

Plethori

A decentralized cross-chain ETF Investment Platform that allows trading and creation of trustless ETFs by utilizing blockchain technology and layer 2 solutions.

[Problem/solution & background whitepaper — release 1 —
February 19, 2021 - The Plethori Team]

Summary

The orthodox banking/financial systems provide a diverse range of investment structures and services. Before the advent of blockchain technology, these OTC services have been provided primarily by large financial institutions. One of the most widely offered of these investment products are exchange-traded funds (ETFs).

An exchange-traded fund is a form of investment fund that is traded on exchanges. ETFs offer investors a way to invest in a range of assets in one security that tracks the price of the underlying assets and can be bought or sold like a stock. ETFs make up a proportion of equity of U.S. corporations, and attract both retail and institutional investors.

Exchange-traded funds have advantages compared to directly investing in individual securities. These include low cost, tradability, diversification, liquidity, and tax efficiency. However, these come with fees and expenses. Primary structures of ETFs

are index ETFs, actively managed ETFs, inverse ETFs, leveraged ETFs and thematic ETFs. It goes without saying that investors are generally more likely to trust larger firms with longer track records to handle their capital. This makes competition limited as access to the industry is difficult for smaller, less established firms.

This is where Plethori will strategically disrupt the money market by facilitating a decentralized trustless investment network.

Plethori is a Cryptocurrency ETF Investment Platform that allows open trading and creation of trustless ETFs by utilizing blockchain technology and layer 2 solutions. The platform offers decentralized cross-chain investment for exchange-traded funds built on the Ethereum and Polkadot blockchains. Our service will allow investors to deposit capital in the form of our PLE token and invest in a wide range of ETFs enabling investment into entire industries in cryptocurrency such as insurance, oracles, NFTs, Derivatives, Polkadot ecosystem projects and many more.

Plethori is built on an interoperable DeFi protocol that allows cross-chain investments and trades. Our cross-chain functionality opens new opportunities to our users and leverages layer 2 technology to deliver high speed, low-cost trading at the click of a button.

Our fiat gateway integration will allow users to easily invest in crypto funds via our platform, thus facilitating fiat to token investing and creating a bridge to the world of traditional finance. This will be achieved quickly and seamlessly within the platform.

NFTs will also be integrated into the Plethori platform. Aside from being tradeable, they will also serve to reward ETF creators based on rankings and achievements and provide the community with perks for use within our platform and our various partner projects.

Market Overview

At the end of 2020, exchange-traded fund assets worldwide were worth \$7.74 trillion, according to the Statista Research Institute. The countries with the largest ETF industries were:

North America: \$5.6 trillion
Europe: \$1.3 trillion
Asia Pacific: \$0.69 trillion

Since most ETFs are index funds, they generally incur low expense ratios because they are not actively managed. An index fund is much simpler to run, since it does not require security selection, and can be done largely by computer.

In addition, unlike mutual funds, because ETFs do not have to buy and sell securities to accommodate shareholder purchases and redemptions, an ETF does not have to maintain a cash reserve for redemptions and saves on brokerage expenses. ETFs typically have extremely low marketing, distribution and accounting expenses.

As of October 2020, the SPDR S&P 500 ETF Trust was the highest valued ETF globally with a market capitalization of approximately \$327 billion. ETFs are generally traded on exchanges and are popular among young investors.

At the beginning of 2020, the total market capitalization of all cryptocurrencies was approximately \$300 billion. Presently, there are over 8500 cryptocurrencies in circulation with a total combined market cap of over \$1.5 trillion. This figure is expanding daily.

Plethori will be strategically positioned to capture a sizable chunk of these industries expanding the benefits of decentralization to traditional finance.

ETFs - History and Mechanics

Brief History

An exchange-traded fund (ETF) is a type of investment fund and exchange-traded product, traded on stock exchanges. ETFs are similar in many ways to mutual funds, except that ETFs are bought and sold throughout the day on stock exchanges while mutual funds are bought and sold based on their price at day's end.

An ETF holds assets such as stocks, bonds, currencies, and/or commodities such as gold bars, and generally operates with an arbitrage mechanism designed to keep it trading close to its net asset value. This occurs when there is a price disparity across exchanges, and arbitrage trade has become very popular in the Defi space.

Most ETFs hold the same securities in the same proportions as a certain stock market index or bond market index. The most popular ETFs in the U.S. replicate the S&P 500 Index, the total market index, the NASDAQ-100 index, the price of gold, the "growth" stocks in the Russell 1000 Index, or the index of the largest technology companies.

Apart from non-transparent actively managed ETFs, in most cases, the list of stocks that each ETF owns, as well as their weightings, is posted daily on the website of the issuer. The largest ETFs have annual fees of 0.03% of the amount invested, or even lower, although specialty ETFs can have

annual fees well more than 1% of the amount invested. These fees are paid to the ETF issuer out of dividends received from the underlying holdings or from selling assets.

