Holdex Finance Whitepaper

What is Holdex Finance?

Holdex Finance aspires to be a technology-enhanced finance management platform that aims to counter the shortcomings of the conventional finance sector. Influencers and bad players easily manipulate the conventional finance market, causing an imbalance and occasional loss to small investors. With the highest ROI in the DeFi world and multiple investment options, Holdex Finance provides healthy earning opportunities to investors belonging to every class and sector.

The platform utilizes three different systems, The Holdex Annual Percentage Yield (H-APY) Scanner, Holdex Auto Trading Bot (H-ATB), to provide its quality services and H-STAKING to make staking even easier.

H-APY

The H-APY Scanner gathers information about all interest rates on stable coins and let's you know about them. This tool from Holdex Finance makes it extremely easy for new investors to invest in more profitable platforms available on the DeFi space. The platform would also facilitate easy learning of the intricacies of the DeFi industry for the new investors.

H-ATB

On the other hand, the Auto Trading Bot has been made to allow busy investors to indulge in algorithmic crypto trading. Experienced traders can make huge profits with minor efforts by appropriately setting the parameters of this platform.

The benefits of a trading bot like H-ATB are well known. They provide seamless trading capability and analyze the market trend in real-time and deduce the future prices based on historical data instantaneously with high accuracy.

H-ATB implements many transactions rapidly and identifies the direction of change in the trend on the market. It now predicts the best time to complete the transaction so that maximum profit can be generated.

The Holdex platform also features an automated market maker that replaced traditional ways to fight liquidity problems by providing liquidity pools that maintain adequate liquidity to keep the platform and the token in a healthy state. $HOLDEX is the platform's native token compatible with Ethereum, Huobi Ecochain, and the Binance Smart Chain network.

H-STAKING

The company's innovative development team brought forward an outstanding idea that will change the way users use regular staking. Holdex users will be provided with a unique API to their wallets holding the Holdex tokens. Through this API the company will observe how users behave with their token holdings and provide them with cyclic interest rates based on that. So, if the user is not transferring the token to any other wallet for a longer period they will earn rewards which will not only ensure price stability but also help in increasing the price floor.

The Holdex team is also in talks with other crypto projects and is ready to offer them this unique API system. This might prove to be very useful for many projects who want to ensure more holders hold their token. It will give the developer an authority over where they want the users to store the token and then reward them on the basis of their behaviour.

Holdex Token Economics

The entire fixed supply of HOLDEX tokens is 100,000,000 tokens.Every quarter Holdex locks the coins that have been assigned to the team to unlock 10% of the total.

Salient Features of the Holdex Token

Holdex BEP20 Token contract link:
https://bscscan.com/token/0xd85b5e9a7c33832dcdb554ec07cdcc56810b2e5a

- Yield farming: 50.000.000
- Team: 10.000.000
- Platform designers: 10.000.000
- Ico: 5.000.000
- Private sale: 5.000.000
- Exchange listing: 5.000.000
- Rewards: 5.000.000
- Advisors: 5.000.000
- Marketing: 5.000.000

Unique Feature of the Holdex Platform

Holdex Swap

The intelligent Swap Holdex cokes it possible to directly trade one cryptocurrency for another, avoiding the need for the use of centralized middlemen such as DeFi exchanges. Atomic swaps may be carried out across the blockchains of various distinct cryptocurrencies outside the primary blockchain. This handy feature initially came to public attention in September 2017, after completing an atomic exchange between Decred and Litecoin.

Since then, other companies and decentralized exchanges have enabled consumers to use the same feature. One such use is off-chain swaps, which have been carried out by Lightning Labs, a company that makes use of bitcoin's lightning network for transaction processing.

This technology has also been integrated into cryptocurrencies and decentralized exchanges, such as 0x and Altcoin.io, among others. Holdex Finance will contribute to the further development of this swap mechanism.

Holdex Swap is a crypto-to-crypto swap that takes place inside the wallet, enabling users to quickly and conveniently swap one cryptocurrency for another without leaving their Wallets.

With Holdex Swap, investors may swap cryptocurrency stored in their Private Wallet or Trading Account for other cryptocurrencies. Swapping from its Private Wallet allows investors to take advantage of the non-custodial, on-chain transaction settlement. Swapping from one's own Trading Account results in quicker settlement and eliminates the need to pay network costs.

