenever needed. Tornado keeps this in mind and will build a support system which will address traders' problems immediately.

- **No Language support**

Language has always been a problem. Exchanges deal with one or two languages, but Tornado makes sure to address different languages to tap into the global market.

The Opportunity

At Tornado, we firmly believe that cryptocurrency is the future currency, replacing fiat currencies.

The cryptocurrency market has a combined market cap of \$175 billion. The blockchain platform is driving the economy toward a secure domain. We believe that there is a large number of professional and novice traders in the world who wish to buy and trade cryptocurrencies using fiat currencies.

The Tornado team possesses in-depth knowledge about cryptocurrencies, hence, developed this exchange.

Tornado as a solution

To eradicate the issues prevailing with the exchanges, Tornado will build a highly secure, cutting-edge and high-speed cryptocurrencies/Fiat, crypto-crypto, tokens to Fiat and Tokens to Cryptocurrency exchange.

Exchange

- The company aims to build a user-friendly, powerful, highly responsible and scalable matching engine with a various set of applications.
- The exchange will support more than 300 cryptocurrencies.
- The exchange will support all the mainstream fiat currencies (AUD, USD, EUR, GBP, JPY, NZD) for buying and trading. The traders will be able to trade with a variety of base cryptocurrencies like BTC, ETH, NEO etc.

Matching Engine

Tormado's matching engine sustains _____ orders/second. This makes Tormado, one of the fastest exchanges in the market.

Token listing

The exchange will support the listing of utility ERC20 tokens. Later, tokens supported by other blockchain will be added.

ICO launch Pad

We will provide the facility to launch an innovative blockchain. Tokens launched will be available immediately upon completion of ICO.

Multiple Fiat Money

Fiat currency is backed by the government. The currencies that we use in our everyday lives are called fiat currencies. A legal tender not supported by a physical commodity is called Fiat money. Tormado will establish a platform for the trading of Multiple Fiat Money. Traders will be able to deposit/withdraw multiple fiat money without limitations.

Advanced Trading Platform

The exchange will act as an advanced trading platform with exclusive features to trade cryptocurrencies/fiat, crypto to crypto, Tokens to fiat and Tokens to crypto exchange. The platform will be highly scalable and responsive.

About the company

Tormado is a dynamic trading platform aiming to ease the lives of traders. A company that believes cryptocurrencies are the future. The company was established in the year _____, headquartered in _____. The company intends to provide the best services for traders bridging the gap between the cryptocurrency ecosystem and the trading platform, by launching its Exchange.

Based on the current situations and pricing, the company is looking forward to launching an advanced trading platform.

Our Vision

At Tormado, we believe that our customers should be given nothing but the best. We have always conceived cryptocurrencies to be the future, replacing fiat currencies. Our vision is to build a global one-stop digital currency exchange to list and trade all types of cryptocurrencies and blockchain utility assets.

Our Mission

Since there are only a few exchanges that provide a platform to perform advanced technical analysis or develop algorithmic trading bots, our mission is to change this situation and gain momentum in the present. We intend to provide users with a platform that facilitates easy trading.

Benefits of our Exchange Platform

Tormado exchange provides users with the following:

- A platform for fair trading
- A one-stop solution for all your needs
- An exchange that is user-friendly
- The exchange will support more than 300 cryptocurrencies

- Tornado will support all the mainstream cryptocurrencies
- All the base cryptocurrencies can be used to trade
- Save time and cut-down on costs
- A wide range of options to perform technical analysis
- Trade with fiat or cryptocurrencies
- Build sophisticated algorithmic trading bots
- Fair pricing
- Trade tokens with fiat pairs
- The facility to launch an innovative blockchain ICO

The feature that outstands the others are:

- Liquidity - Liquidity is when the asset or security can be quickly bought or sold in the market without affecting the price of the asset. At Tornado, the liquidity will be provided to other exchanges as well.
- Will - If the wallet owner passes away, the total coins will be shared with the nominee.

Features

Technical analysis and auto chart pattern recognition tools

Successful traders are often highly skilled at identifying chart patterns and setups with distinctive characteristics that helps them read market clues and put odds in their favour. After identifying the patterns, trader's filters and trades high probability trade setup with high chance of successful trades. However, there are hundreds of different chart pattern types in existence, such as double top and double bottoms, triangles, rectangles, channels, flags, Elliott waves, head and shoulders and many other patterns. However, with so many different patterns it becomes very difficult to identify them, especially in real-time, fast moving markets.

