

ARIX DECENTRALIZED EXCHANGE

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ARIX.EXCHANGE

ABSTRACT

Bitcoin launched in 2008 as the first peer-to-peer (P2P), Blockchain-based digital currency. At the time, Bitcoin's philosophy was premised on separating money from central governments through the creation of a trustless, P2P, and decentralized currency. It is now over 12 years since Bitcoin was unveiled, yet the philosophy underpinning Bitcoin and cryptocurrency adoption remains a mirage. While a vast digital ecosystem—also called tokenized economy—has emerged with Blockchain as its underpinning technology, mass adoption remains a distant dream. The exponential in coins, prices, participants, and market capitalization is still dwarfed by traditional asset markets.

But what exactly are the challenges bedeviling the crypto markets? Cryptocurrency exchanges, which play a significant role in the tokenized economy, is still fraught with a litany of pain points, namely: scalability, security, liquidity, trading fees, and trading pairs. We believe that an ideal cryptoexchange should not only allow mass adoption of virtual currencies but also allow traders to flourish. In a sense, traders require a cryptocurrency exchange that offers them the highest level of security and privacy. In addition, such a crypto exchange should allow them to exchange assets at a transparent (best and fair) price with minimal transaction fee.

Introduction

The 2010s saw an increase in financial technology firms- commonly known as FinTech-offering a broad spectrum of services from payments to local and international money transfers to P2P lending. The global market capitalization of FinTech rose from US\$2.5 trillion to US\$3.3 between 2010 and 2018¹. This significant growth trajectory shows that the FinTech sector is here to stay.

In parallel to FinTech innovations, whose aim is facilitating frictionless payments and transfers in fiat currency, there is also a rise in cryptocurrency usage. While the former saw its adoption and usage in the virtual economy, the later has entered the mainstream economy². Thus far, the primary goals of most successful cryptos such as Bitcoin and Ethereum are twofold: eliminating the need for financial intermediaries and minimizing transaction costs.

Take Bitcoin, for example. When Bitcoin launched in 2008, its main objective was to become the de facto electronic cash for online payments. Today, only a handful (160 companies³ to be exact, as of this writing) accepts Bitcoin as a form of payment. Thus far, Bitcoin's use case has largely remained speculative. This

is despite the massive benefits that it can provide to the online community.

The case for poor adoption of cryptos does not only apply to Bitcoin. Other altcoins, such as Bch ,have their own hurdles. BSC changed the whole concept of cryptocurrencies. For the first time, developers could program smart contracts-self-executing codes-and leverage a native currency to run them because of Ethereum.

Security

The problem of cryptocurrency adoption could be due to many factors. However, crypto exchanges play a significant role in disenfranchising mass adoption. So far, crypto exchanges are the only options that traders have to the crypto markets.

Challenges in crypto exchanges

The main reason why traders-whether new or experienced-would want to get started with crypto assets is to make profits. To attain this goal, a trader needs a crypto exchange to buy and sell the asset. In recent times, traders have cited the following concerns when it comes to a successful exchange of crypto assets⁴:

- Security
- Liquidity
- Trading fees
- Customer support
- Restric countries under sanctions
- Hacking centralized exchanges

According to recent statistics from Bitcoin.com, 54% of crypto exchanges have security vulnerabilities⁸.

ICO Rating, in its latest report, lists the following as among the most common causes of security breaches in crypto exchanges:

- Passwords that have less than eight symbols
- Passwords that are either letters or digits alone
- Creation of accounts that lack email verification
- Accounts that lack Multi-Factor Authentication (MFA) protocols

Evidently, the security challenges inherent in crypto exchanges can only be eliminated via a platform that leverages MFA and whitelist withdrawals. Besides, the platform must implement a robust encryption protocol that relies on cold storage as opposed to hot wallets to achieve a high degree of security. These measures are lacking in most crypto exchanges.

Liquidity

There are three facets to liquidity within the crypto markets: exchange liquidity, asset liquidity, and market liquidity⁹. While exchange liquidity is determined by the number of makers and takers on the crypto exchange, asset liquidity focuses on the number of buyers and sellers for a particular asset. Market liquidity, on the other hand, integrates both asset and exchange liquidity.

