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ONCHAIN CAPITAL ALLOCATION

HANDBOOK

Allo.Capital

Allo.Capital (founded by Kevin Owocki + Rena O'Brien) is dedicated to funding what matters in the 21st century. We are building a network of thinkers, hackers, and doers, figuring out how to allocate capital in the 21st century. We are building an internet that uses next-generation technologies to fuel collective action in the 21st century.

We believe that education is a core component of building this network, and have helped to sponsor some amazing resources. Check them out:

2024	Exploring MycoFi - Mycelial Design Patterns for Web3 & Beyond	Jeff Emmett Jessica Zartler
2024	Onchain Capital Allocation: Innovators Edition	Kevin Owocki
2024	Onchain Capital Allocation: Explorers Edition	Kevin Owocki
2025	Grassroots Economics: Reflection and Practice	William Ruddick
2025	Ethereum Localism: Grounding the future of Coordination	Open Machine
2025	AI x Onchain Capital Allocation	Kevin Owocki
2025	Abundance Networks: Winning in the Community Economy	Kevin Owocki
2025	Pathways to Regeneration: Hope and Resilience through Anticipatory Design	Scott Morris Stephen DeMeulenaere

You can download these books (or order a print copy) at **https://allo.capital**

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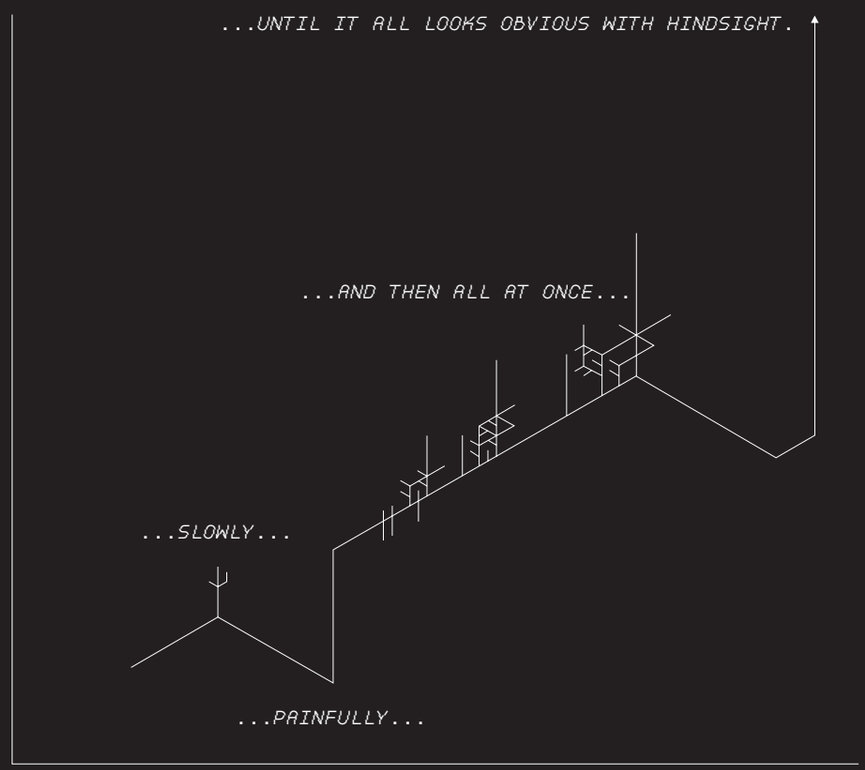

MAY WE FUND WHAT MATTERS...

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INTRODUCTION

Welcome to the second edition of "Onchain Capital Allocation HandBook,". This book is an accessible exploration of the rapidly evolving landscape of resource distribution in both traditional and blockchain-based systems. Our goal is to empower the creators of systems aimed at collective impact and to assist organizations in selecting the most suitable models by offering real-world implementations and adaptations.

This book builds on its predecessor, offering a more interconnected view of capital allocation with diverse themes and models. In addition to funding mechanisms, it includes governance and cooperative strategies. Governance tools like multi-signature wallets and voting systems ensure fair management of decentralized organizations, while cooperative mechanisms provide frameworks for shared ownership and equitable capital flows. These pages offer valuable insights for developers, grant operators, and anyone intrigued by the future of capital allocation.

