

A2A tokens

Whitepaper

Revision 2



50x.com is the first cryptocurrency exchange with automated liquidity aggregation, powered with the innovative A2A technology, where you can change ANY listed coin to ANY other listed coin, directly in one trade.

<https://50x.com>

Contents

The Problem	3
1.1 The liquidity problem	3
1.2 Missed opportunities	3
The Solution	4
2.1 Solving the liquidity problem	4
2.1.1 Liquidity aggregation	4
2.1.2 Liquidity pool creation (collected at IEO)	4
Market analysis	6
3.1 Current metrics	6
3.2 Projections	8
A2A Technology	9
A2A Tokens	10
5.1 A2A tokens details	11
5.2 A2A tokens supply and distribution	11
5.3 The A2A:SHOP	11
A2A Token Holders' Benefits	12
Use of IEO Funds	13
Legalization	14
The Project	15
9.1 Decentralization	16
9.2 Crypto-security	17
9.3 Speed	17
9.4 Horizontal scaling	18
Risk Disclosure	19
Translation Disclaimer	21

The Problem

The cryptocurrency world has experienced such an enormous and explosive growth in recent years that no existing crypto exchange is capable of managing it. One coin may be trading on one exchange - while another coin may be trading on another, but there is no one place for all coins. 50x.com provides that one platform to trade all existing coins.

1.1 The liquidity problem

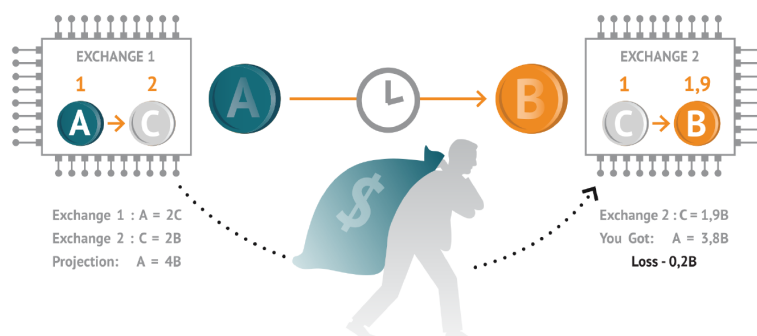
Many coins and tokens suffer from one big problem – a lack of liquidity. This leads to enormous implications for active traders. No known exchange shows the calculations regarding available volume at a specific price; this is valuable information for high volume traders. Without this information, a reasonably large volume trader cannot make a truly informed decision. The scourge of the modern exchange is terrible liquidity. This is exactly where we deploy our private algorithms and technical solutions - to solve this problem.



Have you tried to switch between coins, following trends in emerging tokens ?

1.2 Missed opportunities

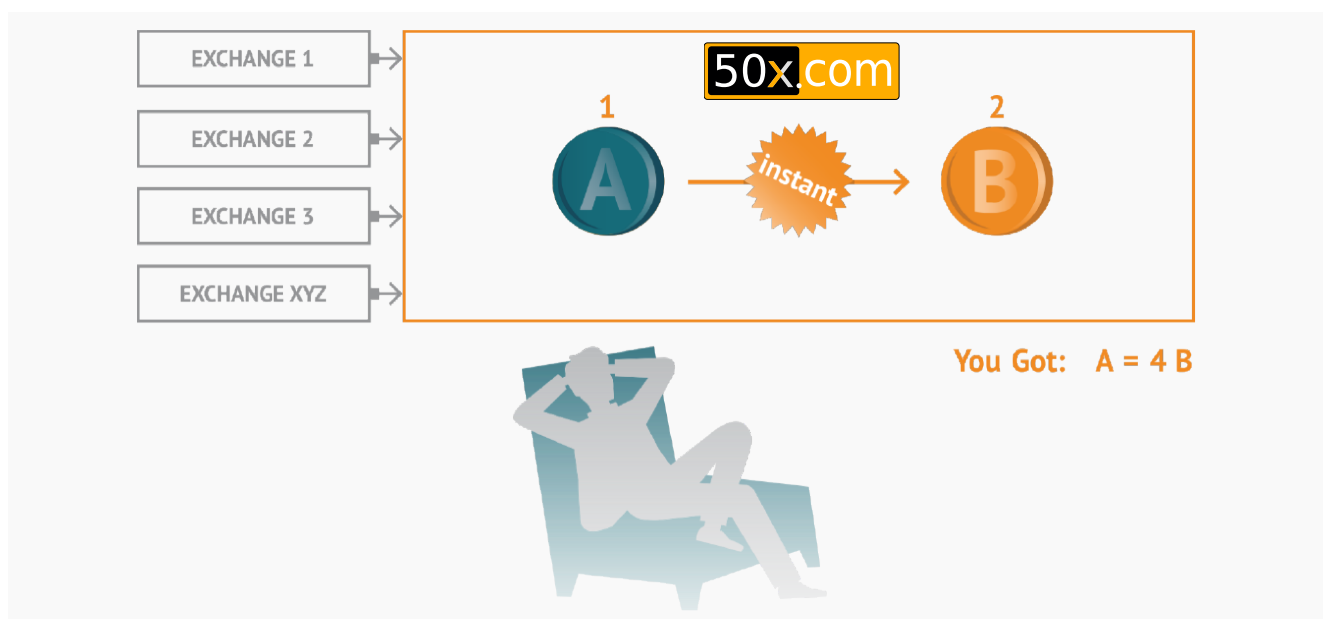
Imagine, you have coin A and a nice opportunity to sell it at a profit and at the same time, you wish to buy a new promising token - coin B. The only problem: they are traded (or have the best rates) on different exchanges. To take advantage of the opportunity, you must finish the first trade, then transfer your assets from one exchange to another - wasting days (the world is fast nowadays, remember?) and potentially missing the brilliant opportunity to raise money - all because of current market insufficiency.



