



OneExBit

EXECUTIVE SUMMARY

In 2018, the cryptocurrency market experienced both record highs and dramatic lows. The immaturity of the market was demonstrated in full relief: cryptocurrency exchanges lost hundreds of millions of dollars to hackers; over 1000 ICOs were launched, with a failure rate of 80%; and so-called whales – abetted by exchanges themselves – cunningly manipulated asset prices.

Even though the beginning of 2019 was marked by a new phase of tentative growth, many more issues will have to be solved for cryptocurrencies to achieve a mass adoption. Many of these issues have to do with crypto exchanges. Excessive centralization (and resulting machinations), lax security, high fees, clumsy interfaces – all these factors hinder the work of traders and stop large institutional investors from entering this market.

OneExBit aims to make crypto trading more secure, efficient, and user-friendly. OneExBit already has a fully-functional trading terminal that integrates several popular exchanges using API. Apart from the trading functionality, the terminal offers useful graphs, trading history and statistics, and a highly intuitive, carefully designed interface.

The next step for OneExBit is a large-scale expansion of the terminal's functionality, paired with launching a masternode coin. New features will include intra-exchange arbitrage bots, asset management services, social and mirror trading, compound order types, and a decentralized exchange. OneExBit will also keep adding new exchanges, with their total number expected to reach 40 by the end of 2019.

Thanks to the new features, OneExBit users will have a number of revenue sources at their disposal: manual and automatic trading, passive income from entrusting their assets to professional traders, masternode fees, arbitrage profits, and others. Thus, the terminal will become a perfect tool both for trading and for passive investments.

The present White Paper provides a detailed analysis of the existing crypto market issues, as well as of the solutions proposed by OneExBit. The document describes the key advantages that the terminal offers to traders and investors and explains how the project differs from its main competitors. Dedicated sections include explanations of the basics of API trading, order types, the concept of a decentralized exchange and masternodes, as well as the key facts about the ONEX masternode coin launch.

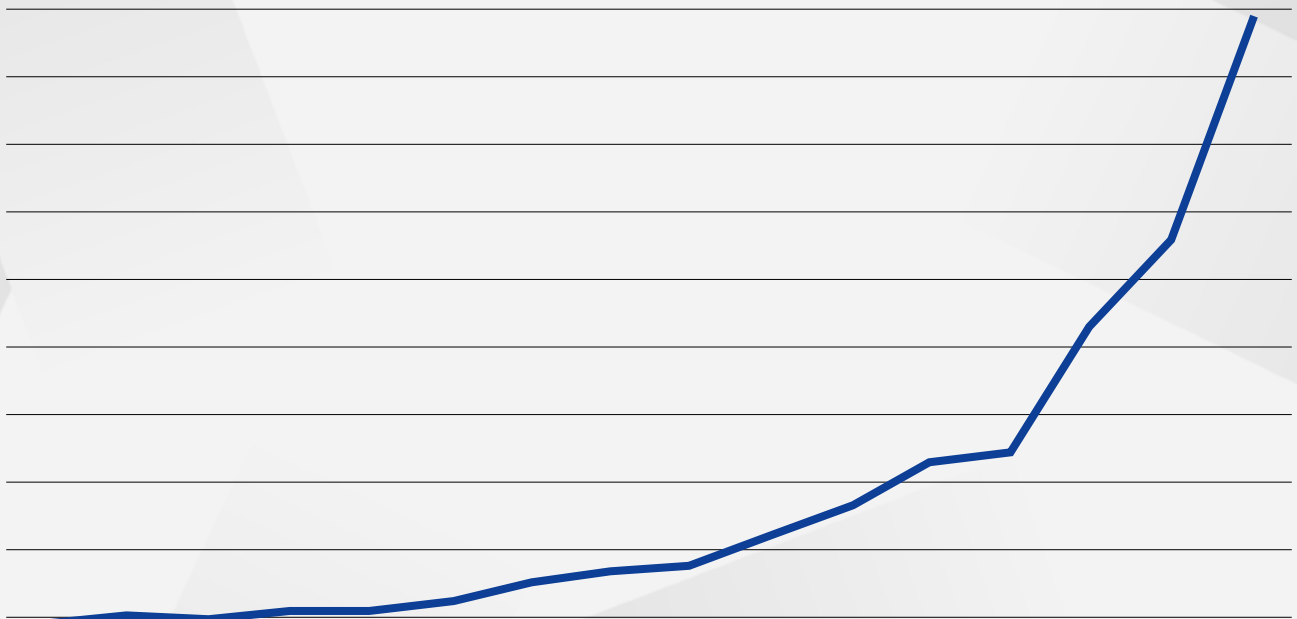


1. MARKET TRENDS AND PROBLEMS

January 9, 2019 marked the 10th anniversary of Bitcoin. It is a well-known fact that the first-ever transaction with Bitcoin was a purchase of two pizzas for 10 000 BTC of \$42. By May 2010, 1 BTC was priced at \$0.01. In January 2018, its price skyrocketed beyond \$20 000 and the overall capitalization of the crypto market exceeded \$800 billion: compared to the \$18 billion in early 2017, the market had grown 45 times, with 2000 different cryptocurrencies traded on 400+ exchanges. Historical data shows impressive dynamics:

Year	Number of cryptocurrencies	Number of exchanges	Number of ICOs	Total market cap	Daily trading volume
2013	<100	35	0	\$10 bln	0 \$
2014	200	76	2	\$11 bln	\$78 mln
2015	350	91	5	\$8 bln	\$80 mln
2016	500	170	34	\$15 bln	\$500 mln
2017	1335	280	905	\$566 bln	\$41 bln
2018	2042	Circa400	1771	\$800-120 bln	\$60 bln
2019	>2400	>400	>100	\$130 bln (as of March 1)	\$33 bln (as of March 1)

It is also worth illustrating the fast growth in the number of Bitcoin users (most of whome are investors and traders):



Unfortunately, despite crypto enthusiasts' glowing forecasts, the January 2018 peak was quickly followed by a rapid fall. Another 12 months later, the BTC/USD exchange rate fell below \$3400, with a total market cap of just \$100 billion on December 15, 2019 – 88% less than in January¹.

These dramatic fluctuations demonstrate how immature the cryptocurrency market is and show that digital assets remain a speculative instrument that can bring large profits only to experienced traders. As for ICOs, or Initial Token Offerings, which are positioned as a lucrative alternative to trading for amateur investors, they have also reached their peak of popularity in 2018: almost 2300 ICOs were launched as opposed to just 966 in 2017. In this case, too, the immaturity of the industry became clear: the total amount raised reached \$11.4 – only 13% higher than in 2017. If one detracts the \$2 bln raised by Telegram in a closed sale, the proceedings were actually lower than 2017. The failure rate, however, remained distressingly high, reaching 80%. In particular, the largest scam of 2018 – Bitconnect – has cost investors over \$2.5 billion.

Despite the gloomy results of 2018, experts predict that the industry will soon overcome its growing pains and enter a more stable and mature phase. By some estimates, the market will grow by 50% in 2019². However, a number of serious market issues have to be resolved first – issues that stem from the very mechanism of crypto exchanges.

