YOP 2.0 Whitepaper

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EXECUTIVE SUMMARY

The emergence of Decentralised Finance (DeFi) as a viable alternative to traditional centralised financial systems has led to an explosion of growth within the DeFi space. This has manifested itself in many ways:

- A growth in Total Value Locked (TVL) in DeFi from a little over $20b at the start of 2021 to $275b as of early Dec 2021
- A growth in the number of DeFi Protocols to over 800 as reported by https://defillama.com/
- A growth in the number of Blockchains offering DeFi services to over 70, again as reported by https://defillama.com/

While all this growth is positive for the DeFi space, it presents its own set of challenges. With so many Blockchains and Protocols to choose from, how do you identify the best Protocols and avoid the clones and scam artists? This requires a lot of due diligence (often called Doing Your Own Research) which can be time consuming and challenging. Protocols need to be assessed from many different angles – team, code, security audits, tokenomics, TVL, liquidity, maturity, social sentiment etc.

The Yield Optimisation Platform (YOP) Ecosystem aims to solve this problem by delivering a solution which allows users to easily interact with the best DeFi Protocols across the top blockchains from a clean, simple, easy to use and educational Application. Each Protocol included in the YOP Ecosystem will be risk assessed, scored, and tracked on an ongoing basis - allowing users to see at a glance how trustworthy a particular Protocol is. Users will be able to directly engage with these Protocols via YOP Vaults, which provide diversified access to multiple DeFi Protocols.

Over the course of this Whitepaper, you will be presented with the complete picture of the YOP Ecosystem. Starting with a background on DeFi and Yield Farming, (If you are a DeFi native then head straight to page 8) we then move on to the YOP Vision, Protocol and Partnership opportunities, where we will explore some of the key challenges with DeFi today and how the YOP Team aims to address these challenges as part of the wider YOP Ecosystem.

Following on from this, there is a review of the YOP Roadmap, Risk Evaluation Framework and Architecture. These sections provide a deep dive into the workings of the YOP Ecosystem and illustrate how DeFi Protocols are assessed and scored, the various users and roles in the YOP Ecosystem, the system layers and components, and the various user interactions which will be possible.

The final sections of the whitepaper look at the Tokenomics and the Team. Within Tokenomics, there is a review of the token history and circulating supply, details of the new Tokenomics and emission schedules for the existing YOP Token as well as information on sustainability and deflationary mechanisms. Unlike many DeFi Protocols which hide behind anonymous teams, the YOP team is publicly visible and identifiable. Information on the current team as of the publication of this whitepaper can be found in the Team section. For up-to-date details of the YOP Team, please visit https://yop.finance.

INTRODUCTION

For a comprehensive primer on DeFi for newcomers, see "DeFi: An Unstoppable Wave?" – which was created as a result of a partnership between Pluto Digital PLC (Pluto) and an MBA team from University College Dublin (UCD). This is aimed at individuals with some base understanding of cryptocurrencies, who want to learn more about the power, potential and promise of DeFi.

DEFI BACKGROUND

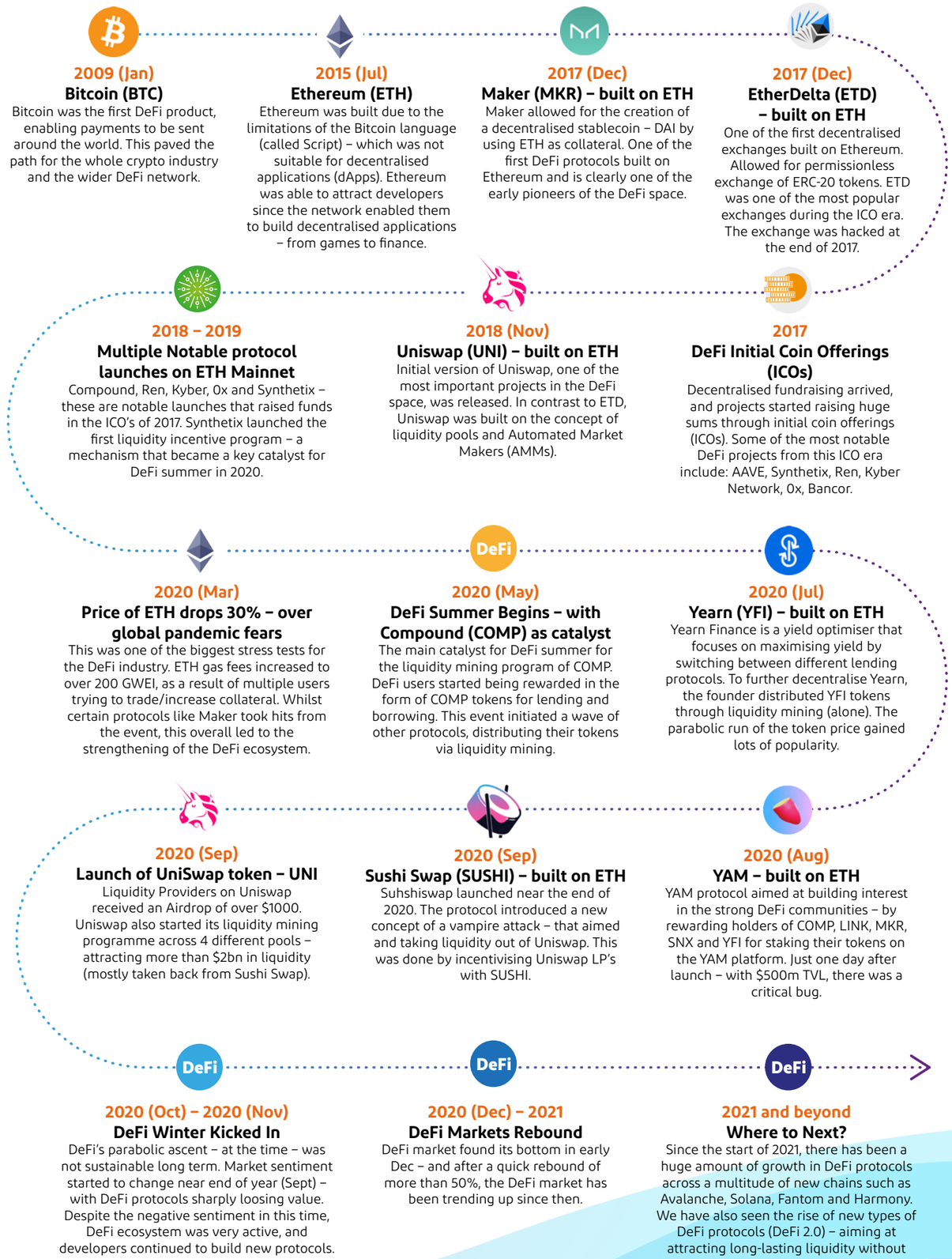
After the 2008 financial crisis, the idea of Decentralised Finance (DeFi) was born with the inception of Bitcoin. The Bitcoin network enables payments to be sent around the world within a transparent, borderless and secure blockchain – a stark contrast to the traditional financial system. Following this path, the Ethereum Network was launched in 2015 and empowered creators to build smart contracts and decentralised applications (dApps) – without the risk of downtime, fraud or third part interference. Today, there are thousands of dApps and smart contracts built across multiple blockchains[1] – including Ethereum, Polygon, Solana, Binance Smart Chain, Avalanche and Terra. These DeFi dApps have been leading the way in disrupting traditional financial business models in areas such as lending and borrowing, trading, and payments. The figure to the right provides a brief history and timeline of the development of DeFi and also where we stand as of today.

One of the drivers for DeFi comes from the fact that almost 1.7bn[2] people all around the world have no means and access to traditional financial services.[3] This is not considering the people that are living within oppressive regimes – and have very limited scope for financial activities such as lending, borrowing and cross-border payments. Within the current infrastructure, there is an over-dependence on the centralised authority. Without its governance, rules, regulation and reach – it is not possible to implement in areas where wealth generation and distribution is less or inadequate. A peer-to-peer network works without a centralised authority, relies on minimal infrastructure and gives users full control over their assets and investments – wherever and whoever they are.

1 DeFi Prime - DeFi Project Tracker: https://defiprime.com/ethereum

2 World Bank – Unbanked People: https://www.worldbank.org/en/news/press-release/2018/04/19/financial-inclusion-on-the-rise-but-gaps-remain-global-findex-database-shows

3 2021 Consensys DeFi Report: https://consensys.net/reports/defi-report-q1-2021

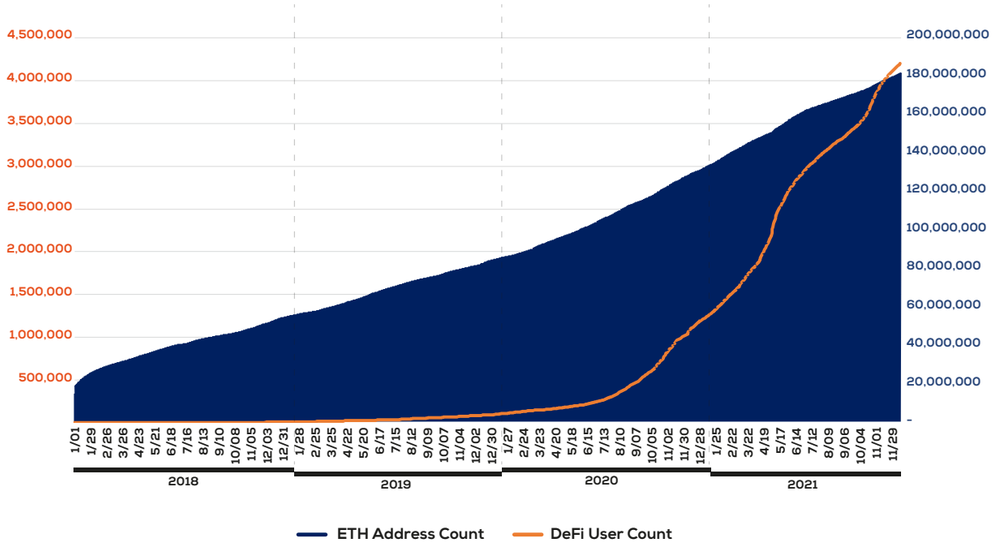


DEFI MARKET

For the first five years, DeFi adoption was mainly among crypto enthusiasts. However, beginning in the Summer of 2020 (referred to as DeFi Summer), growth in the space exploded and allowed millions of users to transact the equivalent of billions of dollars in digital assets[4]. During this time, the number of unique addresses interacting with Ethereum dApps increased from 90k in January 2020 to 4m as of December 2021[5] – with Total Value Locked (TVL) booming from $600m to $178bn in this time. Whilst this may seem like a lot, the total number of unique addresses surpassed 180m as of December – over double the number in January 2021. This difference is illustrated in the chart below[6], showing the growth in Ethereum addresses and the number of them interacting with DeFi Protocols. There is clearly a huge growth potential for DeFi within the existing crypto community, and this does not include the masses that have not yet heard of the DeFi revolution.

It's clear from the chart below that the DeFi market is still in its infancy – with constant market discovery and an explosion of dApps and blockchains. However, this makes it extremely difficult for a non-crypto native to navigate the space – never mind keep up with it. Whilst the "DeFi Natives"[7] have been able to devote the time to research new Protocols and follow the highest incentives in the DeFi universe, the average person cannot – missing out on becoming an early adopter in the future of finance. The Yield Optimisation Platform (YOP) aims to address this issue (among others) and bring the best of DeFi to both newcomers and natives – more on this in the YOP vision.

ETH ADDRESS AND DEFI USER COUNT



4 DeFi Prime – Dex Volumes: https://defiprime.com/dex-volume

5 Dune Analytics – DeFi users over time: https://dune.xyz/rchen8/defi-users-over-time

6 See Data for Chart: https://plutodigital-my.sharepoint.com/:x:/p/anar/EfaS3BH7LlhMgfYErEgfHTgBjIAC15vG8p6gcFRDD0fyRq?e=q5gWTZ

7 "DeFi Natives": Those that have been in the DeFi space a long time (i.e. more than 12 months) and are able to quickly find and assess new Protocols

DECENTRALISATION & GOVERNANCE

The term "Decentralisation" is used often within the DeFi space as a general catch all for the various forms of decentralisation which can exist within a DeFi Protocol. What follows is a review of the various degrees of decentralisation, where the YOP project is right now and where we want to get to.

CUSTODY AND SETTLEMENT

Are the financial assets held and controlled by the user?

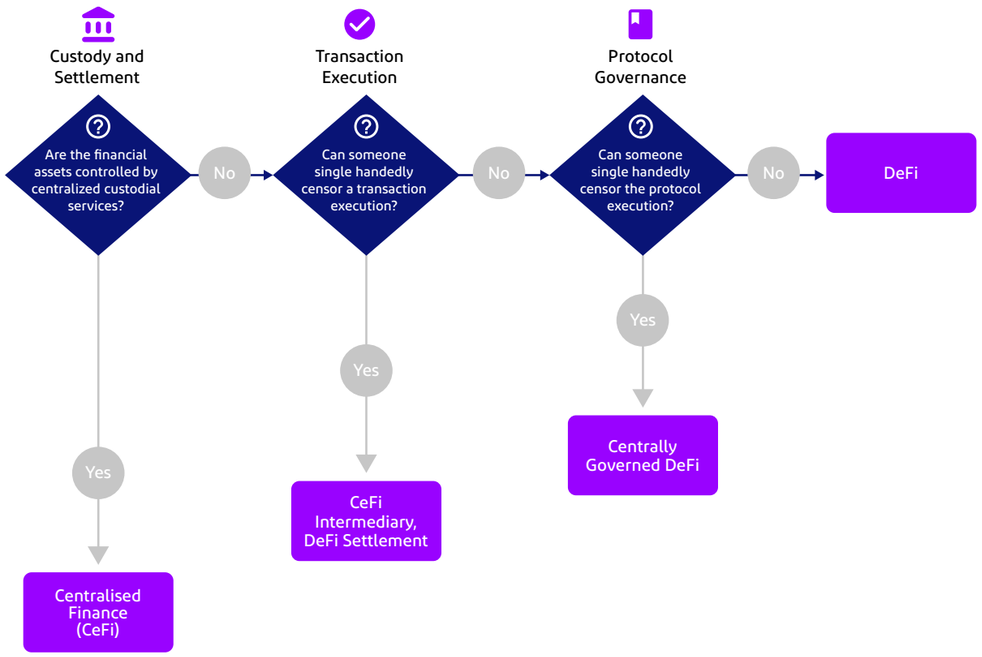
In traditional Centralised Financial (CeFi) systems, the centralised entity (e.g. bank) holds the customers (or users) assets (e.g. in a bank account) and can make use of these assets as it sees fit - e.g. lending out to other customers and collecting interest, which is not passed on. In a decentralised financial system, the user holds the keys to their own crypto wallets. This is akin to having a physical safe and being responsible for the physical key – if you lose the key, you lose access to your assets. Centralised systems also exist in the crypto space – exchanges such as Coinbase, Binance, Kraken and others are centralised and present the same risks as traditional financial institutions in that you do not have custody of your assets.