The Solution

2.1 Solving the liquidity problem

With our unique HFT algorithms, originally developed to work on traditional stock exchanges, we can solve this problem: providing access to all trading possibilities from one trading platform and one trading account - in the blink of an eye.



2.1.1 Liquidity aggregation

One of our solutions to solve the liquidity problem is to aggregate offers from many other exchanges in one place. Big orders will be executed on the 50x.com at better prices thanks to the automatic collection of all of the best offers from various exchanges.

2.1.2 Liquidity pool creation (collected at IEO)

One of the main reasons to collect more funds during an IEO is the ability to strengthen the project's own liquidity pool. This means that a significant amount of cryptocurrency will be available as bid and ask offers on the 50x.com exchange from the very beginning - with fast execution.

2.1.3 Liquidity providers

On top of that, 50x.com will be offering direct access through fast API protocols to those who want to provide liquidity to the 50x.com exchange, allowing them to trade without any commission. For all such trades, commissions will be taken from a counterparty willing to buy or sell at the offered price.



If any two coins are listed on 50x.com, you can trade one against the other directly

2.2.1 Built-in cross rate support

Our special A2A decentralized technology gives 50x.com the ability to support hundreds of thousands of cross rates simultaneously - an ability no other exchange has at the moment. More importantly, this means full featured support - including a much wider variety of trading abilities, such as trailing stop loss orders, take profit orders, charts and many more. All of the features you find on 50x.com will be available across any trading pair, too.

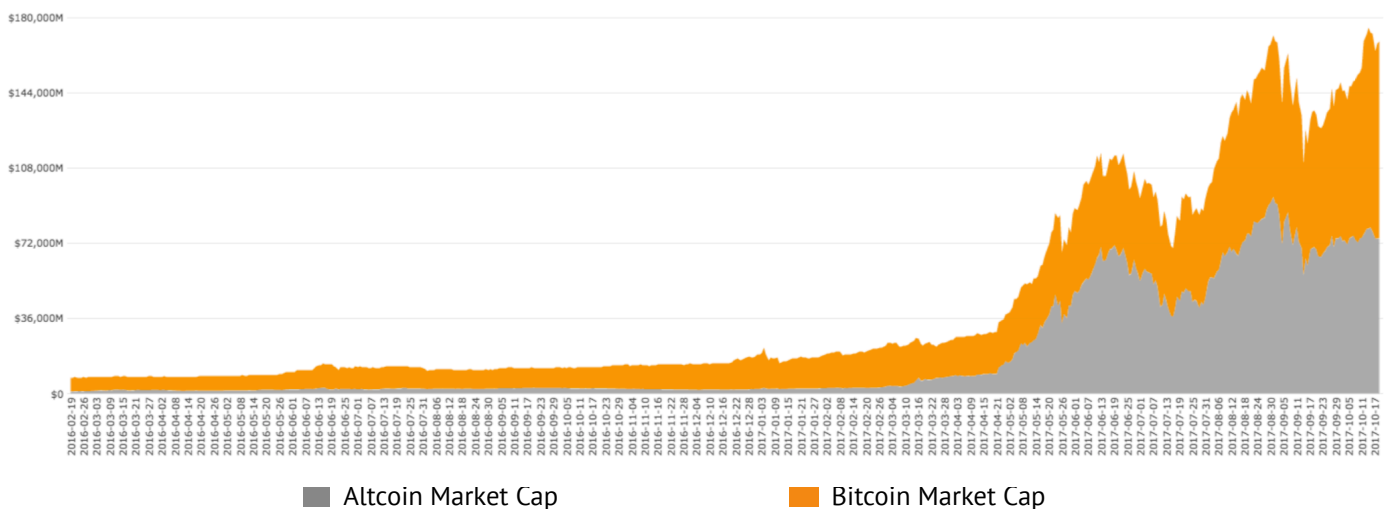
No more missed opportunities! Switch between any altcoin immediately and pick up all the profits!