1.2. Crypto exchanges: challenges and risks

Crypto enthusiasts are convinced the market for digital assets will soon be as large as the Forex market. However, most experts believe that a mass adoption of crypto trading and the arrival of large institutional investors is still far in the future. The reason is the extreme immaturity of the industry and high risks. Even though the largest crypto exchanges can boast daily trading volumes reaching billions of dollars, their levels of security, reliability and usability are still far below those of traditional exchanges.

1.2.1. Centralization risks

Assets traded on crypto exchanges can be more or less decentralized, but the exchanges themselves are fully centralized structures that store their clients' data and assets on their own servers. For this reason, exchanges are subject to the same risks as any other, non-crypto-related platform:

a) Risk of hacker attacks, theft, and fraud

2018 was a year of records in terms of thefts from crypto exchanges: in the 6 largest attacks, hackers made away with \$865 million, out of which \$533 mln were stolen from the Japanese exchange Coincheck (this was the biggest crypto heist in history).³

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1. <https://www.newsbtc.com/2019/01/02/december-crypto-roundup-markets-hit-lowest-level-of-the-year/>
 2. <https://www.ccn.com/cryptocurrency-trading-volume-to-see-50-growth-in-2019-research>
 3. <https://www.coindesk.com/2018-a-record-breaking-year-for-crypto-exchange-hacks>

Crypto exchanges are themselves fintech startups, and their systems of cyber security often leave to be desired. At the same time, deposits worth billions and a low risk of getting caught make attacks on exchanges very attractive to hackers.

Finally, an exchange itself can turn out to be fraudulent or abusive in its practices. For instance, after the recent death of the founder of QuadrigaCX – a Canadian exchange – it was discovered that \$145 mln in client deposits had simply disappeared from the accounts.⁴

It is worth pointing out that crypto exchanges are still not properly regulated in most jurisdictions; many exchanges operate in offshore areas without any controls. Thus, in case of theft or other issues an exchange can simply refuse to compensate traders.

b) Internal manipulations

Since the internal workings of centralized exchanges are kept hidden from the public, exchanges can and do manipulate asset prices together with so-called “whales” (large investors) to maximize their profits. The most popular methods are front running, insider trading (starting to trade a new asset several days or even weeks before the official launch), flash crashes (artificial short-term crash of an asset’s price that causes margin traders to lose their deposits), wash trading (an exchange trades with itself at zero fees to increase the trading volume for an asset), and pump-and-dump (artificially increasing the price of an asset, then selling it, which causes a price crash).

Most traders know about these risks and diversify their portfolios, opening accounts at a dozen or more exchanges. This way, even if a trader’s deposit on one exchange is stolen or lost, most of his or her capital will be preserved. However, diversification has its costs, too: it becomes difficult for traders to keep track of their assets on different exchanges.

1.2.2. Usability problems

a) Bad interface

Crypto exchanges’ main priority is speed, not UX or functionality. For this reason, many of them have clumsy, hard-to-use interfaces. For example, the new interface of Bittrex, launched in April 2018, elicited reactions on Reddit ranging from “unusable” to “disgusting”. Exchange interfaces are now at the same level as average banking apps and a decade behind the current UI/UX trends.

b) Poor functionality

Exchange interfaces can be both overloaded by unnecessary features or very poor. They often lack key graphs and analytical tools, as well as important trading features: social trading, arbitrage, and advanced order types (trailing profit,

4. <https://cointelegraph.com/news/crypto-exchange-quadrigacx-missing-145-mln-after-death-of-founder>

stop loss, etc.). Moreover, the set of currencies available for trading is often small: according to a poll conducted by Ecrybit, 22% of traders are dissatisfied with the low number of currency pairs offered by exchanges.

c) Lack of a standard interface

Exchange UI is not just difficult to use – it is not standardized, either. Each exchange has its own system of registration, deposits and withdrawals, order placement, etc. As a result, traders have to waste hours on learning to use multiple interfaces.

d) Problems of access and viruses

Trading on multiple exchanges requires downloading large amounts of data, which slows down a computer and can disrupt trading operations. One should not forget about the risks of getting infected with a virus or having personal data stolen by a phishing site. Such sites copy the interfaces of large exchanges and have addresses that often differ in just one letter. If a user enters login and password details on a phishing site, they will fall into the hands of criminals, who can then easily steal the user's funds stored on the real exchange (sometimes even with an activated 2FA).

1.3. Trading terminals as a solution

Trading terminals – such as the one proposed by OneExBit – cannot eliminate the structural issues of crypto exchanges; however, they help traders to diversify risks without spending too much time or effort. Thanks to API integrations, traders that open and close deals on dozens of exchanges, risking to lose only a small share of their capital in case one of these exchanges is attacked. Moreover, control over accounts and assets stops being a problem: the trader does not risk to forget how much of each asset is stored on each exchange or to miss out on a good deal. Furthermore, all trading operations can be carried out within a single user-friendly interface build using the latest UI/UX trends. Yet another important advantage of API trading is the protection of asset theft that it provides: since API keys do not allow to withdraw funds, criminals will not be able to take possession of the user's funds even if they can access the terminal.

Trading terminals offer a much wider range of features than any specific exchange. Various graphs and analytical tools, statistics, news, intraexchange arbitrage, compound order types – all this makes terminals a preferable alternative to crypto exchange websites. Finally, it is worth noting that the new-generation terminals, including OneExBit, are aimed not only at traders but also to amateur investors, thanks to the presence of asset management services.



2. ONEEXBIT TRADING TERMINAL — ADVANTAGES AND CURRENT FUNCTIONALITY

As shown in the previous sections, working with crypto exchanges presents serious risks. In order to diversify their risk, most traders maintain accounts on several exchanges. However, until recently there were no services for accessing multiple exchange accounts at the same time. This opportunity finally emerged thanks to OneExBit – an innovative trading terminal that allows traders to manage all their exchange accounts in real time using API.

2.1. Current release of OneExBit – key features

The current fully functional version of OneExBit is offered for both Mac and Windows and is already used by over 500 traders.

The current release (as of March 2019 – information about the features added after the publication of the White Paper is available [here \(link\)](#)) offers the following features:

- Remote access to 8 exchanges: Binance, Bitfinex, CryptoBridge DEX (data and trading operations); Poloniex, Bittrex, HitBTC, BitMEX - viewing mode (graphs, deals, orderbooks);
- Opening and closing positions on all fully integrated exchanges within the OneExBit terminal – no need to use a browser for trading;
- Fast switching between exchanges;
- Vast range of tech analysis and forecasting tools; analysis results are saved even when the program is closed;
- Limit and market orders;
- Exchange rate graphs (available thanks to an integration with [tradingview.com](#)) with multiple display options;
- Current orders displayed on a graph;
- Orderbooks and last transactions;
- Working without API keys (price and graph analysis);
- Displaying the account balance, transaction history, a list of open orders, real-time order closure, last price, daily price change in %, daily highs and lows, daily trading volume (more types of data are added regularly).

