



Table of Contents

	Vision of Open Finance State of DeFi			03
				04
	-	State o	of DAOs	05
	Introducing PrimeDAO			06
	 Liquidity of the Commons Safety and Reliability of the Whole Products and Mechanisms 			08
				09
				10
		•	Prime Aggregator	11
		•	Liquidity Pool Manager	11
		•	DAO2DAO Interactions	12
		•	Ratings and Safety Interface	12
		•	Decentralized Hackathons	12
	Evolving PrimeDAO			13
	Tokenomics			15
	•	 Token Distribution 		
	 Voting Power Distribution 			18

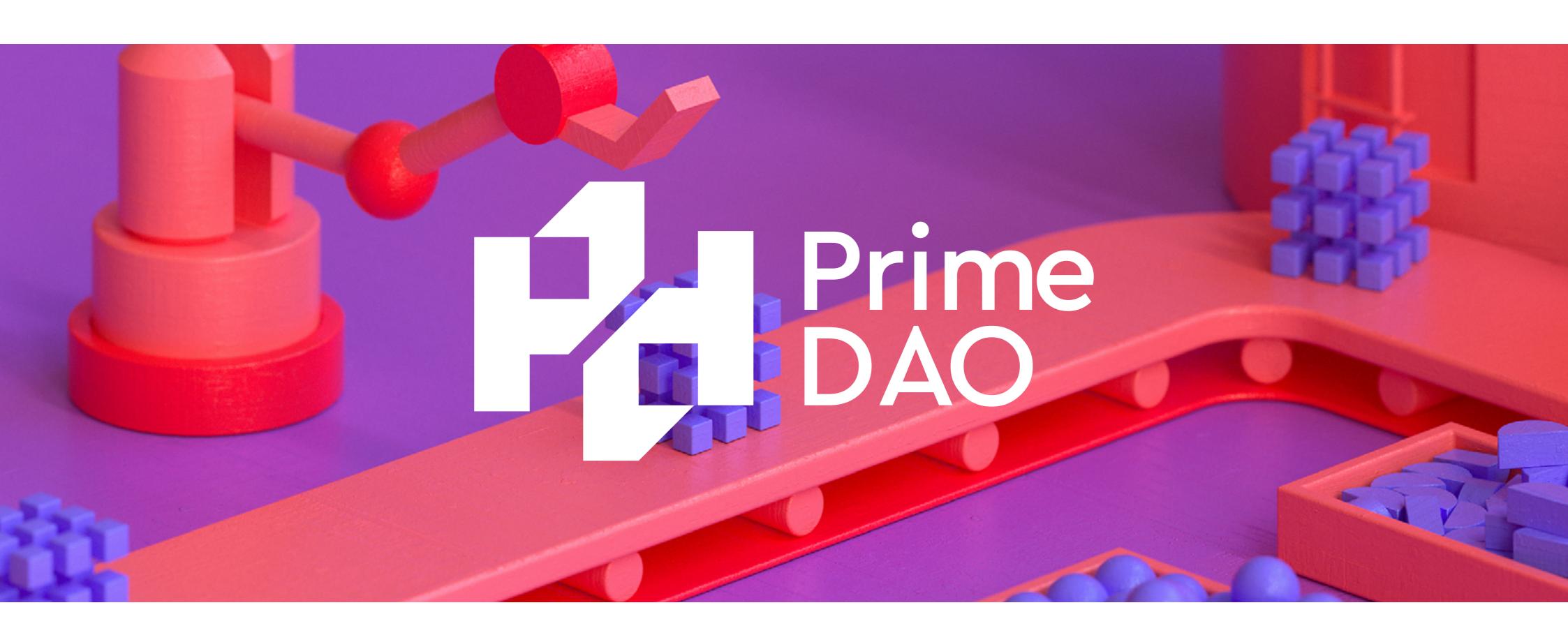


Vision of Open Finance

A new system of open finance based on programmable money is emerging on Ethereum, a fully-programmable smart contract platform that facilitates interoperability between decentralized applications. This open finance ecosystem has already realized much of a vision of universal access made possible only by programmable money. However, the next major step, the transition towards mass adoption, will require products and services that deliver a user experience surpassing that of traditional finance in many aspects. The fundamental challenges in this path will, as a consequence of composability, require complex, systemic coordination among projects, users, and stakeholders who stand to benefit.

In order to preserve open finance's fundamental ethos of permissionless access, one corporation, foundation, or centralized entity cannot single-handedly govern such effort. Nor should it be run by cartels or other forms of theatrical decentralized governance. For open-source products and services to adapt to an evolving open financial environment without central management, decentralized governance becomes a necessity. However, for many projects in the open finance space, developing frontier technology is challenging enough. In the absence of a well-funded foundation, most projects have insufficient resources to properly develop, administer, and grow an ecosystem/community. A single, well-funded dominant project may emerge, but if run by a single entity, risks degenerating into a walled garden of control.

To solve these coordination problems, we introduce PrimeDAO, whose mission is **to facilitate the wide adoption of open finance by coordinating and cultivating projects that promote safety, reliability, liquidity, and open access, while avoiding centralized appropriation of critical financial infrastructure through decentralized governance.**





State of DeFi

From Stablecoins to Decentralized Exchange

With the emergence of stablecoins, we can begin to speak of the development of a decentralized finance (DeFi) movement. These synthetic *cryptodollars* established a firm ground for the now thriving composable DeFi ecosystem. Ethereum's token standards have expedited the proliferation of application-specific tokens and the ability to exchange them via smart contracts known as decentralized exchanges (DEXs). DEXs have replaced the need for centralized custodians and thus the need for traders to identify themselves or establish credit, allowing access to anyone with a blockchain send and receive address.