Market analysis

Since 2012, the cryptocurrency market has been picking up speed, ramping up exponentially within the past 3 years.

3.1 Current metrics

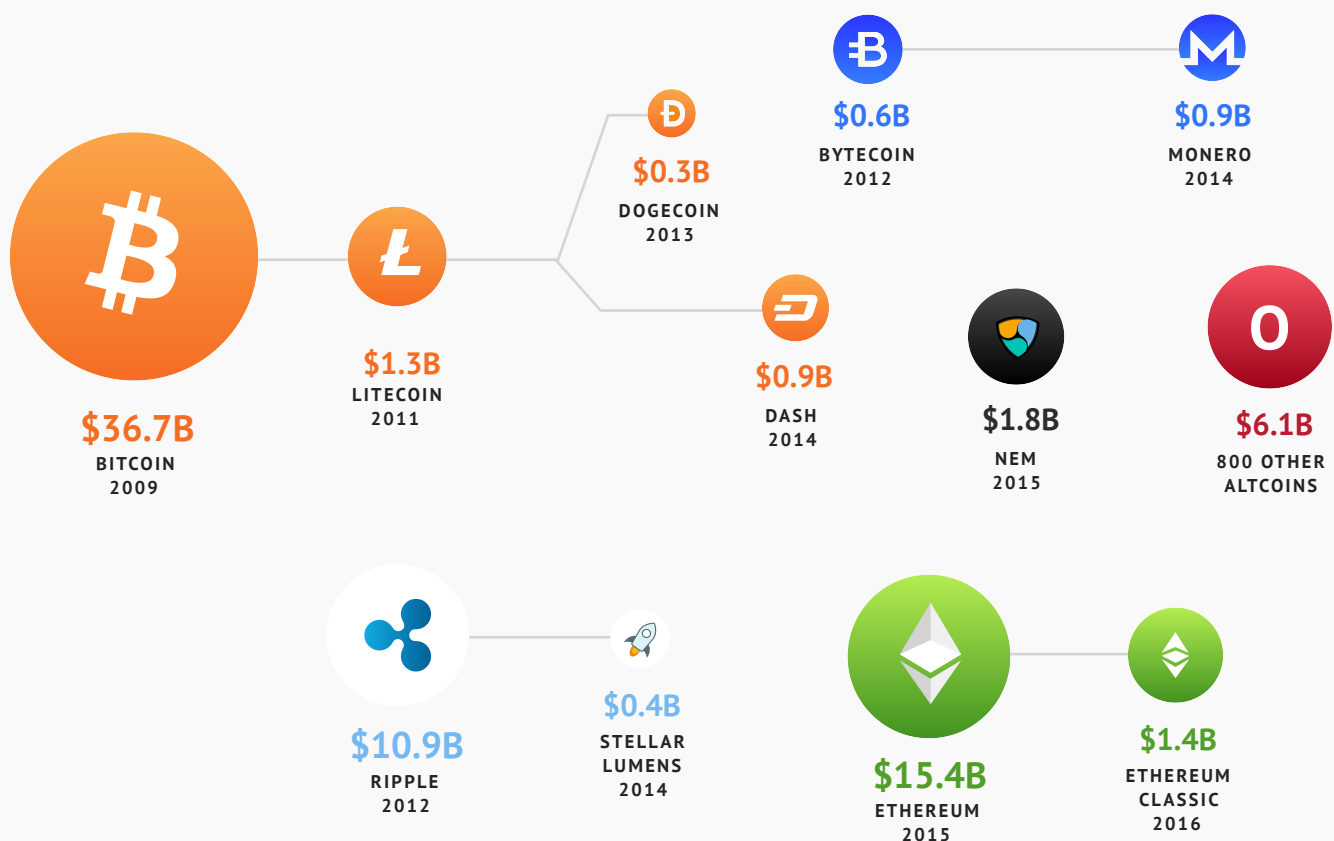
At the time of writing, the market capitalization for all cryptocurrencies is at \$168.72 billion and there are approximately 330k confirmed transactions per day, with some predicting a possible increase to a \$200 billion market cap by the end of 2017.



As of October 2017, between \$1-4 billion is traded through cryptocurrency exchanges daily. While it is difficult to pinpoint exactly how many traders are currently out there, a global cryptocurrency benchmarking study by the Cambridge Centre for Alternative Finance representing roughly 75% of the industry, estimates that there are at least 3 million people actively trading Bitcoin today - while data from other sources, such as Coinbase and ARK Research, estimate that there are between 10-14 million Bitcoin owners worldwide.

The Cryptocurrency Universe

Altcoins now account for around 50% of the worldwide cryptocurrency market capitalization. As of January 1st 2017, the Altcoin market cap was at around \$2.18 billion, rising 34 times to \$74.39 billion as of October 2017. The Bitcoin market cap rose to \$94.34 billion from \$16.28 billion - rising just under 6 times in the same period.



