



TECHNICAL OVERVIEW

Over the past few months, we've seen countless new DEXs in the works. This is a good thing; the market is finally waking up to the failure of centralized exchanges. By leveraging our own expertise and technology to help budding DEXs, we hope to accelerate this migration to a secure trading environment.

Thesis: The DEX that will win this market is the one that is able to reach scale the fastest in terms of liquidity.

Solution: We focus on building the best trading engine, launching our own DEX using a 0.1% maker/taker model and then allow others to build unique trading interfaces on top of this to allow us to expand rapidly internationally as well as cater to others in the market we may never have been able to otherwise.

Investment: We are looking for a \$500k investment to help us reach our initial DEX mainnet launch as well as the creation of our "DEX" partner program which will enable others to profit from our technical advancements while creating a shared liquidity pool all at the same time.

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DEX challenges and goals

Altcoin.io is decentralized crypto asset exchange which aims to provide experience of traditional, centralized exchanges combined with security of blockchain.

So far in this market dominate only centralized exchanges providing centralized escrows for people who want to trade decentralized assets which is great paradox given that cryptocurrencies exist to avoid third parties and trust. In order to transfer to decentralized exchanges, users don't want to compromise on their experience. Users expect better or at least same user experience from DEXes too. In order to be competitive enough on market DEX must have following:

- Instant trustless trading
- Great user experience
- Blockchain interoperability

Altcoin.io will be addressing first two in first MVP of altcoin.io sidechain for trading on Ethereum network. In later iterations we will be addressing interoperability. This paper is short technical overview of our MVP sidechain which aims to achieve instant trustless trading and great user experience.

Trustless trading is something which is possible by using atomic swap technology combined with smart contracts. Atomic swaps address trustless trading and interoperability but fall short in achieving great user experience for simple reason of having to wait for transactions to be confirmed on their blockchains and having to pay sometimes very high fees. This is blocking achieving high trading volume and liquidity and jeopardizes user experience. Users want security but not if it comes at price of trading great UX for waiting trades to be confirmed. This is why instant trustless trading and great user experience are more important and why we will be focusing on those two in our first MVP for altcoin.io sidechain.

Smart contracts and on chain DEX

Smart contracts are way to express any business logic and have its execution enforced by blockchain. You can use smart contracts to build custom applications with guaranteed finality. Speed and cost of smart contract transaction depend on underlying blockchain.

In case of building decentralized exchange, smart contracts can be used to build exchange logic but transaction time is limited to time needed to confirm block in blockchain. Example of this type of exchange is EtherDelta. This is also true for any other application which needs instant transactions.

Altcoin.io sidechain

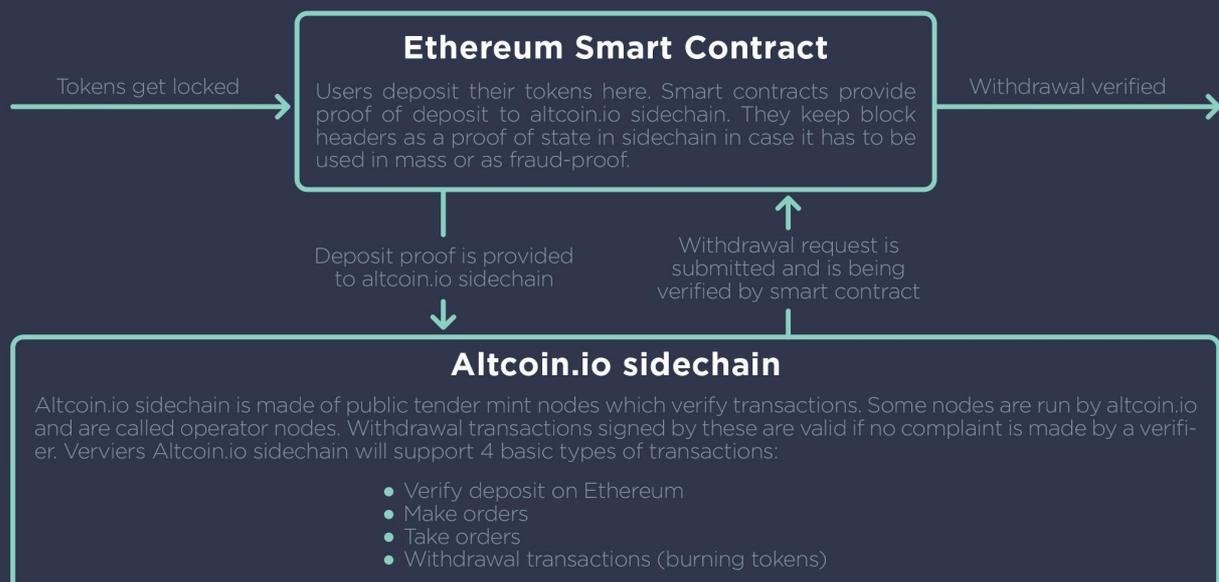
This scaling problem is currently being solved by introducing second layer of side chains which are specifically made to support only transactions needed in respective application. This idea has been proposed by Vitalik Buterin and Joseph Poon in Plasma Whitepaper.

Plasma consists of smart contract on Ethereum network which locks value and provide proof of locked value to sidechain(i.e. tokens or cryptokitties). Once tokens are locked in smart contracts they become available on sidechain for users to transact. Because this sidechain is specifically created to serve the needs of specific application it's running, in this case Altcoin.io exchange, it can support far more transactions. Other reason it is so scalable is because consensus is reached by using Proof Of Authority (PoA) which means that there is operator (i.e. Altcoin.io main nodes) which signs transactions and commits them to blocks.