Overall, the Holdex Swap allows investors to:
- Quickly swap into an asset that seems potentially profitable
- Quickly move from a volatile asset to Holdex stable coins
- Hedge against traditional assets

The DeFi industry is undergoing exponential growth in terms of the facilities it provides and its user base. The highly secure and inherently trustable architecture of blockchain technology has fueled the development of a wide range of financial instruments that are decentralized, highly accessible, and highly trusted. Its popularity is evident because the total value locked in DeFi as of February 18, 2021, has reached $42.18 billion, up from $1.077 billion a year before, massive growth in just one year period.

Technical Details of The Swap Mechanism

The Holdex Swap utilizes the Uniswap protocol of swapping cryptocurrencies. Uniswap is one of the most notable and widely used instruments for exchanging cryptocurrencies on the Ethereum blockchain. The protocol facilitates automated transactions between cryptocurrency tokens on the Ethereum blockchain through the use of smart contracts.

Mathematically,

If R_α and R_β represents the number of tokens in reserve, and k is a constant, then,

$$R_\alpha R_\beta = k$$

If, during a transaction involving Δ_β amount of β and Δ_α amount of α currencies, with a percentage fee of $(1 - \gamma)$, it must satisfy the following equation:

$$(R_\alpha - \Delta_\alpha)(R_\beta + {}_\gamma\Delta_\beta) = k$$

So, the reserves would be updated as:

$$R\alpha = R\alpha - \Delta\alpha$$
$$R\beta = R\beta + \Delta\beta, \text{ and}$$
$$k = (R\alpha - \Delta\alpha)(R\beta + \Delta\beta)$$

Thus, using the constant product invariant unlocks a gas-efficient way of automated exchange on Ethereum.
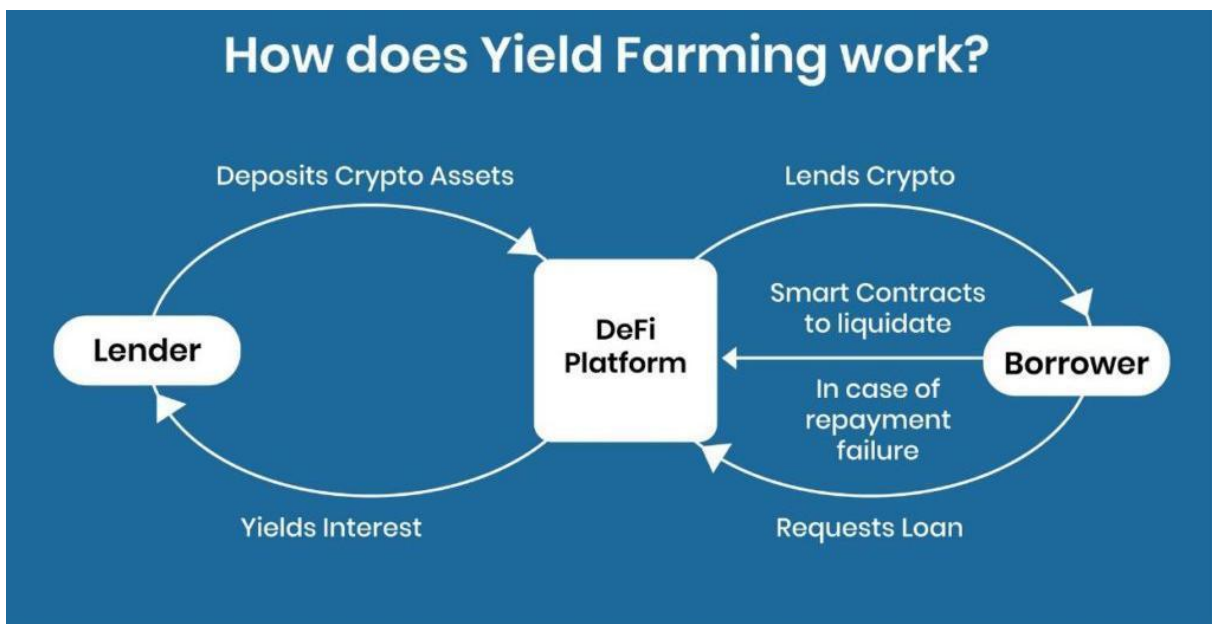
Yield Farming

Yield Farming is a method for maximizing the rate of return on initial capital investment (capital investment) by using different DeFi protocols. A yield farmer will attempt to optimize their production by experimenting with a variety of techniques. A successful method usually employs the fewest DeFi protocols, such as Compound, Synthetix, or Curve, as opposed to more complex approaches. When a technique no longer produces a good yield, farmers may move their money across protocols or exchange coins for other methods that generate a higher yield.