We've curated a rich tapestry of capital allocation methods, from time-tested traditional models to cutting-edge blockchain innovations, offering a comprehensive look at how resources can be distributed more effectively and transparently in both conventional and onchain systems.

INSIDE, YOU'LL DISCOVER

Funding mechanisms	A diverse array of funding mechanisms, from AutoPGF to Harberger Taxes.
Governance structures	Governance structures underpinning effective resource management in decentralized systems.
Cooperative models	Cooperative models breathe new life into collaborative economic approaches.
Real-world applications	Real-world applications showcasing these concepts in action.

Are you ready to embark on this journey of discovery? Let's dive in and explore the fascinating world of onchain capital allocation together. As we progressively elaborate this infinite garden, we are discovering a future where a plurality of capital allocation mechanisms coexist and thrive.

allobook.gitcoin.co

For more tools and resources to explore onchain capital allocation, visit https://allobook.gitcoin.co/. There, you'll find innovative solutions to help implement secure, efficient, and transparent capital distribution systems, empowering you to bring the strategies in this book to life.

WHY ONCHAIN CAPITAL ALLOCATION?

Every time you make a decision about how to spend money, you are allocating capital. At scale, venture capitalists and grant administrators allocate billions of dollars in capital yearly.

The internet transformed how information is routed in society, fundamentally altering everything that relies on information (such as news, entertainment, and social media). Now, with the advent of blockchains, there is an opportunity to transform how society routes value, which could fundamentally change how we allocate capital. Now that we can program our values into our money, can we build resource allocation networks that better serve their constituents?

Onchain capital allocation represents a transformative shift from traditional, centralized methods of resource distribution. This shift is crucial because it breaks down long-standing barriers to capital access, empowering communities to take charge of resource allocation and aligning incentives toward collective, positive social outcomes. By embracing decentralized mechanisms, we enter an era where financial decisions are no longer confined to gatekeepers, and resource distribution becomes more democratic and equitable.

Innovations in the onchain era, including many mentioned in this book, are poised to revolutionize how public goods and regenerative projects are funded. These mechanisms leverage blockchain's trustless, transparent nature to bring a new level of efficiency and fairness to capital allocation.

For example, Quadratic Funding allows small individual donations to have a large impact by amplifying the collective contributions of many, while Retro Funding rewards impactful work after it has been demonstrated, ensuring that the best ideas receive resources based on widespread perceptions that they provide value. Onchain approaches to capital allocation enable communities to collectively decide where resources are most needed.

The opportunity size of onchain capital allocation cannot be overstated. Traditional capital allocation systems route $trillions, yet often suffer from inefficiencies, opaque decision-making processes, and limited access to capital for those outside elite decision making networks. By leveraging blockchain technology, decentralized systems enable a more inclusive and community-driven process. They align financial incentives with positive social outcomes, creating resilient ecosystems where resources are directed toward public goods that benefit the many, not just the few. By empowering communities to take ownership of capital distribution, these systems foster innovation, collaboration, and long-term sustainability.

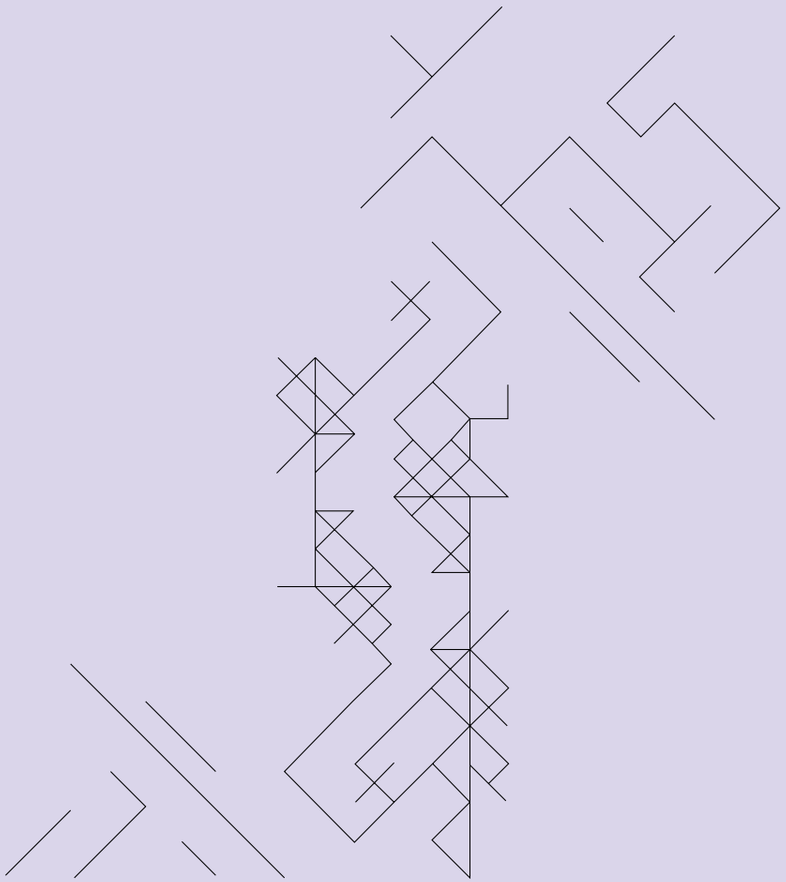
This book focuses on practical, real-world mechanisms for implementing decentralized capital allocation. It delves into the design space of emerging mechanisms like Buidl Guild Streams, LottoPGF, and other innovative models, offering a comprehensive guide for individuals and organizations looking to ex-