An Automated Exchange Revolution

The advent of constant function market makers, such as Uniswap, has eliminated the need for exchange counterparties to coincide on traditional order books, opening the door for decentralized applications to access DEX liquidity in an automated fashion. This capability enabled the development of permissionless, decentralized financial applications, which previously could not have emerged on centralized exchanges (CEXs).

The Power of Composability: Rise of Yield Farming

The on-chain composability of decentralized applications (dApps) has led to an explosion of innovative financial instruments—lending, borrowing, leverage, swaps, derivatives, and more —that provide permissionless access to a wide and expanding range of crypto and traditional assets. These instruments continue to evolve in novel ways to produce increasingly sophisticated offerings, many of which were previously accessible to only a select few who had sufficient capital and access to financial services.

We now witness the explosive growth of incentivized liquidity pools that reward users with tokens while leveraging their capital in the protocols mentioned above to generate passive profits—a practice colloquially referred to as *yield farming*.

New Risks to Adoption

However, with new opportunities comes new risks. As the complexity grows with each innovation, adoption faces significant challenges. We are witnessing new composable attack surfaces emerge with the availability of various interactions between contracts. For example, flash loans, which allow anyone to borrow with zero-collateral on the sole condition that the loan is repaid in full by the end of the transaction, have created a new and exotic form of attack known as a *flash loan attack*.

The possibilities of what can develop with these composable building blocks are endless, though some will have a net negative impact on public welfare, hindering mainstream adoption. Entry barriers remain high for the unsophisticated user, as DeFi UX has yet to achieve a breakthrough. High network fees are reducing the profitability of small traders, increasing the dominance of whales. As a result, the system's integrity, security, and the overall vision of democratized open finance are at severe risk.



State of DAOs

A natural synergy has been brewing with another promising element of the open finance ecosystem: Decentralized Autonomous Organizations (DAOs). DAOs are community coordination and governance vehicles that have the potential to improve ecosystem welfare using mechanisms that incentivize and reward all stakeholders.

Mechanism Design

Yield farming is one such mechanism used to distribute protocol governance rights to protocol participants. So-called *governance tokens* attribute stakeholders inside the ecosystem using skin-in-the-game mechanisms, turning alignment into value-added engagement. While governance in most systems is synonymous with control, good incentive design can create inflationary and democratizing effects, allowing for new stakeholders to organically emerge.

Incentivizing Builders

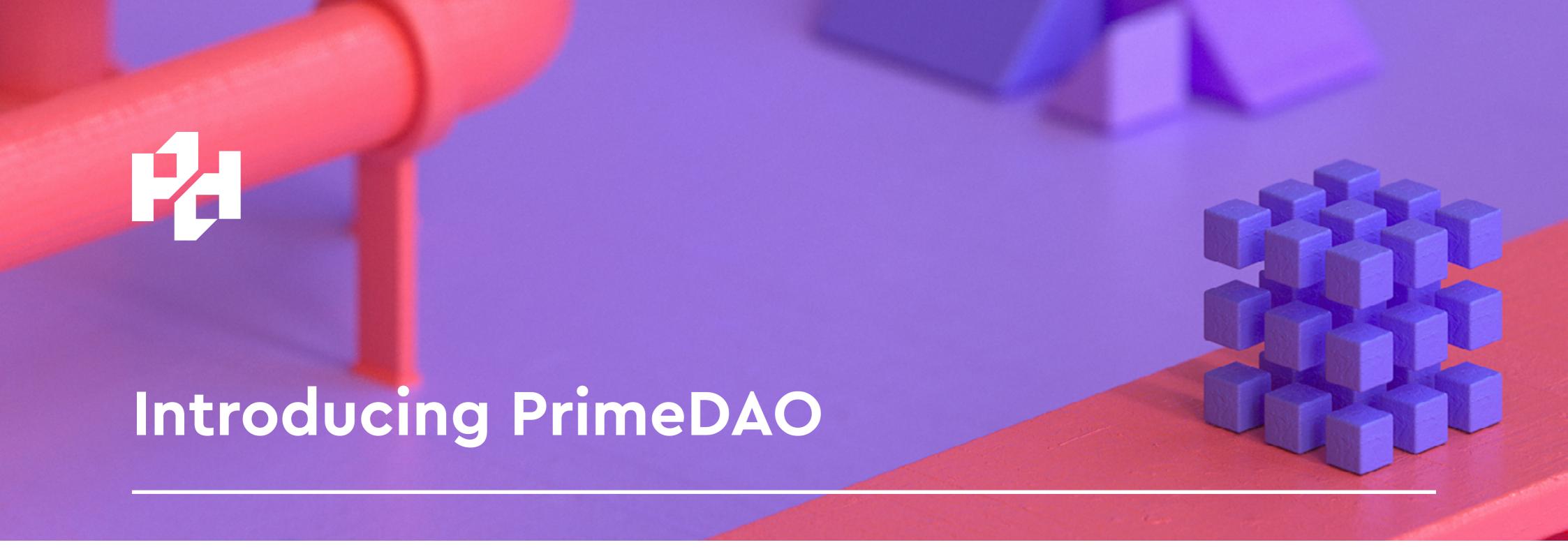
The question of linking value creation to financial sustainability in open-source development is still a major puzzle to be solved. Most projects funded through earlier cryptocurrency market cycles are centralized teams who operate similarly to traditional startups, utilizing burn rates while seeking profitable product-market fit. Other systemic funding mechanisms, such as <u>Gitcoin grants</u>, while promising, are frequently insufficient for sustaining the livelihoods of builders. Additionally, generic open-source ecosystem funding rounds frequently underfund contextualized work that builders must provide for specific sub-communities. There is a clear need for productive engines tied to value systems that sustainably support open innovation.

Democratized Product and Protocol Governance

In moving away from centralized markets, the transition of financial protocols like lending and borrowing towards a decentralized paradigm immediately begs the question: Who controls these parameters, such as interest rates, in a post-central bank world? And to this end, DAOs offer transparent, accountable, and trustless on-chain mechanisms to oversee these crucial financial levers.