2.2. Advantages for traders

- Working with multiple exchanges within a single interface;
- Working simultaneously with an unlimited number of accounts;
- Ease of use: the intuitive interface is suitable for beginner traders and amateur investors;
- Speed; all orders are executed by the terminal, without the need to use a browser; it is possible to switch instantly between different accounts on the same exchange; exchange data is instantly sent to the terminal;
- Risk diversification thanks to trading on several large exchanges;
- Many sources of income compared to trading on a traditional crypto exchange;
- Security – all the data received from a user's exchange accounts is processed locally on the user's computer;
- Stability: the app works and processes orders smoothly even during periods of high volatility and crises on the market;
- Tech Support – the button for contacting tech support is available from the terminal window;
- Additional profits from strong price fluctuations:
 - a) If the price of an asset falls sharply, the user can sell it through the terminal in just a few seconds, before the information about the fall reaches other exchange participants; in case of interexchange arbitrage and using automated trading algorithms (under development) – the trader can buy an asset at the lowest price on one exchange and almost instantly sell it for a higher price on a different exchange;
 - b) Bot trading: a specially built intraexchange bot (under development) will track exchange rates and carry out trading transactions, ensuring a moderate but stable daily profit;
 - c) Margin trading (under development): traders can borrow funds from exchanges. Doing this in the terminal maximizes the available choice of leverage sizes;
 - d) Mirror trading (copying the deals made by experienced traders), as well as copying one's own orders on several accounts (under development);
 - e) Passive income from managed asset accounts (under development); in order to minimize the risk of fraud, it will be possible to have one's assets managed by other exchange users but not by outside "professional" managers.

2.3. API basics and security

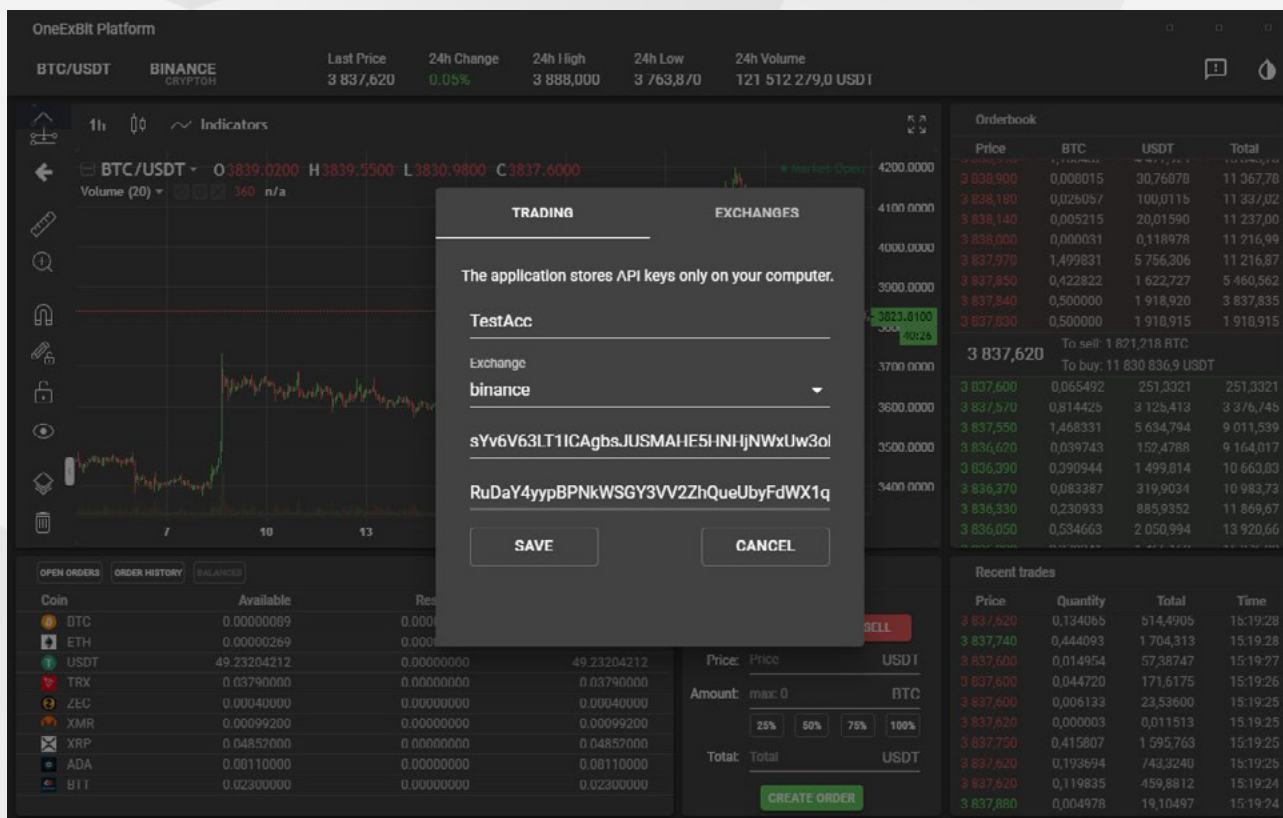
An API (Application Programming Interface) is a channel that allows two devices (computers, servers, etc.) to communicate by requesting and sending data. In basic terms, it is a machine interface that is similar to program interfaces we are used to, but with an important difference: users of APIs are not humans but machines. An API provider offers a service, while a client (be it a computer, a smartphone, or something else) sends a request to use that service. The idea behind APIs was well illustrated by David Berland, editor-in-chief of ProgrammableWeb: he compared an API to an electric plug.⁵ All home appliances consume electricity (service), which is provided by an energy company (provider). A wall socket acts as an interface. All sockets and plugs in the country are standardized, so that any appliance can connect to a service provider through the same API. The provider does not need to know anything else about each appliance plugged into a wall. Once the plug is inserted into the socket, the provider receives a request to use electricity and the appliance starts working.

In the same manner it is possible to integrate, say, Google Maps or a Share on Facebook button into any app. One can add an automatic translator into an email program, a weather forecast into a trip planner, and so on.

Most large crypto exchanges have their APIs that allow to buy and sell cryptocurrency, obtain current and historical exchange rate data, generate blockchain addresses, and even accept payments for goods and services in crypto. (It should be noted that exchanges themselves also use third-party APIs: for example, Binance offers instant currency exchange using a Changelly API.)

In order to access an exchange via an API, an app – such as a trading terminal – needs to identify itself using an API key. Exchanges provide these keys to authorized users in a special section of their user areas. Two keys are issued – one public, the other private. The keys must be stored on a safe medium, preferably one not connected to the Internet. The screenshot below shows the API key window of Binance when using the OneExBit terminal:

5. <https://www.programmableweb.com/news/how-web-and-browser-apis-fuel-api-economy/analysis/2015/12/03>



Apart from protecting their API keys, users must also be careful when storing their login details for exchange accounts and for the terminal. For this purpose, one can use Google Authenticator – an app that generates security codes for iOS and Android and works even offline.

If an API key or login credentials fall into the hands of criminals, they will be able to carry out trading transactions from the user's account, as it happened on Binance in July 2018⁶. Because of such incidents, many beginner traders perceive API trading as risky. However, if one does not neglect security guidelines, the risks are minimal. Trading on exchanges using APIs is a standard practice in more mature markets, such as Forex, and its advantages far outweigh the risks. In the OneExBit terminal, asset protection is ensuring by limiting API access: it is possible to open and close deals but not withdraw funds.