TRANSACTION EXECUTION

Can financial transactions be censored or controlled by a centralised organisation?

In traditional finance, the centralised institutions have the power to censor or block transactions, terminate accounts and refuse access to funds. In a decentralised financial system, the blockchain is the ledger of all transactions and it cannot be censored, blocked, altered or destroyed. Each block in the chain contains a number of transactions and once the block has been written and approved, it cannot be altered, reversed or otherwise changed.

DEGREES OF DECENTRALISATION



PROTOCOL GOVERNANCE

Can any single individual censor the Protocol execution?

The first two questions dealt with the broad financial system. This question relates specifically to an individual DeFi Protocol (such as YOP) and asks whether the governance of the Protocol is sufficiently decentralised to ensure that a single individual or small group can not overly influence, control or censor the Protocol execution. Decentralisation in Protocol governance requires transparency of execution and multiple approvers for any significant action. This is typically achieved using a "multi signature" wallet, whereby a defined subset of a group is required to approve before the transaction can be executed. The size of the group and number of approvers required give a good indication of the level of decentralisation – typically larger numbers are better – for example a 5 of 7 approval is more decentralised than a 2 of 3 approval as the latter only requires collusion between two people, whereas the former requires five separate individuals to collaborate.

For YOP, the multi signature configuration will start at 3 of 7 for key transactions (e.g. deploying new contracts and updating governance information). As YOP transitions to a decentralised governance using Decentralised Autonomous Organisation (DAO) this number will increase and signing rights will transition to community members.

YIELD FARMING

Yield farming refers to the methods used to generate rewards and earn returns on your cryptocurrency assets by using them on DeFi platforms. Yield is denominated in Annual Percentage Yield (APY), which is similar to the more familiar Annual Percentage Rate (APR) – but APY takes compounding into consideration. A user can generate said yield using a collection of Strategies such as lending, providing liquidity to pools and even use bridges to access favourable returns on alternative blockchains. In the following section, there is an outline of various methods – given for a context into the "Strategies" referred to in this whitepaper.

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Note: There is a distinction made between principle protected and unprotected Strategies. Principle protected Strategies do not involve taking market risk, such as taking exposure to any other crypto – examples include: lending or staking. Non-protected Strategies involving taking exposure to other crypto, with the goal of delivering a higher comparative return – examples include: liquidity provision (most cases) or index tracking.

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LENDING
(Principle Protected)

DeFi loans enable users to lend their crypto to someone else and earn interest on the loan. Banks have been utilising this service to the fullest with depositors' funds. Now, anyone can become a lender to generate interest on their assets – and this process can be done through lending pools, the offices of traditional banks. Lending through DeFi Protocols offers complete transparency whilst also enabling a very fast processing speed for loan origination. Protocols include the likes of Compound and Aave on Ethereum and Tranquil Finance on Harmony.

STAKING
(Principle Protected)

Staking is a novel mechanism to generate yield on assets within the blockchain – there is not a direct comparison within traditional finance. The process involves "locking-up" a portion of tokens for varying period – as a way of securing or contributing to a blockchain network or Protocol. By doing so, stakers are earn rewards – typically in the form of additional coins. This is usually done by utilising decentralised Staking-as-Service providers in order to run "nodes" that secure the network on behalf of users. Examples include Lido and stakefish – which support a variety of blockchain tokens such as Ethereum, Solana and Luna.

LIQUIDITY PROVISION
(Principle Unprotected – Most cases)

Traditionally, in order to facilitate trading between pairs – such as GBP/EUR or TSLA/USD – centralised market makers (such as investment banks and brokerages) provide liquidity for both buyers and sellers and make money through the "spread" between these prices. Liquidity provision within DeFi removes the dependence on these centralised intermediaries. Anyone can deposit their coins into a decentralised exchange (DEX) in order to provide liquidity for other users to exchange their coins and tokens. Returns are made from the fees generated on swaps within an exchange pool. Examples of DEX's include Curve and Uniswap on Ethereum and Trader Joe on Avalanche.

INDEX TRACKING
(Principle Unprotected)

This involves taking an exposure to a diversified basket of coins/tokens in a cost-effective way. For example, a DeFi basket would give exposure to the top DeFi coins (over 10 coins) without having to expend fees to purchase each of them individually and worrying about re-balancing as the weights of the coins change within the index. Clearly the principal amount invested in this strategy is not protected as a market downturn could impact the price of the constituent index – however diversification ensures that Protocol specific risk is diversified. Examples of a tracking Protocol are IndexCoop and Enzyme Finance on the Ethereum network.

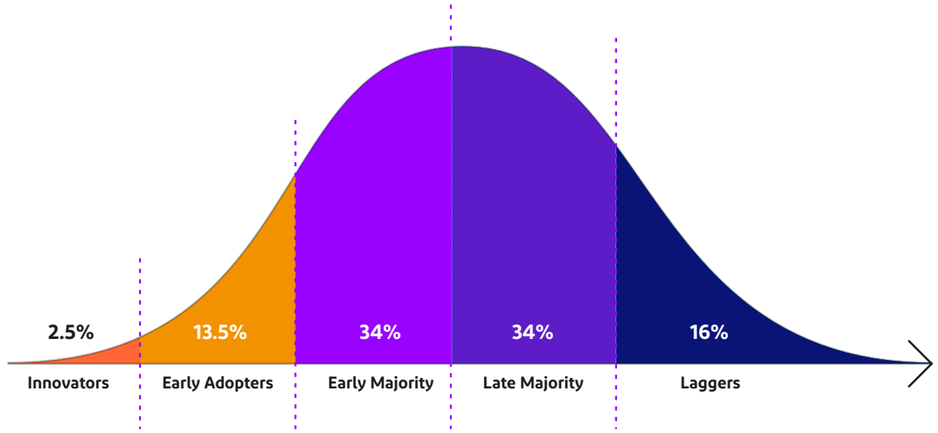
INSURANCE
(Principle Unprotected)

Insurance Protocols offer coverage for a wide range of products, markets and Protocols. This coverage and protection is purchased by the user and is insured through other Protocol participants that supply the capital. The participants that supply capital to insurance Protocols earn a return through the premiums paid by insurance purchases. This strategy would not guarantee the principle as claims by insurance purchasers would results in loss of insurers funds. That being said, by providing insurance to multiple Protocols it is possible to mitigate the impact of insurance claims. Examples of insurance Protocols include Nexus Mutual and Unslashed on the Ethereum network.

THE YOP VISION

It's clear that DeFi is here to stay. We are reaching the limit of old financial technologies with siloed databases and moving into the decentralised age, where society will be paying for daily expenses with their stablecoins through their self-custodial wallets and seamlessly earning a yield across a variety of assets within. Looking at DeFi from an innovative technology point of view, there are clear indications the market is moving away from being filled with "Innovators" and "Early Adopters" – who are enthusiasts and enjoy taking risks on new technologies – to the "Early Majority" phase, where DeFi is starting to be considered by individuals who adopt new products or technologies only after they are proven and individuals feel comfortable it won't put them at risk.

RODGER'S INNOVATION ADOPTION CURVE



The Figure above shows the Rodger's Innovation Adoption Curve (also called the Diffusion of Innovation Process).
This is a model that classifies adopters of innovations into various categories, based on the idea that certain individuals are inevitably more open to new innovations than others. Microsoft's director of Blockchain – Yorke Rhodes – recently stated that "the growth of DeFi seems to suggest that we are starting to move beyond the early adopters' stage[7]."

YOP's vision is to cater towards both the existing and incoming DeFi adopters and offer an intuitive gateway into the world of DeFi and crypto. Existing Protocols have mainly catered to the innovators - the more technical, existing crypto community – with sub-par user experience, lack of transparency and little diversity offered within Protocols.

These are exactly the factors why most of the potential market (Early Adopters, Early Majority, Late Majority and Laggards) have not yet seen significant usage of DeFi. The following section lays out the key factors that have contributed to the slow adoption outside the crypto native's and how YOP plans to tackle these issues to deliver on the vision of becoming the gateway to DeFi.

[7] https://blockworks.co/microsofts-rhodes-crypto-defi-and-nfts-have-moved-beyond-early-adoption/

ENHANCED USER EXPERIENCE

CURRENT STATE

A large majority of the most popular DeFi Protocols were built during the DeFi Summer of 2020. As such, these early entrants were focused on verifying the market and often suffered from a minimalist, yet unintuitive design. Usually there is no inline help, walkthrough or help toolkits to get new users comfortable with the DeFi space. From connecting a wallet to understanding the need for multiple contract approvals to complete a single transaction, there is a clear need in the market for the next generation of DeFi apps – which focus more on user experience and education. In order to address the mass market, the user experience must be intuitive for most people who already know how to manipulate traditional Fintech applications. The current lack of usability can be a high barrier to entry and discourage new entrants.

YOP VISION

At every step of the process – going from wallet connection to vault selection – users will be given intuitive step by step guidance and incentivised to utilise YOP educational materials. By offering relevant and context sensitive help to users, simplifying tasks and personalising the user experience for various levels of users – YOP aims to attract the digitally savvy, not solely the crypto natives. To address the fragmentation in the market, YOP has the long-term goal of becoming the trusted one stop shop for DeFi access – intuitively connecting users to the DeFi universe across multiple Protocols and blockchains.

TRUE PROTOCOL DIVERSITY

CURRENT STATE

In any type of portfolio, diversification is key. This is the idea of not putting all your eggs in one basket. However, within DeFi – when interacting with a single Protocol – users concentrate their capital within a very narrow field. Within single Protocols, there is very little focus on interoperability or cross Protocol or blockchain support. Due to this, users must take it upon themselves to deploy capital across blockchains and Protocols manually and then track all these positions. This can be a very daunting and time-consuming process, which is why a layer above these Protocols is needed.

YOP VISION

YOP's smart contract architecture is built to be modular and sustainable from the ground up. This coupled with the reward mechanism, means that strategy proposers and builders are strongly incentivised to continually integrate new DeFi Protocols across multiple blockchains onto the platform. YOP does not rely on a high initial emissions schedule of tokens to attract community members. Instead, by re-distributing all fees generated on the platform to the community, YOP can scale and grow with the DeFi landscape to give the world access to diverse yield generation Strategies. By removing the need for individuals to search for the best opportunities and worry about the complexities of tracking exposures – YOP will be at the forefront of driving DeFi adoption.

INCREASED TRANSPARENCY

CURRENT STATE

Whilst DeFi Protocols are built to be trustless and transparent – in terms of public transaction that occur on the Blockchain – a certain amount of personal research and expertise is required to understand exactly how yields are generated, how sustainable a yield generation strategy is, and the risks involved. Whilst some Protocols make the effort to build in-depth docs pages, these alone are not sufficient to make an educated decision. There is key basic information missing such as: historical APYs (annual percentage yield), how APYs are calculated, and the underlying Protocols utilised.

YOP VISION

Protocols that are chosen or proposed to be utilised within YOP Strategies undergo a thorough risk screening, which produces a YOP Risk Score (detailed in Risk Evaluation section). On top of clearly outlining where the returns for a particular Vault, Strategy or Protocol comes from, users are also given a breakdown of the types of risks they are exposed to and what they mean. This way, YOP Vaults can cater to individuals and groups with varying risk tolerances. The key element here is that YOP will be able to clearly communicate levels of risk and performance to the end-user, where currently there is a lack of focus being placed here.

THE YOP PROTOCOL

At the heart of the YOP Protocol are Vaults, Strategies and Governance mechanisms.

STRATEGIES

These can be thought of as the building blocks that interact with one or more DeFi Protocols to generate Yield. Strategies can layer multiple Protocols to generate higher Yield. All aspects of the interaction with the target DeFi Protocols, from depositing, to claiming, to re-investing, to withdrawing are fully automated and encoded in the Strategies.

VAULTS

Vaults combine one or more Strategies to create a blended / diversified investment opportunity. These Vaults offer variable APYs based on the Strategies in use and the percentage allocation to each strategy. Vaults also have different variations, for example, insured Vaults mean that the smart contract risk of the Strategies is mitigated.

GOVERNANCE

The governance system controls how the Protocol is configured and executed. This includes things such as fee rates, allocation of community emissions and creation of new Vaults and Strategies.

Each of these parts of the ecosystem interact with each other to provide users with an intuitive and easy to use gateway into the world of DeFi and yield generation. The vision for the YOP Ecosystem is to work across multiple blockchains and provide access to all DeFi Protocols on all supported chains to users – regardless of which chain they connect from. This means that users will be, for example, able to invest in DeFi Protocols on the Ethereum blockchain from other chains such as Polygon, BSC and others, thereby enjoying significant gas savings while still gaining access to top DeFi Protocols on Ethereum. The YOP Protocol will move funds between chains as required to put users' assets to work. Cross chain transfers and other management gas costs are funded by the Protocol fees.

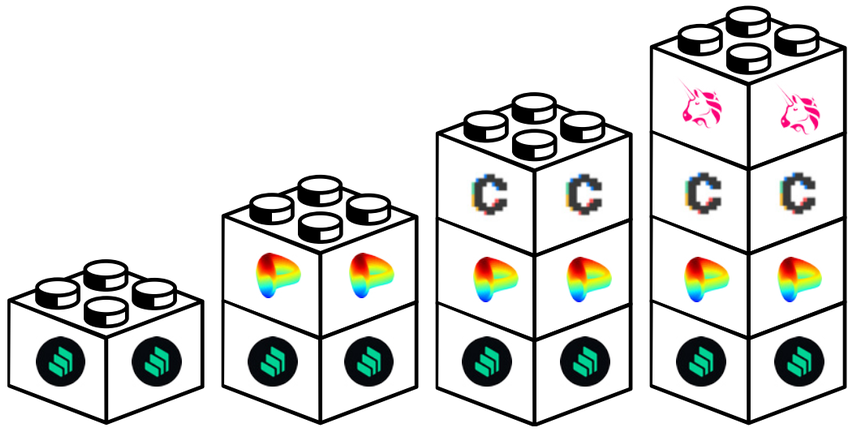
1 STRATEGIES

Strategies are the underlying steps used to generate a yield on a user's assets. These can include lending assets on Protocols, providing liquidity to pools, investing in crypto indexes and other DeFi activities. Users can learn more about Strategies and access the historical data such as TVL, APY, YOP Risk score and security audit information for each one. As can be seen in the diagram below, DeFi Protocols can be stacked within a strategy.