An ETF divides ownership of itself into shares that are held by shareholders. The details of the structure vary by country, and even within the same country there may be multiple possible structures. The shareholders indirectly own the assets of the fund, and they will typically get annual reports. Shareholders are entitled to a share of the profits, such as interest or dividends, and they would be entitled to any residual value if the fund undergoes liquidation.

As of 2017, there were 5,024 ETFs trading globally, with 1,756 based in the U.S., with over half of the inflows going to the 20 largest ETFs. As of September 2020, assets under management by U.S. ETFs was \$4.9 trillion.

How ETFs Work

Unlike mutual fund shares, ETF shares are traded on an exchange, so investors purchase and sell ETF shares in market transactions. ETF shares are purchased from, and sold to, other investors. This contrasts with a mutual fund, where an investor buys a share directly from the mutual fund, and then "sells" or "redeems" those shares from the mutual fund itself.

When an ETF initially goes public, or when an ETF wants to issue additional shares, it does so by selling shares to one or more financial institutions known as “Authorized Participants.” Authorized participants typically are large broker-dealers. Only authorized participants are permitted to purchase and redeem shares directly from the ETF, and they can do so only in large aggregations or blocks commonly called “creation units” or a “creation basket”. Each ETF can specify how big the creation basket is.

To purchase shares from an ETF, an authorized participant assembles and deposits a designated basket of securities and cash with the fund in exchange for which it receives shares in the ETF. Once the authorized participant receives the ETF shares, the authorized participant is free to sell the ETF shares in the secondary market to individual investors, institutions, or market makers in the ETF.

The redemption process is the reverse of the creation process. An authorized participant buys a large block of ETF shares on the open market and delivers those shares to the fund. In return, the authorized participant receives a pre-defined basket of individual securities, or the cash equivalent. Most ETFs charge the authorized participants a fee for each of these “creation basket” transactions, but it is usually not very large.

Benefits

- Lower costs of fees charged
- Instant diversification
- Liquidity
- Tax Efficiency
- Sector investing
- The ability to purchase in small amounts • The availability of a wide variety of alternative investments.

Plethori Ecosystem

Plethori provides a decentralized cross-chain investment platform for exchange-traded funds built on the Ethereum and Polkadot blockchains. The protocol allows users to trade ETFs and create custom ETFs by staking collateral.

Our platform’s users are rewarded for trading and creating their own ETFs. Top performing managers are ranked on a leaderboard which guarantees investment credibility and a performance-validated track record. Our cross-chain leverage and layer 2 integration gives competitive low transaction costs to users over any other investment platform.

With Plethori incentivized fund creation, any skilled investor can instantly create an ETF

and leverage the Plethori Protocol to yield higher profits, reduce market competition and earn a sizable profit taken as a percentage of the transaction fees of the fund.

Cross Chain Interoperability

Plethori is an interoperable DeFi protocol that allows cross-chain ETF investments and trades.

The need to build a cross-chain project is crucial, due to the recent surge of unaffordable fees charged by networks such as Ethereum which make trading and investment opportunities seemingly unprofitable to small-scale investors/users.

Our cross-chain functionality will open up new opportunities to our users enabling them to invest in both the Ethereum and Polkadot ecosystem, thus creating a two-way bridge for investment into both ecosystems. This is a strategic move to provide a cost-effective, low-latency alternative to excessive transactions to save on fees and reduce transaction costs.

We chose Polkadot primarily because of its aim to build on top of Ethereum and that it boasts smart contract functionality and compatibility with the Ethereum Virtual Machine (EVM) where the bulk of traded DeFi assets are native.

One of the striking advantages of our cross-chain protocol is the cheap cost to users, allowing users to invest additional funds that would otherwise be used on transaction fees. Functionality is maintained at a near optimum level, primarily because we can mitigate service lag caused by singular network congestion using our cross-chain protocol as a by-pass of sorts.

Plethori will enable fund managers to create ETFs quickly, cheaply, and in a trustless manner. Users will be able to participate in a secure environment and invest in a collage of investment portfolios with minimal, yet calculated risk based on the performance of the funds. As a user, you have only to make a deposit with PLE on our platform, which can then be used to make investments into the Polkadot ecosystem.

Layer 2

As usage of blockchain technology grows, the importance for new solutions to address the issues of speed, scalability, and cost, whilst maintaining decentralization, grows ever more present. Being the home of DeFi, Ethereum has been the perfect environment to see the amazing development and also difficulties in bringing traditional financial services to the public and the gas fee crisis coupled with slow transaction times has presented us with

an area to revolutionize in the DeFi space. Plethori will leverage layer 2 technology across our entire platform to enable high speed, low-cost trading and deliver fast contract executions creating a smooth experience for the user. The layer 2 solution we will be using is Optimism (optimism.io).