Systemic Challenges

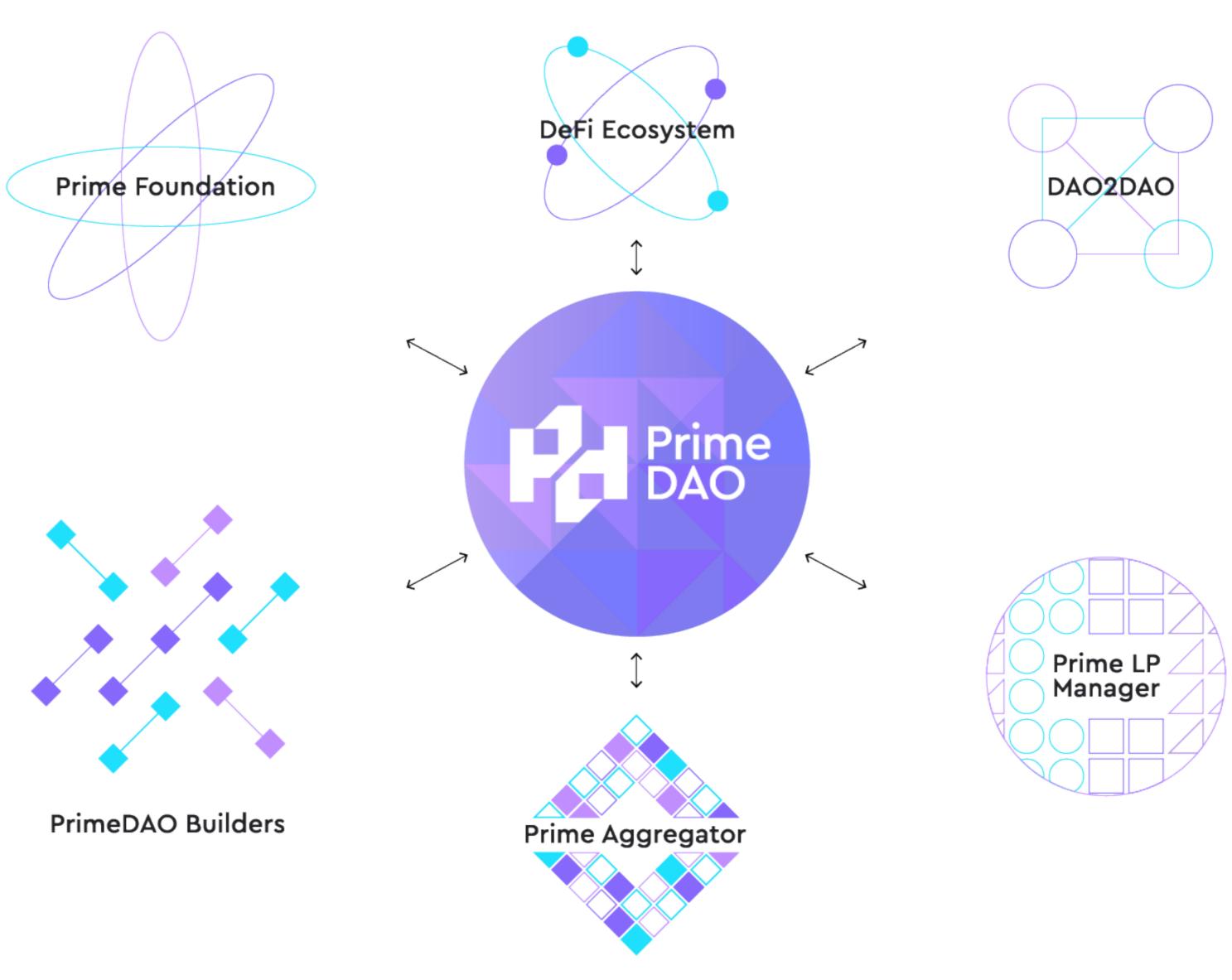
The composability of open finance systems necessitates decentralized coordination in order to avoid inefficiencies and risks. DAOs simultaneously hold great promise for funding and enhancing user onboarding, security, and UX by unifying and streamlining dialogue between users, design partners, and builders. This vision, however, necessitates that DAOs transcend their current status as crowded multi-signature governance schemes and gain sentience of their stakeholders, their roles and needs, and the broader ecosystem's efforts.



PrimeDAO's mission is to facilitate the wide adoption of open finance by coordinating and cultivating projects that promote safety, reliability, liquidity, and open access, while avoiding centralized appropriation of critical financial infrastructure through decentralized governance.

PrimeDAO's ecosystem aims to cultivate competent and well-funded builder teams, establish coordination mechanisms that sustain ongoing operations, and become a much-needed Schelling point for DeFi ecosystem coordination. The goal is to partner with, produce, and maintain a community-owned set of products and services that are accessible to and benefit a wide range of users.

The community's focus will be on delivering support structures that a centralized prime brokerage would otherwise provide, such as efficient order matching, guaranteed settlement, liquidity for spot trades, borrowing/lending, derivatives, leverage, and related services. These structures will reduce costs by bootstrapping fees and creating aggregated interactions that leverage economies of scale.





DeFi must rapidly advance in four key areas: (1) *liquidity*, (2) *safety*, (3) *reliability*, and (4) *governance*, and PrimeDAO will initially prioritize projects addressing issues in these critical areas:

- Liquidity should be increased and utilized more efficiently such that slippage and user experience are on par with centralized exchanges. Aggregation and layer 2 technologies available on mainnet today provide powerful tools with which to realize economies of scale.
- Smart contracts, especially those holding large amounts of funds, need to be less exploitable than centralized exchanges and must function as intended under all circumstances (e.g. network congestion, rapid market movements, etc.). Safety and confidence may improve through increased integration testing, cross-project audits, bug bounties, and insurance mechanisms.
- Price feed accuracy and transaction settlement success rates need to be on par with those of centralized exchanges. When things do go wrong, as they inevitably will, consensus decisions on remedies need to be enacted swiftly and efficiently so that mainstream users feel as confident as they would be with a centralized actor.
- As an ecosystem coordinator, PrimeDAO will govern and allocate resources towards contributors for building, auditing, and maintaining the mechanisms and products of its community. PrimeDAO aims to form a networked organization that can efficiently coordinate systemic DeFi advancement, becoming a sustainable home for DeFi builders.

