



Xena Exchange

For Professionals by Professionals

The first Exchange focused on transparency, profit-generating functions, and a seamless integration of financial institutions

Introduction

The blockchain technology creates a trusted network that facilitates a seamless move from the B2C and B2B economies to the P2P version, where everyone can be both the utility supplier and buyer. UBER, Airbnb, and Lending Club have already reaped a lot of benefits from the new P2P economy, and blockchain is exactly the infrastructure that can facilitate the transformation of almost any business to its P2P version; it is a natural evolution of social nets to economic nets. One can transfer money within a trusted network without having to go to a bank or take out insurance on their car without the involvement of an insurance company, and still be sure that it will pay out when the time comes. Secure, frictionless, and instant transactions are the future of economic interactions, so the blockchain sector will expand regardless of the Bitcoin price or even its existence.

The P2P economy is biting at its share from the traditional B2B and B2C economies; the token trading volumes are rising like wildfire; the next Google or Amazon of the blockchain economy is almost here.

Financial institutions need a solid counterparty with a professional team that has experiences from the renowned industry leaders to efficiently navigate the token investments and cryptocurrency trading. That is why we created [Xena Exchange](#): to match the trading flows and provide financial institutions with access to the expanding blockchain technology, which will be one of the main and growing pillars of the economy in the next 10 years.

Common exchanges have recently announced their plans to launch the Bitcoin non-deliverable futures, but investors will still require a reliable platform to hedge the risk with deliverable assets. As an example, we could make a comparison with the commodities markets: crypto market is quite similar to them. In the commodities markets (such as oil, gold, copper, palladium, etc.), futures require a working deliverable market for hedging. By all means, the futures market cannot in any way replace the commodity market, as the real commodity flows occur on the deliverable commodity market and futures are a zero-sum game. In fact, the launch of crypto futures is actually positive news for trading volumes, as they will create additional flows of arbitrageurs gaining profit on price differences between markets.

Blockchain development will lead to various token trading and investment project opportunities that will not be covered by the common exchanges. This coupled with the fact that a deliverable instrument will in any case be required, makes the existence of a professional exchange paramount.

Again, only a professional crypto exchange can integrate cryptocurrencies into the existing payment systems, as common exchanges do not work with crypto wallets or plastic cards connecting cryptocurrencies with fiat money. The issue is that many current projects are trying to create investment indices or derivative products without actually building an infrastructure for trading, so an expert approach is of crucial importance here.

Xena Exchange is the first exchange focused on transparency, profit-generating functions, and a smooth integration of financial institutions, which will help adapt cryptocurrency trading and investments for high net worth individuals (HNWIs), banks, asset managers, and professional traders.

Disclaimer: The information set forth below may not be exhaustive and does not imply any elements of a contractual relationship. While we make every effort to ensure that any material in this white paper is accurate and up to date, such material in no way constitutes the provision of professional advice. Xena Exchange does not guarantee, and accepts no legal liability whatsoever arising from or connected to, the accuracy, reliability, currency, or completeness of any material contained in this white paper.

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Professional Investment Banking Team

We are a reputable, dedicated group of investment banking, risk, IT, and corporate finance professionals. Our goal is to bring our extensive expertise in financial markets, IT security, and trading operations into one tangible package to build out Xena Exchange with a very high level of transparency and professional functions for profit generation.

Name | Role

Experience Highlights

Anton Kravchenko
Chief Executive Officer

- **VTB Capital** (Moscow)
Associate Director

Business management of fixed-income global commodities (derivatives, commodities financing)

- **Otkritie Financial Corporation** (Moscow)
Vice President

Investment banking and structured derivatives solutions

- **J.P. Morgan** (London and Moscow)
Derivatives and structured products (Moscow and London Offices)

Timur Abushkin
Head of Trading Operations

- **J.P. Morgan** (Moscow)
Vice President, Russia and CIS Cash Equity Sales Trader

Received the 'Best Equity House in Russia' award from Euromoney in 2011

- **RTS Stock Exchange** (Moscow)
Head of Stock Market Sales

Setup, and development of the new Russian cash equities market, RTS standard and derivatives products

- **Ministry of Finance of Russia** (Moscow)
External Debt Expert

Development of the debt management policy of the Russian Federation
Negotiated the Paris Club repayments in 2005 and 2006

Stan Tainitskiy
Head of Trading Risk Management

- **Ernst & Young** (Los Angeles)
Transaction Advisor

Financial modeling
Transaction advisory services

- **J.P. Morgan** (New York)
Risk coverage

Coverage of c. \$350bn Chief Investment Office (CIO) portfolio for the JPM Treasury with primary responsibility for structural risk transfers and hedges