6. <https://support.binance.com/hc/en-us/articles/360006675312-Incident-Recap-on-Irregular-SYS-Trading>



3. PROJECT DEVELOPMENT STRATEGY

3.1. Upcoming features – an overview

OneExBit developers are currently working on the following features that will be included in the upcoming releases:

- Integration of new exchanges;
- A new blockchain and a proprietary masternode coin with PoS mining;
- A system of pricing plans;
- Integration of the ONEX coin as the main means of payment on the platform;
- A referral program;
- Additional order types: stop loss, take profit, trailing stop, combined orders, etc.;
- Margin trading;
- Social and mirror trading;
- Demo accounts;
- A decentralized exchange built on the BitShares protocol;
- Asset management (PAMM accounts and the platform's own service);
- A bot for intraexchange arbitrage;
- A data panel for interexchange arbitrage;
- Portfolio analysis tools;
- A news and stats hub to assist in fundamental analysis.

These features and their implementation strategy are described in detail in individual subsections of this chapter.

3.2. Integration of new exchanges and trading on demo accounts

Up to 30 new exchanges will be integrated until the end of 2019, with one exchange being added on average every two weeks. The decision about which exchanges should be integrated first will be taken using a OneExBit community vote.

For those beginner traders and amateur investors who are not yet ready to trade with real money it will be possible to use demo accounts. Such accounts present a great opportunity to learn the basics of trading or try out a new strategy without risking one's capital. Each demo account will be opened with 10 BTC on it; trading operations will be carried out locally and using actual data from Binance but without API keys.

3.3. Proprietary blockchain and ONEX coin

In order to provide users with the widest feature possible range of services and create a self-sustaining financial system, OneExBit will issue its own masternode coin, ONEX. Coin holders will get two additional sources of income:

1. Launch and maintenance of a masternode – that is, a node that stores a complete and up-to-date version of the OneExBit blockchain. Masternodes provide crucial services to the network: they ensure the blockchain's security and stability, and in some blockchains (such as Dash) they make it possible to carry out instant private transactions. Masternode operators receive a reward for their services in the form of a share the block reward. In order to create a masternode, a OneExBit user would have to:
 - Purchase a certain number of ONEX coins to create a stake;
 - Buy a VPS (virtual private server) from such providers as DigitalOcean or Vultr; this is necessary because a masternode must remain online 24/7;
 - Install the OneExBit wallet on the virtual server and set up a hot-cold storage system for ONEX coins. To do this, a user would need to install another OneExBit wallet on their local computer, transfer the necessary number of ONEX coins into it and create a so-called secondary private key that would serve as a link between the two wallets. The wallet on the virtual server will remain empty and complete transactions on behalf of the wallet on the local machine, where the stake is actually stored. Once the connection is established, the user will be able to disconnect their local wallet from the Internet (switching it to the “cold”, or secure, mode), while the remote wallet will remain online, which is necessary to receive the rewards.
2. Proof-of-Stake mining. ONEX coins can be mined just like any other PoS cryptocurrency. A user will only need to store some ONEX coins in his or her wallet (a stake) and confirm transactions on the network. Like in all PoS systems, the members with higher stakes will have better chances to complete a block and receive a fee.

Many cryptocurrency users mistakenly believe that PoS and masternodes are one and the same thing, since stakes figure in both cases. This is wrong: the mechanism of masternodes is also known as PoSe (Proof-of-Service), and there are important differences between the two ways of earning money:

- The stake size for a masternode is predefined and rather large; PoS mining is available to users with stakes of all sizes;

- Any device or computer with a wallet installed is enough for PoS mining; a masternode needs private server space to work without interruptions;
- A masternode stores a full copy of the blockchain, which can reach dozens of gigabytes;
- Users who do PoS mining do not pay any fines when their wallets go offline – they just do not receive any rewards; by contrast, a masternode must always be online to update its blockchain copy, otherwise it is charged a fine;
- Unlike miners, masternode operators do not complete blocks; however, they can refuse a block if a miner breaks the rules (for instance, to manipulate rewards);
- Launching and running a masternode is technically complex; PoS mining is easy enough for any user;
- Masternode rewards are higher and more predictable, though the monthly VPS costs have to be considered.

ONEX COIN — KEY FACTS

Total coins:

100 000 000

Premine:

500 000 (0,5%)

Masternode collateral:

10 000

Mining:

**MASTERNODE
+ POS**

Stake age maturity:

12 HOURS

Block generation time:

60 SECONDS

REWARD DISTRIBUTION:

Masternode - 80%



PoS - 20%



Developer fee - 0%

REWARD ALLOCATION STAGES

BLOCK	REWARD
0 — 1	500 000,00
2 — 999	1
1000 — 19999	7
20000 — 39999	8
40000 — 59999	9
60000 — 79999	10
80000 — 99999	11
100000 — 119999	12
120000 — 139999	13
140000 — 159999	14
160000 — 179999	15
180000 — 199999	16
200000 — 219999	17
220000 — 239999	18 (20000 collateral)
240000 — 259999	19
260000 — 279999	20
280000 — 299999	21
300000 — 319999	20
320000 — 339999	19
340000 — 359999	18
360000 — 379999	17
380000 — 399999	16
400000 — 419999	15
420000 — 439999	14
440000 — 459999	13,5
460000 — 479999	13
480000 — 499999	12,5
500000 — 519999	12
520000 — 539999	11,5
540000 — 559999	11
560000 — 579999	11,5
580000 — 599999	12
600000 — 619999	12,5

620000 — 639999	13 (30000 collateral)
640000 — 659999	13,5
660000 — 679999	14
680000 — 699999	14,5
700000 — 719999	15
720000 — 739999	15,5
740000 — 759999	16
760000 — 779999	16,5
780000 — 799999	17
800000 — 819999	17,5
820000 — 839999	18
840000 — 859999	18,5
860000 — 879999	19
880000 — 899999	19,5
900000 — 919999	20
920000 — 939999	19,5
940000 — 959999	19
960000 — 979999	18
980000 — 999999	17
1000000 — 1019999	16
1020000 — 1039999	15
1040000 — 2559999	14

3.4. Social trading

The concept of social trading on the traditional markets has gained popularity thanks to the eToro platform; however, it is only now starting to be implemented in the crypto market. The key elements of social trading are as follows: a) possibility to find and add traders to one's "friends" to see their updates on one's feed, just like it is done in social networks; b) copying trades of chosen users; c) exchange of experience and a message system or chat to discuss the market situation. The social trading module of OneExBit will include all these elements.

While searching for traders to add to one's feed, it will be possible to view their transaction history and filter the list by total and average profit, by asset risk levels, etc. Having found an interesting trader, the user will not have to start copying his or her trades right away: it will be possible to just add the trader to favorites and follow their updates (orders and posts). Beginners will be able to ask traders questions and learn by analyzing their strategies and results. The goal of social trading is practical learning, and trades should be copied mindfully. Of course, each trader can decide to join the social trading module or not.

Professionals who wish to participate in social trading will be added to a special trader showcase, displaying their statistics; the most successful members will be displayed on the "wall of honor". Trades can be copied manually or automatically; there will be options to copy all trades made by a trader on one of his or her accounts, on several, or on all.