- We aim to develop dynamic auto chart pattern recognition tool in the platform that will recognise various emerging patterns for user selected time frames, from all the trading pairs along with star rating. Star ratings of the pattern will help traders to identify the strongest patterns with high probability of success and trade those pairs.
- Our platform will also enable traders to develop their own patterns and add the developed custom pattern to their personal pattern library.
- Our platform will have professional charting facility with over 100 technical indicators added for performing advanced technical analysis. We also aim to include drawing tools for performing trend analysis, Fibonacci drawings tools, geometric drawing tools, markers, text and other general drawing tools.

- Detachable charts that enable various trading pairs on multiple screens.

Quick Click trading

- Our proposed platform will also enable traders to trade from chart and one click trading option from a price display.

We also aim to develop and include in our platform trading on price ladder with single click. This option will be useful for traders who want to enter and exit the market quickly

Algorithmic Trading System development and testing

With advancement of computers and machine learning now a days many high net funds uses sophisticated computer algorithms to guide their decisions for investing and trading. Computers and algorithms have become mainstream in investing and we expect this trend to continue as younger, more computer savvy investors continue to allow portions of their money to be managed by Trading Systems to reduce risk and increase returns. We aim to include tools in our platform that will enable all traders from novice to professional traders to create trading systems with and without coding as well as develop automatically the trading system for any market that is available on our platform. We also aim to provide facility to backtest the developed algorithmic trading system, assess its performance with variety of statistics and then deploy the systems to live market. Following are the tools that we aim to develop and include in our trading platform.

- **Pick and plug system development:** Develop trading systems manually without coding in a few simple steps with set indicators and using specific criteria in few simple steps by picking the indicator, select the signal conditions, select entry conditions to buy or sell and finally select exit conditions with profit and loss target.
- **Auto algorithmic trading system development:** Develop trading system automatically for any market by using our powerful program to run on the market that extracts required information, than apply trading system developer tool to generate a new trading system with its own signals that can be deployed on our trading platform for auto trading. The trading system generator tool will automatically write the code in easy to understand language that is compatible with our platform.
- **Manual coding for system development:** Our platform will provide the tools for traders to code their own system using simple coding language to develop custom complex trading systems and deploy it on our platform for auto trading.

Social media sentiment trading signal generation

- We plan to build a tool within our platform that can analyse various social media and generate a buy and sell signals for cryptocurrencies.

Advantages of Trading with algorithm

- Speed - The algorithms are written beforehand and automatically executed. The speed is measured in fractions of a second.
- Accuracy - Since the computer handles all the data, human errors become less. Manual entries call for lesser accuracy.
- Reduced costs
- Has the advantage of scanning and executing on multiple indicators.

Apart from the above factors, the biggest advantage is the ability to remove human emotion. Since the trades are confined to set criteria, the elimination of human emotions leads to rational decisions.

The other perk is that with algorithm trading, traders do not have to spend a lot of time on monitoring the markets.

Trading platforms

We aim to develop web, desktop, mobile (android and IOS) app.

Other developments

We aim to develop crypto payment processing for ecommerce. This will help in unblocking enormous potential for revenue and will also help in mainstream adoption of cryptocurrencies.

Security

We aim to install all the possible security measures as described in CryptoCurrency Security Standard (CCSS)

- **Wallets:** multisig wallets
- **Hot, Warm and Cold Wallet management:** Blockchain assets will be stored in following order. Hot wallet will have around 5% of blockchain assets, warm wallet will have other 5% of blockchain assets and Cold wallet will have around 90% of blockchain assets. The keys will be stored at secure and geographically diverse and safe locations.
-

Data: All server side data will be fully encrypted with AES256 encryption with multiple backups.

- **Secure Web Service:** Website and data will be secured by installing Web Application Firewall (WAF) to protect from threats of DDoS, SQL injection, cross-site scripting (XSS) and remote file inclusion (RFI), data transfers using Secure Sockets Layer (SSL) and Transport Layer Security (TLS) certificate, Block visitors by country, Multi-user / role based access control, if we plan to use debit or credit card for payments then installing ‘The Payment Card Industry Data Security Standard’ (PCI DSS) 3.2 or 6.6 Compliance depending on our legal requirements.