Monitoring of the risk profile of transactions and strategies undertaken by the CIO

- **Basel Asset Management** (New York)
Analyst

Initiated qualitative due diligence for potential investments in hedge funds

Renata Zinkovskaya
Head of General Risk
Management

- **ING Bank** (Amsterdam)
Financial Risk Officer

Approval mandate for financial institutions
Assessment of financial profiles, sovereign and transaction risks
Sovereign macro risk projects
- **J.P. Morgan** (London)
Investment Banking Risk Officer

Risk assessment of structured finance and LBO deals across Europe, AP and NA regions
Negotiations of legal documentation
Ongoing management of credit portfolio, including monitoring of credit limits, country risk, and early warning indicators
- **Goldman Sachs**
FICC Analyst

Alexander Kalyuzhny
Head of Strategy

- **KPMG** (Moscow)
Global Strategy Group

Management consulting for various industries
- **RBS** (Moscow)
Foreign Exchange and Interest Rates Desk
- **J.P. Morgan** (London)
Credit, FX and Interest Rate Sales for Financial Institutions
- **Deutsche Bank** (Moscow)
Corporate finance advisory, generalist

Alexey Simonov
Quantitative and Artificial
Intelligence

- **Mizuho Capital Markets** (London)
Quantitative Developer
Traded EUR interest rate swaps book, market-making swaps, hedging with interest rates and bond futures, developed pricing/risk C++ library
- **J.P. Morgan** (London)
Quantitative Analyst
Maintained and developed a global interest rates multi-platform (Windows, Linux, and Solaris), multi-interface (Excel, Java, Python, and Perl) pricing/risk analytics library in C/C++
- **RBS Global Banking** (London)
Software Developer
Developed a front office FX options trading system

Konstantin Plavnik
Head of Corporate Finance

- **RUSNANO** (Moscow)
Senior Analyst
Managed several VC investments of Russia's largest state-owned 5bn USD VC fund, served as a board member of a large portfolio company
- **Adela Financial Retail Group** (Moscow)
Corporate Finance Director
Managed the fundraising process for portfolio companies
- **Ernst & Young** (Moscow)
Senior Consultant
Business valuation expert providing financial modelling and transaction services

Anton Galchenko
Chief Technical Officer

- **Acronis** (Moscow)
Unit Manager
Product development
- **Kaspersky Lab** (Moscow)
Development Team Lead
Finance anti-fraud: Server-side high-load data collection and processing solutions
- **CROC** (Moscow)
Senior Developer
Led the development of various business solutions for government customers

Alexey Semichastnov
Product owner

- **RAMMFX** (Moscow)
Chief Technical Officer
Developed business concept and product architecture, executed project and product management
- **Deutsche Bank** (Moscow)
Technical Product Owner
Owned the Strategic Clearing Connectivity application
- **My Invest** (Moscow)
Head of Software Development
Responsible for all aspects of software development in a FinTech startup

Our Values and Focus: Transparency, Profit Generation and Financial Institutions

Xena Exchange (“the Exchange”) is different. We are building a financial institution that will be able to accommodate professional traders, banks, and asset managers. To fulfill this plan, our team of reputable financial market professionals is investing heavily in transparency and profit-generating outcomes for our clients.

We want our clients to have access to the best-in-class profit-generating functions to close the functional gap between traditional and cryptocurrency exchanges.

Financial institutions (“FIs”), e.g., investment banks, asset managers, and hedge funds, want to participate in this growing market. Representing the buy side, they would want to get the “price exposure,” without having to hold cryptocurrencies, as this might be operationally complicated.

Our platform will seamlessly integrate these client flows within the three trading cores while providing full transparency and reporting strengthened by a number of professional profit-generating functions for individual traders and FIs.

Transparency is the cornerstone of our business model, as the lack of transparency and client protection on other exchanges is the main showstopper for FIs to delve into the cryptocurrency investments.

Engine Interaction Structure



FIs will use the services of the Exchange that will entirely match their demands of instruments that are necessary to build high-quality investment products. Our professional team from the top investment banks is set to deliver these instruments.