Improvements in these areas work together in virtuous improvement cycles. For example, improved safety and reliability attracts users and increases trade volume, making markets more liquid and improving price stability, which can lower over-collateralization margins and eradicate whole classes of exploits by rendering them unprofitable. Conversely, a lack of improvement creates a negative feedback cycle: low liquidity can increase transaction failures and vulnerability to profitable pump and dump exploits, creating an inferior user experience that suppresses the transition of trade volume/liquidity from centralized exchanges to DEXs.

By focusing on these four critical areas, PrimeDAO will accelerate the virtuous cycle that accelerates the wide adoption of a more holistic system for decentralized exchanges, finance, and governance.



Liquidity of the Commons

One of the biggest challenges with DEXs today is a lack of liquidity for many tokens, which often results in significant trade slippage and worse prices than those of centralized exchanges (CEXs). The fragmentation of liquidity across several independent DEXs exacerbates the slippage problem. One solution to this problem is to split a large trade into smaller pieces, which are settled on different DEXs, achieving a lower overall slippage and significantly better price than just using a single DEX. This technique, which effectively makes the fragmented liquidity pools appear as a single large liquidity pool, is known as aggregation.

DEX aggregators, or smart routers, are critical infrastructure for DeFi and the Ethereum ecosystem at-large. DeFi's recent growth has dramatically increased the demand for aggregating on-chain liquidity. For example, Multi-Collateral DAI introduced multi-collateral liquidations, which increased the demand to exchange the new collateral tokens on DEXs. Selling collateral tokens on a single DEX incurs greater slippage than utilizing an aggregator. By pooling liquidity and reducing slippage, DEX aggregators make sizeable liquidations more attractive to bidders and promote a more robust marketplace for multi-collateral liquidation auctions. In general, DeFi applications whose transactions involve DEX trades will have their incentives impacted by DEX slippage and will need on-chain liquidity aggregation to maintain competitive markets.

To this end, PrimeDAO's first governed product is a DEX aggregator that provides best-price discovery, slippage reduction, and reliable settlement. It is a licensed version of the <u>Totle aggregator</u>, provided to PrimeDAO as its first governed product. From day one, the Prime Aggregator will integrate with hybrid DEXs, automated market makers (AMMs), and other DEX types. Soon after the DAO's launch, the DAO will govern the router's parameters, including its fee structure and whitelisted liquidity sources.



Safety and Reliability of the Whole

Promising work is currently underway to improve the reliability of on-chain price oracles, increase success rates of complex transactions, and disincentivize DEX front-running. However, component-level improvement does not fully address the safety and reliability problems that could arise from any combination of protocol interactions. In software development, unit testing requires complementary integration testing; and so it should be for composable smart contracts.

No one project is adequately incentivized, nor should bear the burden of investigating and solving all the possible cross-project problems that could affect the entire open finance ecosystem. We need both component-level improvements from individual projects and a coordinated effort to improve the safety and reliability of the complex transactions DeFi enables. DAOs are well-suited to coordinate systemic audits that no individual project intends to fund, and achieving that coordination will be a focus of PrimeDAO.



Products and Mechanisms

When the composability characteristic is taken into consideration, a focused and creative builder core that interfaces with a broad user community are necessary in order to create competent mass adoption products and design patterns from open finance primitives. To this end, proposals that abstract away complexity for endusers and strengthen the ties between the value-generating DeFi products and/or the PRIME token will likely be favored (See pg 15 for further details about PRIME tokens). *Token sinks*—a family of value capture mechanisms where tokens are locked or removed from circulating supply—are a strong example. We can, in general, imagine four types of proposals submitted to the PrimeDAO:

Integrations

Composability reaches its true potential when seamless interactions between protocols and contracts are integrated and maintained under strong interoperability frameworks. PrimeDAO will play a crucial role in curating and selecting proposals towards such integrations and standards creating.



Security

PrimeDAO will research and support sustainable methodologies for establishing systemic auditing patterns which survey composability attacks and inform the DeFi ecosystem towards mitigation of these risks.



Modeling & Simulations

Token engineering is an emerging field informing the creation of robust tokenomic systems. A critical component of designing with such engineering rigor is to be able to simulate prospective systems ahead of time in order to "..provide robustness against exploits, unintended consequences and cascade failures". PrimeDAO will seek partnerships with communities and providers in order to bring this discipline to the core of DeFi.