plore and experiment with these tools. By providing a hands-on approach, the book encourages readers to actively engage with these mechanisms, experimenting and contributing to the broader decentralized movement. It serves as both a guide and a call to action, inviting readers to become part of the next frontier in capital allocation—one where transparency, fairness, and community empowerment are at the core.

As you explore the concepts and case studies in this book, you are invited to contribute to a growing ecosystem of hackers, dreamers, and doers that seek to reimagine how capital can be distributed better in the onchain era. This is more than just a theoretical exploration; it's a movement focused on making tangible, lasting change through onchain capital allocation. Together, we'll uncover the next horizon of capital allocation, sharing our findings and effectively traversing this new landscape.

To get learn more or to get involved, checkout this books companion sites at https://allobook.gitcoin.co/ and https://allo.expert/.

FUNDING *MECHANISMS*

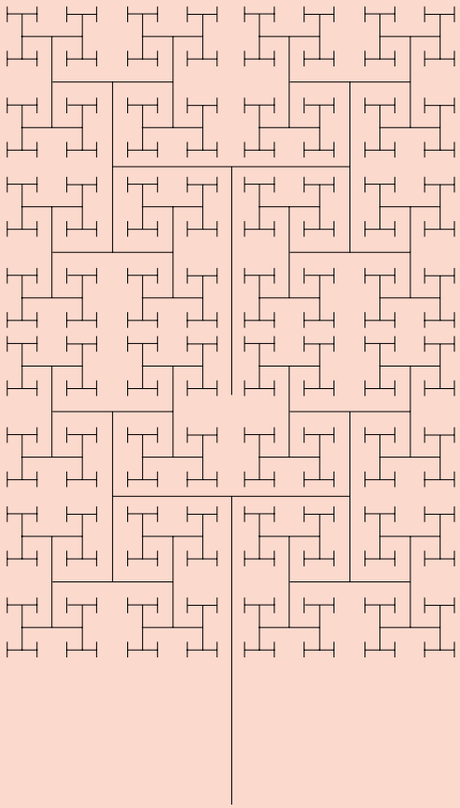


This section presents a range of methods for distributing resources and capital, both within and outside blockchain environments. From novel blockchain-native approaches like AutoPGF and LottoPGF to adaptations of traditional models such as Social Impact Bonds and Participatory Budgeting, these mechanisms offer diverse strategies for capital allocation. By exploring these varied approaches, readers can gain a broad understanding of funding possibilities in the evolving landscape of onchain and decentralized systems, informing potential applications in their own projects or research.

FUNDING MECHANISM

PARTICIPATORY *BUDGETING*

01



Benefits

1. Transparency
2. Wider Inclusion
3. Accountability

Limitations

1. Budgetary Challenges
2. Avoiding capture
3. Complex long-term planning

TL;DR

PIONEERED BY PORTO ALEGRE'S WORKERS' PARTY

View on Allo.Expert

Participatory Budgeting serves as a capital allocation funding mechanism by enabling community members to directly decide how a portion of public funds is distributed.