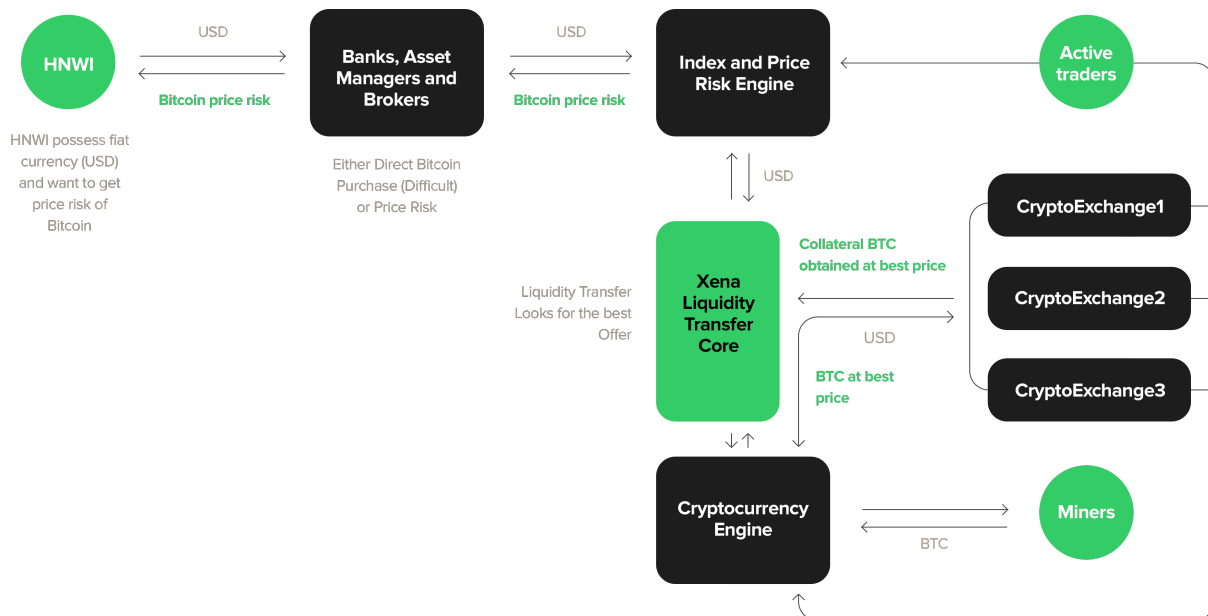
We have a shared vision of the Exchange consisting of the three major engines built on a core that supports more than two million trades per second.

1. Cryptocurrency Engine: the module that will facilitate the exchange of cryptocurrencies to fiat money or cryptocurrencies to cryptocurrencies. Operation of this module requires licenses and professional risk management, which is why many other exchanges are not working with fiat currencies.

2. Price Exposure and Index Engine: the module to get the required price exposure by providing collateral in fiat currency.

The Price Exposure and Index Engine will become the platform for passive and active investment indexes and investment funds. We expect it to be actively used by traders and FIs, as it materially lowers the operational burden.

3. Liquidity Balancing Engine: this engine will balance liquidity between the modules and become the gateway for transfer to and from other exchanges, which will greatly benefit the cryptocurrency community. The dark pool function will be based on the liquidity-balancing engine.



We are set to deliver the unprecedented functions for traders, investors, banks, asset managers, and hedge funds.

Transparency Functions

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- Advanced Reporting
- High-Quality Data Gate
- Plastic Cards Connected with Decentralized Accounts

Profit-Generation Functions

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Multi Licensing and Legal Structure

Recently, authorities around the world have started announcing their stance on the issues of cryptocurrencies, ICO regulation, and the potential risks of investments in the related markets. Positions of the regulators differ from country to country, while the general approach to cryptocurrency markets is yet to be determined.

The main objective of our project is to provide financial market professionals with sufficient instruments to invest in cryptocurrencies.

Our legal team has conducted an extensive research of the related legislation and experiences of other cryptocurrency exchanges with the process.

The multi licensing process will be executed which will become a very strong legal structure. We know that the costs to execute such approach are high, but we see this way as a professional path to set up solid legal structure. The jurisdictions, licenses and legal setup described in here are subject to change on the joint team decision as we take into the account feedback from financial regulators and country authorities.

The holding company is based in **Ireland**

The financial company in **UK and Luxemburg** will file for the local payment institution license to include the following services:

- Execution of payment transactions, including transfers of funds on payment accounts with the users' payment service provider or with another payment service provider. This includes execution of direct debits, including one-off direct debits, execution of payment transactions through a payment card or a similar device, and execution of credit transfers, including standing orders;
- Money remittances;
- Execution of payment transactions where the payers' consent is given by means of any telecommunication, digital, or IT device, and the payment is made to the telecommunication, IT system, or network operator, acting only as an intermediary between the payment service user and the goods or services supplier.

We are reviewing recently launched Gibraltar DLP (Distributed ledger provider) license as Gibraltar generally operates under the English Law, which is positive factor. The country has officially confirmed the setup of their DLP (Distributed ledger provider) legislation, which will come into effect on January 1st, 2018.

We are also reviewing the requirements for index trading that may require the **BVI** setup.