In the figure below, we can see representations of four Strategies with additional Protocols added in each strategy leading to progressively more complex strategy logic.

DeFi Protocols can be combined in multiple ways to create new Strategies – this is an amazing benefit that DeFi brings, which traditional finance can not match. Leveraging multiple DeFi Protocols in this way typically results in increased yield, but with this increased reward comes an increase in risk. Each DeFi Protocol introduced adds additional complexity and contributes to the overall risk. YOP has invested a lot of time in risk profiling and analysis of DeFi Protocols, so as to be able make informed decisions about which Protocols to interact with and what the risk /reward ratio looks like. For full details, see the Risk Analysis Framework section.

ILLUSTRATION OF PROGRESSIVELY MORE COMPLEX STRATEGIES



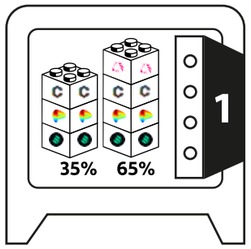
VAULTS

Vaults are the main point of interaction for users within the ecosystem. As can be seen in the diagram below, Vaults combine multiple Strategies in varying weights and combinations – with the goal of offering exposure to returns in the top and upcoming DeFi Protocols, whilst reducing Protocol specific risk exposures within DeFi.

As illustrated to the right, when Strategies are added to a vault, they are boosted with YOP tokens from the Community emissions pool. The exact amount of YOP allocated varies on a vault-by-vault basis, with higher emissions on new Vaults to attract deposits and grow the vault's TVL. This is an incentive for investors to get involved in the vault, thereby enabling the economies of scale required to efficiently harvest and reinvest proceeds while offsetting gas costs – particularly on Ethereum.

Vaults continually re-invest earnings based on the most optimal re-balancing period. This means that no extra actions are required from the user in terms of: claiming rewards tokens from the DeFi Protocols, converting them and re-investing.

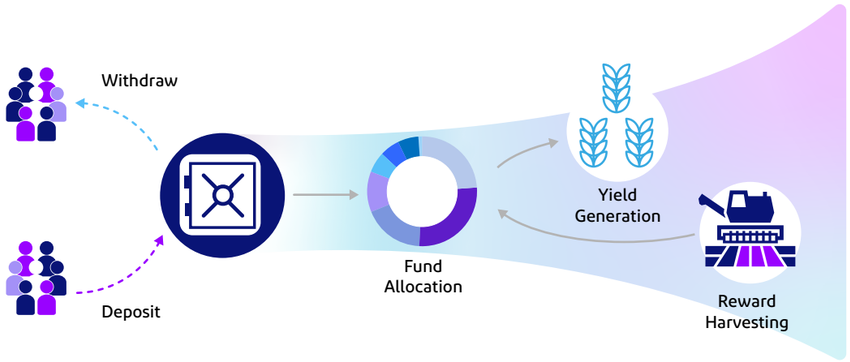
ILLUSTRATION OF VAULT CONTAINING 2 STRATEGIES



Clear performance metrics and insight into the vault and it's underlying Strategies are provided in order to bring peace of mind and offer the opportunity to delve deeper and learn more. With the overall YOP Risk Scores clearly defined, users will be able to choose from a variety of Vaults with varying allocations and incentives – and select to their risk appetite.

The figure below shows the end user interaction with Vaults via the Deposit and Withdrawal flows as well as the internal vault allocation to Strategies and interactions with DeFi Protocols.

ILLUSTRATION OF VAULT USER INTERACTION AND HIGH-LEVEL VAULT STEPS

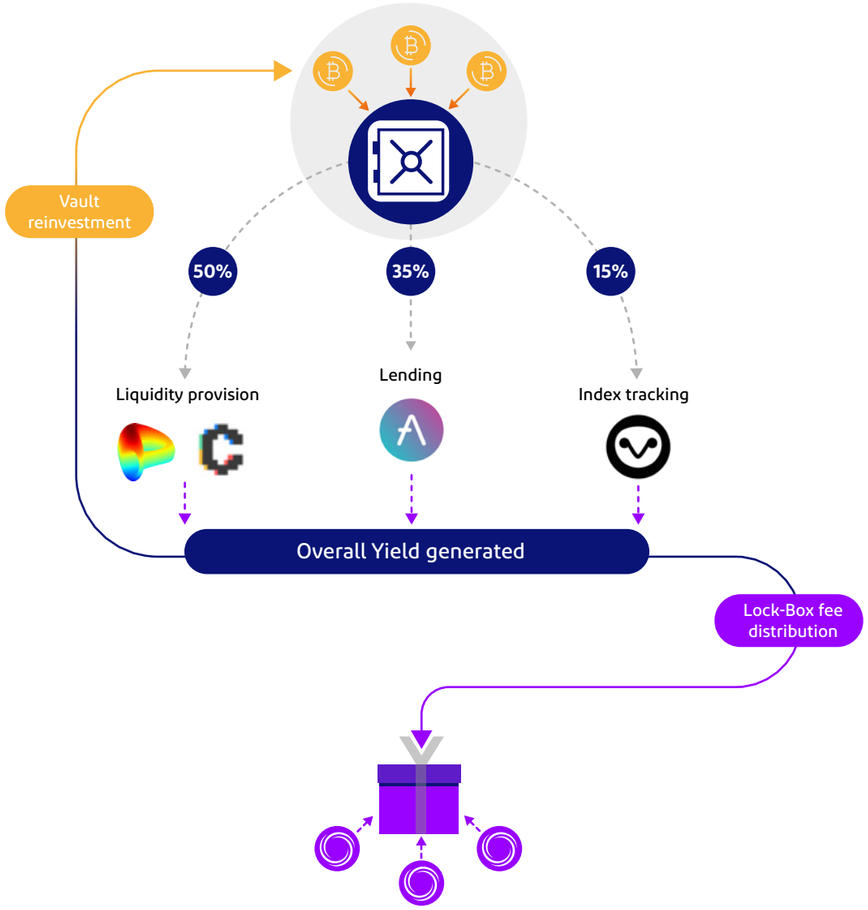


LOCK BOX

Within the Lock Box, YOP tokens can be locked-up (or "staked") for varying periods of time to earn a share of the performance fees (generated from the Strategies) and the management fees (generated from the Vaults). The longer the period a user locks tokens for, the higher the share of the fees.

Once users stake their YOP tokens they will receive an NFT representing their stake position. This NFT can then be used to participate in the YOP DAO governance system detailed below. In the future, the Lock Box may incorporate the lock-up of other tokens and NFTs generated within the YOP Protocol – in return for further incentives.

VAULT, STRATEGY AND LOCK-BOX INTERACTIONS



In the Figure above, we can see a Bitcoin vault. Once users deposit, funds are allocated to the Strategies within the vault. In the Figure, funds are allocated to: Liquidity Provision on Curve + Convex, Lending on Aave and Index Tracking on IndexCoop. A portion of performance and management fees are sent to Lock-Box – where they are distributed as YOP tokens to stakers.

RISK EVALUATION FRAMEWORK

As with traditional financial systems, there are unique risks that must be considered when interacting with DeFi Protocols. In order to enable transparency and inform users of the risk exposures they are taking for a level of return, YOP follows a risk evaluation framework to score Vaults based on the underlying Strategies and DeFi Protocols used. This score is composed of various weighted factors, which are broken down and shared with users to inform exactly how returns are being generated and the risk exposures they have. In the following section, there is a break-down of the key risk factors to consider when interacting with the Strategies outlined – and how they come together to build the YOP Risk Score.

STRATEGY RISK FACTORS

In theory, Strategies such as lending, stable-pair liquidity provision and staking in DeFi should guarantee a user's principal investment – in reality, there are risk factors associated with each of these different Strategies that could cause a loss in this principal amount. Below, the key DeFi risks factors are outlined – along with the Strategies they are relevant to.

SMART CONTRACT RISK
(Applicable to: All Strategies)

Smart contract code is available for all to see, meaning there are more eyes to spot potential exploits due to design flaws. This risk refers to the potential of an exploit[8] resulting in a loss of funds for users. Regardless of transparent code, bug bounties and code audits – these are still new technologies continually being tested. Independent security audits can help to mitigate this risk, but they cannot eliminate it entirely.

UNDERLYING TOKEN RISK
(Applicable to: All Strategies)

In YOP's context, this mainly refers to tokens that peg their vault to another. This includes stablecoins such as USDT, DAI or MIM and wrapped versions of coins such as wBTC[9] or stETH[10]. The risk comes from the collateral or peg mechanisms used, and with a variety of methods – extra due diligence is required when holding representations of other assets.

REWARD TOKEN VOLATILITY
(Applicable to: All Strategies)

This refers to the incentive tokens that are given by Protocols, in order to attract users and liquidity to their Protocol. This practise is more prevalent within decentralised exchanges, where liquidity providers (LPs) generate a significant portion of their returns from tokens such as SUSHI or CRV. This means that LPs face a price risk – as returns are only realised once tokens are sold.

IMPERMANENT LOSS
(Applicable to: Liquidity Provision)

Impermanent Loss or Divergent Loss is the difference between the value of the tokens when a liquidity provider deposits them into a liquidity pool, versus simply holding them. The more divergence in the price of a token within a pool, the more impermanent loss is suffered. This means that pools comprised of stablecoins, have a very low exposure to impermanent loss.

UTILISATION RATE RISK
(Applicable to: Lending)

This risk is similar to the risk carried by banks and refers to the percentage of the lenders' assets that go out to borrowers. For example, if 70% of all lenders assets go to borrowers, the utilization rate is 70%. This means only 30% of lenders assets are available for withdrawal. If something were to prompt lenders to withdraw all their crypto assets (similar to a traditional bank run), this would be a problem for the Protocol.

VALIDATOR RISK
(Applicable to: Staking)

Running a validator node to stake crypto on behalf of users involves technical know-how to ensure that there are no disruptions in the staking process. Nodes need to have 100% uptime to ensure that they maximise their staking rewards. In cases where a validator node misbehaves or goes offline, they could incur penalties (often called slashing) in the principal, which would impacting overall returns.

8 Flash Loan attacks are an example of this. These are made possible by contracts that perform their calculations on the value of a particular token or trading pair completely internally.

9 wBTC stand for Wrapped Bitcoin. It is an ERC-20 token that represents Bitcoin (BTC) on the Ethereum blockchain. The BTC that backs wBTC is transparently verifiable through a "proof of reserve" system.

10 stETH is Lido's liquid variant of staked ETH. It is a token that represents staked ETH in Lido, combining the value of initial deposit + staking rewards.

YOP RISK SCORE

In the following section, there is an outline of the key metrics/data utilised by YOP to evaluate strategy specific risks. These factors are chosen to be able to compare different types of Strategies and the relative risk between them. The individual risk scores are combined with varying weights (ω), in order to output the final YOP risk score. This information would be used by the Vault Proposers to determine allocation weights to various DeFi Strategies.

FORMULA

The YOP Score, as seen below, is made up of 2 components – the smart contract risk (SC) and the strategy specific risk (SP).
A breakdown of the factors that determine these components are given below. The ω's are the relative weights given to each component of the score – more on how these are determined below.

$$YOP\ Risk\ Score = \omega_1 SC + \omega_2 SP$$

$$\sum^{2} \omega_i = \omega_1 + \omega_2 = 1$$

COMPONENT BREAKDOWN – SMART CONTRACT RISK (SC)

The following displays the key components that will be used to determine the risk of smart contract exploitation for a Protocol used with a strategy used with a vault:

- **Audit Score (AU):** This highlights the number and quality of external audits that have been conducted. This will also be weighted by a trust score of audit providers – complied based on their reputation and track record. Higher score is better.
- **Age Score (A):** This refers to how long (in days) the smart contract has been live for. The idea comes from Lindy's Law [11] – stating that longevity implies a resistance to change, competition and greater odds of continued existence. Higher score is better.
- **Total Value Locked Score (TL):** This looks at the total funds that have been deposited into a particular smart contract. This value indicates that the strategy is trusted enough to allocate significant capital. Higher score is better.

$$SC\ Score = \omega_3 AU + \omega_4 A + \omega_5 TL$$

$$\sum_{i=3}^{5} \omega_i = \omega_3 + \omega_4 + \omega_5 = 1$$

[11] Lindy effect (or Lindy's Law) is a theorised phenomenon by which the future life expectancy of non-perishable things, like technology or an idea, is proportional to their current age. https://en.wikipedia.org/wiki/Lindy_effect

COMPONENT BREAKDOWN – STRATEGY SPECIFIC RISK (SP)

In this breakdown, there are the key components that are used as a proxy for the strategy specific risk:

- **Underlying Token Liquidity Score (UL):** This score refers to the various pegged or wrapped assets that one needs to hold in order to participate in a particular strategy. The liquidity of these tokens indicates how mature and well traded they are, and the likelihood of the peg between the assets breaking.
- **Reward Token Liquidity Score (RT):** This is similar to the UL score, except that the token that is being analysed is the incentive token given by the Protocol (if any). A score of 10 (highest) implied that there are no reward tokens – and all returns are in the form of the native deposit token.
- **Principal Safety (PS)** Looks specifically at the degree to which the principal amount invested in the strategy is safe. Types of Strategies such as Liquidity Provision/Index Tracking would have a low ranking. Considers elements such as: impermanent loss exposure, utilisation rate and price risks.