In order to make yield farming more understandable, it would be helpful to relate it to traditional finance. Consider the following scenario: an investor is looking for a new savings account with the highest annual percentage return. She would analyze the accounts and decide which would provide her with the best overall return on her investment across various categories. The returns of different yield farming techniques may all be expressed in the same way, using the same mathematical formula. While many savings accounts provide just 0.1 percent annual percentage yield (APY), yield farming may offer rates as high as 100 percent APY, which is a significant increase over conventional financial techniques.

How does yield farming work?

Let us consider another scenario in which an investor contacts a DeFi platform such as Holdex, acquires crypto assets, and loans them to borrowers. The borrowers are repaying the investor the interest on the loan they received from the investor. Interest rates may be constant or variable, depending on the platform and the rates established by that platform. Holdex Finance, for example, rewards investors with its native token "Holdex" in addition to the interest payment received from the company.

To borrow money from the platform, a borrower will be required to deposit a sum equal to double the amount of money being borrowed as collateral before the transaction can be completed. The collateral value may be confirmed at any point in time, thanks to the use of smart contracts. If it is less than the amount borrowed, the contract may be triggered, resulting in the liquidation of the borrower's account and the payment of interest to the lender. This means that even if the borrower defaults on their payments, the lender will never suffer a loss.

How does Yield Farming work?

Among the most popular concepts in the decentralized financial sector, yield farming has taken over the whole DeFi ecosystem in the past year, becoming one of the most talked-about topics in the industry. According to the company, it provides investors with incentives for securing their crypto assets in a Holdex finance market.

Yield farming is a method that allows cryptocurrency users to earn rewards for their holdings that is fundamental to the concept of Holdex financing. Holdex Finance yield farming is a technique in which an investor deposits units of a cryptocurrency into a lending protocol in exchange for interest on transaction costs. Additional yields from the governance token of the system are given to specific users as an extra incentive.
Using Holdex Finance Yield Farming, one may drive a DeFi market by collaborating with a liquidity provider and a liquidity pool (a smart contract filled with cash).

Staking

Staking is how investors can lock up a part of their investment for a fixed period to contribute to the blockchain network. The network, in return, rewards the investors with more tokens. Cryptocurrencies that use proof-of-stake models use staking as a way to add new transactions to the blockchain.

By committing their money, participants demonstrate their commitment to the system. The protocol chooses validators from among these individuals to confirm blocks of transactions. The more the number of coins one commits, the greater the likelihood that one will be selected.

As new blocks are uploaded to the blockchain, new currencies are generated and distributed as staking rewards to the individuals responsible for validating those blocks. Even though other blockchains employ a different kind of cryptocurrency for rewards, the payments are usually made in the same cryptocurrency that users are staking.

To stake a cryptocurrency, the investor must first own a cryptocurrency that uses the proof-of-stake mechanism, such as the Holdex coin, before they may stake their cryptocurrency. The investor may then determine how much money she wants to put on the line.

The coins that are put up for locking stay in possession of the investor. It is just a matter of putting them to work. If investors decide they want to swap them later, they may unstake them. It may take some time for the staking process to be completed, and specific cryptocurrencies demand that staking be maintained for at least a particular period.

To differentiate itself from other cryptocurrencies that use the "proof-of-work" method, Holdex Finance has ingeniously implemented the staking mechanism. The former, which is used in cryptocurrency mining, is very computationally demanding. The platforms that use it are often criticized for their excessive energy consumption and negative impact on the environment. Bitcoin, the pioneering cryptocurrency, has been singled out for criticism on many occasions due to this.

Holdex Finance's "proof-of-stake" method does not need to use excessive energy, making it more environmentally friendly than other financial institutions. The platform's decreased resource needs also enable it to process more transactions faster, which increases its overall efficiency.