We will set up subsidiaries in **Japan** and **Australia** afterwards.

In order to be fully compliant with the regulatory requirements, we will undertake the following:

- Conduct regular financial and legal due diligence;
- Constantly monitor the changes in the evolving legal landscape and their potential impact on our operations;
- Adhere to the AML procedures;
- Maintain financial reporting as appropriate;
- Comply with the identification and verification requirements.

Partnerships with Financial Institutions and Payment Systems

We have built strong relationships across many FIs in London, Moscow, and New York. During the years of our employment with investment banks and professional activities in financial markets, we have been involved in a great variety of deals and transactions. We understand that FIs are eager to access the cryptocurrency market, as an increasing number of clients are pushing them to introduce cryptocurrency exposures to their portfolios.

The crypto exchanges that are typically created by the IT crowd rather than by investment banking teams that tend to follow the traditional requirements, methods, and functions, make FIs somewhat hesitant to get into the new markets. The recently launched Bitcoin non-deliverable futures are not going to solve this problem, as there are not enough arbitrageurs that would take the sell side of the future to match the FI flows against the miners that generally use the common cryptocurrency exchanges.

A situation with the non-deliverable futures is also not suitable for miners as they are the “commodity providers,” just like oil producers, and they need to actually sell their “commodity”, not just short the price risk. Deliverable instruments in the cryptocurrency space are more native and can generally become a solution, but common exchanges are lacking the deliverable markets to match the flows.

We are going to be the bridge that the FIs need by allocating expert-level consultants to manage our partnerships and provide guidance for FIs.

We will provide the kind of full service that is normally offered by the Direct Market Access (DMA) departments. Every FI that signs an MOU with Xena Exchange will be allocated an account manager, who will help fully setup the Direct Market Access (DMA) to the Exchange and will be available to provide guidance and answer questions related to the specifically customized applications.

We will begin signing MOUs with financial institutions that are looking to obtain new expertise, use Xena Exchange’s services, and potentially contribute to press releases about partnering with Xena Exchange. Once we have signed a sufficient number of MOUs to kick-off the process, we will expand our scope to payment systems. We expect the deep e-commerce integration to unlock the full potential of the proprietary fiat trading engine and legal licensing. We also have plans to build out the payment module for direct connections to focus on expansion.

Zero Trading Commissions for Active Traders and Margin Trading

We generally intend to keep commissions as low as possible. We are also committed to encouraging liquidity providers and market makers who use limit-type trading orders by offering zero commissions on usage of the active limit-type orders. Market taker orders will benefit from low commissions of 5 bps (or 0.05%, which is around 4x lower than the average 0.2% commission level of other exchanges), and we will create several ways to lower this commission to zero as well.

We aim to provide enough service to generate a substantial profit without charging traders the usual 20 bps (or 0.2%) commission per transaction.

Revenue-generating activities for Xena Exchange include, but are not limited to, the following:

- Liquidity transfer;
- Investment indexes;
- Fiat currency withdrawal;
- Margin trading;
- High-quality data gate;
- Plastic card payments;
- Listing of tokens;
- Support of decentralized accounts transactions;
- VPN, Colocation for algorithmic trading, etc.

Margin trading is an important instrument for profit generation, and such leverage can be highly beneficial when the lending mechanism is safe and transparent. We are aiming to implement margin trading as soon as possible, and cryptocurrency engine margining will be available in the lending order book. Lending will be transparent, and separate reports will be available on margining details.

We will also evaluate the opportunity to support the extended multipliers on a price risk engine if we see sufficient demand for such instruments.