WEIGHT DETERMINATION

The weights below (ω) will initially be determined by an internal YOP model. This takes input from both objective and subjective market factors to appropriately weight and output and overall risk score depending on the general market outlook. For example, if liquidity was a concern in a bear market – then the underlying tokens and reward tokens score would be weighted higher. Initially, these weights will be determined by the YOP team, with control transitioning to the YOP DAO over time.

$$SP\ Score = \omega_6 UL + \omega_7 RT + \omega_8 PS$$

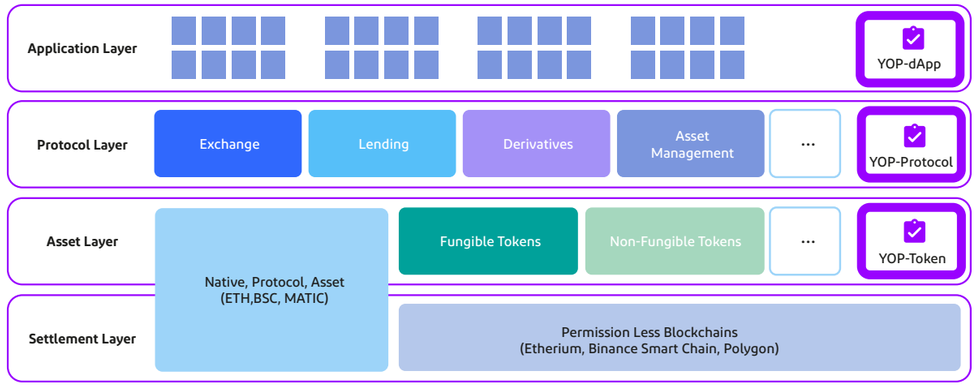
$$\sum_{i=6}^{8} \omega_i = \omega_6 + \omega_7 + \omega_8 = 1$$

ARCHITECTURE

In this section, we will take a detailed look at the architecture of the YOP Ecosystem. We will start with an overview of a DeFi layered stack and indicate at which layers the YOP Protocol exists. We will then look at a component architecture for the YOP Platform. Finally, we will look at a broader ecosystem diagram, where we introduce user roles and explain how various user roles interact with the components of the YOP Ecosystem.

LAYERED DEFI STACK

DEFI STACK: A LAYERED ARCHITECTURE



As DeFi continues to mature, a layered stack is emerging that systematizes the knowledge of the domain. At the lowest level of the stack is the **settlement layer** which constitutes a public permissionless blockchain that allow for atomic swaps and programmable smart contracts for more complex value transfers. These blockchains have native assets and also allow for the creation of programmable fungible and non-fungible tokens in the **asset layer**. YOP tokens and NFTs are part of this layer which leverages underlying settlement layer. The true magic of DeFi is brought to life by individual financial Protocols in the so-called **Protocol layer**.

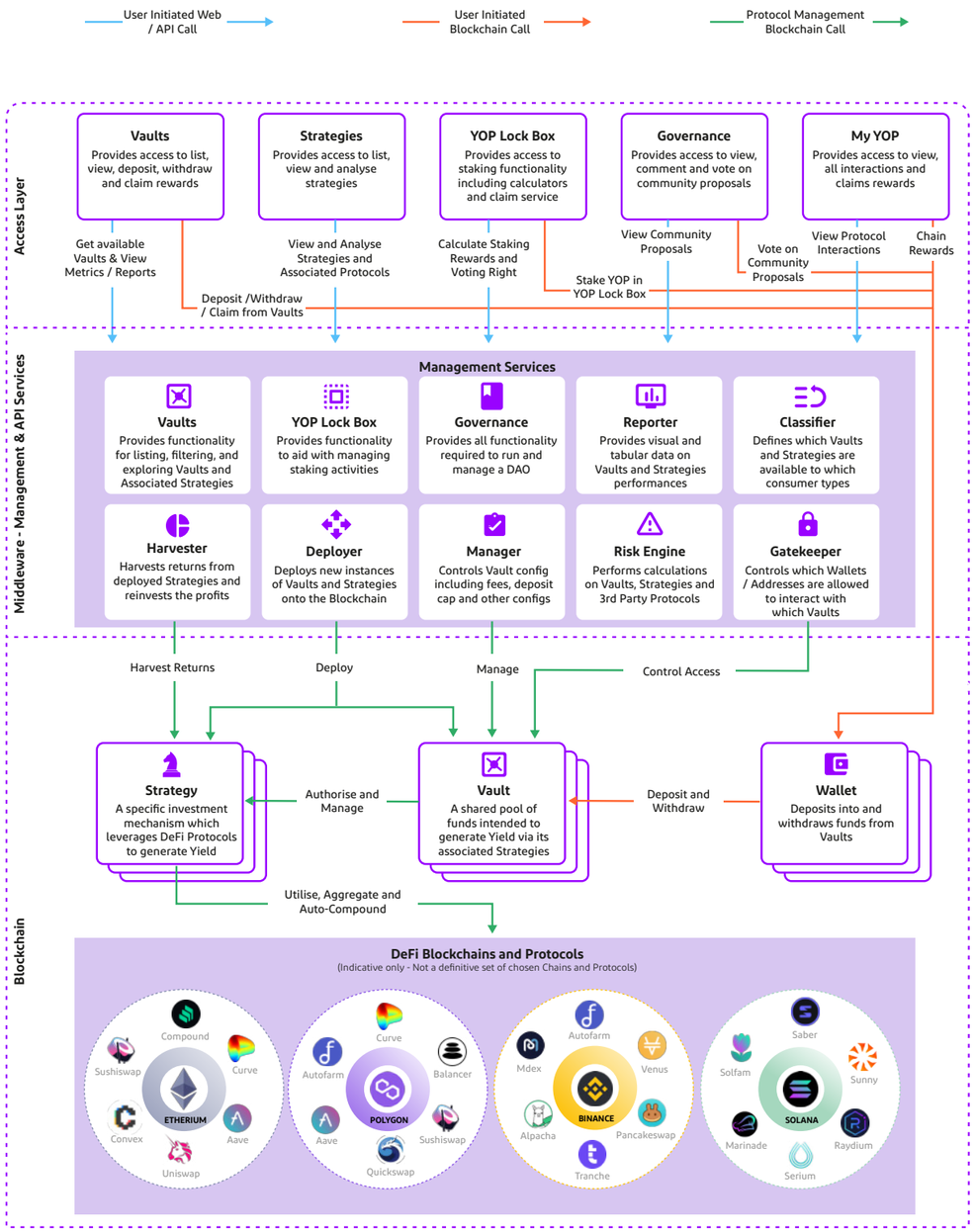
In recent times multiple Protocols have been deployed which provide solutions for financial instruments such as lending, borrowing, exchanges, derivatives and asset management. YOP abstracts away the complexity for the user by providing the best risk assessed and diversified yield generation opportunities. Finally, applications usually called dApps (Decentralised Applications) provides access to these Protocols in a user experience quite like traditional web-based platforms. The **YOP dApp** provides beautiful, seamless access to the YOP Ecosystem via an easy-to-use web application.

Next, we dive deeper into the YOP components below describing key capabilities, roles, and responsibilities in the YOP Ecosystem.

COMPONENT ARCHITECTURE

The YOP Ecosystem, is divided into multiple tiers, with a range of components living within each tier. The diagram below provides a visual representation of the various tiers and the components within.

YOP COMPONENT ARCHITECTURE DIAGRAM



This diagram shows the high-level tiers of the YOP Ecosystem:

- **The Access Layer**, where end users interact with the system
- **The Management & API Services** which provide a depth of information, analytics, and access control to the ecosystem
- **The Blockchain**, which houses the Vaults, Strategies, Access Controllers, and other smart contracts required to execute the YOP Ecosystem

ACCESS LAYER

Users of the YOP Ecosystem will interact primarily with the Front End dApp[12] for activities such as depositing and withdrawing, staking, and claiming rewards. This state-of-the-art user interface will prove an intuitive, high quality, easy to use experience, with information and educational material built right into the experience. The dApp uses a range of in house and 3rd party off-chain microservices to provide high quality, valuable data such as historical performance data, risk scores for Vaults and Strategies as well as metadata about Vaults and Strategies (descriptions, links to audit reports, links to smart contracts etc). Where possible, the microservices read directly from on-chain sources for their raw data.

The Front End dApp is designed to be simple, transparent, and as easy to use as possible. Useful information and context is provided step by step, with links to additional information provided exactly where it is required. This application is built using React.js and architected with Next.js. It is a Responsive Web App which aims to deliver a compelling user experience for both desktop and mobile users.

The ultimate goal of this dApp is to provide a seamless user experience to all categories of users (Creators, Maintainers and Consumer). The initial focus will be on the Consumer role as this will service the largest user base. Front end UI support for Creator and Maintainer roles will be added on a case-by-case base basis depending on need, cost and value.

MANAGEMENT & API SERVICES

The Management and API Services provide a wealth of usability and information to the Access Layer. For example, historical data about Yield rates (APYs) and total value locked (TVL) for Vaults, Strategies and 3rd party DeFi Protocols is correlated by the Reporter Service and exposed via the Access Layer to consumers. Similarly, risk information from the Risk Engine Service is used to provide risk scores for Strategies and Protocols within the Access Layer.

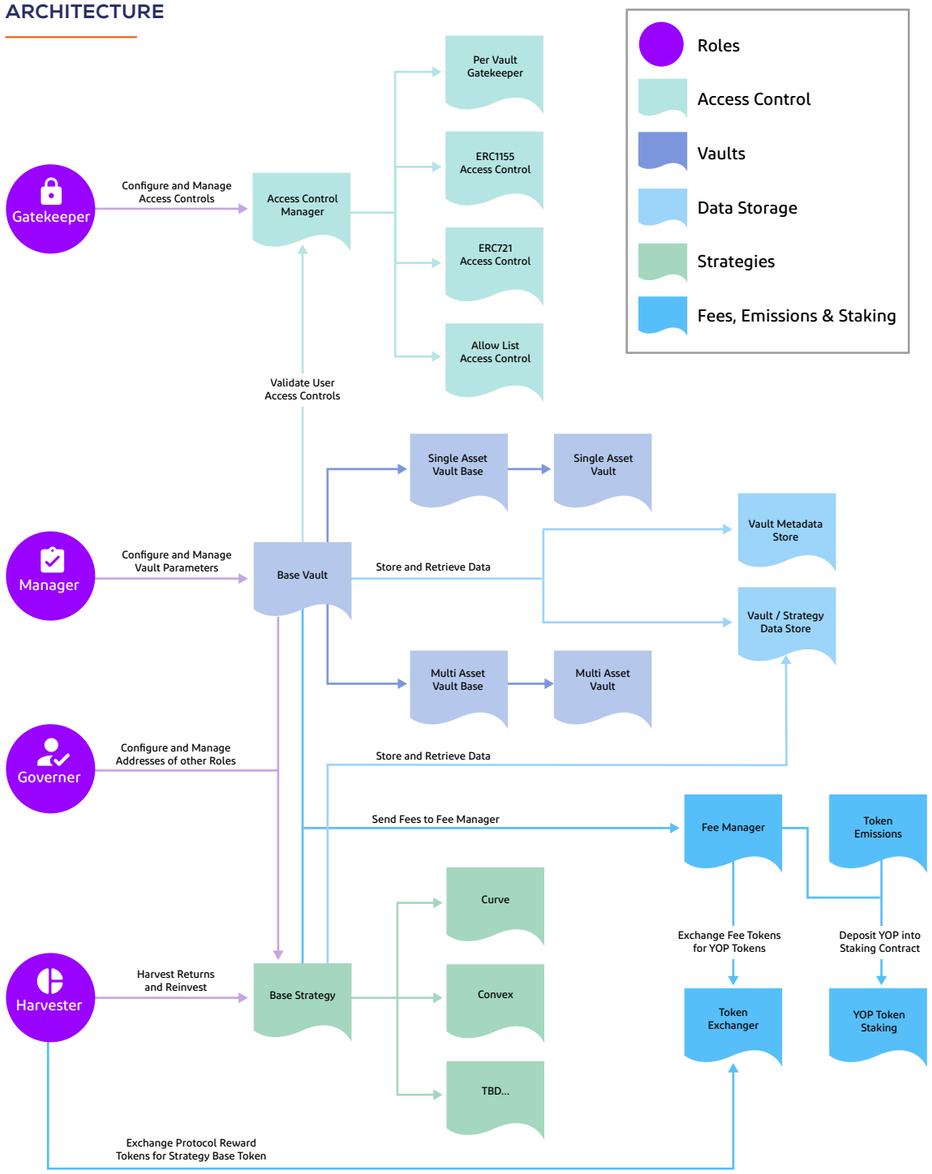
These microservices also interact with each other. For example, the Risk Engine Service will source relevant data on Protocols (e.g. TVL, liquidity) from the Reporter Service. The back end microservices are built using Node.js and expose APIs via a GraphQL Interface. They use a variety of databases – with the database chosen depending on the classification of data being stored. All categories of users interact, either directly or indirectly (via the Access Layer), with these microservices.

12 dApp is a decentralised application built on a decentralised network – that combines a smart contract and a frontend user interface.

SMART CONTRACTS

On chain contracts are initially being developed in Solidity for Ethereum and EVM compatible layer 2 chains. Additional chains will be added based on demand, effort, and potential of the chain. For each chain that YOP deploys on, a set of smart contracts will be deployed which will include some or all of the following: Vaults, Chain and Protocol specific Strategies, YOP Lock Box for staking, emissions for staking and Vault rewards, DAO governance. The diagram below shows the various smart contracts and their relationships/interactions.

YOP SMART CONTRACT ARCHITECTURE



As can be seen in the previous diagram, the YOP smart contracts are architected for security, composability, and modularity. With the exception of Strategies, which will continue to grow and evolve, the diagram represents the vast majority of the key smart contracts required for the YOP Protocol.

Traditionally, multi chain Protocols have required the user to manually switch between chains in order to interact with the services provided on that chain. YOP aims to re-imagine this, with true multi chain access, allowing users to connect from any supported chain and access all available Vaults and Strategies across all supported chains directly from a single chain. This requires secure cross chain transmission of both funds and data. YOP already has a number of partnerships established with cross chain bridge providers and is continuing to evaluate this emerging space in advance of launching a true multi chain experience.

Vaults

The vault architecture consists of a Base Vault, which all other Vaults extend. Initially, a Single Asset Vault contract will be developed, with a Multi Asset Vault planned for the future.

The Base Vault will encapsulate as much of the common functionality as possible, including name, LP Token symbol, Vault TVL cap, addresses of roles, and strategy management and allocation. Each vault will have the following roles: Governor, Manager and Gatekeeper which will allow the wallet addresses assigned to these roles to perform the actions outlined in the “Components and Users” section below.

Strategies

Like Vaults, the strategy architecture consists of a base strategy, which all other Strategies extend. Strategy Creators will be required to implement a set of functions for each strategy.