This process was pioneered in 1989 when Porto Alegre's Workers' Party introduced a democratic process that empowered residents to actively participate in the allocation of public funds, particularly focusing on supporting disadvantaged neighborhoods.

WHO SHOULD USE IT?

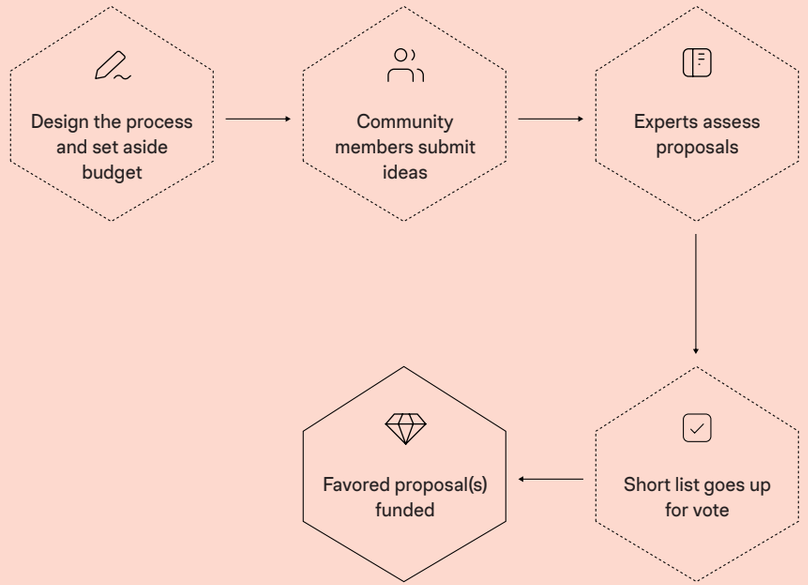
Participatory Budgeting is best suited for municipalities, communities, and organizations that want to empower their members in the decision-making process regarding public spending.