The market continues to evolve. It now requires a single platform that will allow high liquidity for a variety of crypto assets, as well as efficiently provide an interoperable trading environment - saving on time and compounding fees from multi-step trades. We plan to satiate this need by offering 10,000 trading pairs across the top 100 cryptocurrencies at launch on one platform - all with the lowest rates available.

3.2 Projections

While it is extremely difficult to predict the growth of the cryptocurrency market, 2017 has been a demonstrative year in the growth potential of cryptocurrencies as inventive blockchain solutions, innovative DAOs and awareness of smart contract applications in the real world continue to drive momentum.

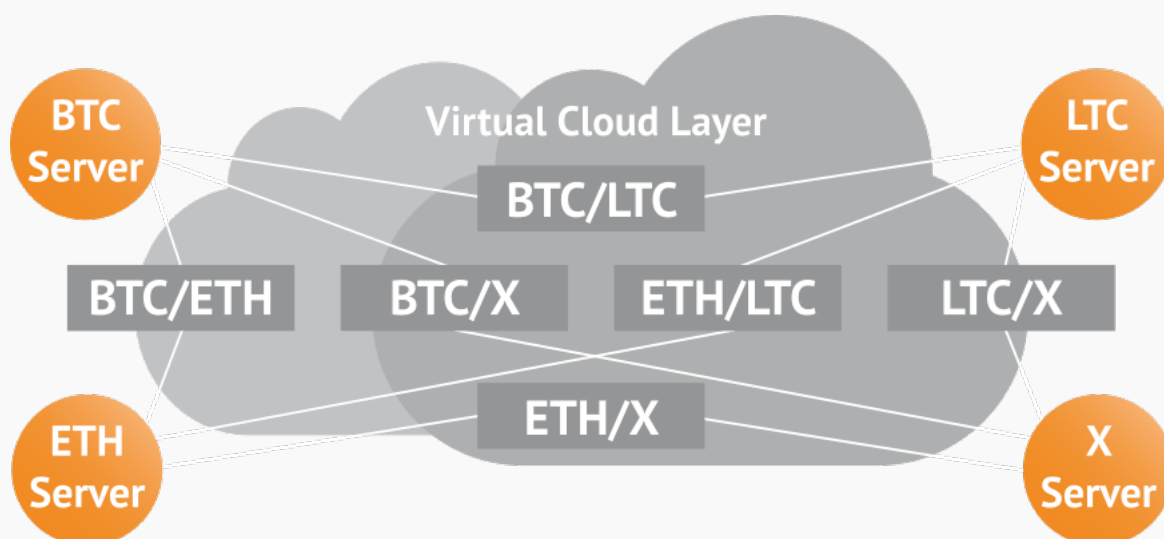
According to an analyst at Saxo Bank, the Bitcoin market cap could hit 1.75 trillion in 10 years, with its price reaching \$100,000. The estimate is that cryptocurrencies will account for 10% of the average daily trade volume of all fiat trade by 2027. Foreign exchange ADV currently stands at \$5 trillion and we can follow growth estimates to assume that cryptocurrencies could account for \$500 billion by that time.

Average daily trading volume in 2017: \$2.1 Billion

Projected daily trading volume in 2027: \$500 Billion

A2A Technology

Our A2A decentralized technology allows us to support thousands of cross rates simultaneously with efficient resource usage. We process all cross-rates in A2A Cloud, with virtually unlimited ability of horizontal scaling.



Imagine an orchestra with a conductor. Each instrument is a separate coin server, playing its own part in the symphony.

The core (conductor) makes them all work together perfectly synchronized. If the core is down, this role is transferred to a spare conductor waiting nearby, or even to one of the musicians.

If some musicians are not fast enough to play all the tunes in time, we can add another with the same instrument to share the task. Each task is totally independent and can be performed on a separate server, or if needed, on hundreds of such servers. All that is automated in the 50x.com Cloud.

A2A tokens are used as an intermediary to evaluate every listed coin and create a matching pair of orders in the system's core.

A2A Tokens

A2A tokens are used as an intermediary in every trade on 50x.com using A2A technology. The problem is that while working with hundreds of different assets, you need a measurement system to evaluate all the tokens in order to create cross-rates, calculate commissions and do all the internal accounting. So, we used an additional token for that purpose. It was designed with self-balancing supply capabilities ruled by the smart contract on the Ethereum network.

Furthermore, we have a promotional system to attract users and make their trading activities more profitable (especially, for active traders who may suffer from turnaround commissions).

By mixing these two concepts together, we have created a 50x.com utility token named A2A after the technology Any2Any we invented and used to create up to 10,000 cross-rates.

The additional utility function of this token is to provide an easy-to-account-for tier system for commission discount for all users on the 50x.com exchange. There are no passive income opportunities, no profit sharing in the A2A token, and, at the same time, it should be very attractive for the users to buy, use and hold in order to get extra discounts and unlock the professional features on 50x.com. This will only be available for professional traders with a sufficient amount of commissions paid to the system.