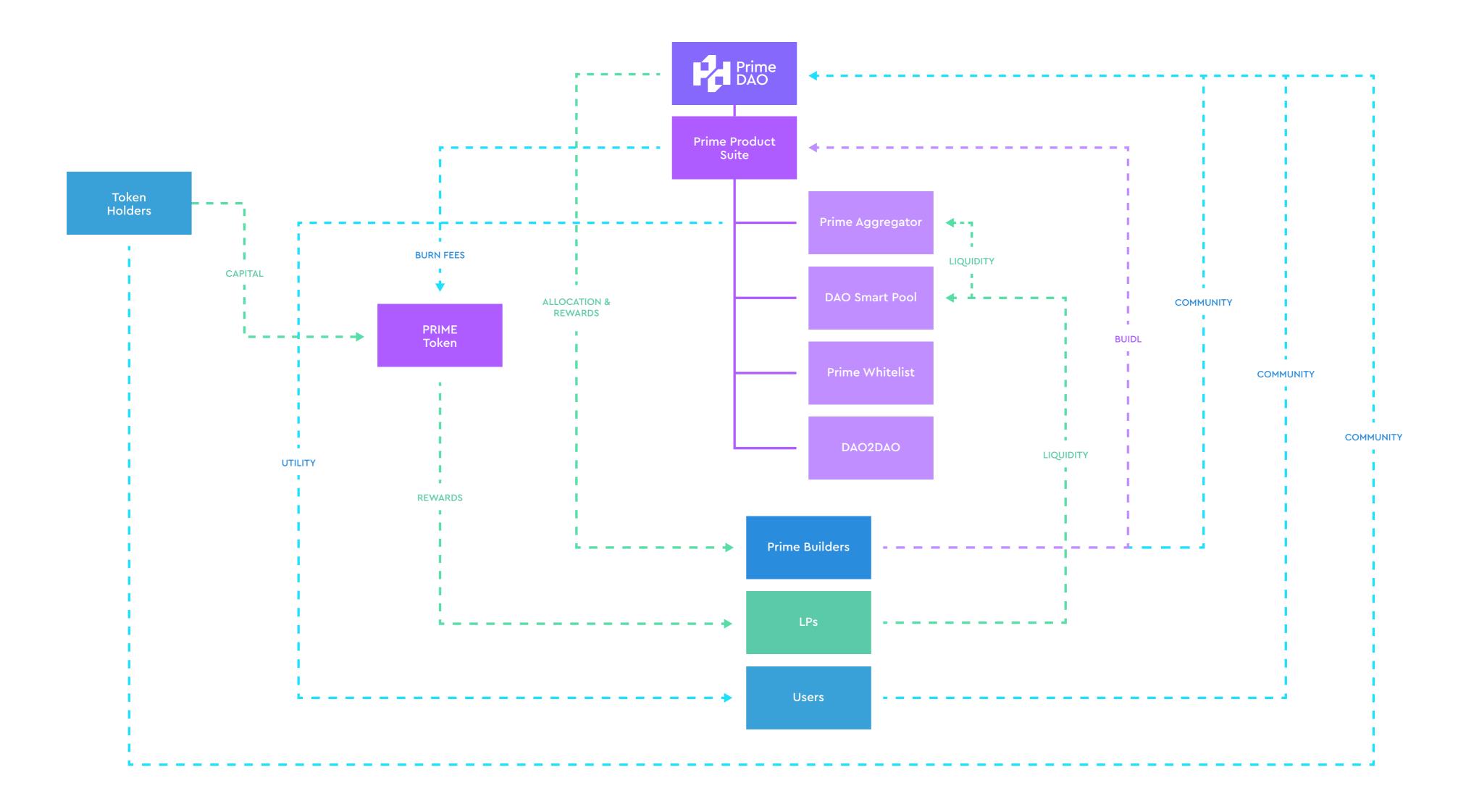


Usability & Frontend Improvements

User experience and adoption will be a significant focus for PrimeDAO. The community will allocate resources towards improvements that benefit "the last mile" DeFi adopters.

From these mechanisms and proposals, the captured value will cycle towards builder teams who continue to improve, secure, imagine, and implement new DeFi products and protocols for PrimeDAO. The DAO, as an oversight body, will approve the builder's proposals if they contribute towards PRIME's token mechanics and/or the resilience of the DeFi ecosystem. While such efforts are commonplace in the protocol layer, DAOs have yet to reap similar collective focus and experimentation.





A schematic demonstrating the flow of engagement between PrimeDAO's stakeholders and products.

Prime Aggregator

In relation to the smart router, PrimeDAO will govern a robust incentivization schema, which could include fee rebates and proof of liquidity rewards, as well as a whitelist of safe and reliable tokens and liquidity sources. To ensure that centralized interface gatekeeping is not possible, and maintain the open values of the DAO, any person or project should be able to submit a proposal to such a whitelist that automatically executes the results.

Liquidity Pool Manager

As one of its first implementations, PrimeDAO is creating a governable scheme for deploying liquidity pools on <u>Balancer Protocol</u>. This is an experimentation ground for novel ideas such as *co-farming*, where PRIME rewards and voting power are allocated to liquidity providers who stake into the DAO-governed pools, or a DeFi/DAO alliance pool: a multi-token liquidity pool which builds liquidity between project members who cooperate on joint initiatives.



DAO2DAO Interactions

A robust interface supporting DAO to DAO interactions is necessary for PrimeDAO's success as an ecosystemic coordinator. Such interactions could range from token swaps to establishing joint ventures and/or launching funding rounds such as Gitcoin that support new builder teams and enterprises. With such an interface, we can imagine fractalized DAO orders where PrimeDAO delegates or formalizes relationships with a network of sub- or partner DAOs.

DeFi Ratings and Safety Interface

In order to achieve its mission of safety and reliability, PrimeDAO will own and manage a decentralized interface providing scoring and analysis of the security of DeFi ecosystem protocols, products, and primitives.

Decentralized Hackathons

Quarterly decentralized hackathons and innovation crowdsourcing competitions are planned to stimulate and expand PrimeDAO's builder ecosystem. PrimeDAO members with voting power will be able to allocate rewards, determine the number of winners, and the share of rewards each winner receives in a trustless and fair manner.



Evolving PrimeDAO

PrimeDAO's projected development is segmented into three separate phases, each with its own characteristics, objectives, and strategies. These phases should be seen as the scaffolding of an ever-evolving strategy that guides stakeholders towards a common goal and set of principles and initiatives as means of coordination and alignment.



Current Phase: Incubation

The Incubation phase started in Q2 2020 with the creation of a PrimeDAO working group at ETHDenver and is expected to end in Q4 2020 with the launch of PrimeDAO.