Each strategy will need to encode the logic required for interacting with the various DeFi Protocols the strategy makes use of. These interactions include depositing, withdrawing, harvesting, re-investing, liquidating, migrating and reporting.

Initial strategy development will focus on a number of the top DeFi Protocols on the Ethereum blockchain. These include Protocols such as Aave, Convex, Curve, Uniswap, Sushiswap, IndexCoup and LIDO. The exact order of execution for which Protocols to target in what order is flexible, and will be reviewed on an ongoing basis. New Protocols will also be assessed as they emerge. The YOP Community is strongly encouraged to get involved in discussions around which Strategies to prioritise. Ultimately, this ranking and prioritisation of Protocols will become the responsibility of the YOP DAO. DeFi Protocols that already exist on more than one blockchain are of particular interest – especially where both chains are EVM based as this provides an opportunity to reuse Strategies across multiple chains.

Access Control

Access control for Vaults is implemented via the Access Control Manager, which can be configured by the Gatekeepers. Various access control policies have been implemented including an Allow List Access Control, and ERC1155 access control (for YOP NFT holders). Further access control policies are planned, including an ERC721 access control for other NFT access management.

Staking

The Staking contract will allow YOP token holders to lock up their YOP for variable periods and earn YOP tokens as rewards. The volume of tokens locked and lock duration determine the rewards allocated. Once users stake their YOP tokens they will receive a representative NFT, which can then be used to participate in the YOP DAO governance system. In the future, the Lock Box may incorporate the lock-up of other tokens and NFTs generated within the YOP Protocol – in return for further incentives.

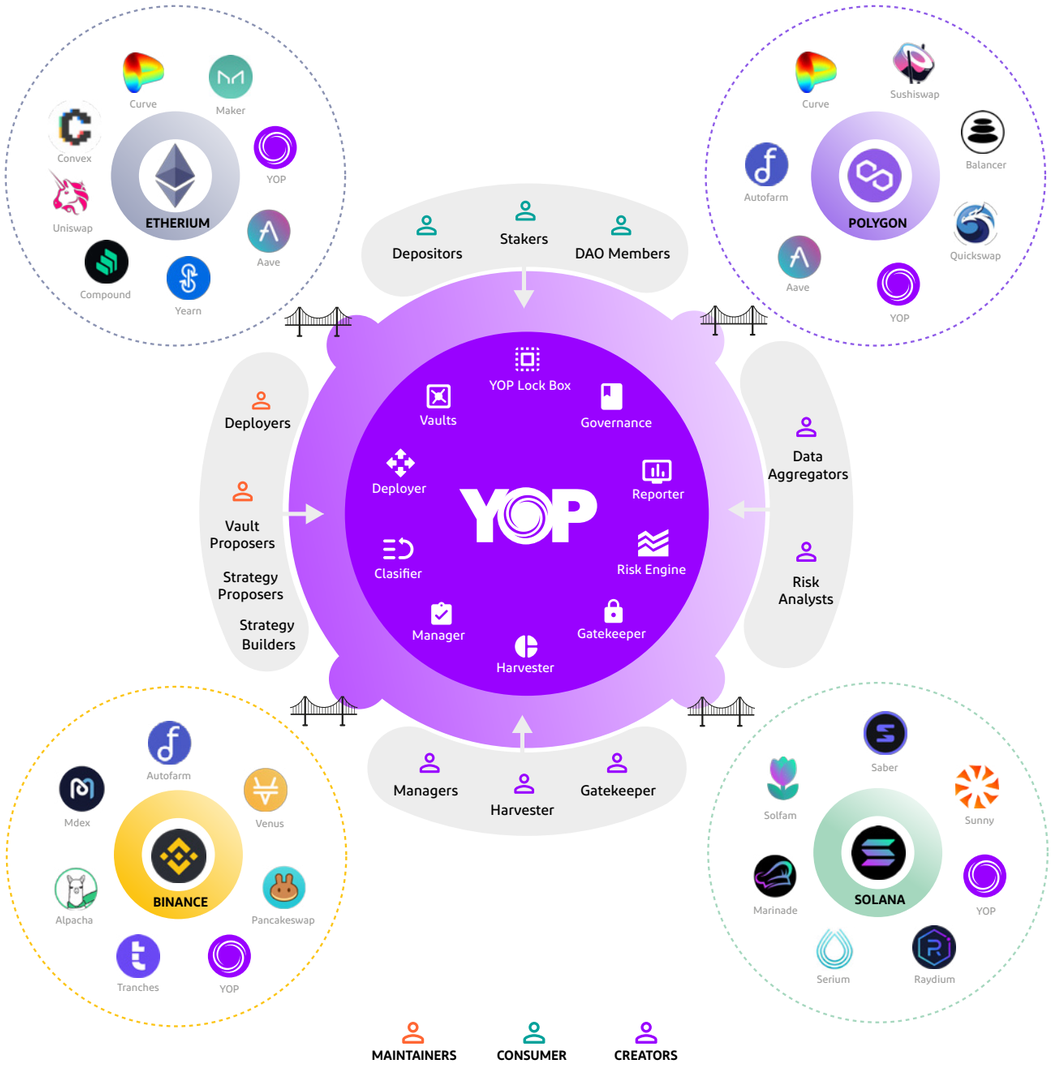
Token Emission

The Token Emission contract will distribute the YOP community tokens to various other wallets based on our Tokenomics and participation in the YOP Protocol (e.g. Depositing in Vaults and Staking in the YOP Lock Box). Community token emissions are split between Vaults and staking, with the allocation to each being configurable. The allocation to the Vaults can be further split with a variable amount being allocatable to each vault. This allows new Vaults to receive an increased share of the vault emissions, thereby increasing its overall APY and attracting new deposits. Since all emissions for both Vaults and staking will be managed by a single contract, users will be able to claim all tokens due to them with a single contract call, thereby reducing gas costs versus having to claim from each vault and the staking contract individually.

ECOSYSTEM ARCHITECTURE

For the YOP Ecosystem to function, it requires various categories, or roles of users to interact with it. The diagram below provides information on the various user types and their roles. The diagram below shows the YOP Ecosystem, including the Protocol components, indicative chains and the various Users and Roles involved in the ecosystem, The section below provides more details about the users and how they interact with
the components.

YOP ECOSYSTEM INCLUDING COMPONENTS, USERS AND INDICATIVE BLOCKCHAINS



USERS & COMPONENTS

VAULTS
Used By: Depositors

This service provides functionality for listing, filtering, and exploring Vaults and their associated Strategies. The service combines real time on-chain data with contextual and analytical data from off chain sources. Data sourced on chain includes Total Value Locked (TVL), strategy allocation ratio, yield generated, fee allocations among others. Data sourced off chain include information such as descriptions of how the vault works, details on the Strategies in use, risk information on Vaults, Strategies and Protocols as well as historical TVL and APY information (sourced from the Reported Service).

YOP LOCK BOX
Used By: Stakers

This service provides functionality to aid with managing staking activities. This includes staking rewards calculator, staking claim information across all active chains, as well as consolidated information on totals staked, historical claims, and other activities. This service will also provide information for a staking leader board, where users can see how they stack up against others in the community in terms of staking.

GOVERNANCE
Used By: DAO Members

This service provides all functionality required to run and manage a DAO. Features such as creating proposals, voting on them and tracking / actioning approved proposals will be managed by this service. There are a number of 3rd party off the shelf services which will be evaluated for this purpose.

REPORTER
Used By: Data Aggregators, Risk Engine Service, Vaults Service

This service provides information on the performance of the Vaults, Strategies and underlying DeFi Protocols. It also provides wallet specific information to individual users on the performance of their portfolio. This information will be available programmatically via APIs for machine-to-machine interactions as well as within the dApp in the form of tabular reports, charts and graphs. Data sources and raw data is provided to the Reporter service by the Data Aggregators.

RISK ENGINE
Used By: Risk Analysts, Vault Service

This service performs the YOP Risk/Reward calculations on the Vaults, Strategies and 3rd Party Protocols in use within the YOP Ecosystem. It is configured and maintained by Risk Analysts, who will provide inputs to the system in terms of weightings for various risk scores, addresses of smart contracts to analyse and off chain risk data such as details on security audits performed, liquidity of tokens and social sentiment analysis.

GATEKEEPER
Used By: Gatekeepers, Classifier Service, On Chain Vaults

This service provides information on which wallet addresses can access which Vaults. Some Vaults will be open access for any users. Other Vaults, such as ones for specific Token or NFT holders will be restricted access. The Gatekeeper Service will be managed by the Gatekeepers, who are responsible for mediating requests for access from users and enabling the access at the Blockchain layer. The Gatekeeper can also define allowed limits for how much each wallet can deposit (to prevent flash loan attacks) as well as the allowed growth rate of the TVL in a Vault over time is (to prevent distributed mini-flash loan attacks).

HARVESTER
Used by: Harvesters

This service assists the Harvesters in interacting with deployed Strategies to automatically harvest and re-invest returns from these Strategies. The Harvester service will advise the Harvesters whether a harvest is recommended (by checking on-chain) and can notify the Harvester when a harvest is due, so they can sign the required transactions. Calculation of harvest frequency will be determined by a number of factors including time since last harvest, current gas prices, value locked, estimated profits available for harvest and liquidity of harvested coin.

MANAGER
Used By: Managers

This service provides functionality to assist the Managers with configuration of Vaults that they manage. This configuration includes setting management and performance fee levels, the address fees are paid to, upper limit of deposits allowed per Vault, Strategies in use and relative weighting/allocation to the Strategies. The Manager (or Governor) is also responsible for initiating emergency lockdown or withdrawal procedures in the event that a Vault, Strategy, or underlying Protocol is compromised. This service will draw information from the Reporter service to help it make recommendations based on relevant data – e.g. an alert for a sudden APY or TVL drop. As with all the other microservices, the intention is to build a user interface layer in the front end DApp for ease of use.

Classifier
Used By: Vault Proposers, Strategy Proposers, Strategy Builders, Vaults Service

This service holds all metadata for Vaults and Strategies and helps to define which Vaults and Strategies are available to different users. Not all users may have access to the same Vaults (e.g. some Vaults may require an NFT to access), and even where they do, the information presented about the vault may be tailored to the specific user based on their experience with DeFi (as determined from their wallet).

Information such as descriptions, audit reports and smart contract addresses are provided to this service by Vault Proposers, Strategy Proposers and Strategy Builders for new Vaults and Strategies that are being added to the ecosystem.

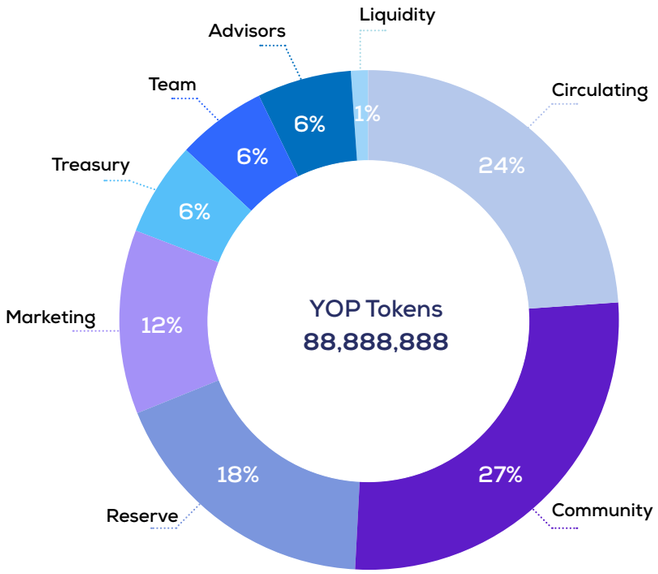
DEPLOYER
Used By: Deployers

This service provides functionality to assist the Deployers with deploying new Vaults and Strategies to target Blockchains. Deployment will be a multi-sig activity requiring a minimum 3 of 5 approvals. This helps to ensure that all deployments are fully reviewed and approved before they go live. The Deployer Service assists with all aspects of deployment and automates the deployment pipeline as much as possible.

TOKENOMICS

EMISSION POOLS

YOP Tokens will be emitted across seven pools - Community, Reserve, Marketing, Treasury, Team, Advisors and Liquidity. The existing circulating supply of tokens is also included in the tables and figures below to provide a complete picture of the YOP Token distribution and the full supply of 88,888,888.



Category	Token Use	Quantity	% Total
Circulating	Tokens that are already in circulation within the YOP community	21,619,102	24%
Community	Token Emissions to the community for staking, vault yield boost etc.	24,000,000	27%
Reserve	Tokens for raising future funding for the YOP ecosystem	16,000,000	18%
Marketing	Tokens for promoting YOP via various marketing platforms and channels	11,000,000	12%
Treasury	Token Emissions to the YOP Treasury for future use, e.g. boosting and burning	5,000,000	6%
Team	Tokens for product and development team who are building YOP	5,000,000	6%
Advisors	Tokens for Advisors to the YOP ecosystem	5,000,000	6%
Liquidity	Tokens for providing liquidity on centralised and decentralised exchanges	1,269,786	1%
		88,888,888	100%

EMISSION SCHEDULE

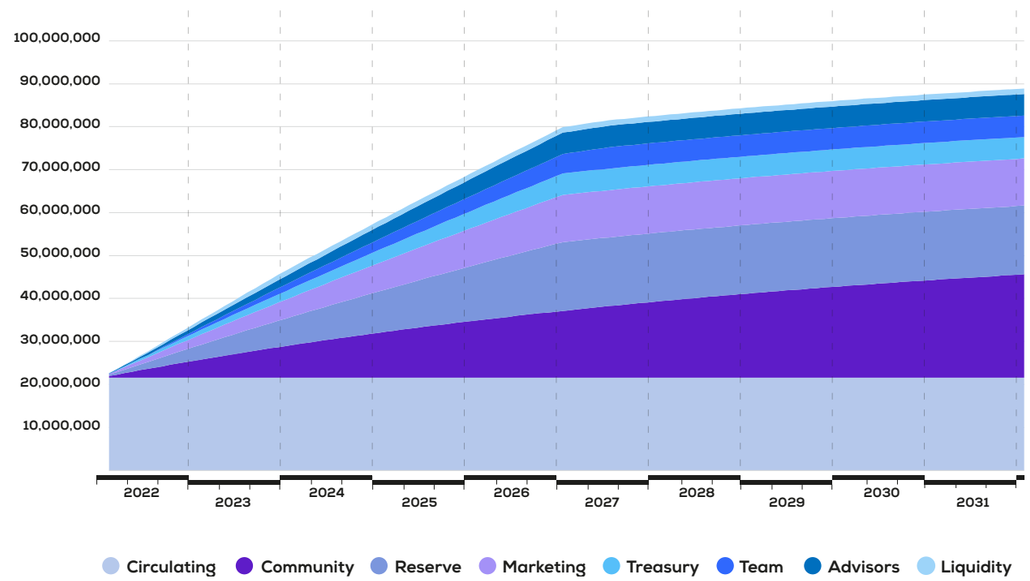
Token emissions will commence in January 2022. Community emissions will be released over a 10-year period on a reducing balance schedule of 1% per month. All other emission pools will be released on a straight-line emission schedule over 5 years, with the exception of liquidity, which will be released over 24 months. Team Tokens will have an initial 6-month lockup before emissions commence.