A2A tokens give users an opportunity to reduce their trading fees by up to 50% through paying commissions with it, and will increase users' discount based on the amount of the commissions paid to the system and the length of time the token is held in the account.

5.1 A2A tokens details

Blockchain: **ETHEREUM**

Token Contract Address: **0x11C039f368606D91664BFd10137B00eEE13CdE77**

The A2A token has **8 decimals**.

5.2 A2A tokens supply and distribution

Total A2A tokens supply is 213,813,768.0680085 A2A.

Circulating supply at the end of the IEO: 50,135,368.7157085 A2A.

According to the IEO terms:

18,160,800.32385 A2A tokens were distributed during the IEO,

1,816,080.032385 A2A tokens were issued to the project owners in order to be distributed between current 50X tokens holding addresses and accounts;

1,816,080.032385 A2A tokens were issued to the project advisors, bounty campaign, etc.;

181,839,199.67615 A2A tokens were issued for the liquidity pool and IEO bonuses distribution;

10,181,608.0032385 A2A tokens were reserved for the external liquidity pool

5.3 The A2A:SHOP

To match cryptocurrency market growth and provide additional long-term stability to the token, we also have a mechanism that balances the prices of the A2A token. From every commission paid to 50x.com, 70% of A2A are sold on the open market at current prices and become 50x.com's income. The remaining 30% are transferred to the smart-contract known as A2A:SHOP to be sold from that contract at the all-time high price, 0.1% higher than the previous sale from the contract. The funds from the sales of A2A tokens via the smart contract are accounted for as 50x.com income. It is an effective price balancing system and is linked to the total trading amount on the 50x.com platform.

When the price of A2A goes down (and it will at some point, as it is a free market), the circulation supply will be temporarily reduced every day by the 30% from daily commissions paid to the exchange. Lower A2A prices will result in bigger absolute amounts of A2A transferred to the smart contract. In an extreme case, the demand for A2A can exceed the total circulation supply and the price will immediately rise to the level of the current sale price in the A2A:SHOP. This system gives us an assurance that any A2A dump will be simply a perfect trading opportunity, and the token itself might become a very attractive trading instrument.

6

A2A Token Holders' Benefits



A2A token holders can get a discount of up to 50% if they pay fees on 50x.com platform in A2A tokens from their internal A2A balance.

In the first year of operations, ALL users will get a 50% discount regardless of the conditions, and in the following years such unconditional discount will be as follows:

	Default discount for all users	Maximum Discount
Year 1	%50	%50
Year 2	%35	%50
Year 3	%25	%50
Year 4	%20	%50
Year 5 and over	%10	%50

Unlike some similar tokens, A2A tokens will never lose all their discount potential and will stay attractive for the users. The maximum 50% discount will always be available for the users meeting special conditions to unlock higher discount rates, like the amount and time the A2A tokens are held, the amount of daily and/or monthly commissions paid, etc.

Additionally, we expect A2A token to be seen as an attractive short- and long-term trading asset, which will increase the demand as well.

7

Use of IEO Funds

Below is the intended use of funds collected during the IEO. It is based on the assumption that at least 30,000 ETH will be collected during the IEO. Final proportions may differ due to the fixed costs in some cases.

- 25%** - Liquidity pool
- 15%** - Research, development and infrastructure
- 10%** - Legalization
- 20%** - Project marketing (partnership program, bounty program, special promotion campaigns, corporate promotional activities)
- 15%** - IEO marketing (partnership program, bounty program, special promotion campaigns, existing agreements)
- 10%** - A2A liquidity pool
- 5%** - Contingency fund



- Liquidity pool
- Research & development
- Legalization
- Contingency fund

- Project marketing
- IEO marketing
- A2A liquidity pool

Legalization



Smart Token Exchange Ltd was incorporated in Saint Vincent and the Grenadines, due to it being the fastest jurisdiction in which to incorporate that kind of business. However, to be able to make fiat deposits and withdrawals, we need to incorporate legal entities in the EU, USA and many other countries, and get all the necessary licenses according to the local laws and regulations.

We expect this process to be completed in 3-5 years from launch. Many procedures must be in place including well trained staff to fit regulators requirements.

The Project



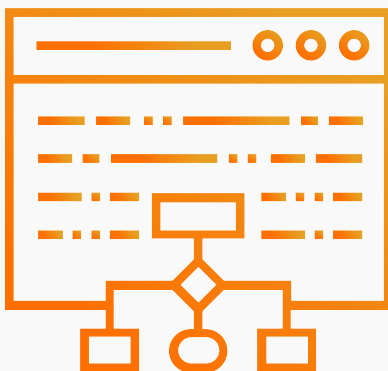
The key concept is this - you'll need just one account to get access to thousands of markets and trading pairs at the lowest rates. Behind the scenes is a fully automated system that takes care of all details. You can choose either segregated storage under your full control and protection or a common account - giving you maximum flexibility and leverage.