3.5. Mirror trading (signals)

Unlike social trading, which is aimed at beginner traders, mirror trading is geared at those investors who do not wish to trade themselves but rather receive a profit with a minimum effort. Mirror trading is associated with high risks, so investors must evaluate each trader's strategy carefully (strategies will be described in trader profiles and available in the trader showcase) and his or her results. It is also essential to diversify one's portfolio, allocating the funds among several traders, and track results regularly, replacing a trader with another if they suddenly change their strategy or reduce their trading volume.

The traders who agree to provide their signals for mirror trading can themselves trade manually, use automated strategies, or even obtain signals from the outside. All this information will be reflected on a trader's profile.

Whenever a selected trader opens a position, the system will send a signal to the investor's terminal, where a new order will appear automatically with the corresponding risk coefficient. Mirror trading subscriptions will be subject to a fee, chargeable on average every 4 weeks. Part of the fee will be allocated to the traders and paid in ONEX coins.

Mirror trading for asset managers. Successful traders who are allowed to manage the funds of other OneExBit members will have at their disposal a modification of the mirror trading tool. In order to open the same position on their master account and on each of their managed client accounts (of which there can

be dozens, including on several exchanges), the trader will not have to perform any manual calculations and place multiple orders: the mirror trading bot will do all the work.

3.6. Asset management: PAMM accounts

The difference between copy-trading and PAMM accounts lies in the fact that in the first case the investor's terminal opens positions as soon as a signal is received from a selected trader, but the trader him- or herself does not bear any responsibility for the investor's funds – only for their own. In case of PAMMs (Percentage Allocation Management Module), the investor transfers assets to an experienced trader to be managed and receives most of the resulting profit. The trader's responsibility is much higher in this case, as is the management fee. For example, imagine that a trader's personal deposit is \$2000 and she has \$2000 of investor money under management. The management fee is set at 30% of the profit. Trading with the total resulting sum of \$4000, the trader receives a profit of 10% in a period, or \$400. Out of this sum, \$200 are the share of the investor, since he had provided half of all the traded capital. However, out of the \$200 one needs to subtract the 30% fee, or \$60. Thus, during the rollover (once the trading week is over) the investor will receive \$140.

The same trader can run several PAMMs with different strategies. All investor funds will be stored in the account of the OneExBit platform, not in the trader's account. Only "champion" traders included on the board of honor will be able to run PAMMs, and investors will have ready access to the information about a trader's total capital under management, open deals, personal deposit, and account dynamics. Investors will be able to set their own take-profit and stop-loss levels to limit their risks even when the trader's strategy is risky. The profit will be available for withdrawal once a week after the rollover (which usually happens on Sunday); in the same time window, it will be possible to withdraw all the funds from a PAMM or reinvest it in another trader.

PAMM portfolios are aggregate investment products that include PAMMs by several traders with different weights. Such portfolios are the next step in automating investment: they are geared at investors who wish to diversify their risks without spending time on analyzing and choosing traders and allocating shares in their portfolio to them. One portfolio can include from 3 to 20 traders with different shares. Example: an investor transfers \$1000 into her PAMM portfolio with the following allocation of shares – 50% to trader A, 25% to trader B, and 25% to trader C. Each trader charges a 20% management fee, and the commission of the platform itself is 5%. Trader A earns a profit of 10%, trader B finishes a period with a loss of 10%, and trader C receives a 4% profit. The investor's final profit available for withdrawal in the rollover will be $0,95 \cdot (500 \cdot 0,1 \cdot 0,8 - 250 \cdot 0,1 + 250 \cdot 0,04 \cdot 0,8) = 0,95 \cdot (40 - 25 + 8) = 0,95 \cdot 23 = \$21,85$.

PAMM accounts and portfolios are considered very risky by some investors due to the infamous affairs of such large Forex brokers as Panteon and Forex Trend. However, one must remember that the reason for their failure lay in their fraudulent practices. These brokers functioned as so-called kitchens: trading orders never left the company (that is, there were no actual operations on the open market) and investor profits were paid out of new clients' deposits (a Ponzi

scheme). By contrast, cryptocurrency PAMMs are much more transparent: it is easy to check that deals are concluded in the open market and involve liquidity providers, since all the transactions are recorded on a blockchain. Thus, investors' risks are down to the natural trading risks and the human factor.

3.7. Cryptocurrency arbitrage

Arbitrage is a low-risk method of earning money on differences between exchange rates on different markets: either the exchange rate of one currency in different exchanges or the rates of two currencies relative to a third in the same exchange. Arbitrage bots are a logical next step in the development of the OneExBit terminal as an all-in-one financial system: traders will receive an additional opportunity of earning a profit within the same terminal and without the need to use any outside services.

Interexchange arbitrage – this is the more common method of arbitrage trading. A coin is bought on exchange A for a lower price and quickly sold on exchange B for a higher price. Differences in exchange rate are a sign of the low efficiency and immaturity of the market: in a perfect, fully efficient market information would spread instantly, so that all exchange rates would be equal across all exchanges. In reality, variations in the amount of liquidity, local regulations, etc. can create price differences (called arbitrage windows) of up to 20%. For examples, a positive piece of news about ETH can lead to quick rise in demand; most users will go to the largest and most famous exchanges to buy more ether, causing a sharp price increase, while less-known exchanges will get a small share of the additional demand, and the price on those exchanges will grow by a smaller amount.

It should be noted that manual arbitrage trading is virtually impossible, since arbitrage windows open and close very quickly. On the one hand, it happens because bots quickly find them and exhaust their potential; on the other hand, because exchanges themselves try to discover and close such windows.

OneExBit will feature an information panel for interexchange arbitrage: the system will not be able to open arbitrage positions, but it will search for arbitrage windows for selected cryptocurrencies on all the integrated exchanges.

Intraexchange arbitrage. This method is based on finding “arbitrage triangles” inside an exchange – that is, differences in the exchange rate of currencies A and B relative to a currency C. Example: imagine that one coin C can be sold for either 1000 coins A or 100 coins B. However the C/A exchange rate is not $1C=10A$ as you would have in a perfectly efficient market but $1C=12A$. Having a total of 10 000 A coins, a trader buys 10 B coins, then uses them to buy 1000 C coins, which she finally exchanges back to A (at the rate of 12 A for 1 C) to obtain 12 000 A. The resulting profit before fees is 2000 A.

A special OneExBit arbitrage bot will search for such triangles on one or several integrated exchanges and perform arbitrage operations for the selected currencies and within the set amounts. The trader will only need to keep part of his or her capital free for arbitrage, since windows can appear unexpectedly. Arbitrage risks are minimal, since trades are made at spot prices; at the same time,

the profit from each deal is very small, so a stable income depends on making a very large number of trades. The bot's algorithm will be able to process any number of different coins, maximizing the use of arbitrage windows.

3.8. Additional order types

When placing orders of advanced types in the OneExBit terminals, they are all stored locally in the app and sent to the required exchange instantly, as soon as the preset conditions are met. The trader will not need to set order parameters individually on each exchange; order details in the terminal can be defined separately for each exchange or identically for all accounts. Apart from convenience, the key advantage of setting up advanced orders through OneExBit and not through exchanges themselves is that the user can create complex condition sets that are not available at an individual exchange.