The problem of liquidity is one that has bedeviled most crypto exchanges because it affects the stability of crypto markets. In other words, the more liquid a crypto market, the more stable it is.

When traders exchange crypto assets involving a more obscure altcoin, there is a tendency that the asset's price will be affected by large trade¹⁰. In instances such as this, a trader must move through order book and ultimately increase the bid-ask spread, potentially increasing, or lowering the overall price of the asset.

Accordingly, not only does this behavior lead to high slippage, but it also increases the volatility of the asset. Therefore, a robust crypto exchange should strive to balance both assets and exchange liquidity to achieve overall market liquidity over time. Arix exchange works based on this. For using liquidity from different decentralized exchanges for a specific currency pair, ARIX works in a way that if you offer the closest price for a token, it uses other exchanges connected to provide you the best offer for the trade.

Brokerage services

In crypto markets, brokers—also called market makers—incorporate a mixture of both brick-and-mortar entities and online entities to facilitate the exchange of virtual currencies for fiat and vice versa. Under this platform, traders assemble at a place (it can be a Bitcoin ATM or any entity) and exchanges crypto for fiat cash and vice versa. Likewise, a broker may be an online service where local instant payment methods are conducted.

Brokerage services have the following advantages:

- They are straightforward to use
- They are user-friendly

However, they also have numerous disadvantages, including:

- They have incredibly high trading fees
- They may not offer the necessary customer support
- The customer may not get the best possible price during the trade

Decentralized Exchanges (DEXs)

DEXs are fully compliant

with Blockchain's philosophy of decentralization and security. In this regard, they do not have access to customers' assets and information, as is the case with CEXs. Their only function is serving as a layer for trade orders.

DEXs have the following advantages:

- They are more secure because there is no centralized server
- They promote anonymity
- They have low trading fees
- They are not prone to government manipulation

The Solution: ARIX Exchange

An ideal decentralized cryptocurrency exchange is one that addresses the pain points bedeviling the crypto markets, namely scalability, security, liquidity, trading fees, and user-friendliness¹².

Arix is conceived with scalability, liquidity, minimal trading fees, and usability in mind. ARIX is a decentralized exchange that intends to facilitate crypto traders who have access to a transparent, cheap, and user-friendly interface for Exchange of crypto/crypto.

- Create multi cross_chain bridge
- Creating liquidity pools with AMM(Automatic market maker) control
- Creating gaming tokens and creating transactions between them
- Create NFT tokens on the second layer of the Ethereum network
- Creating and making logo, brand, in selling the product in arix exchange
- Creating lock tokens and creating token staking in Arix exchange
- 5_Making connections of Metavers networks and selling Metavers products in exchange office 1st version
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Mission and vision

Arix is designed on the premise that traders have inalienable rights to control their money and identity the way they want. Blockchain holds the key to unraveling these rights by empowering traders to manage their money in a transparent and trustless way.

Our mission is to promote the mass adoption of cryptocurrency. By facilitating mass adoption of cryptos, we'll help crypto traders to:

- Control how they access their funds anywhere and anytime
- Safeguard their personal data using cryptographic protocols that are foolproof

Our vision is to facilitate traders to access their coins in every wallet. As such, we are:

- Reimagining how money can be moved, invested, and spent
- Democratizing the entire crypto markets by designing a user-friendly crypto exchange that is simple to use.

ARIX's features

An ideal crypto decentralize exchange is one that addresses the pain points bedeviling the crypto markets, namely scalability, security, liquidity, trading fees, and user-friendliness . Arix is conceived with scalability, liquidity, minimal trading fees, and usability in mind.

Is based on Erc20

Arix DEX Is based on BSC smart and Ethereum and polygon and HECO

ARIX token is developed on Binance Smart Chain.

Regulatory compliance

ARIX will use audit contract and get licenses in Seychelles.

Intuitive user interface

ARIX is designed to offer a simple, yet very powerful GUI for both novice and experiencedtraders.

Simplified liquidity

ARIX is designed to balance both asset and exchange liquidities.

