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The screenshot displays the Eterna Hybrid Exchange interface. The main section features a candlestick chart for BTC-USD with a price of \$38,555. To the right is an order book with columns for Price USD, Size, and Total USD. Below the chart are sections for Positions (BTC-USD Long and ETH-USD Short) and Assets. An overlay shows a mobile app interface with a search bar for BTCUSD, a 'LONG' button, and a 'Staking Opportunities' section with APY rates of 5.50%, 9.10%, and 8.00% for USDT, ETH, and BNB respectively. The mobile app also shows a 'GUILD RANK 8 "ARISTOCRAT"' badge and a 'Stake the new EHX token to earn up to 10% APY' promotion.

Eterna *Hybrid* Exchange

Decentralizing a Centralized World

Section 1 – Introduction

Eterna Hybrid Exchange is the first crypto exchange that effectively combines the features of centralized exchanges (CEXs) and decentralized exchanges (DEXs). **Eterna** is the only DEX to provide access to \$3 billion in CEX liquidity, over 250 perpetual futures contracts, 300 spot trading pairs, as well as a cross-chain swap and a p2p market. In terms of the variety of perpetual and spot contracts available, Eterna the largest perpetual futures exchange in the world.

Eterna Hybrid DEX combines an extensive perpetual futures market with innovative trading tools unavailable on any other decentralized exchange, as well as a Universal Swap and p2p market, that allow investors to reach every corner of the DeFi Market. **Eterna Hybrid DEX** brings together the deepest centralized liquidity pools in the crypto market with the anonymity and agility of decentralized order book trading, and thereby combines the best features of both centralized and decentralized trading without suffering from their drawbacks. **Eterna** also provides investors with a free suite of state-of-the-art trading tools that enable traders to leverage expert knowledge and instantly respond to volatile market conditions, giving investors an advantage over traders using other DEX platforms. **Eterna DEX** also permits its native **EHX** token holders to stake their tokens, thereby earning staking rewards and to collectively share in fifty percent (50%) of **Eterna** net income. No other exchange, whether centralized or decentralized, brings together so many advantages for investors, making **Eterna** a unique value proposition for investors and **EHX** token holders.

Section 2 – Eterna’s Trading Architecture

Eterna Hybrid DEX combines the best features of centralized exchanges (CEXs) and decentralized exchanges (DEXs), without suffering from their respective drawbacks. There are 550 CEXs and 285 DEXs registered on Coinmarketcap’s exchange list, each with their benefits and flaws. Centralized exchanges (CEXs), such as Coinbase or Binance dominate the crypto space, as 85% of crypto spot trading and 98% of perpetual futures trading take place on CEX platforms. CEX spot transactions are executed by an order book, which maintains records of all open orders for buying and selling assets in specific trading pairs. While CEXs are relatively price-transparent, they are less secure than their decentralized counterparts, as they require KYC and store investors’ private information (through presumably more secure third parties). That has not prevented most well-known CEXs from being hacked, and often on a regular basis, which exposes investor funds and records to the depredations of bad actors, whose hacking abilities are usually one-step ahead of the security protocols adopted by CEX administrators.

By contrast, decentralized exchanges (DEXs), such as Uniswap, and Pancakeswap (PCS), are governed by Automatic Market Makers (AMMs) that employ liquidity pools containing equivalent values of each trading pair, which allows traders to execute their orders. However, AMM-based



DEXs also suffer from significant flaws, such as relatively high price impacts caused by insufficient liquidity, or impermanent loss due to the volatility of one of the assets in their trading pairs. DEXs also suffer from regulatory challenges, as no KYC or specific anti-money laundering (AML) protocols are implemented. These deficiencies create opportunities for bad actors to utilize DEXs for unethical purposes. DEXs are also famously rife with scam projects, since they don't vet the projects launching on their platforms.

Figure 1 below illustrates **Eterna** hybrid trading architecture, that provides an elegant solution that overcomes the weaknesses of both CEXs and DEXs. **Eterna's** trading philosophy "decentralizes centralized trading" by providing DeFi wallet holders unlimited access to CEX liquidity pools.