Outstanding Technical Base and Security

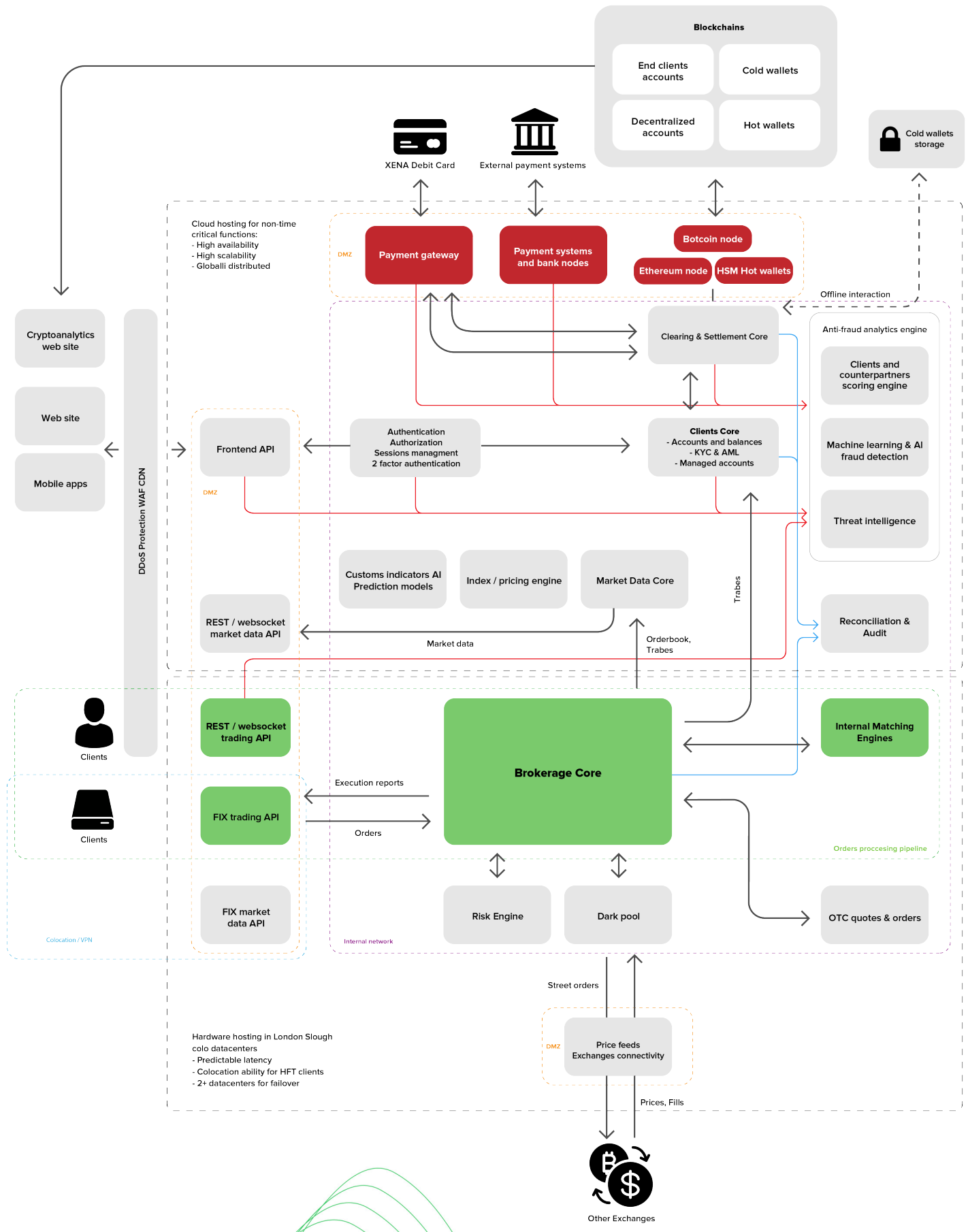
Building a skyscraper is of course different to building a lemonade stand. A professional exchange is therefore expected to provide an exceptional level of security and availability while being able to operate with millisecond latency. To achieve this, we are using the industry's best practices in our software development processes.

Our development team is experienced in the FinTech, information security, high-load and high-availability architectures, and we are eager to make use of the cloud computing and machine learning applications to build an innovative platform for Xena Exchange. The core-matching engine will be able to handle more than 2 million orders per second and will be integrated into a scalable environment with big-data-grade middleware to handle any load peaks. We are targeting to reach the latency of the modern stock exchanges (milliseconds for the order-execution report, round-trip). Security will be implemented into every single aspect of the system by applying industry-leading development processes and techniques as well as solutions from highly reputable professional vendors.

Core components will be written in the C++ language for extreme computational performance, and the rest will be written in Go, which is Google's programming language. This model increases development speed and eases integration. We are going to use the following industry-proven high-load solutions:

- PostgreSQL, Redis, Apache Cassandra, and Aerospike for reliable data storage;
- RabbitMQ and Apache Kafka for fast and durable message brokers;
- kdb+ for real-time calculations and data analyses;
- Docker and Kubernetes for automated deployment and configuration management.





The platform will be built on the microservices architecture with loosely coupled independent components for additional security, extensibility, and nearly unlimited scalability.

The most time-critical components serving order management and execution will be hosted on dedicated servers in one of the London's colocation data centers in Slough, within the microsecond proximity to major financial institutions and extra low-latency channels to other world-wide financial centers, such as New York, Chicago, Tokyo, and Hong Kong. Less time-critical components will be hosted in clouds such as AWS, Google Cloud Platform, or Microsoft Azure that will allow our infrastructure to grow along with the growth of our client base without disrupting the quality of our service.