- **Engine and platform testing:** Once our exchange is ready for beta testing, we will hire multiple independent certified professional companies to do a 360 degree penetration testing. Penetration testing will include source code assessment desktop, web and mobile application testing to ensure that our platform has no security loopholes.

- **User account security:** All users will have to activate 2FA using Google Authenticator. 2FA will be used to authorize withdrawals of fiat or cryptocurrency from user’s wallet. User password should have minimum of 10 characters and MUST include at least one small letter, one capital letter, one special character and one number. Password will be salted and hashed.

- **OTHER security measures to be listed**

Blockchain Based Tornado

The technology is a pivotal factor for the growth of cryptocurrencies. It aids in the transfer of cryptocurrencies. The technology works on the basis of open ledger and distributed structure. Openledger is a term used when everyone can see the transactions and verify their validity. The blockchains cannot be altered, since the cryptographic and hash algorithms protect the ownership of funds. The blockchain technology eliminates the need for a centralized authority. The transactions are dictated by the governing currency system. The blockchain is a decentralized, open ledger where the transactions are transparent, secure and fast. The biggest advantage is the low fee structure.

These digital assets have changed the way the world looks at virtual currencies. It is slowly and steadily replacing financial institutions. Some of the major attributes of these are:

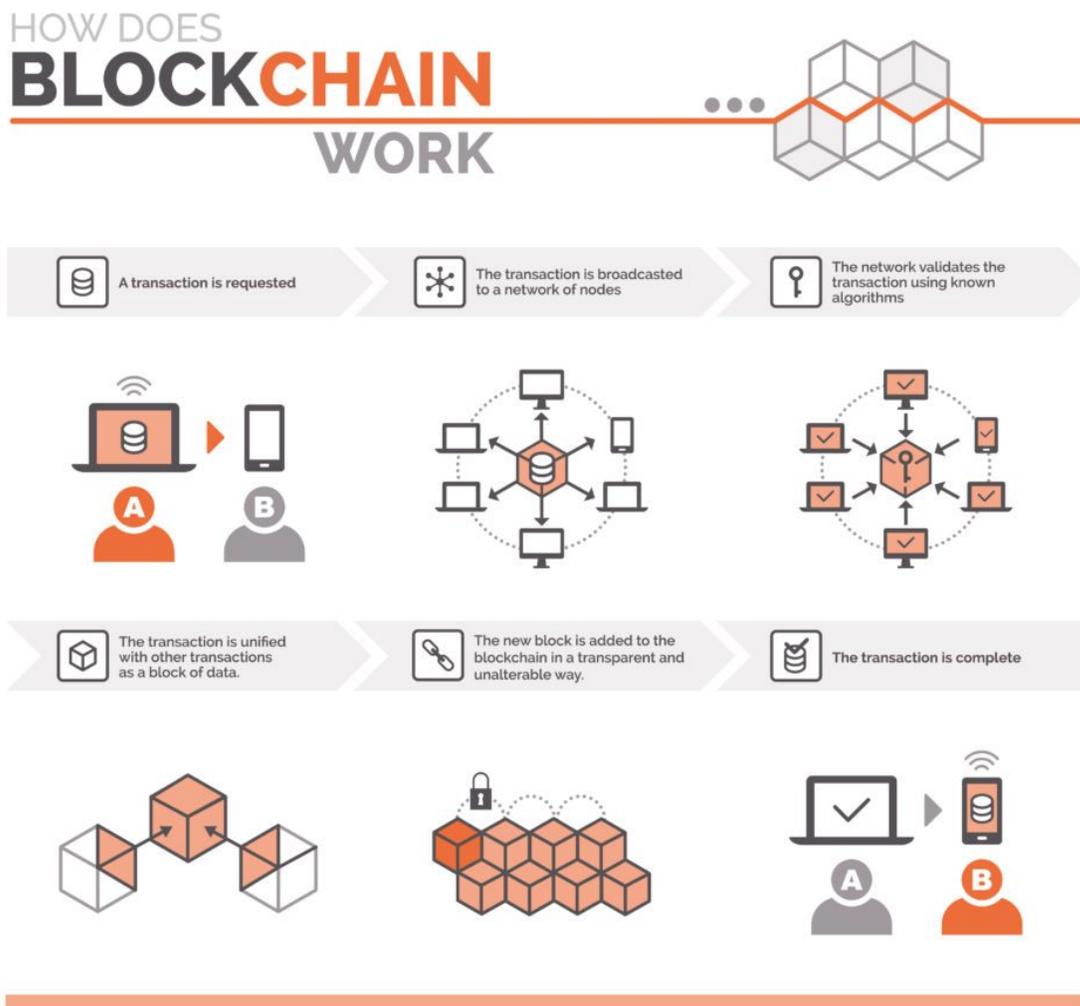
1. It prevents fraudulent activities. Since these are digital, reversing the transaction is not possible.
2. It is a peer-peer transaction.
3. There is no transaction fee.
4. There is no possibility of identity theft.
5. It is accessible universally.