Figure 1: Eterna Hybrid DEX Decentralizing Centralized Trading

The trading process on Eterna Hybrid DEX can thus be divided into four distinct procedures:

1. Traders connect their DeFi wallets to **Eterna Hybrid DEX**.
2. DeFi traders deposit their crypto into **Eterna's omnibus wallet**.
3. All funds are then scanned by Chainalysis, which flags and quarantines illegitimate funds or transfers conducted from sanctioned countries. All other "clean" funds are transferred onto Eterna's DEX platform.
4. **Eterna** then transfers funds to centralized platforms for order execution.
5. **Eterna DEX** then transfers crypto currencies back to DeFi wallets, where they can be stored or converted into fiat and transferred to clients' bank accounts.

Eterna's flow of funds allows investors to ultimately withdraw their cryptocurrency to their DeFi wallets. **Eterna** also guarantees unlimited DeFi access to CEX liquidity, combining anonymous and secure DeFi trading with the vast liquidity pools and price-transparency of centralized exchanges. Because **Eterna DEX** is governed by an order-book instead of an AMM-aggregator, **Eterna** avoids



the inefficiencies of other DEXs that suffer from price impact and associated flaws. On Eterna Hybrid DEX, the price you see (on our partner CEXs) is the price you get. **Eterna DEX** therefore elegantly combines the anonymity and security of DeFi trading with the price-transparency of CEX trading.

Section 3 – Eterna’s Perpetual Futures DEX

Futures are part of the crypto derivatives market. A “derivative” is a financial instrument whose value is derived from the market price of an underlying asset. Derivatives are used to manage risk as well as to engage in speculation, because derivatives contracts allow two parties to agree today about the terms of a transaction at a future date. More specifically, a futures contract permits two parties to agree at time $t = 0$ (now) about the transaction price of an asset or commodity at time $t = 1$ (in the future). Hence, a firm that wishes to manage future price risk can make an agreement today, to pay a pre-determined price in the future for a given commodity or asset, which eliminates uncertainty about the underlying asset’s future price at the date of transaction. Futures are a specific type of derivatives contract, that represent an agreement to buy or sell an asset at a pre-arranged price in the future, often using borrowed funds. Futures are also important because they can be traded on margin, which means that investors can borrow 2X – 125X their currently available funds, making futures potentially one of the most profitable investments in the market.

Eterna launched a DEX for Perpetual Futures, which differ from conventional futures contracts in that: (1) perpetual futures are only traded in crypto markets, (2) perpetual futures do not expire, and (3) perpetual futures require financial settlements at regular intervals, rather than a transfer of ownership of the underlying asset. However, like other futures markets, investors on **Eterna DEX** can trade on margin, or leverage their investments 2X – 125X while limiting their downside risk, which means **Eterna DEX** one of the most exciting new exchanges in the crypto space. The two primary types of perpetuals contracts are short and long contracts. The two positions and their resulting PNL (profit or loss) can be conceived of thusly:

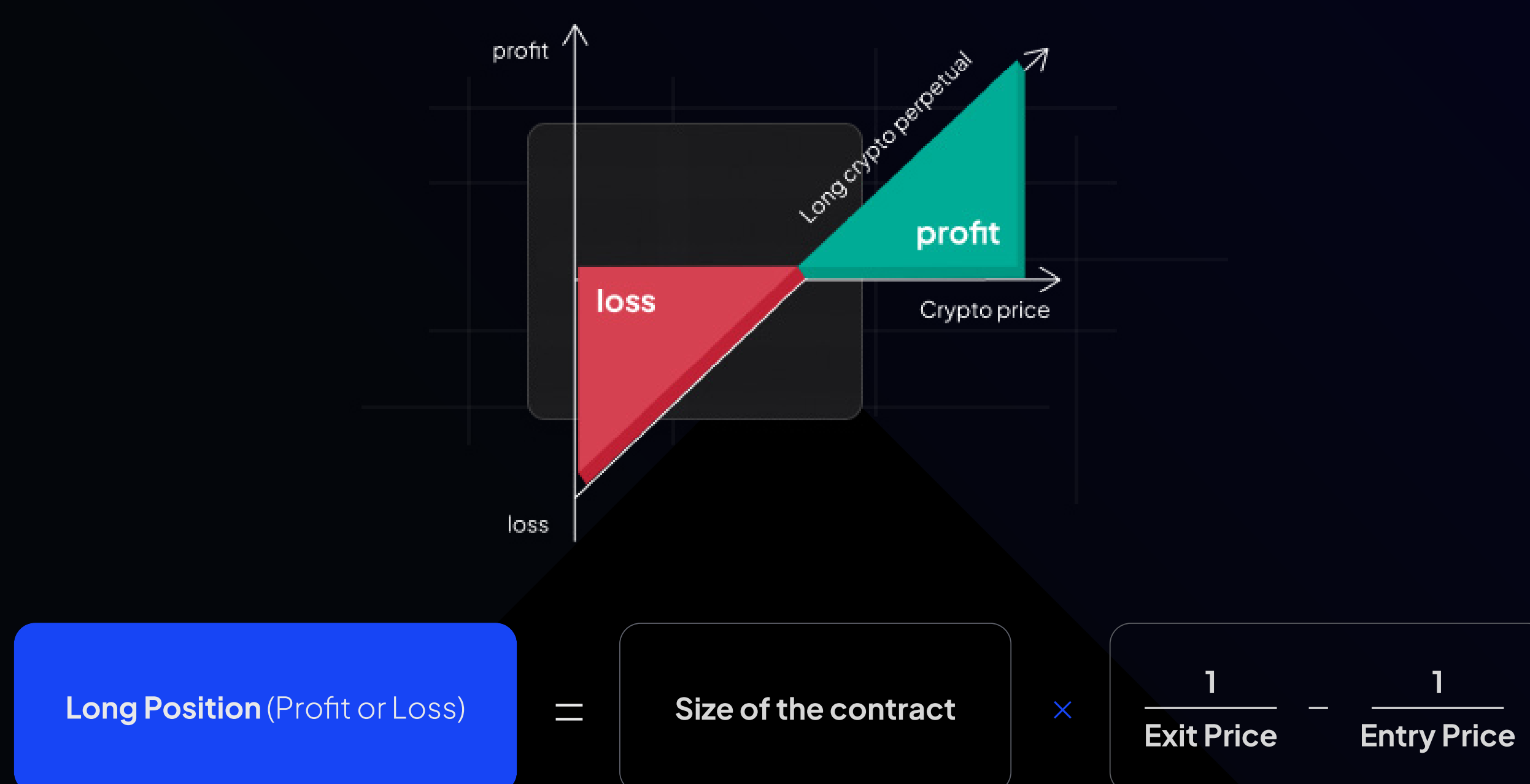
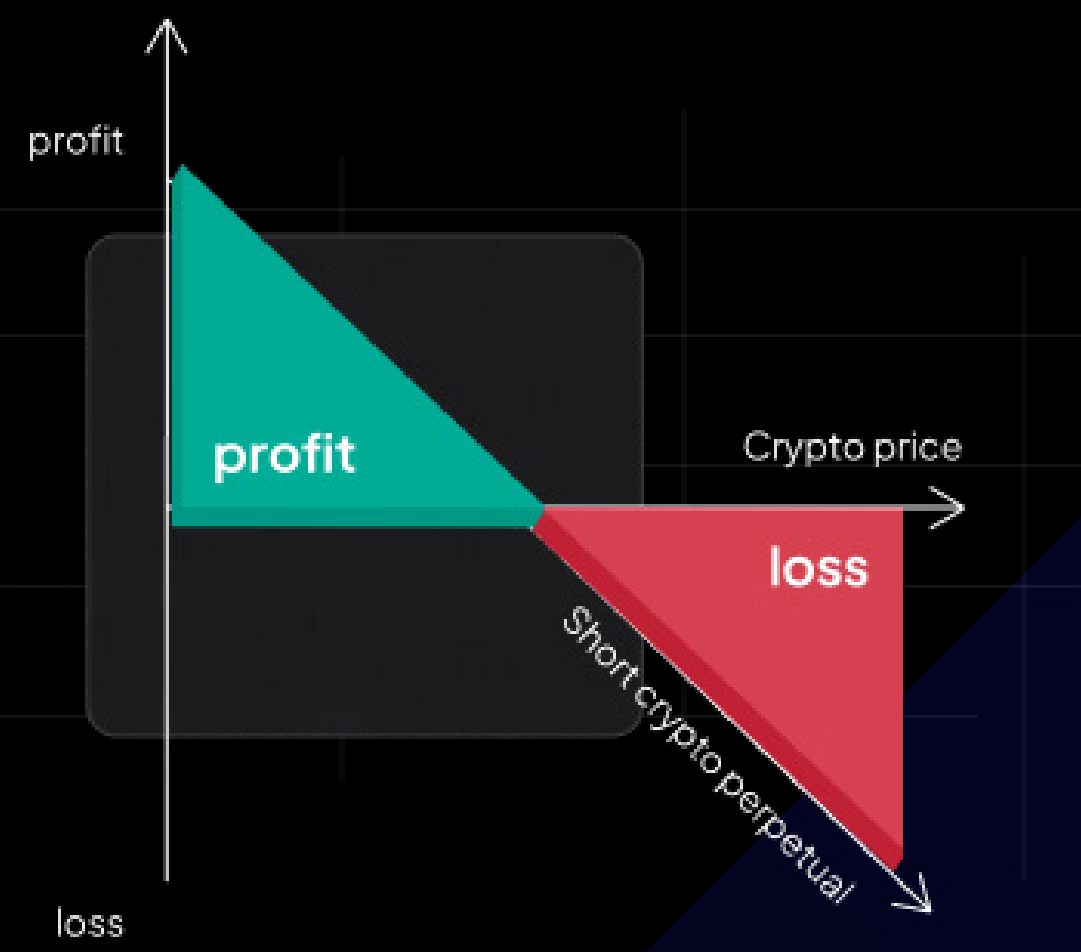