Minimal trading fees

ARIX is designed to provide the lowest fees among all crypto exchanges

Scalability

ARIX Exchange is intended to provide a stable and a scalable platform with minimal downtimes.

Security

ARIX is building a robust platform that leverages the cutting-edge protocols such as cold wallets and MFAs to address the security issues.

Customer support

ARIX will leverage a 24/7 help desk services to provide support for beginners who may have problems on the platform.

Intuitive user interface

ARIX believes that a user-friendly crypto exchange creates a perfect user experience for both novice and experienced traders¹³. As such, our crypto exchange will have an intuitive user interface that is not only simple but powerful enough to facilitate trade for both new and experienced traders.

Simplified liquidity

We understand the problem of liquidity and how it affects the performance of crypto markets. Accordingly, we intend to prevent those problems emanating from high slippage, which can increase an asset's volatility rate. Our platform will balance between asset and exchange liquidities to achieve a robust crypto exchange.

Minimal trading fees

We are alive to the fact that high trading fees are an inhibitory factor for most traders that would like to participate in crypto trading. However, for most exchanges, high trading fees are usually the norm. ARIX is designed with the trader's proposition in mind: minimal fees for both makers and takers.

Security (<https://github.com/TechRate/Smart-Contract-Audits/blob/main/October/Arix%20Exchange.pdf>)

Arix Exchange

Smart Contract Security Audit

Disclaimer

This is a limited report on our findings based on our analysis, in accordance with good industry practice as at the date of this report, in relation to cybersecurity vulnerabilities and issues in the framework and algorithms based on smart contracts, the details of which are set out in this report. In order to get a full view of our analysis, it is crucial for you to read the full report. While we have done our best in conducting our analysis and producing this report, it is important to note that you should not rely on this report and cannot claim against us on the basis of what it says or doesn't say, or how we produced it, and it is important for you to conduct your own independent investigations before making any decisions. We go into more detail on this in the below disclaimer below - please make sure to read it in full.

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under any claim of any nature whatsoever in any jurisdiction) in any way arising from or connected with this report and the use, inability to use or the results of use of this report, and any reliance on this report.

The analysis of the security is purely based on the smart contracts alone. No applications or operations were reviewed for security. No product code has been reviewed.

Background

Tech Rate was commissioned by Arix Exchange to perform an audit of smart contracts:

<https://github.com/arix-exchange/Arix-mainnet/commit/131d55a9ab5d82480612f5298576d6cffe809b5>

The purpose of the audit was to achieve the following:

- Ensure that the smart contract functions as intended.
- Identify potential security issues with the smart contract.

The information in this report should be used to understand the risk exposure of the smart contract, and as a guide to improve the security posture of the smart contract by remediating the issues that were identified.

Issues Checking Status

Checking status	Issue description
Passed	Compiler errors.
Passed	Race conditions and Reentrancy. Cross-function race conditions.
Passed	Possible delays in data delivery.
Passed	Oracle calls.
Passed	Front running.
Passed	Timestamp dependence.
Passed	Integer Overflow and Underflow.
Passed	DoS with Revert.
Passed	DoS with block gas limit.
Passed	Methods execution permissions.
Passed	Economy model of the contract.
Passed	The impact of the exchange rate on the logic.
Passed	Private user data leaks.
Passed	Malicious Event log.
Passed	Scoping and Declarations.
Passed	Uninitialized storage pointers.
Passed	Arithmetic accuracy.
Passed	Design Logic.
Passed	Cross-function race conditions.
Passed	Safe Open Zeppelin contracts implementation and usage.
Passed	Fallback function security.

Customer support

Besides an intuitive user interface, ARIX will leverage a 24/7 help desk services to provide support for beginners who may have problems on the platform.

Ethereum is a crowd-funded and open-source platform for executing smart contracts. These are programs that run themselves on a decentralized ledger¹⁹. In other words, smart contracts allow transactions to be processed by the Blockchain. These transactions can only get validated when the conditions specified in them are met—this happens without an intermediary. Trading cryptocurrency on the ARIX DEX platform is a trust-based process where the parties (in this case, the maker and taker) rely on cross of Blockchain coupled with underlying smart contracts to exchange their funds. ARIX is leveraging the Erc20 developer because the Blockchain is public, open, verifiable, and trustless.