In this phase, the main objective has been to create a coordination structure that can facilitate ecosystemic DeFi advancement by providing democratized prime brokerage services. This has been achieved by finding synergy between different stakeholder resources and industry needs and alignment of collective vision.

The PrimeDAO working group has consisted of a handful of stakeholders that coordinate via private group chats, private meetings and align through mutual contribution. At this stage, there has been no token involved in the coordination of resources in the DAO and no formal governance structure. To better coordinate and steward governance, a Curação-based foundation—titled *Prime Development Foundation*—has been established to support the initiation of PrimeDAO and provide the network with a legal anchor into the traditional legal world. The Prime Foundation does not own PrimeDAO or any of its products and only has a supporting and stewarding role.

The initial stakeholders have collectively created this litepaper. Once PRIME tokens have been allocated according to this litepaper, PrimeDAO will transition into its Growth phase.



Second Phase: Growth

In this phase, PrimeDAO should develop several tactical governable primitives for itself. Development of the primitives will be matched by the DAO's governance to an ecosystem of development teams according to their strengths and capabilities, with a designated team dynamically maintaining and reporting on a holistic ecosystem roadmap to all DAO stakeholders.

This Growth phase is projected to start in Q4 2020 with the deployment and launch of PrimeDAO governance and resource allocation. The PrimeDAO will utilize the Alchemy platform by DAOstack at the beginning of this phase.

During this phase, the dual primary objectives are (1) to mature PrimeDAO by expanding its suite of products, achieving much-needed economic sustainability, and (2) designing and improving Decentralized Governance and Operations specific to the needs and requirements of PrimeDAO. The former objective is expected to accelerate adoption in the DeFi space and the latter expected to require DAO fractalization and delegation mechanisms. These mechanisms include the capacity to designate and deploy sub-DAOs and joint DAO ventures, form nested organizational hierarchies, and allocate funding and/or special governance privileges to designated administrators.

At the start of this phase, PrimeDAO will launch its first product, primedao.eth/trade, a DEX aggregator leveraging Totle's smart routing technology. Afterwards, PrimeDAO's community can decide on other promising DeFi value-add models that contribute to the advancement of open finance and strengthen PrimeDAO.

At this stage, PrimeDAO now consists of a broad network of independent stakeholders that coordinate publicly and transition value through PRIME tokens. In this phase, the function of the Prime Development Foundation will be limited, and the vast majority of interactions will be executed directly by PrimeDAO and its consortium of decentralized actors. All infrastructure, including the smart contracts, will become increasingly decentralized during this phase.

Once stakeholders have agreed to the specification of a new PrimeDAO governance and tokenomics for the next phase—including the speculative initiation of a continuous fundraising mechanism, such as a PRIME bonding curve—the network will transition to its Maturity phase.

Final Phase: Maturity

The Maturity phase is projected to start in Q1 2022 with the launch of a native PrimeDAO backed by on-chain governance and fully integrated tokenomics.

Through continuous improvement, PrimeDAO should continue to evolve into a global decentralized autonomous organization that can self-fund, self-govern and self-organize. At this point, PrimeDAO should govern a network of decentralized financial applications and interfaces that allows anybody—without being limited by a lack of resources of any kind—to be able to utilize and benefit from PrimeDAO's integrated financial offering. PrimeDAO, as a public good, will help improve coordination and effective use of resources and contribute significantly to a more thriving global society.

The 'completion' of the Maturity phase depends on the state of the industry and evolution of PrimeDAO, however specific cryptoeconomic simulation tools such as CADCAD can help create models to determine when PrimeDAO has reached a point of resiliency and economic sustainability.



Tokenomics

Token economics has proven to be a powerful design tool to facilitate resource coordination, exchange of value, and stakeholder alignment in decentralized ecosystems. Recent successes of token driven projects, such as YFI, have showcased the effectiveness of robust tokenomic designs. Huge operational efficiency can be gained by aligning PrimeDAO's structure, governance methods, and actors with PRIME tokens.