Stop loss: the terminal automatically places a sell order if the asset's price falls to or below a set level. A stop-loss order allows to limit the losses, though the trader must consider that even strong price fluctuations can turn out to be temporary. A weakness of a stop-loss is that the asset is sold not at the trigger price but at the spot price. This means that during the short period that passes between the placement of the order and the actual sell the price can fall even lower, increasing the loss. Moreover, once the order is closed, the price can start growing again.

Partial stop-loss: when the price falls to or below a set value, the terminal sells not the total volume of the asset but only its part – say, 50%. This limits the loss if the price starts growing but increases it if the price keeps going down.

Trailing stop: the trigger is not set as a percentage or absolute difference from the asset purchase price but pegged to the current market price. The value at which the stop loss is activated moves together with the spot price if it grows. This allows the trader to protect his or her capital and at the same time not miss out on the gains in case of growth. For example, having bought Bitcoin at \$4000, the trader sets the trailing stop trigger at 200. If the price starts going down, then at the level of \$3800 the terminal will automatically place a sell order. If Bitcoin grows to \$4000, then the stop loss trigger will also move up to \$4200.

Take profit: an asset is sold automatically when the price grows to a certain value. This protects the trader's profit in case the price starts going down again (though on the other hand, it leads to a missed profit if the price grows even higher).

Trailing take profit: the trigger moves up together with the price, and the cryptocurrency is sold only when the price starts falling again. This allows to maximize the profit during a positive trend.

Stop orders: the trader sets a trigger price and places the order in the market; the trade is executed as soon as the price reaches the trigger level. There is a risk of missing out on profits if the price keeps moving in the desired direction.

Limit order: an order to either buy an asset at a price equal to or lower than

the trigger or to sell an asset at a price equal to or higher than the trigger. Such orders are placed in the orderbook and not directly in the market. They can bring optimal returns if the price keeps moving in the desired direction.

3.9. Marginal trading

Marginal, or leverage, trading is a trading strategy that involves borrowing funds. It allows to execute trades that far exceed that size of a trader's own deposit. The leverage size indicates the total amount of available funds relative to the deposit. For example, a 5:1 or 5x margin means that with a deposit of 1BTC a trader can operate an amount of 5 BTC. Marginal trading is much riskier than traditional strategies, and only experienced professionals can profit from it. The main risk is that the provider of liquidity can force the trader to close their position if they start to quickly lose money when the price goes against them. In order to avoid the closure of their orders and the loss of their deposit (this is known as a margin call), the trader can top up their deposit; however, this can lead to even greater losses.

Marginal trading is subject to strict regulations and is not supported by all exchanges. However, one must admit that in the hands of a seasoned professional leverage trading can bring very high returns. For this reason, the OneExBit terminal will provide verified traders with margin trading tools on all integrated exchanges that offer this service, such as Poloniex and Bitmex.

3.10. Decentralized exchange module (DEX)

As mentioned in the section on market problems, centralized exchanges – even large ones, like Binance and Poloniex – are subject to a serious risk of hacker attacks, theft, and manipulations on behalf of the administration. Furthermore, the way they work often goes against the principle decentralisation: indeed, in order to trade, users have to transfer their funds into the exchange's wallet, thus losing control over their assets.

To resolve the issues of security and excess centralization, teams around the world have created decentralized exchange solutions – from basic p2p exchangers to universal protocols, such as BitShares. In the most general case, users of a decentralized exchange (DEX) transfer their funds not into a wallet but into a smart contract; all deals are executed on a blockchain, and traders retain full control over their funds. The exchange only maintains an orderbook and performs order matching (automatic matching of sell and buy orders).

However, none of these solutions can be called ideal. In particular, DEXes based on standard blockchains, such as Ethereum and Waves, suffer from the same problems as any transactions on these blockchains:

1. It takes a long time to execute a deal (minutes, sometimes even hours);
2. Each transaction is subject to a fee – this applies to placing an order on the orderbook, executing it, or canceling it. Thus, active traders face quickly mounting fees;

3. It is impossible to prevent front running: since the full list of orders awaiting execution can be seen by everyone on the blockchain, any member can move their order up the queue by paying a higher miner fee.

Example: a trader sees a large buy order for BTC in the orderbook and realizes that once that order is closed, the price will grow. She takes note of the paid gas fee associated with that order and places her own BTC buy order, adding a much more generous fee. This way, she makes sure that her order will be executed first, while the price is still low. Then all she has to do is wait: once the pending large order is executed, she sells the BTC she had just bought, but at a higher price, gaining a profit.

Front running is considered an unfair practice and is universally condemned. However, centralized exchanges use it widely (they have exclusive access to their orderbooks, after all). The difference is that decentralized exchanges have no way of preventing front running.

As an attempt to merge the advantages of DEXes and traditional exchanges, various innovative protocols were created, allowing for high-speed trading using smart contracts and at low fees. The best-known of such solutions is BitShares, which is built on the Graphene blockchain. The OneExBit team plans to use BitShares for its own DEX module. The advantages of this solution are many:

- Very high speed: the potential transaction processing capacity of Graphene reaches 100 thousand transactions per second – orders are executed virtually instantly;
- Low commissions: the BitShares fee for placing an order is circa \$0.0015;
- Possibility to trade in any currency pairs offered by all the exchanges built on BitShares – at present this means over 50 currencies and hundreds of pairs;
- An established system of security, risk management, and regulatory compliance – there is no need to develop these procedures from scratch;
- Access to liquidity providers and OpenLedger payment gateways.

It is worth pointing out that OneExBit already offers an integration with one BitShares-based decentralized exchange, CryptoBridge. Nevertheless, the implementation of a white-label exchange will allow not only to include many currency pairs involving ONEX coins but also to solve a range of issues associated with using CryptoBridge, such as deposit and withdrawal problems.

OneExBit DEX users will be able to place orders within the same terminal, as well as deposit and withdraw funds using the OneExBit payment processing module.

3.11. Portfolio tracking and analysis

Crypto investors will appreciate an opportunity to track all their digital assets right inside the terminal. The module will serve as an alternative to such crypto trackers as Blockfolio and xFolio; it will allow to add a limited number of blockchain addresses and exchange accounts for free and an unlimited amount for

a small fee. The tracker will be updated and synchronized automatically and reflect the growth or decrease of the portfolio as a whole and of individual assets (including in fiat equivalent), as well as a full trading history for different accounts and exchanges.

3.12. Crypto trading bots and bot marketplace

A trading bot is a program that can react to market signals and place orders in accordance with a chosen algorithm or strategy. Crypto bots can be divided into automatic (take decisions, make deals, do not require supervision) and semiautomatic (create alerts based on market signals, but it is up to the trader to make the decision). Good automatic bots can make quick (and usually correct) decisions when there is no strong volatility present, though they are less reliable in the presence of sharp fluctuations, when human analysis and intuition are required. In any case, a quality bot can save a trader's time and generate large profits, while a badly written (or even malicious) bot will lead to serious losses.