From a security perspective, we will adhere to the [PCI DSS standards](#). There will be no access to internal networks where sensitive data is stored and processed except through APIs located in DMZ, secured by several levels of protection (anti-DDoS and web application firewalls like CloudFlare and Fortinet) and continuously monitored for suspicious activity or emerging threats and vulnerabilities by complex security providers like Trustwave. All sensitive data stored will be encrypted with additional integrity checks.

All system components will report to an AI-based fraud detection system that can analyze all possible threats in real time. This will include detection of suspicious trading activity, like market manipulations or money laundering, as well as customer-end threats, such as account takeover or spoofing of transaction details. All business data coming from various sources will be collected and reconciled by a dedicated component to detect and fix possible mismatches and processing errors. External threat intelligence and risk-assessment providers like ThreatMetrix will be used as a source of data about potential risks and fraud.

Most of the exchange funds (except for those needed for daily withdrawals) will be stored in cold wallets, which are separate offline devices, physically disconnected from any networks and protected from unauthorized access or in decentralized wallets belonging to the clients. Signing a transaction from cold wallets will have to be multisigned by several Xena Exchange employees. Hot wallets for daily withdrawals will be implemented using hardware security modules with multi-level protection of private keys.

Performance testing and penetration/security testing will be conducted on a regular basis, with the latter being done by the recognized security providers such as HackerOne cyber security team. All critical functionality is thoroughly tested before being released to production environments; we will maintain a high level of automated tests coverage. No changes in production environments require manual intervention, so we can reduce the human factor to a minimum.

TRANSPARENCY FUNCTIONS

Proprietary Decentralized Accounts System

The majority of the existing decentralized exchanges mostly provide one core service: direct transfer of Bitcoins between the wallets of the holders. However, they do not offer any additional functions, they are expensive and slow. Even private traders find them slow, which clearly suggests that they will not be able to adequately support the minimal functionality required by financial institutions.

We bring the benefits of decentralized exchanges to the Xena Exchange without sacrificing the speed of the operating engine and functions. Technically, we give the users a realistic Decentralized Accounts option.

Just like common exchanges provide clearing services, we will also introduce this process to the Exchange. We will provide an option to clear 70-100% (depending on a user's credit level) of the account with a fully external multisignature wallet **outside of the exchange**. Users will have 24-hour access to their wallets.

This service is also intended for those who keep large amounts of funds in cryptocurrencies, so the transaction costs were insignificant in comparison with exchange-related risks.

Advanced Reporting

Xena Exchange will be the most transparent exchange. We will provide daily, weekly, and monthly reports to our clients and regulators on various aspects of fund movements to Xena Exchange, from Xena Exchange, and inside Xena Exchange.

We will make Xena Exchange as transparent as possible to our clients and financial regulators. Xena Exchange will become the leader of the transparency initiative in crypto exchanges.

High-Quality Data Provider

The main concern for many investment banks and common exchanges is a lack of data. Currently, data access is a problem, and it creates the barrier for cryptocurrency integration with financial institutions and financial regulators.

Xena Exchange is a high-quality data provider where FIs and other clients can get access to cleaned and normalized data for their risk management purposes, algorithm-building aims, or legal and disclosure requirements.

We will become the data provider for various common exchanges and regulators, so the diversity of our connections will be beneficial to all users and cryptocurrencies.

Plastic Cards Connected with Decentralized Accounts

Today, it is hard to surprise anyone with plastic payment cards connected to Bitcoin wallets, although there is no plastic card connected to one's Exchange Wallet, and we are going to change this.

Since plastic cards are still the most convenient way to pay for products and services, we are eager to make our users' lives easier by making the plastic cards available for order right after all applicable KYC processes have been finalized by Xena Exchange.

PROFIT-GENERATION FUNCTIONS

Proprietary AI Analytical System

As financial markets professionals, we have been using Bloomberg for years. We have also seen many non-standard ways to analyze markets and get more information from the charts to ensure successful trades.

The traders' community has created massive databases of indicators and analytical studies, and we have seen thousands of them. However, very few of them are actually useful.

We know that analytics are not about the quantity, but also about the quality of the methods, so shortly after the launch, we will roll out a proprietary AI Analytical System that will enhance the user's market views. Users will receive proprietary research that can help better trading decisions, and we are going to consistently develop these methods.

After several advanced studies have been launched, we will create a marketplace for AI Studies, so that artificial intelligence engineers were able to sell their work and further enhance Xena's AI Analytical System.

Investor-Trader Cabinet

Many investors are looking to work with professional traders, while many traders would like to allocate some of their friend's and family's money to their portfolios to earn fees and commissions.