Our idea is simple, yet extremely complex at the same time.

On one platform we will combine direct access to the top 100 coins with direct cross-trades between any two of them, the ability to use your own cold wallets to store your coins, and an automated system that will aggregate the liquidity from the other exchanges as well. You can get speed and big liquidity of the centralized exchanges, and the ability to trade from your cold wallets - using one single account at 50x.com exchange!

More importantly, we will bring freedom to traders by providing them with the tools to choose any role they desire in this new reality.

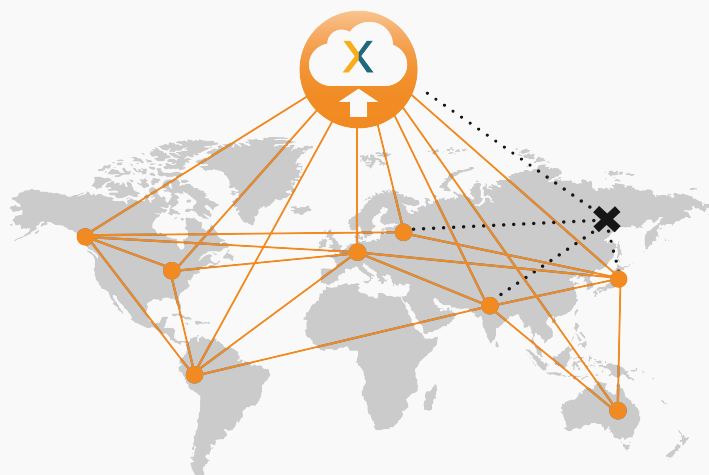
Whether you want a simple coin-to-coin exchange or intraday trading - we will provide planet-wide best rates for thousands of trading pairs - as well as much better liquidity than has ever been seen before. Our sophisticated arbitrage algorithms and unique platform architecture make sure of that.



A user-friendly web-based interface with the highest level of security access control, taken from real-world trading terminals, will provide instant access to the biggest choice of coins and tokens with worldwide best bid & ask prices.

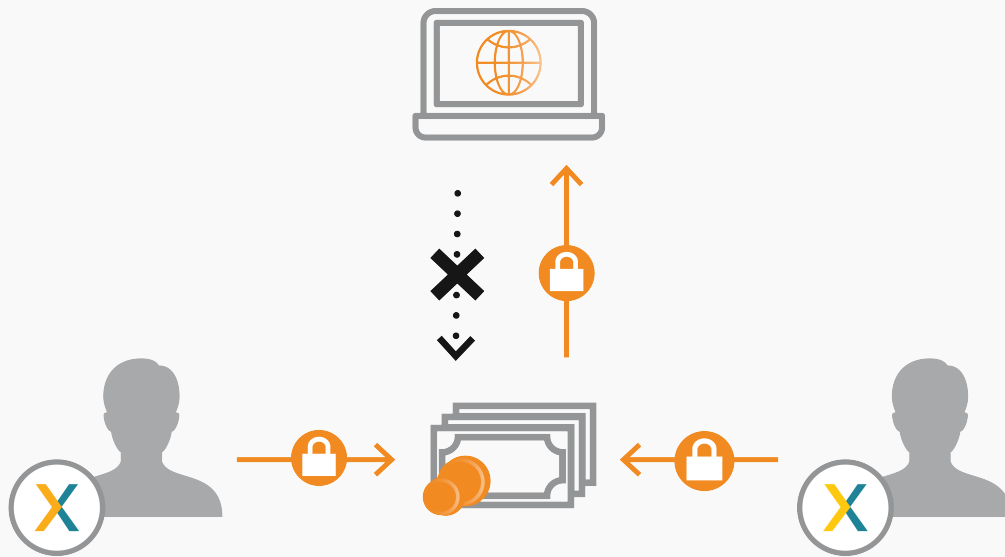
9.1 Decentralization

50x.com's own cloud cluster is physically hosted in many countries to prevent the possibility of downtime due to real-world/technological attacks or failures.