The OneExBit team plans to add support for a number of popular bots, such as Gecko, as well as give users an opportunity to purchase bots in a specially created marketplace. Verified developers will be able to sell their bots directly on the OneExBit platform for a desired price (or even offer them for free), while traders will rate and review those bots. The marketplace will feature both automatic and semiautomatic bots. Payment will be done in ONEX coins, and the platform will charge a commission on each sale.

3.13. Crypto asset management services

In the second implementation stage, OneExBit users will get access to a set of crypto investment management services. The product will combine asset management by the most experienced and successful traders and the use of exclusive bots. Both asset managers and bots will have to pass rigorous tests and verification, and the platform will provide security guarantees. Asset management services will be available both to individual and institutional investors. The key advantages of ordering portfolio management services from OneExBit are a high level of risk diversification and access to the most advanced and efficient strategies that can only be identified by professional traders and investors.



4. PROJECT IMPLEMENTATION STRATEGY

4.1. Pricing plans

The pricing plans outlined below can be modified and expanded.

	Basic	Classic	VIP	Referral
Activation price	Free	\$20 per month	A stake of ONEX 30 000 - 50 000	
Max. exchange accounts	2	5	unlimited	Works in combination with the Basic and Classic plans and provides a unique referral link and referral rewards of up to 30% on all payments made by referrals
Max.accounts per exchange	1	2	unlimited	
Margin trading	Only bitmex-test	yes	yes	
Arbitrage bot	no	yes	yes	
Self-mirroring	no	yes	yes	
Social trading	no	no	yes	
Mirroring top traders	no	no	yes	
Asset management	no	no	yes	
Trader ratings	yes	yes	yes	
News hub	yes	yes	yes	
Feature requests	no	no	yes	
Referral program	Only with the activation of the Referral plan	Only with the activation of the Referral plan	Yes (referral rewards of up to 50%)	

4.2. Competition analysis

In spite of the record popularity of crypto trading, there are still few apps and terminals for trading on multiple exchanges; thus, the range of direct competitors of OneExBit is very narrow. As for indirect competition, it comes from well-known terminals for trading in other markets, which could potentially add crypto trading functionality in the near future.

Key direct competitor: Coinigy

- + Over 40 integrated exchanges, stats and graphs provided by TradingView, API trading and portfolio tracking.
- High subscription fee – circa \$20 a month – which is only suitable for active traders. Complex, overloaded interface that requires a lot of experience to master.

Direct competitor – QT Bitcoin Trader

A long-established and popular trading terminal that partially automates Bitcoin trading. The identities of the developers are not known, but supposedly the creator of QT is a certain Igor from Ukraine, who answers users' questions on Bitcointalk.

- + A free terminal created by independent developers, many integrated exchanges, easy to use;
- Dated interface, frequent errors, trading in BTC only, limited functionality, absence of a developer certificate for Mac.

Indirect competitor – MetaTrader 5

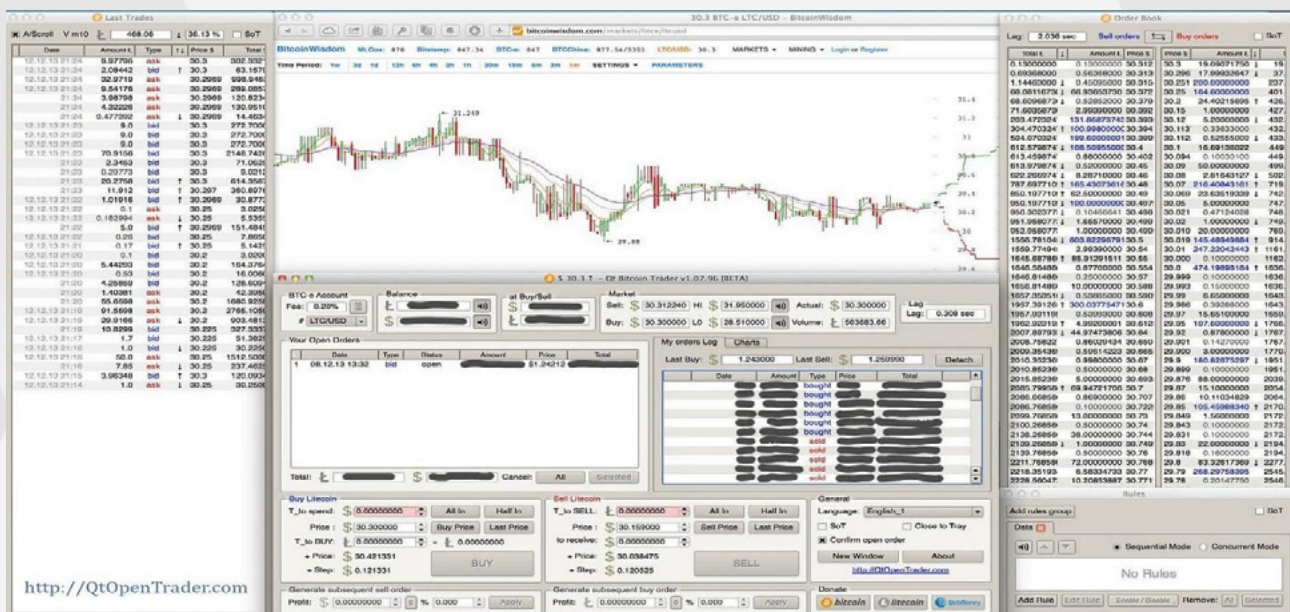
A widely popular trading terminal geared at the Forex and stock market. Crypto trading is available through specialized brokers. Connecting directly to crypto exchanges is not possible.

- + A large number of available currency pairs; an interface well known to Forex traders; a wide range of features.
- Crypto trading is only possible through a broker; far from all brokers are reliable; crypto trading is not the main focus of the terminal.