What is Blockchain

The blockchain is a digital ledger that records transactions worldwide. It acts like a spreadsheet. Any information recorded cannot be changed or erased.

It is in chronological order. It is a peer-peer transaction which cannot be reversed.

Each block in the chain is time stamped and individuals enter transaction details in the blocks. There are no centralized data in the blockchain. This prevents others from tampering with the data. The blockchain is purely decentralized, which means, it can neither be run by a certain company nor a person.



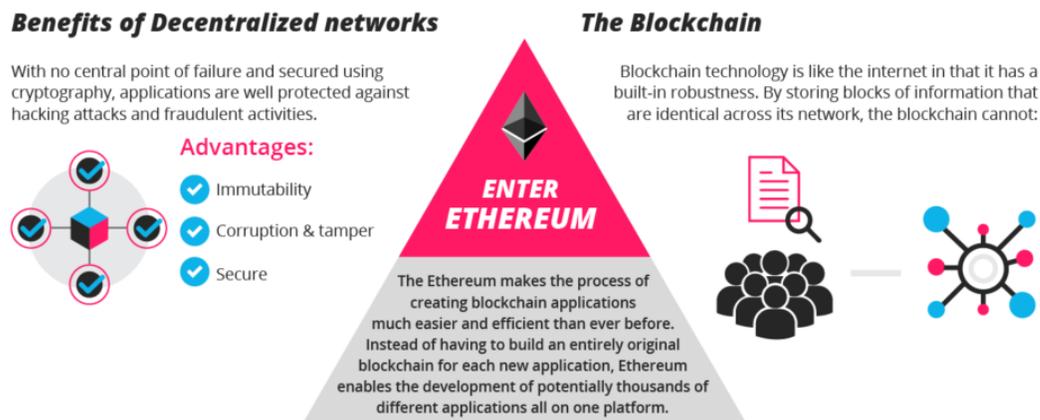
In comparison to traditional database technologies and centralised systems, the implementation of blockchain technology is relatively cheap and require less IT investment. Due to the high security feature of blockchain technology, the financial sector shows huge interest. Bank-specific cryptocurrencies have been modelled on bitcoin and self executing smart contracts.

ERC20 TOKENS

Ethereum: The network behind Tornado

Proposed in late 2013, by Vitalik Buterin, a cryptocurrency researcher and programmer, Ethereum was founded. There were 11.9 million coins that were premined and that accounted for about 13% of the total circulating supply. Ethereum is a decentralized application that supports digital currency similar to Bitcoin. With this, purchases can be made online, used for trade or sent to any individual. Bitcoin uses blockchain technology while the cryptocurrency that Ethereum uses is called Ethereum which runs on smart contracts.

Ether is a cryptocurrency whose blockchain is generated by the ethereum platform.



Smart Contracts:

A smart contract also called a crypto contract is a computer program that directly controls the digital currencies or digital assets between parties under certain conditions. These smart contracts are stored on blockchain technology and are secure. The smart contracts are high level programming compiled and deployed to the Ethereum blockchain. The Ethereum blockchain applications are usually called as Decentralized applications. There are many usecases including internet of things, sports betting and electricity sourcing and pricing.

Tokenomics

Token Name	
Token Code	
Soft Cap	USD 5 million
Hard Cap	USD 30 Million
Token Supply	300 million
Burning process	0.5% of each transaction

Customer service

We aim to establish multilingual live chat and phone customer support team for quick resolution of customers query.

Fees

Type	Fees
Maker	0.075%
Taker	0.1%

Fees discount using our tokens

Year/month	Discount on fees
1st Month	75%
11 Months	50%
Year 2	35%
Year 3	30%
Year 4	15%
Year 5	5%
Year 6	No discount