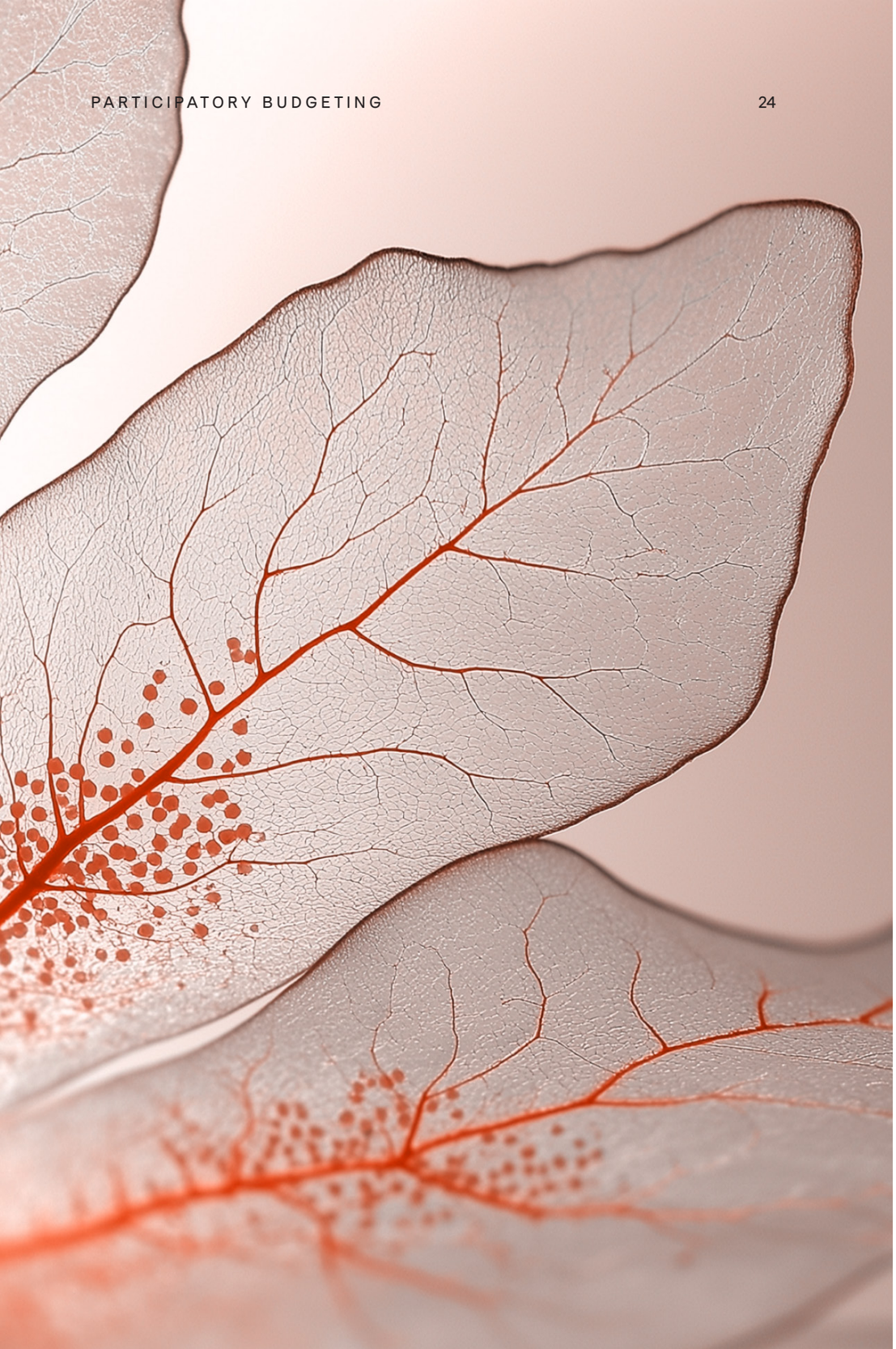
FUNDING STRATEGY

The participatory budgeting funding strategy focuses on allocating a specific portion of a public or organizational budget directly to the community for decision-making. This method allows community members to propose and vote on projects they believe will enhance their neighborhoods, ensuring that funding aligns with local interests.

HOW DOES IT WORK?

The participatory budgeting process starts by allocating funds, usually from municipal or organizational budgets, and inviting community members to submit their ideas. This process involves several stages. First, community members propose projects they believe will address local needs. These proposals are then assessed for feasibility by experts or city officials to ensure realistic implementation. After refinement, the projects are presented to the public for voting. Residents vote on the proposals, and the most favored ones receive funding. This approach ensures that public spending reflects community priorities, promoting transparency and active civic engagement. It not only democratizes the budgeting process but also builds transparency and trust by allowing citizens to directly influence how funds are allocated.



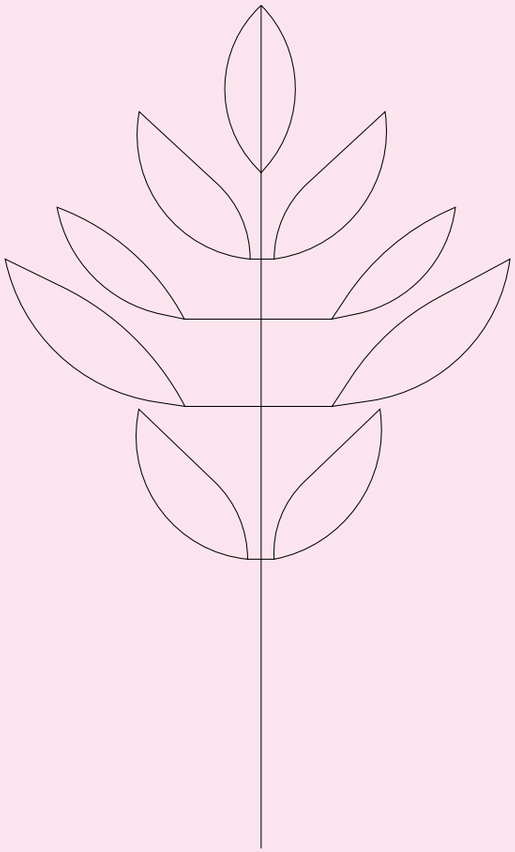


WHAT SETS IT APART?

Community-Driven Decision Making	Participatory budgeting gives residents direct power to propose and vote on how public funds are allocated, ensuring the process reflects local needs and priorities.
Transparency and Accountability	The entire budgeting process is open, allowing citizens to track the progress of proposals, vote outcomes, and how funds are spent, fostering trust between the community and governing bodies.
Inclusive Civic Engagement	By involving all community groups in the decision-making process, participatory budgeting promotes active participation and ensures that diverse voices are heard in shaping the allocation of public resources.