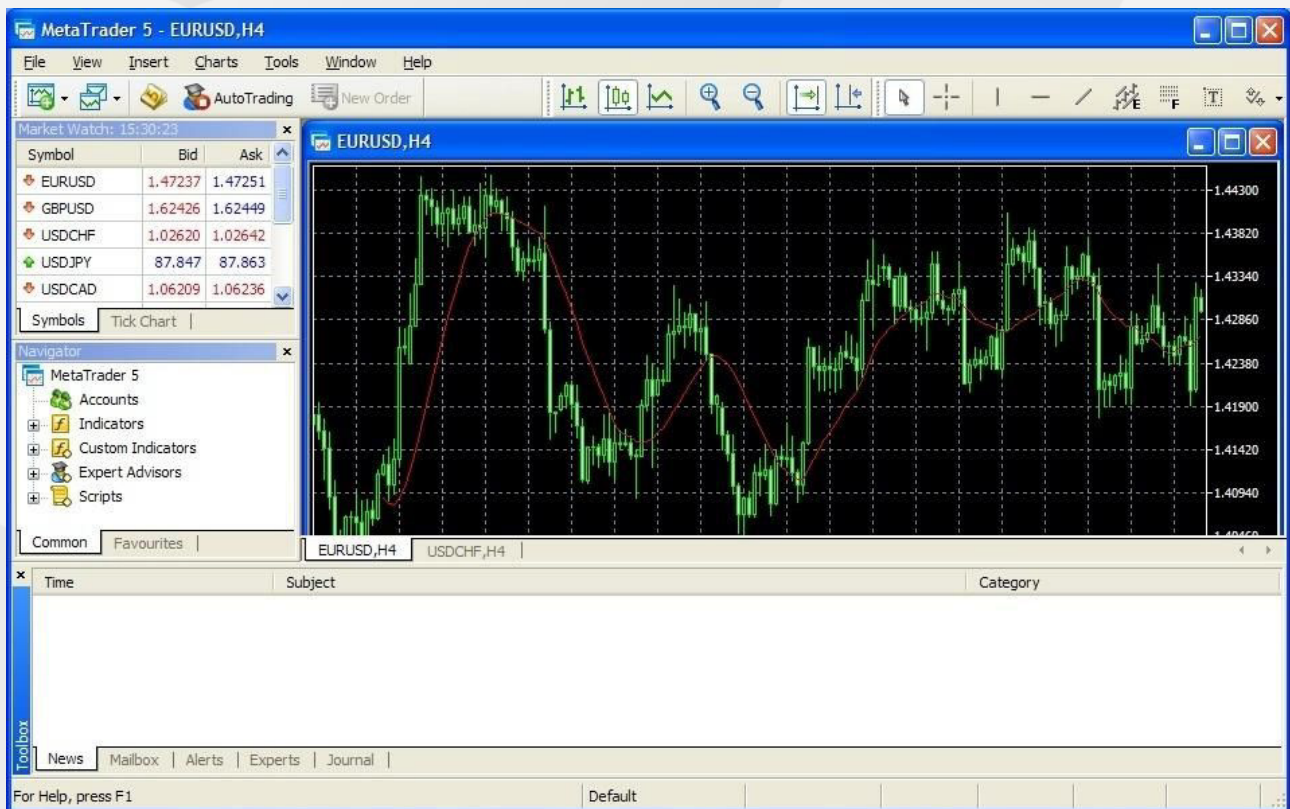
In conclusion, let us provide screenshots of all the mentioned apps in comparison with OneExBit:



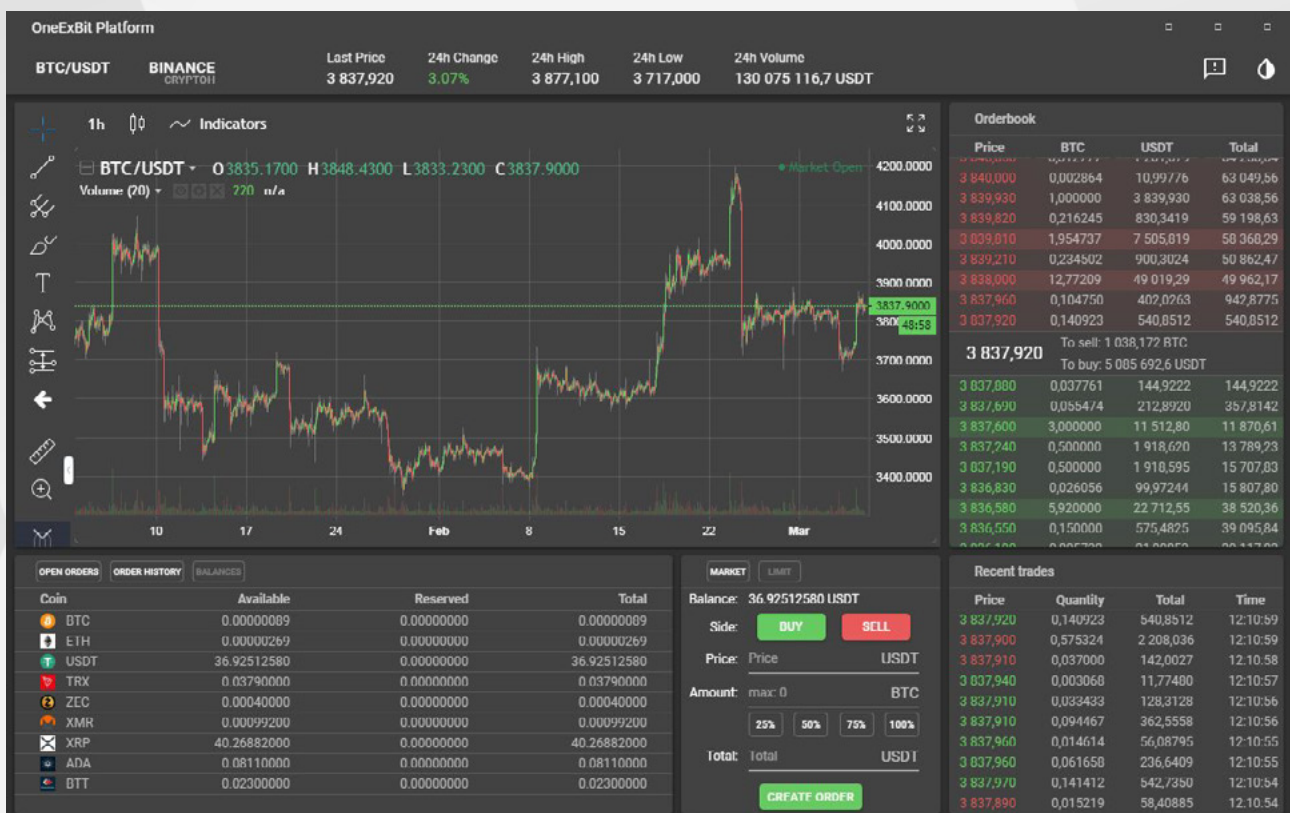
Coinigy



QT Bitcoin Trader



MetaTrader 5



OneExBit

As can be seen from the illustrations, the OneExBit interface combines a slick design and an intuitive way of displaying data, making it a worthy alternative to Coinigy.

4.3. Project roadmap

Q2 2018 (completed)

- Ideation and market research
- Blueprinting and team formation
- Functionality and development planning and start of development

Q3 2018 (completed)

- Development of an API core for exchange integration
- Interface development
- Integration of Binance and Bitfinex
- Displaying exchange data in the interface
- Working with several exchange accounts
- Launch of the orderbook features

Q4 2018 (completed)

- CryptoBridge integration
- Alfa launch on Mac and Windows
- Official website launch
- Development of a blockchain
- Developer team expansion

Q1 2019

- Beta testing
- Integration of Bitmex, Poloniex, OKex, HitBTC
- Margin trading - interface and functionality
- Displaying trades on a graph
- New design of the site and marketing materials
- Launch of the blockchain and nodes
- User registrations and payment gateway

Q2 2019

- Integration of 10 new exchanges
- Demo accounts
- Additional order types: stop loss, trailing profit, etc.
- Mirror trading on accounts within the app
- Trading statistics
- Proxy and VPN
- Intraexchange arbitrage bot
- Growth in the number of masternodes
- Listing ONEX on several exchanges

Q3 2019

- Integration of 10 new exchanges
- News hub (for fundamental analysis)
- Social trading and trader showcase
- Mirror trading (copying top traders' deals)
- Signal system based on the results of strategies and traders

Q4 2019

- PAMM accounts and asset management
- Launch of a DEX
- Start of work on an AI-driven analysis system

2020

- 1 million MAU
- Recommended by exchanges from the top 5
- Proprietary asset management service