Benefits of Staking Cryptocurrency

Holdex Finance provides several benefits to the investors by using the staking protocol.
- Staking is an easy and sure-shot way to earn handsome interest on an investor's cryptocurrency holdings.
- Provides a relatively passive way of earning in contrast to cryptocurrency mining, which requires significant resources and may be prohibitively high.
- By staking, individual investors contribute towards the development of the blockchain. It is like a symbiotic relationship, where the investor benefits the blockchain, which helps the investor in return.
- It is more environmentally friendly than mining and is thus more sustainable.
- Give very high-interest rates. Sometimes, they may provide interest rates ranging from 10% to 20%.
- It acts like a passive earning opportunity where the investors just need to keep their investments locked. They can earn a steady and passive handsome income for a lifetime.
- Staking allows investors to contribute to the platform's development by enabling them to verify transactions and keep everything running smoothly. The investor who has staked her holdings becomes an active validation node for the network. In this way, individual users also contribute to the security infrastructure of the network.

Holdex Finance provides staking opportunities to even smaller investors by locking only a fraction of their holdings.

Holdex Wallet

Just like any crypto wallet, the Holdex wallet is a piece of code that can store public and private keys for accessing the records on the digital ledger. Being a decentralized wallet, their access credentials can be generated and shared with users to have ownership of the assets on the

digital ledger. The network structure allows all the transactions to be validated by any user, creating a network of trust where financial frauds may be a thing of the past.

How The Holdex Wallet Works?

The Holdex crypto wallets operate based on two secure keys -- a public key and a private key. The public key acts as the wallet's address, which is provided to the investor, which she can share with others for making transactions. Gaining access to the assets in a wallet is restricted by the private key. Only the wallet owner has the private key, and only she can unlock the wallet to access the assets. The architecture of the cryptocurrency platform prohibits a duplicacy of the address, i.e., no two users on the blockchain can have the same address. This is globally unique.

Properties of the Holdex Wallet

To sum up, the following are the properties of the Holdex crypto Wallets:
- These are decentralized wallets, eliminating the chances of loss of access due to a single point of failure with centralized wallets.
- These can be controlled only by the owner, who has the private key for it.
- Unlike centralized wallets, these have access to a considerable number of dApps available.
- Being completely anonymous, these wallets do not keep any personal information of the holder.
- With the ease with which users can manage their assets using these wallets, they make the crypto market more accessible to average users.

What these wallets do

- Acting as a bridge, Holdex wallets connect individual blockchains via their nodes. Every blockchain has its own set of unique addresses to map a user's assets on the digital ledger.
- Holdex wallets are free to use. Investors need not pay anything just to hold a wallet.
- These wallets also help investors manage their addresses for carrying out transactions.

Holdex Auto Trading Bot (H-ATB)

Terms like Automated Trading System, Mechanical Trading System, and Algorithmic Trading System all denote an automated system of cryptocurrency trading that automatically performs trading on behalf of the investors themselves according to the rules of trade entry and trade exit set by the investors. These systems are regularly used on traditional stock exchanges, with up to 70% to 80% of trades on US stock exchanges coming from automated trading systems.

The H-ATB system allows traders and investors to set rules for precise entry, exit, and money management. The bot constantly monitors the market, and precisely when the rule's conditions are met, it performs the specified action automatically. In a way, it frees the user from the burden of constantly monitoring the market graph and eliminates the chances of users missing the most profitable point.

The trade entry and exit rules can be as simple as conditions like a moving average crossover or as complex as the strategies requiring a comprehensive understanding of the market and the system. This simply means that the bot makes it possible for all types of users. With simple rules, it allows non-technical users to make good trading rules while also allowing technical gurus to fine-tune the controls to maximize profits.

Establishing the trading rules
The platform features "wizards" that allow users to build trading rules with ease. They present users with a list of available technical indicators that can be used to build a set of rules to perform automated trading. For example, a user may program the bot to enter a long position trade once the moving average for 50-days crosses above the 200 days moving average for a five-minute duration for a particular cryptocurrency. Type of the order like market or limit can also be set, along with when the rule is triggered (like at the close of the bar or the open of the next bar).

Apart from these predefined technical indicators, the platform allows advanced users to program their own customized hands and strategies. Such users may work closely with the programmer to design unique systems that offer greater flexibility and more profitable outcomes.