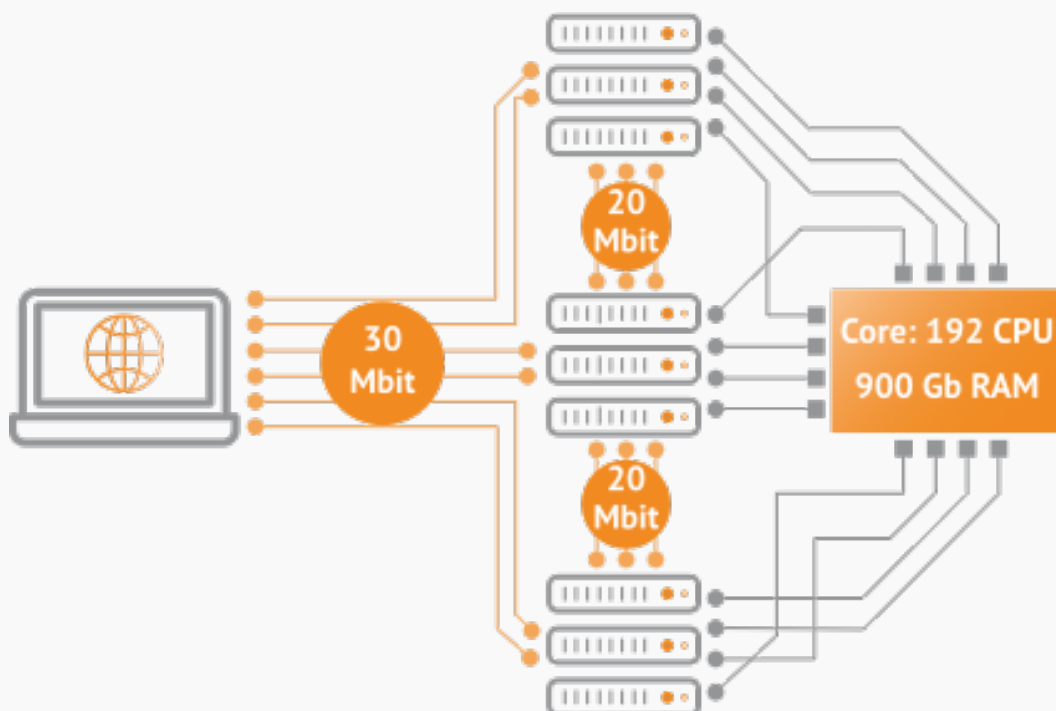
9.2 Crypto-security

All 50x.com systems are encrypted and cannot be accessed without proper authorization from 50x.com. The project's main funds - including users' funds - are stored in cold wallets, not vulnerable to online attacks.



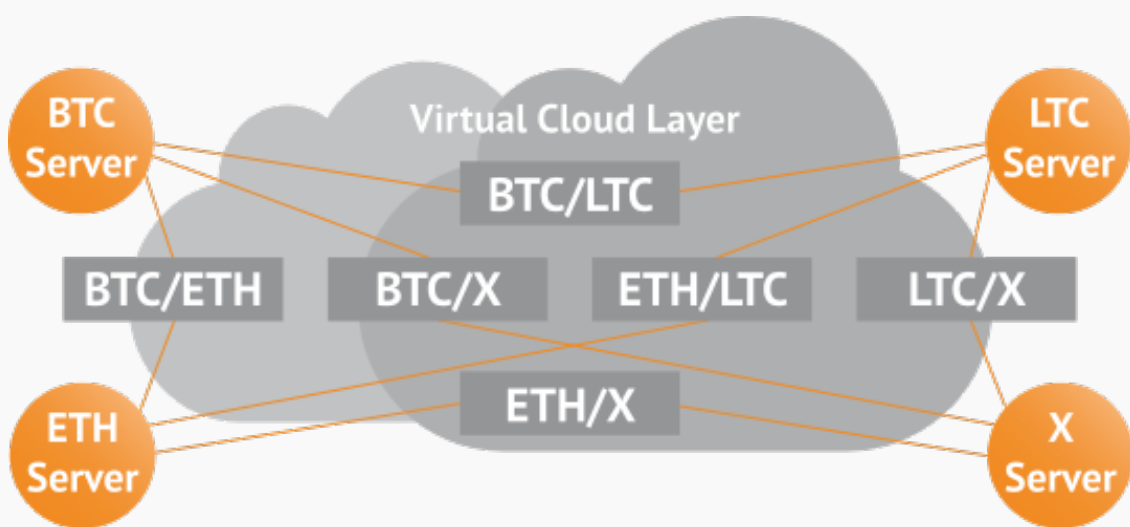
9.3 Speed

Superfast cloud processing core - internal trades are completed in the blink of an eye.



9.4 Horizontal scaling

Our A2A decentralized technology allows us to support thousands of cross rates simultaneously.



Behind our system lie years of experience in trading on the world's largest stock exchanges and countless hours developing trading algorithms for private hedge-funds and brokers.

This unique combination of understanding end-user needs, knowledge of how to build infrastructure capable of delivering services to millions of users, teamed with sophisticated HTF market-making algorithms - ensures that the project will be successful while being difficult to imitate, if someone wishes to compete.

Risk Disclosure

A2A tokens are not any type of securities or security derivatives. A2A tokens do not provide any kind of passive income and cannot be seen as an investment of any kind. However, if you decide to use this token in your speculative activity, you should consider the following risks that may affect the future demand for the A2A tokens and, therefore, the prices on the open market and even the existence of the common public marketplace for A2A tokens:

10.1.1 Instrument risk: You should consider technological, legal and infrastructural risks of the 50x.com project token itself, because it is based on a third-party decentralized solution known as Ethereum network, which is not controlled and cannot be controlled by the project management team or yourself. You should take the time to understand the nature of the technology that you are interacting with.