Advantage

- 1-cross-chain bridge BSC&Ethereum& Huobi chain and polygon
2. Creating liquidity pools with AMM control (Automatic market maker)

3. Create NFT tokens on the second layer of the Ethereum network

4- Creating gaming tokens and creating transactions between them

5_Making connections of Metavars networks and selling Metavars products in exchange office 1st version

6_Creating and making logo, brand, in selling the product in arix exchange

7- Creating lock tokens and creating token staking in Arix exchange

Technical Specifications for Arix

ARIX is conceived as a 100% self-funded platform, not relying on external investors before its launch. As such, a native token is necessary for power all the transactions on the platform. ARIX Token initially be launched as an BEP-20 token on the BSC Blockchain. The ARIX is a revenue-generating coin that allows parties to receive revenues in terms of transaction fees.

The revenues will automatically be transmitted into ARIX token holders' accounts once the trade is concluded. In this regard, ARIX anticipates generating interest whenever a successful transaction takes place on the platform.

The platform will generate revenue from the following sources:

- Withdrawal fees. Whenever a withdrawal request is made, transaction fees will be levied in the form of ARIX.
- Transaction fee. ARIX will leverage the maker-taker transaction fee mechanism to generate income that sustains the platform. The fees will start at 0.5% to 2% for both makers and takers. 50% of the fees generated as transactions will be shared with ARIX token holders.

Technical Specifications

ARIX is conceived with the global needs of the crypto traders in mind. As such, our platform will be a one-stop system where both novice and experienced traders can easily trade. Below are embedded features that will be incorporated into ARIX:

- **Wallet.** The wallet will provide a secure medium for storage of cryptocurrencies
- **Market cap listings.** The market cap listing highlights the trading volumes, market prices of most virtual coins, and fiat currency.
- **Cryptocurrency listing.** The cryptocurrency listing will provide developers with a seamless interface upon which to add their tokens to the ARIX.
- **RSS feeds.** The RSS feed will display the latest news about cryptocurrencies and Blockchain. This will allow investors to make informed choices about their trades.

Because of the above features, ARIX will have two principal components:

- The Front-end Application

- Exchange

ARIX DEX

The ARIX DEX will handle both and cryptocurrencies. Traders will have direct access to ARIX Exchange using their wallets. To trade on the platform, users will be required to have registered, and their KYC/AML verified. Once registered, such users will mark their favorite currency pairs that will be bookmarked.

For each trading pair on the platform, the Exchange will Exchange displays the following information:

- The currency being traded,
- Daily transaction volume
- Price increase/decrease for the past 24 hours

Every trade on the platform will take place between two parties: the maker and the taker. The maker must place the order before the trade, while the taker can place a matching order or the makers' order. ARIX will specify both limit and market orders.

ARIX DEX

Besides facilitating cryptocurrency exchanges, ARIX will also allow traders to trade their Arix Tokens without an intermediary. ARIX believes its DEX will ensure investors' funds remains in their

custody, potentially eliminating the security issues that have bedeviled many exchanges. This also means that investors' funds remain secure.

Suppose we have two traders, Alice and Bob. The protocol will work as follows:

- Bob creates an order on the ARIX platform.
- The transaction goes to the ARIX's order book and is retransmitted across many traders on the ARIX's ecosystem. Any trader shares this order for other traders to see.
- If Alice wants to accept the order, she will leverage ARIX's platform which will automatically match the request and send it to DEX's smart contract to complete the order.
- When creating orders, Alice and Bob allow the DEX's smart contract to deduct funds from their respective wallets.

Market Overview

It is now over 12 years since Bitcoin launched as a Blockchain-powered cryptocurrency. Because of Bitcoin, governments, corporations, and banks, corporations have recognized the

excellent tech value of digital currencies. As an underpinning technology for Bitcoin, Blockchain has changed organizations' approach to security and anonymity.

Today, the number of new use cases riding on Blockchain for electronic payment services is expanding. As of this date, there are more than 5,000 cryptos in existence with over 20,000 different types of crypto markets²⁰.