We propose a function where an investor can find a trader among the users of Xena Exchange and then grant the selected trader a right to trade on their behalf under a range of conditions, for instance:

- a fixed % of the account's balance;
- a fixed payment per term;
- a % of the account's profit, etc.

The investor's funds are safe, as the trader cannot withdraw funds from the account. Management fees will be automatically transferred from the client's to the trader's account, so the trader's payment for services were secure. Either monthly or quarterly payments can be received.

Development of this function will include the internal marketplace of the investors and traders and chats for discussions between traders and their investors.

Trading Statistics

Trading Statistics is a function that would help to get deeper insights into trading performance, as the gross trading income provides relatively limited information about the risks run by the trader.

Trading Statistics will be automatically connected to the trading history, so users would be able to calculate a number of metrics, such as Sharpe ratio, profit factor, recovery factor, profit/loss ratio, average deal, risk/reward and others based on various timeframes.

This function will help users make more informed decisions on individual trading styles, so risk could be adjusted if required to improve the risk/return profiles.

Pink Sheet for Investment Tokens

In financial markets, pink sheets are used for trading equities of small companies with low liquidity. Pink sheet equities have lower requirements for listing. Many years ago, the names of such companies were printed on pink paper; this is where the name "pink sheets" is coming from.

There are many tokens on the market that are worth investing with great teams and projects, but current exchanges do not support them, and the process to get on the exchange with these tokens is slow and full of operational burden.

We are building a modern financial institution, and we will let low-liquidity investment tokens operate in a specialized section. Our plans include streamlining the due diligence process to get into this section.

Robot Builder with Neural Nets

Algorithms are everywhere, since automatization saves time and lowers costs. Financial institutions have enough programmers on board and use APIs to connect their trading robots, algorithmic strategies, and automated terminals. But these are often not lean enough; so most traders are constantly looking for easier ways to implement algorithms and strategy builders.

As a result, a robot builder will become part of the Exchange and will enable users to effortlessly construct strategies and let them run automatically.

The built-in word blocks will be made of easy-to-understand parts, which, when combined, will give way to many combinations:

Quantity operators: =, <, >, <=, >=, etc.

Logic Operators: And, Or, If, Then, etc.

Information Operators: Price, Indicator, TimeSinceStart (in hours), TimeClock, TradeNumber, OpenTrades.

Action Operators: Buy, Sell, CloseAll, StopAlgo.

Traders will be able to initiate algorithms based on any graph. For example, their created algorithm may look like this:

If Price > 3000, then buy 1

If Price > 3100, then buy 1

If Price > 3200, then buy 1

If TimeClock = 23:00, then StopAlgo

Or it could look like this by using some indicators:

If Indicator1 > Indicator2, then Long 1

If Indicator2 > Indicator1, then Short 1

If OpenTrades > 1, then CloseAll

If TimeSinceStart > 24, then (CloseAll and StopAlgo)

Neural nets can also be made easy. A neural net is a system that gets several data series as inputs, studies history, and then tries to predict some parameter as a price or something else using its layers of neurons.

We will create a very simple neural net builder that will let users combine some parameters of their choice, then let the Neural Net figure out the patterns, and then the chosen parameters, such as price open, close, high, low, or volume at any point in future, could be forecasted using this Neural Net.

News Collector

News impacts the cryptocurrencies. That is a fact, and this is normal for the market. Since there are a lot of tokens, it is quite difficult to get a solid grasp on the newslines, while any given news item could materially impact the price of certain investment tokens and even cryptocurrencies.

Our News Collector function will monitor large amounts of the Internet data to get the latest news really fast across more than 100 tokens and cryptocurrencies, so that investors were able to react as quickly as possible.

FINANCIAL INSTITUTION FUNCTIONS

FIX API

API is a universal gateway for external software, and the currently used Web Sockets API are not enough. FIX Protocol API has already become standard in the financial markets, so we are going to implement it to easily connect those banks and asset managers that already have their terminals and trading systems set on the FIX Protocol API.

Correctly built APIs increase the liquidity on an exchange and create barrier-free access to information. We actively encourage professional FI arbitrageurs that are going to arbitrage non-deliverable futures on common exchanges with deliverable cryptocurrency exchanges to actively use FIX API of our exchange.

For the FI arbitrageurs, the Exchange will be a technical gateway with easy integration, as many of them already use FIX API. Our Dark Pool connector to other crypto exchanges will provide users with an unmatched level of access to deliverable cryptocurrency liquidity.

Investment Indexes and Baskets

This is a big piece of the cake. Investment indexes are well known to the financial world. These indexes provide a base that often includes a number of products suitable for investors: ETFs, structured notes, managed accounts, and others that are sold by financial institutions to high net worth individuals (HNWIs) or institutional investors.