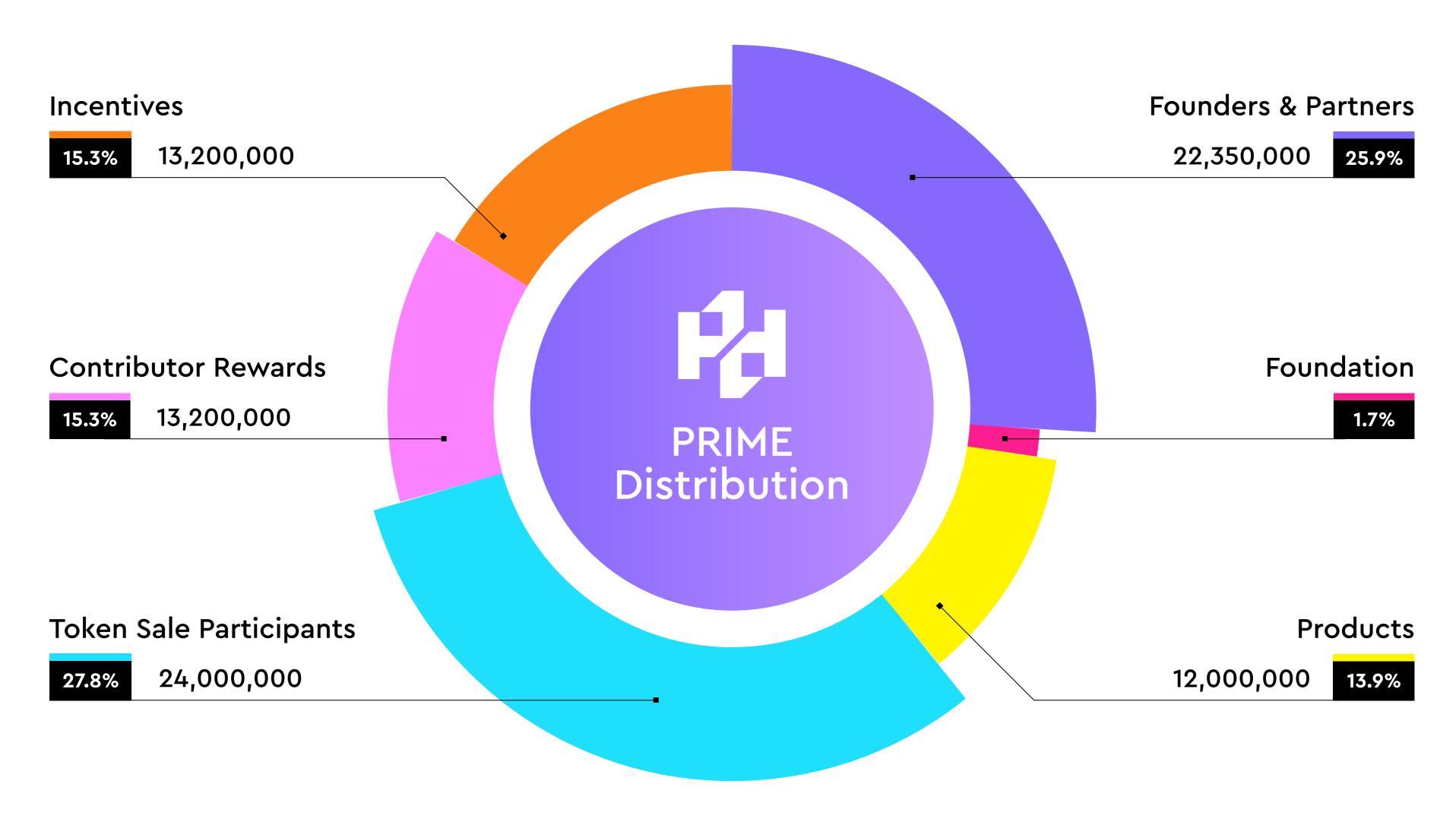
At its genesis, PrimeDAO will be deployed on the DAOstack framework and follow a dual-governance design. PRIME functions as a utility and reward token in PrimeDAO, and REP, a non-transferable governance right, is utilized for PrimeDAO's governance. By separating voting power from utility, PrimeDAO is positioned more effectively to reward and align contributors according to their appetite.

Patrons of PrimeDAO will be able to earn PRIME and REP according to standards that will be defined collectively by PrimeDAO. The current tokenomic design aims to optimize for resource effectiveness, stakeholder alignment, and optimal wealth created for all DeFi users. The token design introduced in this litepaper is by no means final and is likely to evolve as PrimeDAO progresses towards maturity.



Token Distribution

PRIME, PrimeDAO's utility token, will initially be limited to a total supply of 90M distributed over multiple stakeholder groups. The strategy behind this initial allocation is anticipated to provide sufficient resources for PrimeDAO to reach the Maturity phase. Note that this distribution is still subject to change based on the decisions taken by PrimeDAO in the Incubation stage.



Illustrated above is a visualization of the distribution of the PRIME token distribution. The PRIME token will have a maximum market supply of 90M tokens, which will be distributed to various stakeholders based on their contributions.

Founders and Partners (Early contributors)

A total of 22,350,000 PRIME tokens (25.9%) will be allocated to early-contributors and launching partners who have invested time, energy and funds during the Incubation phase and have an active role during the Growth phase of PrimeDAO. The amount allocated to each of the contributing groups is dependent on their past commitment and responsibility during the Growth phase. All early contributor tokens are vested for one year with a continuously linear release schedule.

Prime Development Foundation

The Prime Development Foundation, a Curação-based foundation mandated to support the initiation and development of PrimeDAO, will receive 1,500,000 PRIME tokens to be able to provide support services to PrimeDAO and to cover expenses for two years. 500,000 of the Foundation's PRIME tokens are unlocked, while the other 1,000,000 are locked for one year.



Token Sale Participants

Up to 24,000,000 PRIME Tokens (27.8%) will be distributed to PrimeDAO Token Launch participants. These tokens will not be vested and can freely move after the launch. Alternatively, they can be locked to acquire additional voting power in PrimeDAO. Details on the Token Launch will be communicated shortly via PrimeDAO communication channels found in this litepaper.

Contributor Rewards

Up to 13,200,000 PRIME Tokens (15.3%) are reserved for Contributors and awarded if they provide valuable commitment to the development of PrimeDAO during the Incubation and Growth phases. Contributions could include developing Prime products and tools, technical audits, evangelism, research, good governance or any other contribution deemed valuable by PrimeDAO. Contributor Reward tokens issued during the Growth phase may or may not include vesting schedules—this is up to PrimeDAO's community to decide.

Incentives

Up to 13,200,000 PRIME Tokens (15.3%) are reserved for product users as incentives for protocol usage and community engagement. Following the token launch, a Balancer pool will be created to incentivize market makers for providing liquidity and additional price discovery for PRIME tokens. Up to 1,200,000 PRIME tokens will be distributed via this initial liquidity reward scheme. Further incentive mechanisms have been conceptualized—such as liquidity rewards for Prime Aggregator users—however; it's up to PrimeDAO to ultimately decide which mechanisms are most valuable for PrimeDAO stakeholders and should be implemented.

Products

Up to 12,000,000 PRIME Tokens (13,9%) are reserved to providers of early PrimeDAO products and licences acquired by PrimeDAO. This includes the purchase of a license of Totle's liquidity routing engine. Product tokens are vested for two years with a continuously linear release schedule.