BOUNTIES

02



Benefits

1. Lowering costs
2. Quick deliverables
3. Attracting talent

Limitations

1. Long-term commitment
2. Quality control challenges
3. Management overhead

TL;DR

POPULARIZED BY HUNTER AND READY, NETSCAPE COMMUNICATIONS CORPORATION

Bounties function as a capital allocation mechanism by offering rewards for completing specific project tasks, facilitating decentralized crowdsourcing and efficient resource allocation.

Notable early adopters include Hunter and Ready, who launched the first known bug bounty initiative in 1983. Netscape Communications Corporation followed in 1995 with a widely recognized bug bounty program. This program set a precedent for using bounties to improve software security and quality. Since then, bounties have evolved and are now widely adopted by web3 projects, open-source initiatives, and decentralized organizations to incentivize contributions across various fields, including development, marketing, and governance.

View on Allo.Expert

WHO SHOULD USE IT?

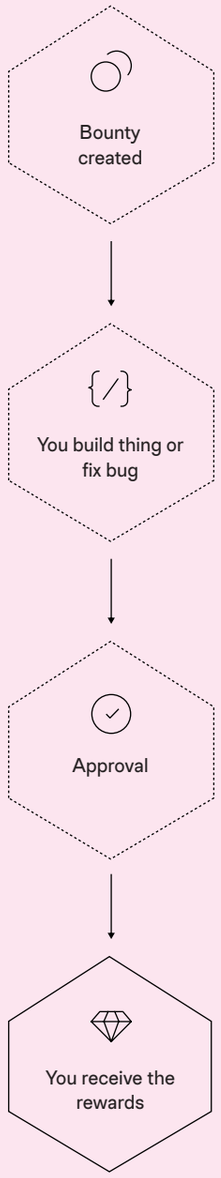
This mechanism is particularly beneficial for software developers, open-source projects, and various protocols. Widely adopted in open-source development and illustrated by prominent web3 projects, this model effectively channels resources into solving specific issues and constructing project infrastructure.

FUNDING STRATEGY

Bounties are reward-based mechanisms designed to incentivize the completion of specific project tasks, with funding released upon the approval of deliverables. While commonly associated with hackathons, bounties also operate independently, offering flexibility in capital allocation and engagement across a wide range of projects.

HOW DOES IT WORK?

Bounties are created when a project identifies specific tasks and issues Requests for Proposals (RFPs) for their completion. Participants complete these tasks, known as bounties, and receive compensation upon approval. Common types include bug bounties, which focus on fixing vulnerabilities, and general bounties, which encourage new features or contributions. This approach allows projects to allocate resources efficiently, ensuring that funds are directed toward specific outcomes and contributors are compensated only after successfully delivering on tasks.

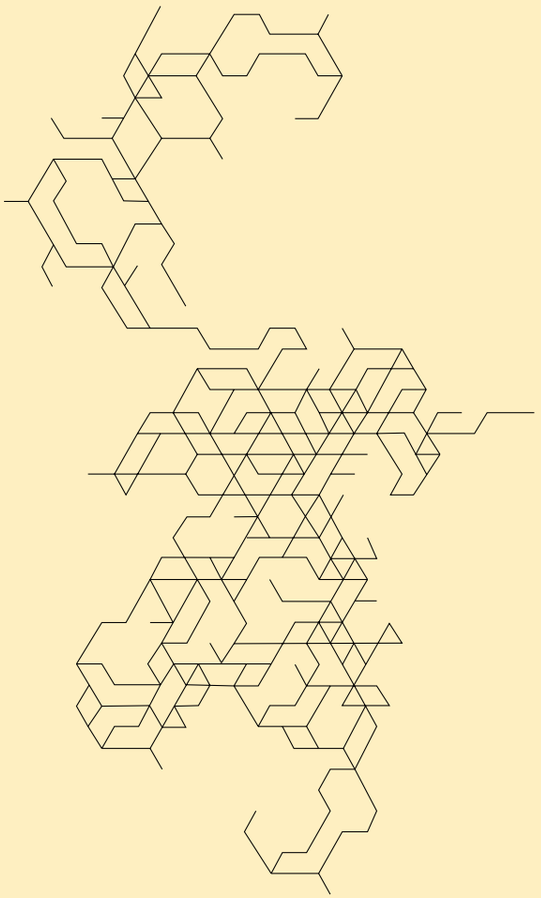


WHAT SETS IT APART?