Examples of passive indexes:

- Top 3/10/30 tokens by capitalization;
- Proof of work tokens;
- Proof of stake tokens;
- Tokens with professional teams;
- Tokens with liquidity >1mm per day;
- Infrastructure tokens;
- Utility tokens;
- Dividend (security) tokens, etc.

All algorithmic indexes have some type of a fixed algorithm on rotation behind them. Algorithms beat the buy-and-hold portfolios, while they maintain low trading (because of the low frequencies) and management costs (these can be several times lower than those of algorithmic funds). After the launch of passive indexes, we will launch algorithmic indexes. External vendors will also be able to launch their own formula for a share of the profit from the investors to this index.

FIs are the main users of indexes, as they will add indexes to products and sell them to HNWIs and institutional investors. Common investors will have benefits held by financial institutions, such as having the same access to tradable indexes, and these investors will be able to add the indexes to their portfolios on Xena Exchange.

Dark Pool

Dark pools are used in modern financial markets to aggregate liquidity without having to show the deal size. Morgan Stanley and Goldman Sachs have such pools, and they are widely used by market participants.

As the structure of the Exchange itself is built with the help of an internal liquidity balancing mechanism, it will naturally become a dark pool connected to other exchanges and aggregate liquidity beneficial to Xena Exchange and other exchanges. This infrastructural layer will benefit the whole cryptocurrency market, as it will help transfer liquidity between exchanges.

Over-the-Counter (OTC) Market

Over-the-counter (OTC) is a standard function in financial markets, while it is not currently supported in crypto exchanges.

OTC will let market participants close their requests without influencing the broader market. Basically, OTC is a decentralized marketplace with higher requirements and lower regulation. For example, NASDAQ is a dealer network. The OTC market supports not only the execution of large orders with lower slippage, but it also creates the right approach to pink sheet instruments trading.

The OTC market will be created as a separate pool with order minimums for the top cryptocurrencies, set at a 5 BTC level or close.

Specialist Trade Orders: Immediate or Cancel, All or None, Fill or Kill

Additional trade order types will allow users create their own tailor-made transactions on the Exchange, depending on the required deal. This is especially important for large amounts, when users do not want to encounter slippage on the market or when all transactions should be made at one point in time or not made at all.

A variety of trade orders is used by financial institutions, and in many cases, these trade order types help reduce the transaction risks, especially when transactions are large enough.

“Immediate or Cancel” (IoC) is a trading order that must be filled immediately at the limit price or better. This order allows partial filling.

“All or None” (AoN) is a trading order that must be filled entirely at once at the limit price or better, or it should not be filled at all. The order will not be cancelled in case it cannot be filled immediately.

“Fill or Kill” (FoK) is a trading order that must be immediately filled entirely (within several seconds, at maximum) at the limit price or better, or it will be completely cancelled, so there is no partial execution for this order.

Colocation and VPN

Colocation and VPN function is important for those financial institutions and traders that operate in the sub-second level, and the demand for Colocation and VPN is growing.

The launch of the non-deliverable futures on common exchanges and the need to hedge them through a deliverable instrument create a trading opportunity for high-frequency algorithms. While we provide an outstanding access to the deliverable market of cryptocurrencies and tokens through our FIX API and Dark Pool, we want to go even further and provide the Colocation and VPN to high-frequency traders to let them benefit from arbitrage opportunities in markets at the sub-second level and thereby create additional liquidity. Funds focused on the AI news analysis for token trading will also benefit from Colocation and VPN availability.

HelpDesk with Timers

We are not satisfied with the existing HelpDesks of the current exchanges, and we believe that our clients are too valuable. Each client request on Xena Exchange will be prioritized in accordance with the seniority of the problem, and the exact time will be allocated for the HelpDesk to respond, which will be reflected on the request screen. Clients will be able to see the timer right next to their requests for the duration of their HelpDesk interaction.

Request New Function Module

To enhance the customer services, we will allocate a portion of our programmers' working hours to implementing client requests on a weekly basis. Clients will be able to see all their requests, and they will be able to "like" the ones they want to prioritize.

Appendix A: Function Launch Schedule

Phase “Delta”

May 2018

Details:

2mm orders/sec main trading core

Trading statistics

Pink sheet for investment tokens

HelpDesk with timers

Phase “Gamma”

November 2018

Details:

Proprietary AI analytical system

Decentralized accounts

Investor-trader cabinet

Index trading core

OTC market

Plastic card connected to decentralized accounts

Phase “Zeta”

March 2019

Liquidity balancing core

Robot Builder and easy Neural Nets

Dark pool

Colocation and VPN

Marketplaces for AI studies and investment management

Request new module function