Despite having so many diverse options to use existing rules or setting customized rules, the strategies for trading vary greatly, and no single control can be standardized to work in every situation.

Once the rules are set, the bot watches the markets for buy and sell opportunities depending on the trading strategy's requirements. Depending on the regulations, any orders for protective stop losses, trailing stops, and profit goals will be created automatically as soon as a trade is made. This immediate order entry may differ between a bit of loss and a catastrophic loss in volatile markets if the transaction swings against the trader.

Advantages of the H-ATB System
There are several advantages, including the following:

Minimizing emotional influences on decision making
Being a fully automated system, the H-ATB bot prevents the emotional surges influencing the last-minute decisions that sometimes may lead to blunders resulting in huge losses. Sometimes it also protects users from overtrading -- a practice of buying and selling at every perceived opportunity.

Backtesting
Backtesting evaluates the viability of an idea by applying trading rules to historical market data. When designing an automated trading system, all rules must be absolute, with no room for interpretation. The bot must be instructed precisely for what it has to do. Traders can use these particular sets of rules to test them on historical data before putting their money at risk in live trading. Backtesting allows traders to evaluate and fine-tune a trading idea, as well as determine the system's expectancy – that is, the average amount of money a trader can expect to win (or lose) per unit of risk.

Enforcing Discipline
Discipline is maintained even in turbulent markets since trading rules are set, and transaction execution is automated. The field is often lost due to emotional reasons, such as fear of losing money or the desire to squeeze out a bit more profit from a transaction. Because the trading strategy will be executed precisely, automated trading helps to retain discipline. Furthermore, "pilot error" is reduced. For example, an order to purchase 100 shares will not be mistyped as an order to sell 1,000 shares.

One of the most challenging aspects of trading is planning the transaction and trading according to the plan. Even if a trading strategy has the potential to be successful, traders who break the rules change the system's expectations. No trading strategy consistently wins. Losses are, after all, a part of the game. Losses, on the other hand, maybe psychologically traumatic. Thus a trader who has two or three losing transactions in a row may opt to forgo the next deal, which may have been a grand victory; the trader would have already destroyed whatever hope the system had. Trading the strategy using automated trading systems allows traders to attain consistency.

Improving order entry speed
Algorithms can trade at ultra-fast speeds eliminating the risk of skipping the best moment to trade. Getting in or out of a trade only a few seconds earlier may potentially make significant differences in the trade's outcomes. All additional orders, including protective stop losses and profit targets, are automatically created when a position is placed. Markets may move fast, and it can be discouraging to see a trade hit a profit goal or blast beyond a stop-loss level before the orders can even be placed. This is avoided by using an automated trading system.

Diversifying Trading
H-ATB allows the user to trade several accounts or strategies at the same time. This provides the privilege to distribute risk across several instruments while also providing a hedge against losing positions. What would be very difficult for a person to do is effectively carried out by a computer in milliseconds. The computer can search for trading opportunities in various marketplaces, create orders, and monitor transactions.

Holdex APY Scanner (H-APY)

Annual Percentage Yield (APY)
The annual percentage yield (APY) is the actual rate of return on an investment after considering the impact of compounding interest. Compounding interest, as opposed to simple interest, is computed regularly, and the amount is instantly added to the balance. With each passing month, the account balance grows slightly, and therefore the interest paid on the amount grows as well.

How the Holdex APY Scanner calculates APY
The annual percentage yield (APY) standardizes the rate of return. This is accomplished by expressing the actual percentage of growth generated in compound interest if the money is deposited for a year. The APY formula is as follows:

$$APY = (1 + r / n)^n - 1$$

Where 'r' represents the interest rate and 'n' denotes the number of compounding cycles.

An example would better demonstrate the APY calculation. If a user deposits $100 for one year at an interest rate of 5% with quarterly compounding, at the end of the year, the user would have $105.09.

So, the **APY = $(1 + 0.05/4)^4 - 1 = 0.05095 = 5.095\%$**

The beauty of the APY is that it adds up the interests earned in each compounding cycle to the principal amount. If the user leaves that $100 investment for four years, at the same terms, that initial deposit will grow to $121.99 after four years. Mathematically,

$$\begin{aligned}
X &= D \, (((1 + r / n)^n - 1) * y) \\
&= \$100 \, (((1 + 0.05 / 4)^4 - 1) * 4) \\
&= \$100 \, (1.21989) \\
&= \$121.99
\end{aligned}$$

Where, X = Final amount, D = Initial deposit, r = period rate, n = number of compounding cycles per year, and y = number of years.