Optimism is a generalized layer 2 solution that utilizes its Optimism Rollups and Optimistic Virtual Machine (OVM) and acts as a 'child chain' for the Ethereum blockchain to offload the computational workload of transactions to increase throughput and enable much faster and cheaper transactions.

When a transaction (tx) is received on the Ethereum mainnet (layer 1) the transaction data is stored in layer 1, but the smart contract computational processes occur on the child chain (layer 2) and the results of this computation are then sent back to layer 1. Since computation is the slowest and most expensive part of a tx, this greatly reduces the demands on the ETH layer 1, thereby increasing throughput and decreasing fees. Layer 1 only receives an input, sends it to layer 2, and receives back the result, with the difficult work happening on layer 2.

With the influx of users and high volume we expect on our platform, all users will enjoy the benefits provided by this layer 2 solution whilst still maintaining the high-level security of the layer 1 Ethereum mainnet.

Fund Designations

The platform will have two investment segments:

- **Public Funds (V1) - Platform-standard ETFs**
- **Private Funds (V2) - User-created portfolio**

Public Funds - The V1 Exchange

The Public investment platform (V1 exchange) will have various categories (oracles, Polkadot, insurance tokens, small caps, large caps) where users can buy into the available exchange-traded funds. The current landscape in cryptocurrency is driven by narratives and our ETFs will allow users to invest in these driving forces of innovation such as NFTs and decentralized oracles.

Users will be able to deposit capital using the PLE token and the platform acts as an exchange where the ETFs can be bought and sold, and limit orders can be placed. This allows users to trade ETFs made up of portfolios of tokens and will benefit them immensely as they will be able to invest in entire industries whilst saving on gas fees. The transaction fees of buying multiple assets in an industry are usually multiplied by the number of assets purchased (e.g. A user would pay five transaction fees to invest in five separate assets).

Private Funds

The private segment houses our Plethori Protocol which will allow users to stake collateral to create their own ETFs with their own portfolio of tokens. Once created, the user can publish this to potential investors to trade in their created portfolios.

Additionally, we have a transaction fee mechanism that allows fund creators to earn a percentage of the transaction fees for all trades of the fund. The better the performance of the ETF, the higher up the leaderboard the fund manager ranks and the more likely other users will buy into their fund.

Gamification

As an industry standard, which fundamentally guarantees the integrity of every blockchain network, Plethori has an underlying ranking system that ensures a competitive ecosystem which allows investors/users to select the highest-ranking user-created ETFs in order to share from the successful trade exploits of these leaderboard top ranking ETFs.

Leaderboards

Plethori has a leaderboard built into the system that will showcase top user-created ETFs where ranking is based on performance. Incentives in the form of NFTs and the PLE Token, would be paid out to the long performing funds thus granting them the

opportunity to climb the leaderboards, earn a larger share of the transaction fees and develop a strong reputation as a seasoned portfolio creator.

This system's design has a higher-level benefit for the Ethereum ecosystem primarily because it helps small traders, reducing overall network load and congestion by consolidating so many disparate trades. By establishing a norm where many traders are investing their funds under a single ETF, the fees would be eliminated for the user and offset for the fund manager based on their gains.

Non-Fungible Tokens (NFTs)

The system is not just limited to a leaderboard ranking by performance. There are also levels in which users and fund creators can level up as their funds perform well. As fund creators level up, they gain perks on the platform in the form of NFTs. These NFTs will be awarded based on milestones achieved. In other words, "NFT-incentivized performance".

For example;

A fund manager with five consecutive funds gaining 25% or reaching top 20 in the leaderboard would be awarded NFTs.

These NFTs essentially act as badges for performance and holding them gives users fund creators different perks such as access to higher

leverage on trades, not only on our platform, but on other partner project platforms.

The gamification of ETF investment is a crucial organic element to the PLE Token's value.

NFTs on the Plethori platform would serve the following purposes;

- Given out based on milestones reached
- Act as badges based on achievements and rankings.
- Rare perks with attributes that give benefits on our platform and other partner projects platforms
- A tradeable asset

Fiat Gateway

The fiat gateway will allow users to easily invest in crypto funds using our platform. This feature gives users the ability to purchase Ethereum and swap to PLE Token directly within the platform. Our long-term plan is to incorporate traditional finance services starting with the integrated fiat gateway on our platform.