The way frauds and double spending is prevented in sidechain is by having verifiers watch over all transactions being committed to blocks and reporting bad behaviour. They will do this because economic incentives are made so that attentiveness is being rewarded by earning some amount of transaction fees (altcoin.io exchange maker taker fees in this case).

In case verifier nodes spot fraudulent or malicious behavior on side of operator they will trigger mass exit by reporting it to users which then exit exchange by unlocking their value from smart contracts after they provide proof of ownership from latest legit state in sidechain. Smart contract verifies these using sidechain block headers which are being submitted regularly to Ethereum network.

It's important to note that Mass Exit is disaster recovery mechanism which gives users possibility to exit from system even if exchange is hacked or malicious without losing their value. In normal circumstances this shouldn't happen at all but in case it does there is mechanism in place which ensures that users don't lose any value. Altcoin will be using Tendermint as a consensus mechanism in sidechain. Tendermint is perfect for creating sidechains and we are building deposit, withdrawal and mass exit mechanisms on top of tendermint core. It already supports thousands of transactions per second.



Business Strategy (BHAG)

Altcoin's long term business strategy is to help non-technical businesses create secure exchanges of their own to cater to the types of trades in which they deal with. An example of this would be an OTC trader that only requires a simple trading interface but would like to ensure that the trades he is presenting to his clients is done through an extremely secure and decentralized manner.

The benefits of this strategy is that we will be able to help 100 of different types of exchanges go live in potentially dozens of different countries that cater to the needs of different types of traders.

Great use case for this will also be using altcoin.io as a liquidity provider for getting any type of tokens fast. With a big number of emerging dapps and utility tokens, these value transfer mechanisms will be important because users usually keep value in few main cryptocurrencies and buy utilities only if they need them specifically to pay for some service from their platform. Once the hype is over and real applications emerge for blockchain, real economy will form around decentralized applications and utility tokens will be used much more for actual payments rather than for speculation or speculative investments.

An easy trap to fall into when you start a business is trying to do everything yourself. You drag out your project roadmap repeating others' mistakes, wasting cash on duplicating existing technology, and losing focus on your main goal. But there's a better way.

Business Execution (White Label)

For reference, white labeling is when one business (in this case, altcoin.io) licenses their product or service (our decentralized and secure digital asset trading engine) to another (DEX or wallet) without branding or with the label "powered by Altcoin.io" (hence the term "white label").

Rather than solving the complex problems of DEXs yourself, take advantage of our experience and achievements. You don't have to start from scratch—we can help jump-start your project, and you'll avoid making the same mistakes we did.

There are a number of big benefits to choosing a white labelled product over developing your own:

Create new revenue streams

Whether you run a DEX or wallet, you can generate additional income from our ready-made solution. Our order matching engine is primed and ready to go. Without needing a budget for research and development, you can go big on brand exposure and reaching your customers.

Save time and money

Our sidechain lets you integrate a safe, secure trading protocol into your DEX or wallet without wasting time and money developing the technology yourself.

Brand however you like

With our white label, the only thing you buy is the sidechain order matching engine and access to altcoin.io liquidity. There is no brand identity. That comes from you. You can customize the interface for exchange whichever way you want.

Focus on your strengths

As you develop your business, it's tempting to try and "fix" everything. Often, you're tackling problems that have already been solved. Rather than reinventing the wheel, adopt our decentralized order matching engine and stay focused on your main goals.

Partnering with us also means increasing the liquidity of both of our businesses. While this enables fluid trading, there's a bigger benefit: as more wallets and DEXs capitalize on our order matching technology, the safer trading will be for everyone in the community.

One of the reasons we're offering this is to better understand the needs of altcoin traders, exchanges, and wallets. We plan to reinvest all the income from white labeling into the order matching engine, listening to your feedback and building our team to make it better than ever.

Business Revenue Model

Many people looking to build a decentralized exchange lack the knowledge and technology to do it, and rush to a white paper just so they can afford the expertise to make their vision a reality. We all face the same challenges, so it makes sense to work together.

We'll give you altcoin.io node to run on your servers with APIs exposed for you to build UI on top of it. We provide tech support, and upgrade the technology as we continue developing it. It'll be like having your own in-house DEX development team, at a fraction of the cost.

Importantly, while we supply the engine, you can customize the exterior however you want. You can add extra features, change the UI, mould it to your brand, and cater everything to your existing traders.

- Initial license fee: \$10,000 upfront
- 20-40% revenue split from trade fees
- Trades - All trades are charged .1% of the profits of the trade. This is calculated by taking the (amount * purchase price * .001).

Our engine, your chassis

The best technology companies are always comprised of two parts—a strong business team and an extremely talented engineering team. To solve the biggest challenges facing DEXs today, we must stay focused on the technology. This is our core strength, and we don't want to lose momentum.



Likewise, our partners have strengths in other areas, like operations, and sharing our mutual expertise means we can both focus on what we're good at instead of trying to do everything ourselves. This catalyses progress—benefiting us, you, and the entire crypto community.

We're really excited about white labeling our decentralized order matching engine, so please do get in touch if you'd like to work with us. As we're just getting started, we can only work with a few partners, but we're happy to hear from anyone who'd like to know more.