Figure 2: Perpetual Futures Profit/Loss Diagram





$$\text{Short Position (Profit or Loss)} = \text{Size of the contract} \times \left(\frac{1}{\text{Entry Price}} - \frac{1}{\text{Exit Price}} \right)$$

Figure 2: Perpetual Futures Profit/Loss Diagram

Market Survey

According to Token Insight, in 2021, the entire cryptocurrency market achieved a trading volume of \$112 trillion, which is the highest trading volume achieved to date. Crypto derivatives in 2021 reached a trading volume of \$57 trillion (or over 50% of total crypto trading volume), representing a 358% growth rate over 2021. According to The Block, in 2021, crypto spot market trading volume reached \$14 trillion, but declined to \$6.96 trillion in the first 10 months of 2022. By contrast, in 2021, perpetual futures trading volume reached \$51 trillion, or approximately 45% of total crypto trading volume. In fact, Bitcoin Perpetual Futures alone reached \$21.75 trillion in trading volume in 2021, but declined to \$11.8 trillion in the first 10 months of 2022. Consequently, perpetual futures represent the largest and most profitable segment of crypto markets, and while smaller investors tend to focus on crypto spot market and yield farming, the bigger players trade heavily in crypto derivatives.

In fact, during the depths of crypto winter, during December 2022, crypto spot trading reached \$50 billion daily trading volume, while perpetuals daily trading volume reached \$3.4 trillion, or 68X the daily trading volume of crypto spot markets. Furthermore, while there are 550 CEXs and hundreds more DEXs that handle crypto spot trading, there are only 72 CEXs and approximately 30 DEXs that handle perpetuals trading. The perpetuals DEX market is thus positioned to expand dramatically in daily trading volume, and **Eterna** intends to ride this decentralization wave from the front.

Section 4 – Eterna’s Hybrid Trading Tools

Eterna Hybrid DEX provides investors with a unique set of trading tools designed to provide them with a strategic advantage. Two trading tools in particular will help **Eterna DEX** users to increase their profitability. First, **Eterna** offers some unique trading tools found on no other exchange, and that will be soon revealed. **Eterna DEX** also contains a chat function that allows investors to



communicate and trade market information. Finally, **Eterna DEX** contains a copy trade function, that allows investors identify, follow and copy the trades of the best traders in the market.

Eterna Chat permits investors to communicate privately with one another or to create investor groups, so they can share relevant and timely information. Information flow is the key to creating a profitable investment strategy, and instead of using Telegram or another communication tool, **Eterna Chat** creates an internal financial community that shares similar references and contrasting opinions, focused on how best to utilize **Eterna DEX** profitably.

Copy trading is another essential trading tool. First, our leaderboard allows investors to identify who are the most successful traders in the **Eterna community**, while preserving everyone's anonymity. Second, **Eterna Chat** permits investors to communicate with the best traders directly. Third, expert traders can create their own chat groups, and charge a fee for copy trading. Copy trading allows **Eterna** investors to tie their own trading behavior to that of the most successful traders in the market, so instead of wondering how best to utilize **Eterna DEX**, novice investors can now directly and immediately benefit from the expertise of more experienced traders.

Section 5 – Eterna's Universal Swap

Eterna's Universal Swap relies on our partnership with XY Finance, which permits our investors to trade cross-chain across twelve (12) DeFi platforms. **Eterna Swap** is not only multi-chain, but fully interoperable, so investors can effortlessly convert coins and tokens on one chain to coins and tokens on other chains. **Eterna** is thus a truly hybrid trading platform, because its perpetual futures trading derives its liquidity from major CEXs, while its cross-chain swap connects DeFi investors to the entirety of decentralized finance. Assets traded on DeFi platforms located on the BSC, Ethereum, AVAX, ADA, MATIC, and seven other chains will be accessible, and no extra liquidity will be required for those trading on DeFi platforms. *Figure 4* below depicts our universal swap concept.