Crowdsourcing Talent	These models allow valuable contributors and sought-after talent to engage with projects and protocols without the need for long-term commitments.
Efficient Budget Allocation	The format enables precise, task-specific funding rather than fixed salaries, directing resources to project vulnerabilities.
Reduced Overhead	The combination lowers project costs and minimizes unnecessary spending by streamlining resource allocation.

BLOCK *REWARDS*

03



Benefits

1. Rewarding validators
2. Network growth
3. Sustainable flywheel

Limitations

1. Contributor's barrier to entry
2. Energy consumption (in PoW)
3. Potential centralization

TL;DR

ORIGINATED BY SATOSHI NAKAMOTO

Block rewards function as a funding mechanism by incentivizing network participants, like miners, with tokens for validating transactions and securing the blockchain.

Introduced by Satoshi Nakamoto in 2009 for Proof-of-Work (PoW) systems, block rewards give miners transferable tokens as compensation for validating transactions and securing the blockchain. This mechanism, now also used in Proof-of-Stake (PoS) systems, helps sustain ecosystem growth and fosters community-driven engagement.

View on Allo.Expert

WHO SHOULD USE IT?

This mechanism is ideal for developers building decentralized protocols, those overseeing mining or staking systems, and node stakers seeking to earn rewards by supporting network security and validation. It's particularly suited for decentralized networks aiming to maintain security and incentivize participation.

FUNDING STRATEGY

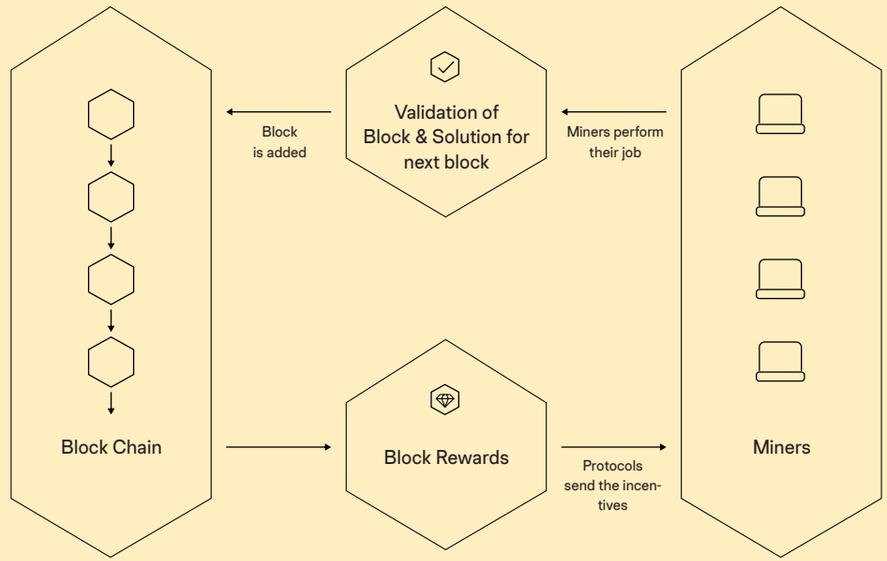
In the block reward mechanism, cryptocurrencies are allocated to miners or validators based on their contribution to block validation. The first to validate a block receives the reward, incentivizing swift and accurate network participation.

HOW DOES IT WORK?

In blockchain networks, transactions are grouped into blocks. In Proof-of-Work (PoW) systems, miners use computational power to solve complex mathematical problems that validate and secure these transactions. Proof-of-Stake (PoS) networks, like Ethereum 2.0, Polkadot, and Cosmos, use token staking instead of computational power for validation.

The first miner or validator to successfully validate a block is rewarded with cryptocurrency. Block rewards typically decrease over time through “halving” events, reducing inflation. Some networks, like Ethereum post-EIP-1559, implement more complex models combining fee burning, staking, and reduced issuance.

In Proof-of-Stake (PoS) systems, rewards extend beyond block validation to include transaction fees and newly minted tokens. These rewards are sometimes divided between validators and a community treasury, which funds ecosystem development. Governance mechanisms, sometimes involving token-holder voting, oversee the allocation of treasury funds.

