Unizen v1 Litepaper

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Abstract—Unizen is a Smart Exchange Ecosystem that enables deep hybrid liquidity through a modular ecosystem that features both centralized and decentralized exchange components. Unizen's innovations are anchored by a commitment to high compliance, deep hybrid liquidity, high security, and a user-friendly, unified user interface for all available digital assets that are familiar and efficient for seasoned traders and intuitive to newcomers.

I. Introduction

This litepaper explores the current state of trading cryptographic digital assets and presents Unizen: a novel exchange ecosystem architecture that addresses many of the risks and challenges that currently hinder wider scale adoption.

A. Background

Crypto trading is a highly volatile and rapidly evolving digital world that is currently accessed through several complex technical inventions (and their respective user interfaces) built by deep mathematical thinkers and software engineers. Experienced traders and newcomers alike are explicitly required to assess and interact with these inventions while leveraging a disparate plethora of online and offline resources, ranging from research documents, whitepapers, tokenomics, published articles and social media sentiment.

Not surprisingly, venturing into the cryptocurrency trading space typically presents a material adoption threshold for newcomers, particularly those with limited technical backgrounds or with limited traditional asset trading experience. Coincidentally, these two "newcomer" cohorts represent the largest group of individuals (by number) that are commonly described as "crypto traders".

Regardless of a given trader's experience, if he or she already has (or is provided with) the ability to read into and better understand the fundamental elements of risk assessment, that trader can reasonably be expected to make a more informed decision to acquire or sell a given asset, or not, and may well even execute more successful trades.

The crypto trading decision-making process is also influenced by the persona of the trader. For example, institutional traders value the deep liquidity enabled by large trading volumes for a given asset. They also value compliance and security guarantees. On the other hand, a more risk-taking persona, oftentimes with less capital to invest, may value quick access to returns over everything else.

What these two personae have in common is that they each implicitly value deep liquidity, as it reduces the slippage of a given trade. Furthermore, they each explicitly value security, broadly defined, including the assurance that their digital assets

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are safe and that the trades they request are actually executed, along with considering the cost of conducting a trade and the execution time.

Finally, the present day crypto trading experience is heavily influenced by the functionality of the exchanges (and their respective user interfaces) on which traders can discover, analyze and execute trades for a given asset. More specifically, the exchange universe has been historically characterized by two disparate categories of exchanges, namely: centralized exchanges (CEX), and decentralized exchanges (DEX).

A **Centralized Exchange** is a cryptographic digital asset exchange that is hosted and maintained in a traditional manner, usually supported by a cloud provider like AWS, GCP or Azure. A **Decentralized Exchange** is an autonomous and self-regulating marketplace where the business logic resides on-chain. They are usually deployed and maintained by an anonymous team. (This litepaper does not distinguish between DEX and DeFi.)

In the tables below, we present the sequence of activities necessary to conduct a trade on both a CEX and a DEX.

Actions Required	Comments	Est. Duration
Set up 2FA	Assumes basic knowledge of common 2FA apps (e.g. Authenticator, Authy, etc.).	5-10 minutes
Create an account	Straight forward process that includes registering basic user information that results in e-mail confirmation	5-10 minutes
Make a trade	A laddered buy order is placed on the books.	30-minutes to weeks
Complete KYC/AML	Provide the exchange with a series if documents that confirm the nationality, identity and residency of the user. Institutional KYC/AML typically requires more extensive corporate and ultimate beneficial owner documentation. This step on the onboarding process is the longest.	Up to 1 hour
Transfer new asset to cold wallet	The requirements of transferring from a hot wallet on an exchange is less cumbersome than accessing a cold wallet.	15 minutes
Transfer funds to the exchange wallet	Common practice for institutional traders Carries risk if mistakes are made or if the transaction is compromised.	30 minutes

Example. Trade Conducted by an Institutional Trader Persona on a Centralized Exchange

In the two foregoing examples the trades were conducted for the same digital asset, but using different means of interacting with the asset and its liquidity on the exchange. Broadly speak-

Actions Required	Comments	Est. duration
Connect browser extension wallet	i.e., Metamask	30 sec - 1 min
Make a trade	The time it takes for a trade to be fully executed is heavily reliant on the underlaying protocol of the dApp. For a DEX built on the Ethereum Network, it can take a long time if the network is congested.	1 - 30 min or more

Example. Trade Conducted by a Risk-Taking Trader Persona on a Decentralized Exchange

ing, when comparing the two trades, the relative aggregate time spent to conclude a given trade is heavily impacted by the regulatory constraints imposed by the given category of exchange.