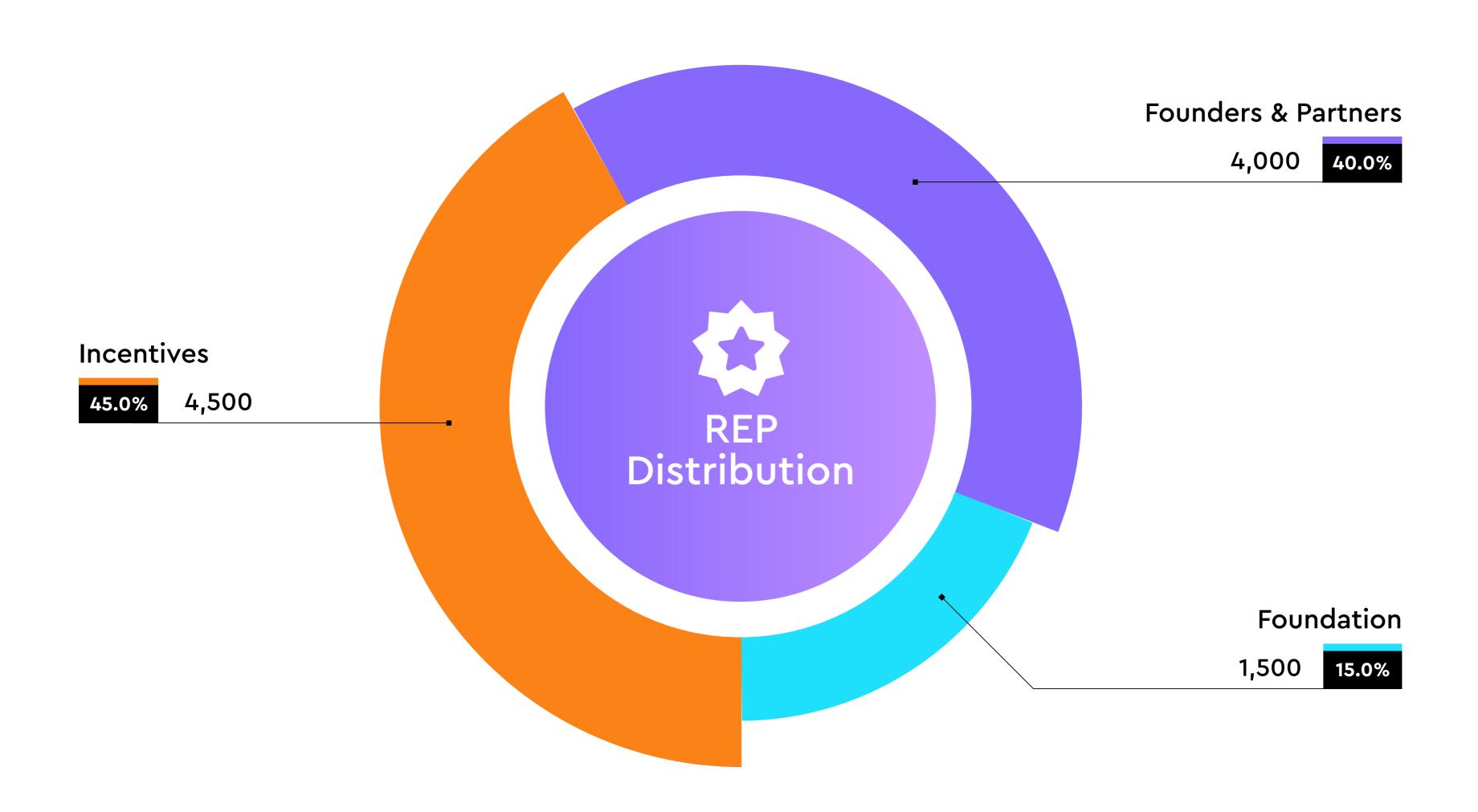


Governance Rights Distribution - REP

In order for PrimeDAO to become an adoption engine for open finance, good governance is crucial. DAOs are unique in their ability to leverage Web 3 primitives, such as open access, tokenomics and smart contract programmability to provide an effective environment for multi-stakeholder coordination. By design, DAOs benefit from decentralized governance as the diversity of participants and voices increases the resiliency of the organization and contributes to a strong fit between different stakeholder groups.

PrimeDAO will initially practice <u>Holographic Consensus</u>—a governance mechanism native to DAOs powered by DAOstack that streamlines the attention of the collective. Central to Holographic Consensus is Reputation (REP), non-transferable voting rights used for voting on proposals. Reputation can be earned by contributing to the development of PrimeDAO. Similarly, through proposals, PrimeDAO may slash REP from stakeholders in case of misalignment or malicious behavior towards the whole.

The initial REP distribution is based on merit and optimizes for good governance, vision alignment, and stakeholder cooperation. Initially, 5,500 REP will be distributed at the launch of the DAO, with large REP inflation shortly thereafter for stakeholders who lock their PRIME tokens. Further distribution will be governed collectively by the PrimeDAO REP holders and is only possible through governance proposals.



Visualization of the planned PrimeDAO REP distribution for the first part of Phase 1.



Founders and Partners (Early contributors)

The early Contributor group, to consist of approximately 50 individuals from 8+ different teams, will receive voting rights from an initial pool of 4000 REP that is divided according to past contributions and assumed Growth Phase responsibilities to help ethically and strategically steer PrimeDAO during its infancy.

Prime Development Foundation

The Prime Development Foundation operates two-of-three multi-signature wallets and is mandated to provide support to help initiate PrimeDAO. Based on this mandate, the Prime Development Foundation will receive 1500 REP to help practice good governance. Unlike other contributors, the Foundation will not attempt to gain further voting power beyond its initial assignment of 1500 REP. In other words, PrimeDAO will progressively decentralize away from its involvement as REP is inflated and earned by Growth-stage contributors.

Locking PRIME for REP

Following the launch of PrimeDAO, PRIME holders will be able to lock their tokens to earn up to 4,500 REP proportional to the amount and time of tokens locked. Additional details regarding this mechanic will be provided through PrimeDAO's communication channels as its Q4, 2020 on-chain launch approaches.