10.1.2 Liquidity risk: 50x.com has no buyback options for the A2A tokens, therefore, they can be used only to pay trading commissions on the 50x.com platform. In case of unsuccessful operational activity, or for any other unforeseen reasons, it may be difficult to sell your A2A tokens on the open market. Furthermore, there may be restrictions on the resale of the tokens you purchase and your ability to transfer them in your country of residence because of emerging regulation or some other reasons. You should not exchange to A2A tokens any funds in which you require the ability to withdraw, cash-out, or liquidate within a certain period of time as traders may have difficulty to liquidate positions since there may be little or no secondary market for the asset at some point in the future.

10.1.3 Valuation risk: The issuer set the initial exchange rate for A2A tokens against ETH and after the IEO there are only market offers that may differ from the initial rate significantly. You may risk overpaying for your stake at any time because of the market nature.

10.1.4 Regulation risk: 50x.com platform is operating outside of your country, some regulations may hamper your ability to use the platform in the future.

10.2 Fraud risks: It is possible that certain people involved in the project may commit fraud or create the conditions for a future act of fraud. If such fraud occurs, then your total equity may be lost.

10.3.1 Principal risk: There are many situations in which the 50x.com project may fail completely or you may not be able to get back your initial equity exchanged to A2A tokens partially or entirely. As A2A is a utility token, it is worthless without 50x.com platform, that may temporarily or permanently shut down, may be hacked, and could become insolvent. This may lead to a total loss of the market value of A2A tokens.

10.3.2 Funding risk: The project may require funds in excess of its existing cash resources to fund operating expenses, develop new products, expand its marketing capabilities and finance general and administrative activities. Due to market conditions at the time when the project might require additional funding, it is possible that the project will be unable to obtain additional funding when it needs it, or the terms of any available funding may be unfavorable. If the project is unable to obtain additional funding as and when needed, it could be forced to delay its development, marketing and expansion efforts and, if it continues to experience losses, potentially cease operations.

10.3.3 Disclosure risks: The 50x.com project is at an early stage and is only able to provide limited information about its business plan and operations because it does not have fully developed operations or a long trading history. Besides, the 50x.com project is not providing some critical information regarding its business, technological and financial affairs to participants in order to protect its know-how and exact business model from the competitors. Therefore, there might not be enough information for you to make an educated judgement about the project's future.

10.3.4 Cyber security risk– startups are vulnerable to the risk of cyber-attacks in view of the online nature of crowd-funding. Such cyber-attacks may come in varied forms, such as overloading a platform's infrastructure, confusing accounts and/or identity theft.

10.3.5 Competition risk: The 50x.com project may face competition from other upcoming or existing companies, some of which might have received more funding than the start-up has. One or more of the project's competitors could offer services similar to those offered by the project at significantly lower prices, which would cause downward pressure on the prices the project would be able to charge for its services. If the project is not able to charge the prices it anticipates charging for its services, there may be a material adverse effect on the project's results of operations and financial condition.

10.3.6 Market demand risk: While the 50x.com project believes that there will be customer demand for its products, there is no assurance that there will be broad market acceptance of the project's offerings. There also may not be broad market acceptance of the 50x.com project's offerings if its competitors should offer products which are preferred by prospective customers. In such an event, there may be a material adverse effect on the 50x.com project's results of operations and financial condition, and the project may not be able to achieve its goals.

Translation Disclaimer

The translation of the whitepaper, other downloadable media and pages on 50x.com website to the languages other than English is performed by third party services over which 50x.com has no control. The service provides translations that are only an approximation of the website's original content. The translations should not be considered exact and may only be used as a rough guide. By making this translation available to visitors to our website, 50x.com is not in any way approving or endorsing this translation, and nothing herein should be construed as such an approval or endorsement by 50x.com.

Such translations are provided "AS-IS" with no warranties, express or implied, and its use confers no privileges or rights. 50x.com cannot and does not guarantee, and disclaims responsibility for, the accuracy, reliability or timeliness of any information translated through third-party services and, because of this, strongly encourages users of our website to critically read the information translated through the use of our website. In the event of any doubt as to the accuracy of the translated document, 50x.com strongly encourages users to seek approval and explanation for all critical information they rely on in the process of making decision whether or not to participate in 50x.com tokensale.

50x.com DISCLAIMS AND IS NOT LIABLE FOR ANY INACCURACIES OR INCORRECT INFORMATION THAT MAY EXIST IN TRANSLATIONS TO THE LANGUAGES OTHER THAN ENGLISH ON OUR WEBSITE.

SHOULD THERE BE ANY DISCREPANCIES BETWEEN THE TRANSLATION AND THE ORIGINAL ENGLISH VERSION, THE ENGLISH VERSION HEREOF SHALL PREVAIL.