Similarly, the degree of liquidity on each exchange often predestines the degree of slippage that will affect a given trade. Slippage is higher, meaning that less assets per Ether are actually traded, when liquidity is lower.

Furthermore, the decision to buy or sell is often time-consuming for a given investment. The decision time is directly correlated to the level of a trader's competence across the multiple factors that are typically considered, including deep economical, technical, marketing and many more key performance indicators that underscore making a sound investment.

What if a single exchange combined all of the advantages of CEXs, DEXs, and decision making tools into a single, intuitive and seamless experience?

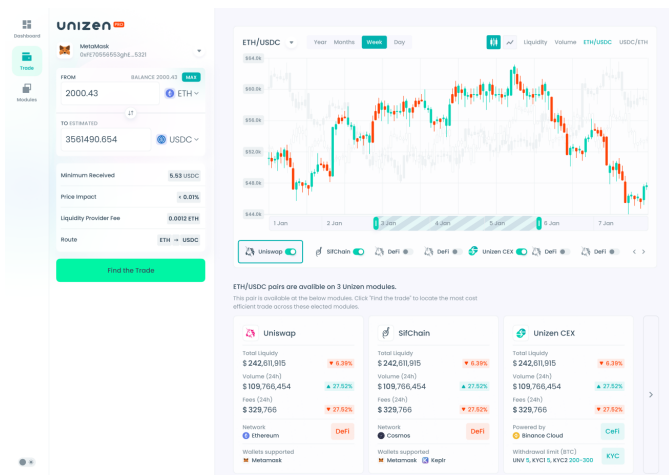### B. Unizen Smart Exchange Ecosystem

Fig. 1. Unizen UI. Data is non-representative of the final product

The Unizen team is developing a modular CeDeFi solution to onboard trading products and exchanges onto the same platform. This will lend itself to all types of trading personae and enrich each of their decision making processes, reduce the time to execute trades, and reduce risk by interacting with vetted and audited products with deep liquidity. It will also give traders the ability to acquire any digital asset without ever leaving the Unizen platform, nor sending funds between exchanges.

Users conducting trades across the Unizen ecosystem will do so with higher security, less slippage, higher asset availability, and more educated investment strategies.

By opting into a CeDeFi fueled architecture we're able to present a number of cross-chain agnostic trade alternatives, with over-arching technical innovations that helps users of the platform find the best trade based on **liquidity depth**, **liquidity provider fee's**, **network fee's**, **KYC requirements, social sentiment** and **withdrawal fees**.

This architecture also allows DeFi builders to onboard their application and part-take in the trade aggregation algorithm for each trade conducted on the platform. This lends itself to healthy competition from which, we will accrue unique datasets for DeFi developers on how they stack up against their competition in terms of trades conducted and how users interact with their platform through the Unizen ecosystem.

The DeFi platform that can serve up the most popular, sought after pairs with the best trading prices will source the biggest volume through Unizen.

Unizen will leverage a network of experts to assess the technical viability and the security and traction of each module that gets onboarded to the ecosystem. The approved modules will be integrated with the ecosystem through an SDK provided by Unizen's technical team.

C. Architecture

To enable Unizen's modular ecosystem, there are three main technical components, including: (1) *Unizen Modules,* which are custom modules built by Unizen; (2) *Third-Party Modules,* which represent external, third-party SDK integrations; and (3) *Unizen Custom Logic,* which is the overarching innovation that allows for interaction with one or more of these modules and which enriches the overall user experience.