We realize the obstacles to wider user adoption of Defi projects fundamentally because of the

complexity in having to understand the functional workings of entities such as Uniswap, fees, gas limits, contracts etc. just to make a purchase. Even though decentralization gives the public ownership of their assets, they still choose to use traditional financial products because they are simple to understand and use. We look to create the smoothest experience on our platform from fiat to our token to investing in our funds, all done relatively quickly and seamlessly within the platform. We have a large network of crypto related partner projects and we are prospective that through these connections to projects that are building mirrored assets, we will eventually offer traditional finance assets such as stocks, bonds and currencies whilst remaining completely decentralized.

Platform Overview

Our platform has a robust feature offering that guarantees not just an aesthetically thought-out UI but an investor-centric feel to create the perfect blend between form and functionality.

These include;

- Metamask Wallet connectivity for trustless non-custodial transactions
- Ultra-low fees on transactions
- Margin trading
- Leveraged trading
- Limit orders

- Advanced charting features
- Detailed asset information
- Cryptocurrency market analytics
- Portfolio management tools
- Market news and calendar
- Video tutorials
- ETF creation tools
- Leaderboards for user created ETFs
- NFT gallery
- Alerts
- PLE token staking and farming
- Fiat gateway integration

Plethori Token (PLE)

The PLE Token is used in an incentive system (including *staking*, *farming* and *fee savings mechanisms*) where locked-in mechanisms for equal profit sharing guarantee all participants share in the generated profit.

We have structured valid tokenomics and a feasible token model for the PLE Token which is designed not just to reflect the success of the platform, but to incentivize a healthy ecosystem that brings together token holders, platform participants and the PLE team. Kindly refer to the Tokenomics section of this document for a complete description of the model.

The PLE Token is used in four ways:

- Access to and deposits/withdrawals for the platform
- Staking/farming for rewards

- Voting rights in governance
- Transaction fees

Governance Model

Our PLE token will additionally act as a governance token for the platform giving the community the power to direct the development and advancement of our goals.

Plethori Governance

Plethori Governance is our governance platform and community forum where PLE token holders will be able to submit proposals and vote on platform changes which will be vetted and executed by our governance contracts. The community will be able to communicate with other equally dedicated members in the tiered groups on the platform and coordinate and propose changes to the Plethori ecosystem.

- PLE token holders can vote on the platform to determine fund parameters and new features.

- PLE token holders can influence decisions concerning the project such as ETF asset rebalancing or listing/delisting of assets.

- The changes proposed will be vetted and then voted on through governance accessed through the PLE tokens and are applied automatically to the smart contracts.

The governance structure will be a complex but fair tiered system with each holder initially holding an equal single vote and their vote growing in value in response to certain factors relating to usage and involvement in our ecosystem.

The metrics that will influence the governance tier level and strength of vote are;

- Length of time holding PLE
- Length of time staking/farming PLE
- Frequency of usage of the Plethori platform
- Level of engagement in the Plethori Governance platform
- Community contributions

This system allows for community control, which holds true to the original cryptocurrency ideals of decentralization and democratization.

As a priority, the Plethori system is driven by the core objective to propel DeFi and its mass-adoption by creating avenues that offer orthodox financial services in a decentralized manner but at the same time availing our users the opportunity to make good gains off of these services.

With our services, we have enabled the

creation of new and completely customizable risk-to-reward models. By offering this in a decentralized free market model system, we hope to enable regular users of the PLE token the privileged advantage to capitalize and grow their assets using our platform.

Tokenomics

DEX/CEX/IDO 2% 2,000,000.00 Advisors
 3.6% 3,583,330.00 Total 100% 100,000,000.0

Below lists our Token Distribution Model;

Type	% of Total	Token amount
Seed	12.5%	12,500,000.00
Private	16.7%	16,666,670.00
Public	3.8%	3,750,000.00
Team	15%	15,000,000.00
Liquidity	5%	13,500,000.00
Operations	13.5%	13,000,000.00
Staking Pool	13%	13,000,000.00
Farming Vault	13%	13,000,000.00
Community Rewards	2%	2,000,000.00

Legal Disclaimer

The information provided in this whitepaper and on the Plethori website does not constitute financial advice, trading advice, investment advice, legal advice, or any sort of advice whatsoever, and you should not treat any of the whitepaper or website's content as such. The Plethori team does take every precaution to secure its token and protect investors and applies the same standards to vetting other projects that utilize its applications. Plethori does not endorse or recommend that any cryptocurrency be bought, sold, or held by you or any persons. Always do your own research and conduct your own due diligence to determine a project's success prospects. By purchasing Plethori, or any asset offered on the platform, you agree that you are not purchasing a security or investment. You also agree to hold the team harmless and not liable for any losses or taxes you may incur. You also agree that the team is presenting the token "as is" and is not legally required to provide any support or services. You should have no expectation in any form, including guarantees of safety, price, functionality, or future feasibility of the PLE token or any tokens launched on the Plethori platform. Always make sure that you comply with your local laws and regulations before you make any purchase.