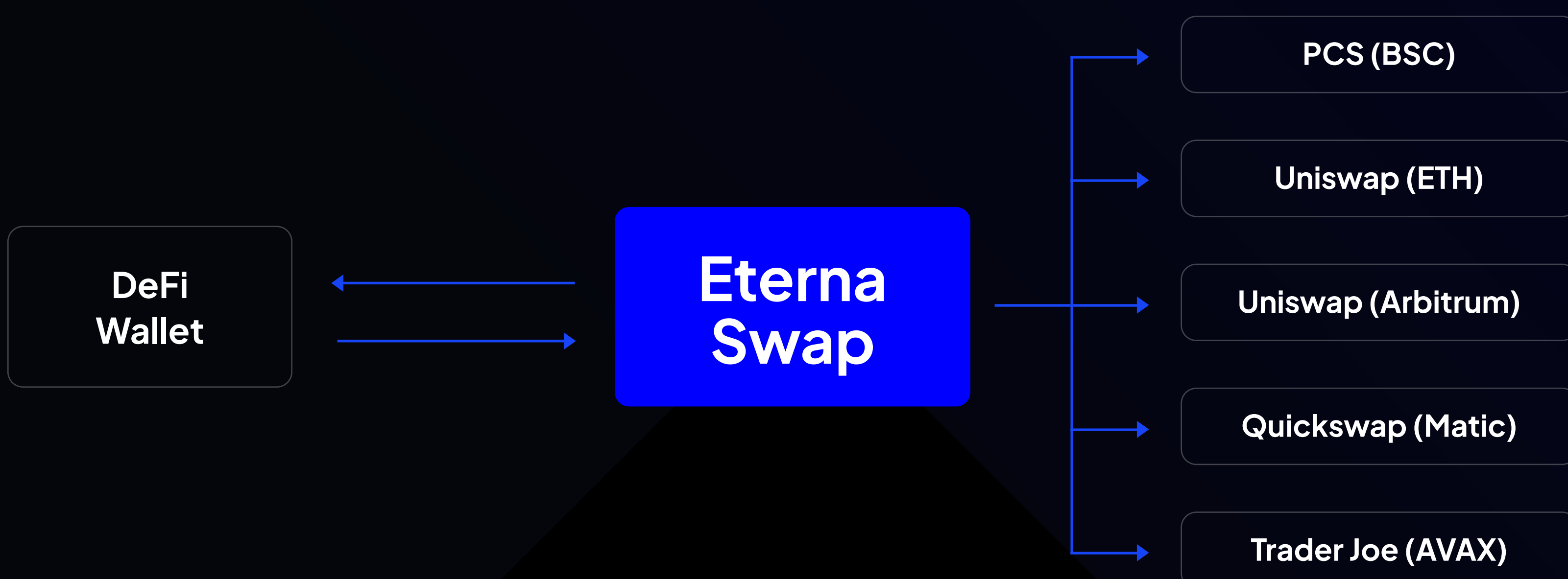


Figure 4: Eterna's Universal Swap

Section 6 – Eterna’s Value Proposition

The market value of the **\$EHX** token is easier to determine than **Eterna’s** enterprise value as a firm. **\$EHX’s** market value is a function of the percentage of discounted free cashflow that is distributed to token stakers. This expectation should be qualified by the fact that a significant proportion of token holders will likely be short-term day traders rather than token stakers, who possess longer investment horizons. Nevertheless, as the total dollar value of free cashflow distributed to token stakers grows, so too should the proportion of token stakers to total token holders, which will create a stronger empirical relationship between the dollar value of cashflows distributed to token stakers and the market price of the **\$EHX** token. As a result, we can estimate the expected value of **\$EHX** token’s market price.

EHX’s market value

= f [

NPV (

FCF distributed to stakers

×

$\frac{\text{token stakers}}{\text{total holders}}$

)

In this case, the NPV(FCF distributed to stakers) is the discounted percentage of free cashflow (from which expenses have been deducted) that is distributed to token stakers. In order to estimate the fair market value of the **\$EHX** token, the discounted FCF is weighted by the proportion of token stakers to token holders, since token stakers are less likely to sell their tokens due to regular price fluctuations, which in turn provides a minimum floor for **\$EHX’s** market price.