YOP EMISSION SCHEDULE

Allocation	Pool	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
24,000,000	Community	3,891,931	3,449,749	3,057,805	2,710,392	2,402,451	2,129,496	1,887,553	1,673,098	1,483,009	1,314,516
16,000,000	Reserve	3,200,000	3,200,000	3,200,000	3,200,000	3,200,000	-	-	-	-	-
11,000,000	Marketing	2,200,000	2,200,000	2,200,000	2,200,000	2,200,000	-	-	-	-	-
5,000,000	Treasury	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	-	-	-	-	-
5,000,000	Team	500,000	1,000,000	1,000,000	1,000,000	1,000,000	500,000	-	-	-	-
5,000,000	Advisors	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	-	-	-	-	-
1,269,786	Liquidity	634,893	634,893	-	-	-	-	-	-	-	-

Max New Tokens	12,426,824	12,484,641	11,457,805	11,110,392	10,802,451	2,629,496	1,887,553	1,673,098	1,483,009	1,314,517
% Entering Supply	13.98%	14.05%	12.89%	12.50%	12.15%	2.96%	2.12%	1.88%	1.67%	1.48%

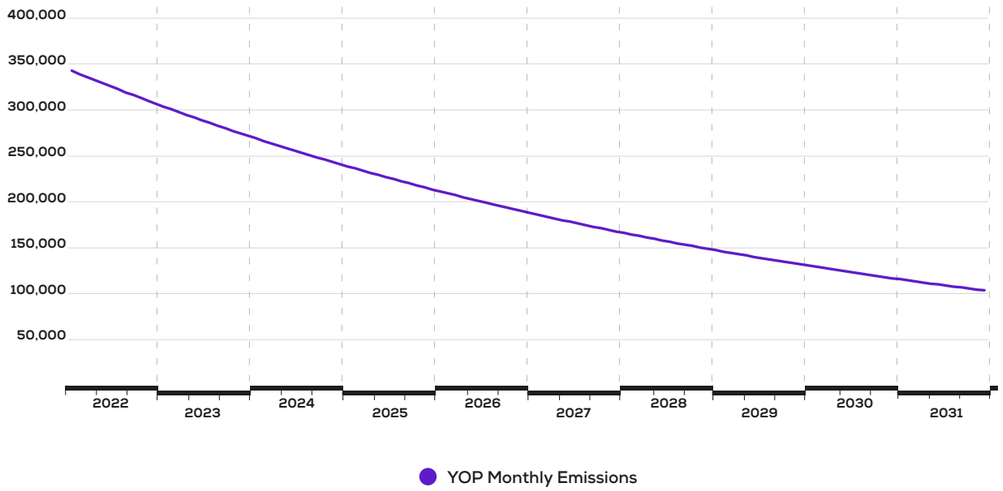
Max Circulating	34,045,926	46,530,568	57,988,373	69,098,765	79,901,215	82,530,711	84,418,264	86,091,362	87,574,371	88,888,888
Total % Available	38.30%	52.35%	65.24%	77.74%	89.89%	92.85%	94.97%	96.85%	98.52%	100.00%



COMMUNITY EMISSIONS

Tokens for community rewards will commence in January 2022 and continue for 10 years on a reducing balance emission schedule, with a 1% drop in emissions each month. Initial emissions will be in the region of 390,000 per month and will decline over the 120-month emission period to approx. 130,000 per month.

MONTHLY EMISSIONS



These tokens will be split between Vault Yield boosts and staking rewards for the YOP Lock Box. The exact split between Vault boosts and staking rewards will be configurable and will be actively managed over time to ensure tokens are used in a manner that is most beneficial to the community.

Staking rewards will be allocated based on a calculation which takes into account the number of tokens staked and duration of staking.

Vault boost tokens will be allocated between active vaults, with additional boosts being allocated to new Vaults to grow the TVL in these Vaults.

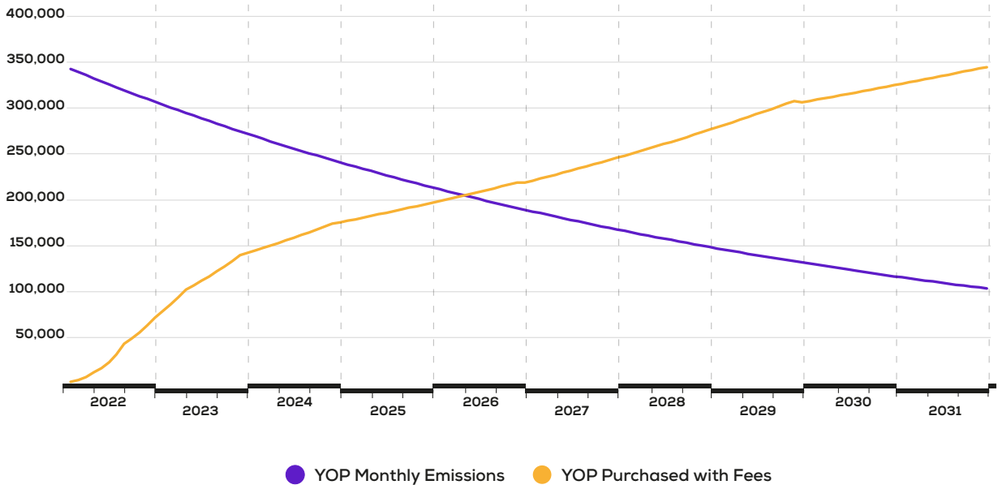
These allocations will initially be defined by the YOP team. As YOP transitions to a DAO, control of the allocation of YOP token emissions will become a community decision, with DAO proposals and voting used to determine fair allocations.

SUSTAINABILITY

In addition to community emissions, YOP tokens will be purchased from the open market on an ongoing basis using a percentage of management and performance fees from Vaults and Strategies. These YOP tokens will be added to the community emissions and used to reward Vault Depositors and Stakers, with the goal being long term sustainability of the YOP reward program.

As the Total Value Locked in the YOP protocol increases, the associated fees will also increase, meaning that there will be additional funds available to purchase YOP tokens. During this time, it is expected that the YOP token will also increase in value, meaning that it will cost more to purchase each token. However, based on projected TVL growth and token value growth, it is anticipated that a sustainable model of token purchase and redistribution can be achieved.

MONTHLY EMISSIONS & PROJECTED YOP TOKENS PURCHASED WITH FEES

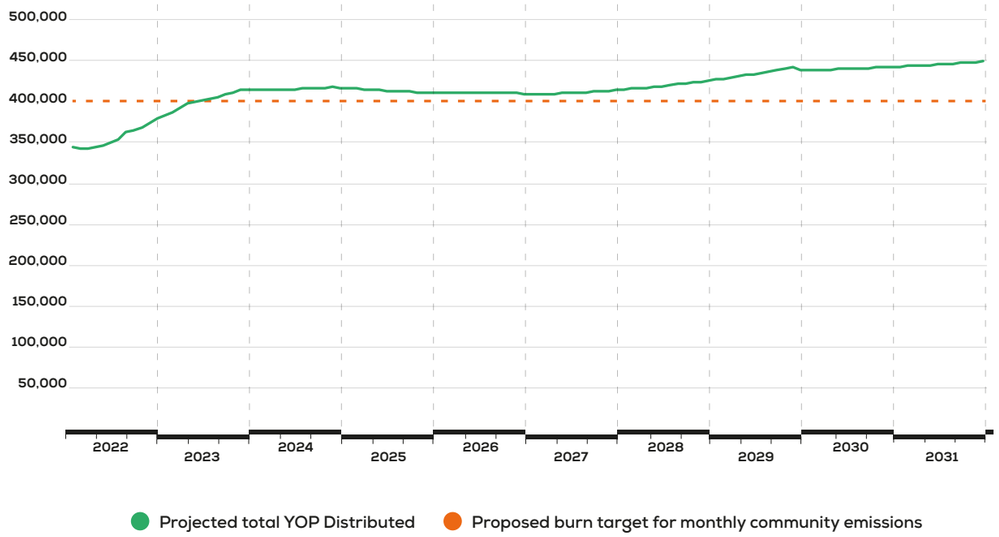


The chart above shows the projected number of YOP tokens per month from both community emissions and YOP tokens purchased with fees from Vaults and Strategies. As can be seen from the chart, these lines intersect around 2026, which represents the inflection point where the protocol truly becomes self-sustaining.

The community emissions schedule has been carefully calibrated to complement the tokens purchased from the open market and provide a long term sustainable stream of tokens. The chart below shows the combined monthly emissions from both the community pool and the tokens purchased on the open market. As can be seen from this chart, there is a relatively steady state in terms of the number of tokens per month - growing from around 350,000 to 450,000 over 10 years.

In situations where the total number of tokens available in any given month exceeds a defined target, the excess tokens will be burnt. This will **result in a deflationary token economy** and help to secure the price per token. The defined target for total distribution will be initially set at 400,000 tokens / month, but this may be amended over time.

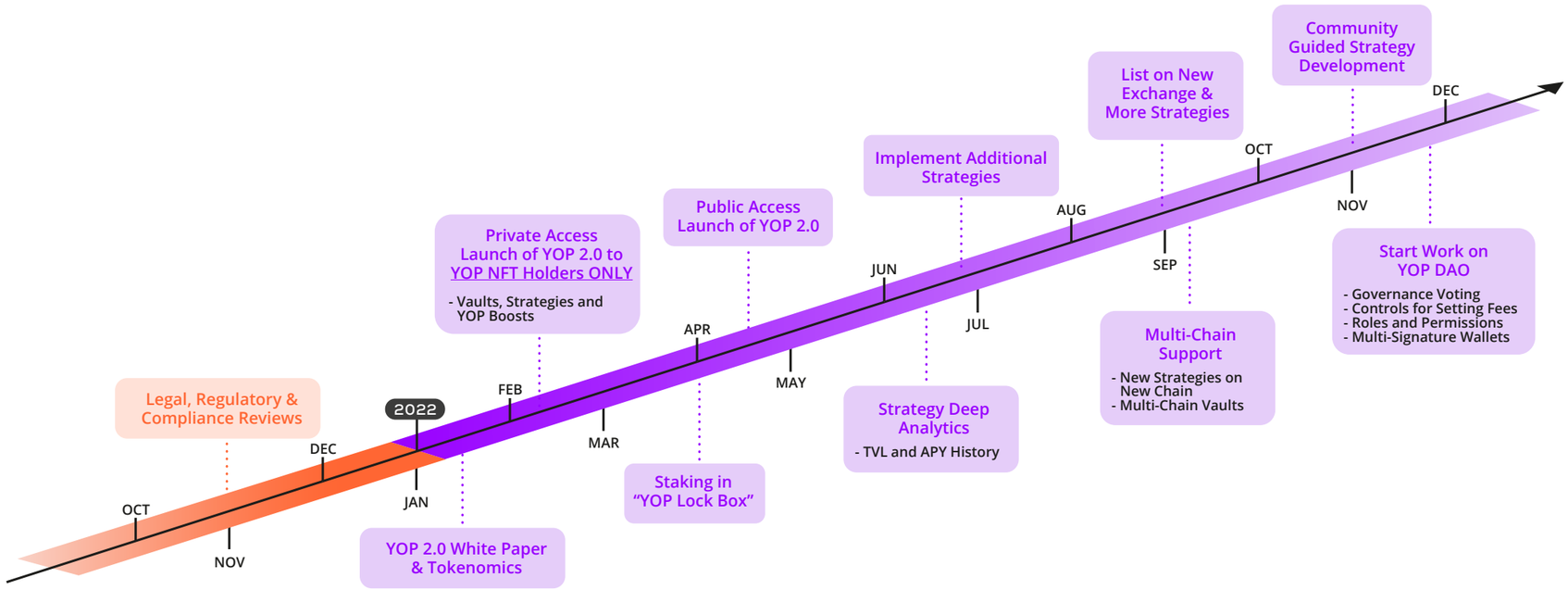
PROJECTED TOTAL YOP DISTRIBUTED TO COMMUNITY / MONTH



Note: The previous charts are indicative only. The actual number of YOP tokens purchased with fees will depend on several factors including the total value locked in Vaults, the growth rate of the TVL, the fees charged and the YOP token price.

ROADMAP

The below sets out the YOP 2.0 roadmap and delivery sequence, breaking down the key features and deliverables coming to YOP 2.0 in the next year.



LEGAL, REGULATORY & COMPLIANCE REVIEW

A significant part of our approach to everything we do at Pluto and by extension YOP, is ensuring we are doing all we can to execute with regulatory best practice and due diligence. We want to ensure the best protection for our YOP community therefore, we not only use the best smart contract auditors we can find, but we also partner with multiple regulatory practices in the crypto space for advice and guidance. During this phase we have completed a regulatory review of both our roadmap and the YOP whitepaper to ensure there were no concerns.

YOP 2.0 WHITE PAPER & TOKENOMICS

Release of the updated white paper (this document) which also includes the revised tokenomics (based on the YOP tokens yet to be in circulation).

PRIVATE ACCESS LAUNCH OF YOP 2.0

The holders of the YOP NFTs will be granted access to the private launch of the new YOP 2.0 platform. This will be an early launch of the platform, in advance of the public launch. There will be no differentiation between the NFTs for this launch. The reason for this is principally because we want as many people as possible to be involved in this phase. We also want to ensure that the early adopters benefit from the reduced number of users, and therefore benefit from the increased yield per user the reduced numbers will bring.