And the market cap has also risen steadily: from a paltry US\$10 billion²¹ in January 2010 to over US\$356 billion²² in 2022.

Obviously, interest in cryptos is being driven by the fact that cryptos are outside the control of mainstream organizations such as banks and governments, and as such, difficult to shut down.

Besides interest from organizations about popular crypto assets such as Bitcoin and BSC, a new wave has emerged in the form of tokenization. Crypto assets have pivoted towards tokenization, and most organizations are retooling themselves.

The design cryptos or tokenized economy have revealed to us that the approach taken by traditional payment institutions is obsolete and needs reimagining. First, access to financial services is limited—if not guaranteed—across the globe. In some countries such as the U.S., we have a stable currency. However, in others like Venezuela, we have witnessed hyperinflation because of the government's inefficiency.

In this sense, a globally accessible and decentralized currency could have a significant impact on stabilizing the country's economy. Bitcoin and BSC could represent such a store of value because their supply is fixed and algorithmically controlled.

Second, accessibility to payment networks is also a challenge. Current payment networks have many inefficiencies and third parties that make the exchange of assets difficult. This is because there is much friction in the use of proprietary, bespoke networks that are incompatible.

ARIX believes in the mass adoption of financial services via a truly open, global financial network that is outside the control of any country. Such a system would create greater economic freedom, efficiency, innovation, and equal opportunities to users regardless of their country of residence.

At the heart of such a system that we envisage is cryptocurrencies. Cryptos can overcome the challenges inherent in traditional payment networks because they are peer-to-peer networks, which means anyone can invest in them and exchange them. Also, the Blockchain design of cryptos encourages technological innovation that has the potential to create a fast and inexpensive network.

For these objectives to be realized, a crypto exchange is necessary. Crypto exchanges play an essential role in crypto markets because they are the only go-to tools for users that want to invest in cryptos. Since the unveiling of Bitcoin, the number of crypto exchanges has sharply increased.

From a paltry ten of crypto exchanges in 2010²⁴, there are now over 200²⁵ crypto exchanges.

And the evolution has been head-spinning. In the earliest days, crypto exchanges were merely offering the underlying infrastructure that allowed buyers and sellers to exchange Bitcoin. Today, consumer needs have changed. As such, any crypto exchange that wants to leave a mark must not only offer the best platform but also understand the ever-evolving consumer needs.

We believe that cryptocurrencies will mature in three phases: speculation/investment (the industry is currently in this stage), institutionalization, and utility. The institutionalization and utility stages are crucial because they represent the maturity of cryptos, with adoption becoming a reality.

Tokenomics

This section describes the Arix Token, Token allocation, and Emission Logic.

ARIX Token

Crypto exchange-and any Blockchain-based project-can only thrive when decentralized parties can participate in it. ARIX is implementing an open, transparent, and auditable platform that will enable traders to exchange their assets.

As such, we want to encourage as actors as possible to not only own a stake but also participate in this noble crypto exchange. For this reason, we are pegging the ARIX token as a unit of membership in the ARIX platform. We are not offering the ARIX token as a speculative token but one that allows investors to own a stake in the platform and enjoy all the services.

ARIX token is a revenue-generating coin that allows parties to transact business and receive revenues on the platform. The revenues will automatically be transmitted into ARIX token holders' accounts once the trade is concluded. In this regard, ARIX anticipates generating interest whenever a successful transaction takes place on the platform.

Revenue Model

The platform will generate revenue from the following sources:

ARIX Token value and the burn

An investor can use ARIX token to pay for any fees on the platform, including:

- Paying for exchange fees
- Paying for withdrawal fees
- Paying for listing fees
- Paying for other fees as may be defined by ARIX from time to time.

Name	Rate	Schedule
Private	20 %	1%/day from day 8 to 18, 2 years linear
Team & Advisors	22%	3.5 years vesting 11 year locked, 2.5 years linear
Treasury Reserves	20%	Uncirculated
Liquidity and Platform Incentives	30%	Dynamically allocated to liquidity pools
Public Sale	1.07%	0.50% will be locked for 1 month, then unlocked. 0.57% unlocked.
Community Incentives and Marketing	6.93%	1 year linear