(1) **Unizen Modules** are custom modules that Unizen builds-out and integrates into the ecosystem. The first module to be onboarded is the Unizen CEX. This will allow Unizen users to interact with Binance-shared liquidity and for Unizen to begin listing prominent and emerging projects before onboarding the first third-party module.

Unizen will continue to innovate and introduce custom modules, tailored for a multitude of trading personae.

(2) **Third-Party Modules** are enabled through an SDK and can be realized on the platform in a multitude of ways. Unizen will expose API's that are versatile and which allow Unizen to onboard any module while simultaneously honoring stringent security requirements and maintaining full product innovation.

(3) **Unizen Custom Logic** is the in-house overarching innovation of Unizen's technical team that will make the overall experience of interacting with any of these modules as frictionless and seamless as humanly possible. This will be an iterative build that will improve with each partnership integration through custom development.

The crown-jewel of Unizen's Custom Logic is the **trade aggregation algorithm** that will be enabled through our data collection services and exposed through our API's. Every
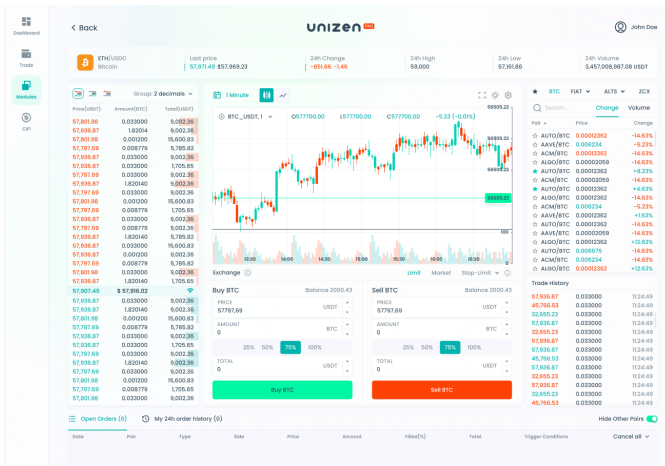
Fig. 2. Unizen Modules. Data is non-representative of the final product

Fig. 3. Third-Party Modules. Data is non-representative of the final product

module onboarded needs to provide endpoints for our Data Collector services that will enable their data feed to be parsed by the aggregation algorithm hosted in the backend of the GraphQL API.
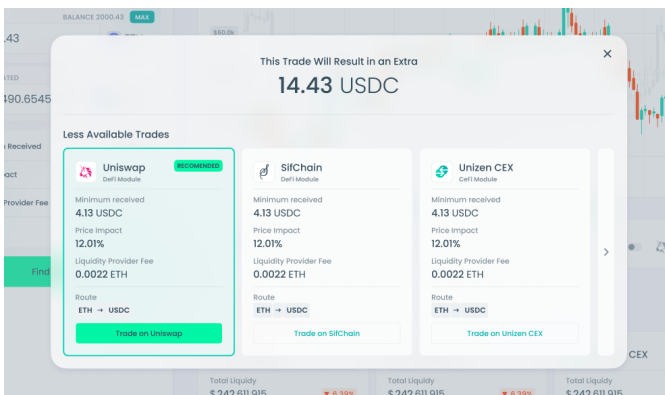

Fig. 4. Trade aggregation. Data is non-representative of the final product

Another component is the **Smart Social Sentiment Indicators**, which are AI-driven indicators reflecting the user sentiment for given digital asset across a multitude of social media outlets. These raw data pipelines are made available

through our partner, **LunarCrush**.

By leveraging the LunarCrush data pipelines, Unizen pulls together custom datasets that make up the ZSS, ZSI and ZTI indexes with data collected across all social platforms. Unizen's team will parse the data into actionable and non-intrusive indicators to help guide traders to make a more informed trading decision at the appropriate time.

Unizen will also introduce a **$ZCX Controlled DAO** as part of the **Unizen Custom Logic** to decentralize the direction of the platform and to put elements of the exchanges decision making process into a decentralized and democratized entity.