There will be no cut off as to when you obtained your NFT, and you can even acquire a YOP NFT, during the private launch phase to take part. The NFTs can be obtained on secondary markets such as OpenSea.

STAKING IN "YOP LOCK BOX"

The YOP Lock Box will allow YOP tokens to be locked-up (or "staked") for varying periods of time to earn a share of the performance fees (generated from the Strategies) and the management fees (generated from the Vaults). The longer the period a user locks tokens for, the higher the share of the fees. Once users stake their YOP tokens they will receive a representative token – sYOP, which can then be used to participate in the YOP DAO governance system detailed below.

PUBLIC ACCESS LAUNCH OF YOP 2.0

Public launch of YOP 2.0 platform where it will become accessible to everyone

STRATEGY DEEP ANALYTICS

Addition of deep strategic analytics into the platform. This includes graphs and charts for the Vaults and Strategies, showing detailed analysis of the TVL and APY histories.

IMPLEMENT ADDITIONAL STRATEGIES

Creation of new Strategies and deployment into the Vaults for public use.

LIST ON NEW EXCHANGE AND MORE STRATEGIES

List the YOP token on additional crypto exchanges so it is more accessible. In addition, create new Strategies and deploy these into the Vaults for public use.

MULTI-CHAIN SUPPORT

Release YOP on multiple chains and create Vaults on these chains. Create and gain direct access to Strategies running on these chains. Offer vaults that include Strategies from multiple chains and can be accessed from multiple chains.

COMMUNITY GUIDED STRATEGY DEVELOPMENT

Start involving the YOP community in the decision-making process for YOP platform development.

START WORK ON YOP DAO

Start development work on DAO. This includes developing the following:

- A feature that allows staking YOP for governance voting
- Building the YOP 2.0 platform to enable proposals for new Strategies
- Adding controls for setting fees
- Building and deploying an Administrator User Interface
- Build out Roles and Permissions to allow the DAO to function
- Creation of Multi -Signature Wallets

The YOP Protocol aims to transition into a fully Decentralised Autonomous Organisation (DAO) within 2 years of launching. This means that YOP will be an organisation represented by Smart Contracts - controlled by the organisation members and not by a central entity. In order to transition to this model, the YOP Protocol will incentivise members of the community to become active participants in the DAO and contribute to its governance.

To ensure full transparency and clarity of thought, there will be a separate follow up document to clearly explain how the DAO will function and operate, for community consultation and feedback. We have touched on it here to ensure there is a clear understanding that this is the direction that YOP is heading, and following the public launch of YOP 2.0, we will be releasing the YOP 2.0 DAO white paper.

PARTNERSHIPS

YOP is building an ecosystem that will have far-reaching potential. A strong ecosystem requires strong partnerships and that is why we believe partnerships will form a significant part of this YOP ecosystem. Now that YOP is part of Pluto, the vast network of partners that Pluto has will only benefit YOP. These partners need not only be restricted to DeFi but could branch into other areas that Pluto is involved with like the Metaverse play-to-earn space or Pluto V's venture projects.

The end game for the partnerships is to provide additional value to YOP token holders. All partnerships are put in place to create greater stability and reach for the YOP token so that it can derive increased value by way of increased utility.

YOP has many partnerships established. Since Pluto has taken over YOP, we have been engaging with these partnerships to ensure we continue to drive the originally conceived benefits. In addition to the original benefits, we are exploring opportunities for new benefits to be derived from these partnerships. As we continue to develop the YOP Ecosystem, we are uncovering more opportunities that will not only create stronger relationships with existing partners but open the door to new and exciting partnerships that were not originally conceived.

Ultimately the partnerships need to benefit the YOP token holders. This is why we are exploring innovative new ways of cross-pollinating NFTs and tokens across separate ecosystems. We believe that providing NFTs and tokens from separate ecosystems outside of the YOP platform, access to YOP Vaults, we will increase the appeal of YOP and drive important KPIs such as TVL. We plan to create dedicated Vaults for our YOP partners that would have Strategies designed specifically for their token and accessible via their NFTs.

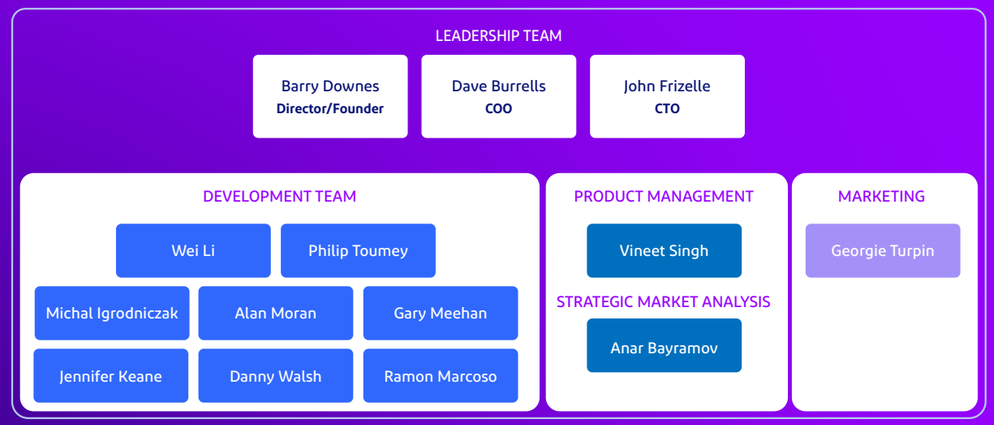
We believe this initiative is going to provide significant value to not only the YOP token holders but also to these partners, as it will add more utility to their tokens, NFTs, and ecosystems. We want to continue growing this network of partners as we believe increasing the network will benefit everyone involved, so we would encourage anyone who is interested to reach out to us.

TEAM

The YOP team contains decades of experience, drawing on TradFi and technology industry leaders, as well as innovative DeFi, crypto and cutting-edge technology start-ups.

We are still in the process of growing our YOP team and are always looking for fresh people and ideas that we can add. For the latest YOP team details please check out this link https://yop.finance

In addition to the dedicated YOP team, being part of Pluto Digital, the team has the backing of the larger Pluto Digital organisation https://plutodigital.com/team/



CONCLUSION

If you have made it this far, congratulations! Hopefully you now know a bit more about DeFi and what is required to interact with it safely and effectively.

It is remarkable to reflect that the DeFi space has really only emerged in the last two years or so. An amazing amount has been achieved by the innovators and early adopters – the foundations have been laid for a truly decentralised financial system with no intermediaries, no censorship and true self custody of assets.

However, to attract the next wave of adoption, the DeFi space needs to mature and evolve. Increased transparency is required to back up APY rates advertised. App developers need to cater for users of different experience levels and guide them through the experience rather than providing minimalist user interfaces and expecting users to figure things out for themselves.

The YOP Platform, Protocol and Ecosystem is ideally placed to provide a single pane of glass through which to access the best DeFi Protocols across the top blockchains. Combining world class user experience with state-of-the-art technology including risk engines, analysis data stores, categorisers, and cross chain technology, YOP is building for the future of DeFi.

With a 10-year community emission schedule, YOP is being designed for the long term – ups and downs, bear markets and bulls. The macro view for crypto and DeFi is all positive and YOP intends to be in integral part of the community and also the history that will be written in the coming months and years as we truly decentralise and democratise finance through cryptocurrencies.

The YOP Platform will be launching a private release in Feb 2022 which will be open initially to YOP NFT holders. A public release is planned for April 2022 as described in the roadmap.

EXCHANGES & PUBLIC DATA

EXCHANGES

Uniswap V2 YOP/WETH:
https://app.uniswap.org/#swap?outputCurrency=0xae1eaae3f627aaca434127644371b67b18444051

KuCoin
YOP/ETH: https://trade.kucoin.com/YOP-ETH
YOP/USDT: https://trade.kucoin.com/YOP-USDT

Gate.io
YOP/ETH: https://gate.io/trade/yop_eth
YOP/USDT: https://gate.io/trade/yop_usdt

TOKEN INFORMATION

CoinMarketCap: https://coinmarketcap.com/currencies/yop/markets/

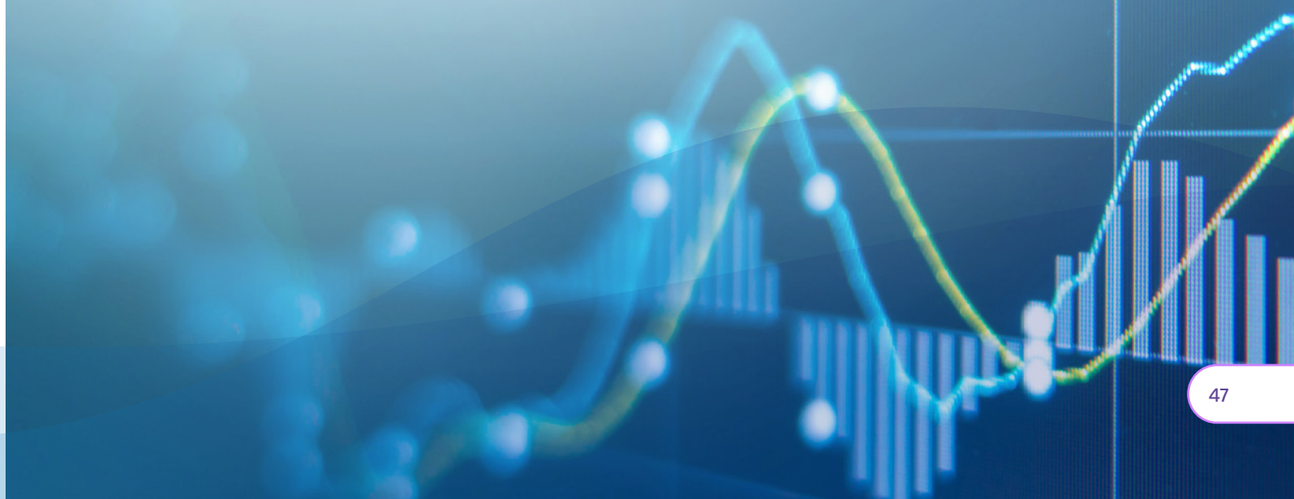
CoinGecko: https://www.coingecko.com/en/coins/yield-optimization-platform

TOKEN ADDRESSES

Ethereum: https://etherscan.io/token/0xae1eaae3f627aaca434127644371b67b18444051

Polygon: https://polygonscan.com/token/0x1033087936618791664 64cd0d0370ac3b8a2a1cb

Binance Smart Chain: https://bscscan.com/token/0xae1eaae3f627aaca434127644371b67b18444051



APPENDIX 1
DEFI PROTOCOLS & BLOCKCHAINS

PROTOCOLS

This section catalogues the top DeFi Protocols by Total Value Locked (TVL) as of November 2021 across multiple Blockchains. This is an indicative list of the types of Protocols that YOP will build integrations to via Strategies. Actual Protocol selection will be determined based on the many criteria that were outlined in the Strategies section earlier and will heavily utilise the calculated YOP Risk/Reward Score.

CURVE FINANCE

(Decentralised Exchange – TVL = 20bn) (Ethereum, Polygon, Fantom)

Curve is a decentralised exchange well-known for its antique and retro look – headquartered in Switzerland and serves as one of the largest DeFi platforms by volume. Curve differentiates itself by specifically accommodating liquidity pools made up of similarly behaving assets like stablecoins or wrapped versions of coins such as wBTC and tBTC. Users can earn a yield by depositing assets into their liquidity pools to earn fees generated from swaps and incentives in the form of CRV tokens – these types of users are known as Liquidity Providers (LPs).

AAVE

(Lending Platform – TVL = $15.49bn) (Ethereum, Polygon, Avalanche)

Aave originated as a decentralised peer-to-peer lending platform, ETHlend, in 2017 and later rebranded to become Aave in 2020 and switched to a liquidity pool model. This enabled them to become an open-source non-custodial Protocol to earn interest on deposits and borrow assets with variable or stable interest rates. Another feature included enabled ultra-short duration, uncollateralized flash loans – allowing certain users to borrow up to $200m with no financial backing.

CONVEX FINANCE

(Decentralised Exchange – TVL = 14.57bn) (Ethereum)

Convex is a Protocol built on top of Curve Finance - in order to facilitate higher returns for liquidity providers. On Curve Finance, users must lock-up their CRV tokens in order to: 1) Have yields "boosted", 2) Receive transaction fees for trades on Curve and 3) Being able to vote on the direction of the Protocol. However, most people are not willing to lock up for all multiple years so they can enjoy the maximum benefits. This is where Convex Finance comes in. The Protocol takes CRV and locks it all up as one big entity – and this allows users to experience these benefits outlined freely.

COMPOUND

(Lending Platform – TVL = $12.21bn) (Ethereum)

Like Aave, Compound is a decentralised lending platform created in September 2018 by Compound Labs, a California based company. Initially, Compound was a centralised lending platform but largely shifted to being a decentralized platform throughout 2019 and 2020. Whilst Compound have announced plans to create Compound Chain, a blockchain that can provide financial services across multiple networks – it could be argued that Aave has surpassed Compound in terms of the variety of asset supported, high borrowing amount compared to collateral and flash loan support.

LIDO

(Staking Protocol – TVL = $10.23bn) (Ethereum, Terra, Solana)

In order to stake on Ethereum 2.0 (to secure the network), you need a minimum of 32 ETH to become a full validator. On top of this, users that stake their ETH into the deposit contract, will not be able to claim their ETH until transactions are enabled on ETH 2.0 (no official date is available for this event). Lido is an alternative to locking up your stake and allows users to stake any amount of Ethereum and in-return issues stETH. This token can be used for lending, as collateral to borrow – all while earning daily staking rewards. This type of liquid staking enabled by Lido balances risk, reward and convenience for ETH holders.

YEARN

(Yield Aggregator – TVL = $6.02bn) (Ethereum)

Previously known as iEarn, Yearn Finance, was create by a single developer, Andre Cronje. After suffering an exploit in February 2020, Andre announced he was stepping away from the project – but he later returned and re-branded the project to yEarn.finance. The platform is a decentralised asset management platform that has multiple uses ranging from liquidity provision, lending and even insurance. The project rose to prominence after introducing its native YFI token. Prior to its launch, the Protocol had around $8m in assets under management – which quickly rose to over $400m within the first week.