Price Discovery

Are financial markets “efficient”? In other words, do prices of financial assets incorporate all available information, so that any sustained arbitrage is impossible over time? Efficient crypto markets would mean that the best forecast of future prices, is the current market price, since current prices incorporate all available information. That further suggests that prices should follow a “random walk” so that no forecasting model will give investors an informational advantage regarding the future trajectory of asset prices¹. However, the empirical literature suggests, that in fact, even the NYSE and other large equity markets are not “efficient” and therefore significant arbitrage opportunities exist². If so, then opportunities for self-financing riskless profits are possible, where investors can leverage their position, sell assets trading in markets at higher prices while simultaneously buying the same asset in distinct markets at lower prices. This simultaneous selling (at a higher price) and buying (at a lower price) permits investors to pay back their borrowed

¹Fama, E. F. (1970). Efficient capital markets: A review of theory and empirical work. *Journal of Finance*, 25, 283–417

²Grossman, S. & Stiglitz, J. E. (1980). On the impossibility of informationally efficient market. *Journal of Finance*, 31, 573–538.



funds plus interest accrued, while pocketing net profits = (the difference of the price discrepancy) x (the \$ value of their market position) – (financing costs). But even if they do exist, such arbitrage opportunities will not endure, or as the folk aphorism suggests: arbitrage in financial markets is like seeing \$100 on the ground. The moment you bend down to pick it up, it will be gone (since everyone else wants free money as well).

Given the inefficiency and manipulation inherent in crypto markets, much larger arbitrage opportunities may exist, especially if the same asset is trading on different blockchains simultaneously³. But unless investors are whales (or a group of colluding whales) who can push prices down, forcing leveraged traders to liquidate, so that assets can then be re-bought at much lower prices, average investors are unlikely to benefit from this kind of price manipulation.

Staking & Profit Sharing

Eterna is committed to providing significant material rewards to **\$EHX** token stakers, in the form of staking rewards and profit sharing. Staking the **\$EHX** token is one of several ways that investors benefit from **Eterna**. An investor who stakes their tokens provides liquidity for the (proof-of-stake or PoS) blockchain network, and in return receives additional **\$EHX** tokens as a reward. Crypto staking is thus similar to depositing money in the bank, and in exchange investors earn rewards in the form of additional tokens. Within the **Eterna** network, staking rewards are distributed in terms of a fixed APY (annual percentage yield). Staking not only enables **Eterna's** network to operate more efficiently, but will provide **Eterna** investors with an added incentive to hold **\$EHX** tokens.

Most importantly, **\$EHX** token stakers collectively receive fifty percent (50%) of **Eterna's** net income as a reward. Net income is calculated on a monthly basis, at the end of each month. The resulting amount is deposited into the profit pool at the beginning of the following month, and is distributed on a daily basis. The percentage of **Eterna's** net income each token staker receives is proportional to the duration of the staking period and to the percentage of the circulating supply held by each investor.

³Griffin, J. and Amin Shams (2020). Is Bitcoin really Untethered? Journal of Finance, vol. 75, issue 4, 1913–1964



Section 7 – Future Developments

Eterna is committed to continuous innovation, to provide the best available services to its investors and to remain at the cutting edge of crypto innovation. **Eterna**'s development schedule is as follows:

Q2	2023	V1 Released Cross-chain Perpetual Futures DEX, Staking, P2P, Secret Trading Tools, and Conversion Functions
Q3	2023	V2 Released V1 + New UI Design, Universal Swap, Spot Trading, Eterna Chat, Mobile Apps (Android & iOS), API connects to brokers + trading bots
Q2	2024	V3 Released V2 + Copy Trading + Forex Trading

Beyond all the previously mentioned features, **Eterna DEX** will eventually incorporate Forex trading, which will unite disparate markets and trading functionalities under the **Eterna** umbrella. **Eterna** has further development plans that will propel it ahead of the market, and maintain its position as a market leader. Consequently, **Eterna** not only empowers investors with unique hybrid trading capabilities, but it also provides an unmatched value proposition for its token stakers. No other DEX provides its users and investors with so many opportunities for profit-creation and profit-participation. **Eterna Hybrid DEX** will thus take its place among the top crypto trading platforms in the market, and provide a more efficient and lucrative opportunity for the entire crypto space.