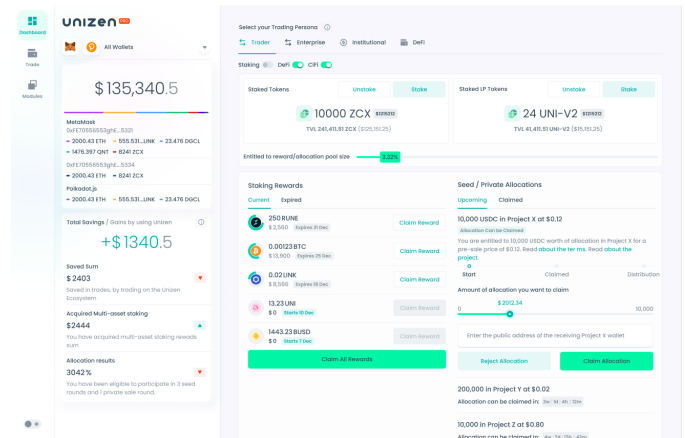### D. Dynamic Multi-Asset Staking on Binance Smart Chain

Fig. 5. Dynamic Multi-Asset Staking. Data is non-representative of the final product

This initiative aims to support prominent networks in the space, while simultaneously fueling Unizen innovations and rewarding ZCX holders alike. These multi-asset funds will be sourced through the ZenX Labs incubator, paid listings, as well as a Unizen hosted and maintained node pool initiative.

Furthermore, staking ZCX will also allow stakers to gain access to early seed and pre-sale rounds for hot up and coming projects in the space. The allocation will be determined by a fixed ratio based on a wallet's set allocation of the TVL of ZCX staked.

i.e If a user has staked 10% out of the total amount of ZCX staked (100%), he/she will be entitled to 10% of both allocation as well as 10% of multi-asset yield.

A user can add or withdraw any amount of ZCX at any point of time. There are no lockup periods or cooldowns, but he or she might lose access to an active incubator allocation.

1) Dynamic sources for rewards:

a) Nodes: Unizen will set up a variety of blockchain nodes of multiple projects and will distribute the rewards partially or completely to users that are staking. The reward distribution type can vary.

b) Listings: Some projects might allocate a specific amount of their own token as part of the payment to Unizen. Some or all of these tokens might be vested to existing stakers.

c) Incubator: The ZenX Labs incubator program will be a benefit for stakers. Each staker will be eligible to obtain a share of an exclusive sale (seed sales, / IDO, etc), based on their current share of the total value locked (TVL). If a user decides to purchase these, he will be able to pay for his allocation after a staking period, within a given timeframe. After the timeframe closes and the start of the vesting period is reached, the user will be able to claim tokens based on the vesting settings and the amount of share he obtained / paid for.

2) Multi-Asset rewards: The big benefit for stakers is that they won't just be getting a single token as a reward, but a multitude of different tokens. These rewards will be BEP-20 tokens in most cases and get distributed *"automatically"* via the smart contract when a user decides to claim their rewards. In addition to that, a user will also be able to gain native — mainnet — tokens as a form of rewards. In these cases, a user will need to add a mainnet public address of the used blockchain to the distribution contract. After adding this address, the individual will be eligible to receive these airdrops — automatically — via distribution outside of the smart contract. It will work similar to Ethereum Name Service (ENS) in this case.

E. *$ZCX - Unizen's native token*

ZCX is an exchange-based utility token, created on the Ethereum blockchain as an ERC-20 token but mirrored on the Binance Smart Chain and can be converted into BEP-20 using one of many supported bridges. ZCX (BEP-20) can be staked by holders in our multi-asset staking platform, which will front and fuel the ecosystem and yield a plethora of cross-chain rewards as well as early seed/private allocations into prominent projects.

ZCX has a deflationary attribute which means that the total supply of 1 billion at the time of writing this will be deflated and burned with every paid listing on the Unizen CEX module.

ZCX will also enable holders to participate in the Unizen DAO to democratize the direction of the platform.

ZCX will always be at the very forefront of all of Unizen's innovations. It packs ever-growing utility that gets enabled through future partnerships, modules, and/or ZenX Lab incubated/accelerated projects.