UNISWAP

(Decentralised Exchange – TVL = $5.8bn) (Ethereum)

Uniswap was born out of an idea proposed by Vitalik Buterin in 2016 – for a decentralised exchanged (DEX) that would employ an on-chain automated market maker. A year later, Hayden Adams began working on turning this idea in to functional product - and in 2018 Uniswap launched. What makes Uniswap unique is that is solves the problem of high spreads for illiquid assets on order-book exchanges – by allowing anyone to become a market maker by depositing assets and earning fees based on trading activity. With the recent release on Uniswap V3 – LP's can now choose to provide liquidity between ranges, increasing capital efficiency.

SUSHI SWAP

(Decentralised Exchange – TVL = $5.5bn) (Ethereum, Polygon, Binance)

The Sushi exchange design is based off the popular Uniswap Exchange. An anonymous creator, known as Chef Nomi, forked (copied) some of the code from Uniswap before allocating liquidity of its SUSHI token to its native liquidity pools. Then the creators pulled all of that money from Uniswap, around $840, and shifted it to their platform. At this time, the creator ended up selling all of their SUSH, crashing the price and leading many to assume the project was a rug pull. Whilst Chef Nomi bought back all of their sold SUSHI after the backlash, they original team was pushed out by the community – and FTX CEO Sam Bankman-Fried took over next, transferring ownership over to nine community members.

ABRACADABRA

(Lending Platform – TVL = $4.74bn) (Ethereum, Avalanche, Fantom)

Abracadabra Money is a lending platform that utilises interest-bearing tokens (from liquidity pools and other lending activities from other DeFi Protocols) – to borrow a USD pegged stablecoin (Magic Internet Money – MIM), that can be used as any traditional stablecoin. These interest-bearing tokens are those that accumulate interest and constantly go up in price as users hold them. For example, a user deposits $100,000 of yvUSDT (received by adding funds to the USDT Vault on Yearn Finance), they can pick their Loan to Value ratio (say 90% in this example) – and borrow 90,000 MIM.

ANCHOR PROTOCOL

(Lending Platform – TVL = $4.08bn) (Terra)

Anchor Protocol is a Terra-based application built by Terraform Labs (TFL). Its launch was the realisation of TFL's vision of integrating three primary financial primitives (payments via UST, savings via Anchor and investing via Mirror Protocol) on the Terra blockchain. The platform offers depositors a stable 20% APY. The Protocol earns a return for the depositors by staking borrowers' LUNA collateral. ANC is Anchor's inflationary Protocol token, offering holders governance rights – as well as a percentage of Protocol earnings.

MIRROR FINANCE

(Tracking Protocol – TVL = $1.35bn) (Terra, Ethereum)

Mirror was developed by Terraform Labs (TFL), the group behind the Terra blockchain, dedicated to building out the Terra tooling and application ecosystem. Mirror Protocol was launched in December 2020 to create price-stable liquid derivative assets on the Terra Network. The Protocol creates Mirrored Assets, or mAssets, which mimic the price behaviour of traditional and digital financial assets – without purchasing the underlying asset. mAssets are designed to be composable and portable across the Terra, Ethereum and Binance Smart Chain networks. Users can mint mAssets in exchange for Terra stablecoins and mAssets deposited into Collateralized Debt Positions or CDPs. The Protocol maintains CDPs to stabilize mAsset value under community management.

BADGER FINANCE

(Yield Aggregator – TVL = $1.16bn) (Ethereum, Binance)

Until recently, the best option to earn a return on Bitcoin were on platforms such as BlockFi and Celsius – centralised lenders where users take a counterparty risk for single digit returns. This is the reason why Badger DAO was formed in 2020 – with the intention of creating a "one-stop, one-click" app to get Bitcoin to work in DeFi. Badger DAO's first project is a yield aggregating vault that provides liquidity to Strategies that earn LP fees and token incentives (CRV, SUSHI).

INDEXCOOP

(Tracking Protocol - TVL = $530.11m) (Ethereum)

IndexCoop creates and maintains the top DeFi index products, akin to ETFs in the traditional financial markets. One of these products is the Metaverse Index – designed to capture the trend of entertainment, sports and business shifting to take place in virtual environments. The constituent tokens of the index are selected through a strict criterion and include Metaverse giants such as The Sandbox (SAND), Illuvium (ILV), Axie Infinity (AXS) and 11 more constituents with a market cap and liquidity weighting mechanism. Within the last 1-month period, the Metaverse Index has returned 88%. These types of products allow users to gain a diversified exposure to a specific category of coins at a fraction of the cost.

BLOCKCHAINS

AVALANCHE

The Avalanche network's fundamental idea was initially shared on InterPlanetary File System (aka IPFS) on May 2018 by a pseudonymous group of enthusiasts going by the name "Team Rocket". It was later developed by a dedicated team of researchers from Cornell University – led by Emin Gun Sirer (known for contribution to peer-to-peer systems since 2003). Avalanche launched its mainnet in 2020 – along with the platform's native token, AVAX, and has had an explosive growth due to the blazing fast, low cost and energy efficient blockchain. The true potential lies in the fact that users can deploy customised blockchains (both private and public) – brining in huge commercial applications.

BINANCE SMART CHAIN

Binance is a cryptocurrency exchange that launched in the summer of 2017 and swiftly grew to become one of the world's largest by trading volume. Binance Coin is an ERC-20 token that was issued as part of an initial coin offering (ICO) to be used for discounted trading costs, with a percentage of tokens burned every quarter. The ERC-20 tokens were replaced by native tokens when Binance launched its own public blockchain – Binance Smart Chain. On the surface, the BSC ecosystem is very similar to Ethereum, but the number of active validators that authenticate transactions is only 21 – making it much more centralised than competitor platforms. This has not stopped growth however – mainly due to the much lower transaction fees (or gas prices) on the network, especially compared with Ethereum.

ETHEREUM

Ethereum was conceived by Vitalik Buterin after he perceived limitations in the functionality of Bitcoin's scripting language. The first whitepaper was published later that year, describing a distributed computing platform for executing smart contracts and building dApps. In 2014 the Ethereum crowd sale raised 31,529 BTC (around $18m at the time) in exchange for 60m ETH and use the proceeds to fund the network's initial development. Ethereum has been a key driver for the for innovation on the blockchain – including DeFi. That being said, there are scalability limitation with the current state of Ethereum. Various teams have been working to upgrade the network for better scalability and security measures – without compromising on decentralisation. The current plan is to swap Ethereum's consensus layer from Proof-of-Work (PoW) to Proof-of-Stake (PoS) and implement a scaling technique known as sharding.

FANTOM

Fantom Foundation was established by a South Korean computer scientist in 2018, and since then Michael Kong has become the CEO. It was created to address the blockchain trilemma – which speaks about the trade-off between scalability, security and decentralisation. The network's independent consensus layer is called Lachesis, featuring a novel consensus mechanism and can provide security on multiple execution chains – first of which is Fantom's EVM-compatible smart contract chain called Opera. The project's goal is to host an ecosystem of execution layers while enabling them to feature fast and cost-efficient transaction due to the benefits provided by the Protocol. Recently, Fantom Foundation's focus has turned towards DeFi use cases – with the help of Yearn finance founder Cronje, who serves as a technical advisor to Fantom.

POLYGON

Polygon was launched as the Matic Network in 2017. It was co-founded by Jaynti Kanani, Sandeep Nailwal and Anurag Arjun to tackle blockchain scaling and usability issues. Traditional blockchains face high latency and transaction costs that hamper adoption, efficiency and user experience. Layer-2 scaling solutions can take load of networks that can't scale as user activity increases. Matic featured a scaling approach that included Proof-of-Stake (PoS) sidechains to assist Ethereum as user demand for the network grew. Over time, Matic POS become a prominent scaling option for various applications. Matic rebranded to Polygon in February 2021 to become the Swiss Army knife for scaling solutions. There is a possibility that several solutions will co-exist and help scale Ethereum collectively and Polygon aims to play a central role in supplying the infrastructure needed.

SOLANA

Solana's origins data back to late 2017 when founder Anatoly Yakovenko published a whitepaper draft detailing a new timekeeping technique for distributed systems – called Proof of History (PoH). Anatoly believed this new technique could automate the transaction ordering process for blockchains – providing a key piece that would enable crypto networks to scale well-beyond their capabilities at the time. Additional design goals include sub-second settlement time, low transaction costs and support for all LLVM compatible smart contract languages. Solana Labs began raising funds to build its new crypto network in Q2 2018 – and between this time and July 2019, the team raised a little over $20m in various private token sales. They announcement the sales as a single Series A in late-July 2019. Since then, Solana's growth has been unprecedented – rising to the top 5 ranked coins, with over 40 DeFi Protocols built on top of it.

TERRA

Terra was created in January 2018 – by co-founders Daniel Shin and Do Kwon – with the singular vision of facilitating the mass adoption of cryptocurrencies by creating digitally native assets that are price-stable against the world's major fait currencies. Keeping in mind that previous innovation in the technology of money was bootstrapped by large payment networks (Alipay with Taobao, Paypal with eBay, Visa with banks), Terra was born with the support of the Terra Alliance, 15 large e-commerce companies in Asia – that collectively process $25bn in annualised transaction volume and 45m users. Terra's payment network replaces the complicated payments value chain, including credit card networks, banks and payment gateways with a single blockchain layer.

APPENDIX 2 YOP BACKGROUND AND HISTORY

PROJECT

The YOP Project was launched in September 2020 by Atif Yaqub with a vision to simplify and streamline access to DeFi Yield via a mobile app. The YOP project raised circa $500,000 through private sale and a Polkastarter launch in January 2021.

Over the course of the next number of months, YOP announced several partnerships (including TrustSwap, Tixl and Alliance Blocks), exchange listings (including KuCoin, Gate.io, Uniswap and Sushiswap) and cross chain bridges to Polygon and Binance Smart Chain. The YOP Token achieved an all time high of $3.90 on February 12th 2021.

In April 2020, the YOP Project suffered an exploit of 2 million tokens through a social engineering attack. The perpetrators of this exploit have never been apprehended and quickly dumped their tokens, causing the YOP token price to drop from $2.73 to $1.63. In response to this exploit, the YOP team burned an additional 2 million tokens as a show of solidarity with the community.

In May 2020, the V0 release of the YOP app was made available. The project had promised a wide array of features including integrated wallet, swapping, token information, yield farming and live chat, and anticipation of the release pushed the token price back up to $2.50. While the V0 release was always intended to a beta release and thus limited in terms of the initial functionality provided, many users were disappointed by the limited feature set released, and also reported issues and errors when using the app. As a result, within a week of release, the YOP token price had dropped to a low of $0.56.

By June 2020, the initial funding raised had been almost fully used in the development and marketing of the YOP project to date. Around this time, communication from the YOP project and team largely ceased, with the community left to wonder what the future held for the project.

In September, Pluto stepped in to support the community by purchasing the assets of the YOP project with a view to reimagining, redeveloping and reaching the project. Since that time, the Pluto team have been working tirelessly on the YOP Project, with a goal of re-releasing it and staying true to the original YOP vision of making DeFi more accessible to all. This whitepaper is one of the outputs of the work that has been completed since September. 2021 and provides a detailed insight into the future of the YOP Ecosystem.

TOKEN

The YOP Token is an ERC-20 Token with a maximum supply of 88,888,888. The token was was first minted in January 2021 and has been in active circulation since then. As of the writing of this Whitepaper (December 2021), a total of 21,619,102 tokens have been issued or burned. The current circulating supply can be broken down as follows:

- 7.66 million tokens being distributed between seed and presale
- 2.42 million tokens have been used for liquidity provision across a number of centralised and decentralised exchanges including Uniswap, Sushiswap and Kucoin
- 1.34 million tokens have been distributed to the community as staking rewards from the YOP 1.0 staking program
- 2.85 million tokens have been used across various marketing and promotional activities
- 3.33 million tokens have been distributed to the original YOP 1.0 team
- 2 million tokens were involved in an exploit in April 2020
- 2 million tokens were burned from the Team pool by the YOP 1.0 team in response to the exploit

This leads to a current circulating supply of 21.6 million tokens, of which 2 million have been burnt.

APPENDIX 3
RISK DISCLOSURE

YOP uses the Risk Evaluation Framework to score and rank the various external Protocols that the Vaults and Strategies will interact with. Whilst this framework allows for the quantification of the risk each Vault hold, there are some further considerations that must be made by the end user. This section aims to highlight some of these risks, with the goal of emphasising to users that they also need to Do Your Own Research (DYOR).

GENERAL CRYPTOCURRENCY RISKS

Cryptocurrency prices tend to be quite volatile. This means that significant value can be gained and lost through price movement. At the start, YOP aims to take a relatively conservative approach to which cryptocurrencies are supported within our ecosystem, with a strong bias towards mainstream, high market cap currencies such as Bitcoin and Ethereum, as well as stable coins such as USDC and Dai. However, even the high market cap cryptocurrencies can have sharp price fluctuations and stablecoins are only stable for as long as they hold their peg to the Fiat (i.e. traditional) currency they are associated with (usually the US Dollar). As such, the value of your crypto holdings may decrease in dollar value, even while they are generating yield. This is something that is entirely outside the control of the YOP Ecosystem and needs to be understood and accepted prior to entering the crypto markets.

SMART CONTRACT RISKS

As mentioned within the Risk Evaluation Framework, at the core of DeFi are smart contract. As with any software, there is potential for bugs. However, unlike traditional software, once a smart contract is deployed to a blockchain, it cannot be updated or altered. Additionally, the blockchain is an immutable, public record – meaning that the source code is visible to everyone. There have been many high profile, high value exploits executed against smart contract, resulting in a loss of funds. External security audits can only provide so much reassurance as bad actors are continually looking for new ways to exploit DeFi Protocols. The nature of the YOP Ecosystem is to build integrations to other DeFi Protocols via Strategies. Whilst every effort will be made to ensure that the Protocols YOP interacts with are as safe and secure as possible, it is not possible to guarantee that exploits will not happen.

REGULATORY RISKS

Crypto and DeFi are still emerging markets. As such, there is far less regulation in this space than in traditional finance. With the growing profile of Crypto and DeFi, as well as mainstream adoption from institutional investors, governments and regulators in many countries are starting to take a far closer look at DeFi than they previously did. The regulatory landscape is still very much an evolving story and as such, it is impossible to predict what regulations will be introduced in different countries and what kinds of impacts they will have on DeFi and Crypto in general. YOP will be closely monitoring this rapidly evolving space and making every effort to remain compliant with emerging regulations and requirements.


YOP
yop.finance