Holdex Decentralized Autonomous Organization (DAO)

Holdex DAO is made up of several smart contracts that are linked together by Holdex. Apart from that, the usual Holdex voting mechanism has been changed with voting weight proportional to the lock-in duration, as described further by the graphic below.
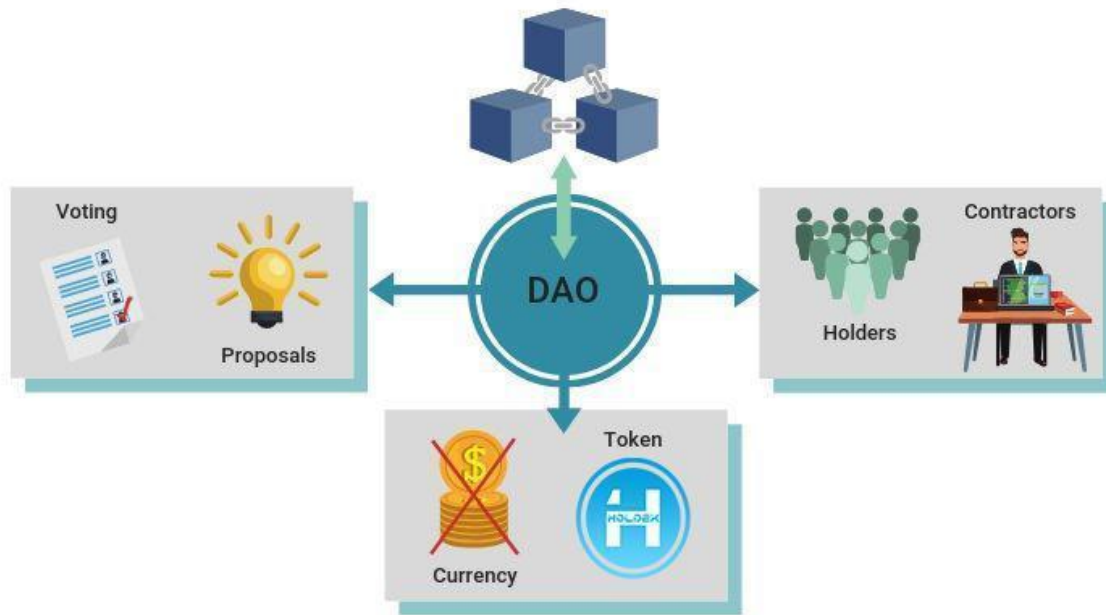
The Holdex IDO Launchpad

Holdex IDO Launchpad, a Blockchain-based ecosystem, offers a decentralized selling technique that is almost identical to initial public offerings (IPOs), initial coin offerings (ICOs), and other ways. Using Blockchain Technology, Holdex IDO Launchpad aims to create a pooled system where everyone can contribute transparently to any project in their ecosystem. Their Ecosystem includes a multi-Chain bridge that connects various significant networks such as Ethereum and BSC and an entirely new and innovative decentralized sales system for its users. Users will quickly invest in multiple potential projects in the IDO Launchpad Ecosystem thanks to the use of blockchain technology, which has been optimized to ensure scalability and cross-chain compatibility. Blockchain technology itself offers a new form of sales that is more effective and efficient, which creates an ideal system for users to easily invest in various potential projects that exist in the IDO Launchpad Ecosystem.

In addition, the team that designed IDO Launchpad created an ideal form of advanced Infrastructure with Algorithm optimization to ensure that every process is carried out automatically and effectively. The team also integrated various innovative features such as Cross-Chain Compatibility, Enhanced Security, DAO, Scalability, and many more. Aside from that, the new Price Discovery feature will also maximize every user's Portfolio through In-Depth Analysis. They also guarantee that their algorithm provides a fair settlement that yields the best possible outcomes once the transaction is completed, thus assuring complete transparency.

This ecosystem offers prospective investors a diverse range of possible projects while simultaneously providing developers with a larger audience, resulting in a beneficial system for all parties.