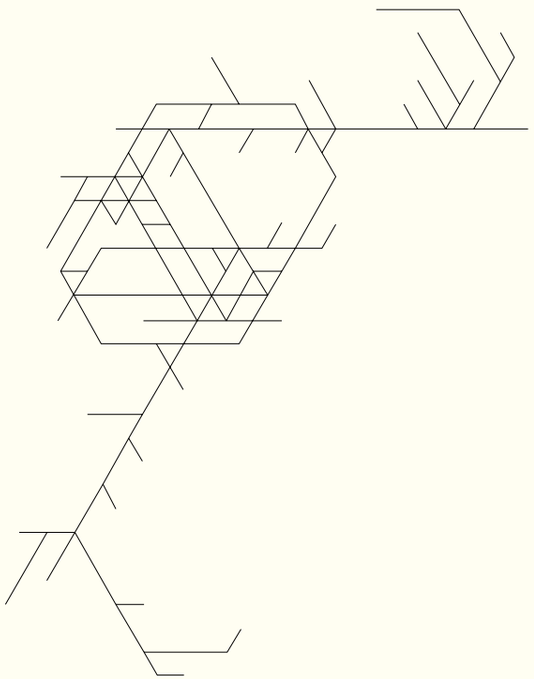


WHAT SETS IT APART?

Automated Incentive Structure	This mechanism automatically incentivizes network maintenance and security through built-in rewards.
Early Contributor Incentives	Higher initial rewards encourage early participation, highlighting the value of early contributors.
Adaptive Reward Model	Rewards typically decrease over time, promoting long-term sustainability and aligning with network maturity.

EIP 6969

04



Benefits

1. Sustainable Developer Compensation
2. Automated and Transparent
3. Encourages Infrastructure Development

Limitations

1. Reliance on Contract Usage
2. Complex Implementation on Layer 2
3. Limited to Developer Contributions
4. Goodharts Law

TL;DR

INTRODUCED BY KEVIN OWOCKI AND ZAK COLE

View on Allo.Expert

EIP-6969 incentivizes continuous development and maintenance of decentralized infrastructure by rewarding smart contract deployers on L2 networks with revenue when their contracts are used.

First introduced by Kevin Owocki and Zak Cole and proposed in May 2023, the mechanism was inspired by the Contract-Secured Revenue (CSR) model used on the Canto blockchain.

WHO SHOULD USE IT?

EIP-6969 is ideal for Ethereum-based projects, DAOs, and Layer 2 protocols. By offering a transparent and continuous compensation model, it ensures developers are rewarded for their contributions to infrastructure, making it a valuable tool for incentivizing long-term development and maintenance.

FUNDING STRATEGY

EIP-6969 introduces a smart contract-based revenue-sharing mechanism, allowing developers to receive a portion of gas fees generated through interactions with their contracts. This approach directs resources toward infrastructure growth, compensating developers based on real usage rather than speculative funding models.

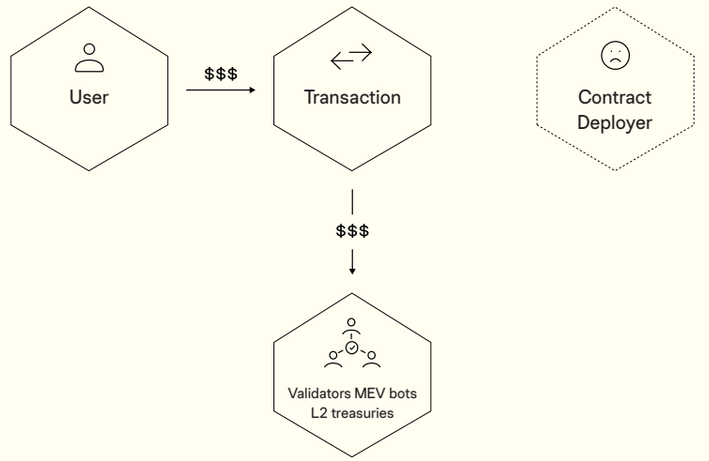
HOW DOES IT WORK?

Upon deploying a smart contract, a developer's address is linked to it. Each time a user interacts with the contract, a percentage of the gas fees is automatically allocated to the developer, proportional to the execution time spent within the contract. This system encourages ongoing infrastructure improvements while reducing administrative complexity. In more advanced constructions, the revenue rights can be tokenized and then traded or split between multiple developers.

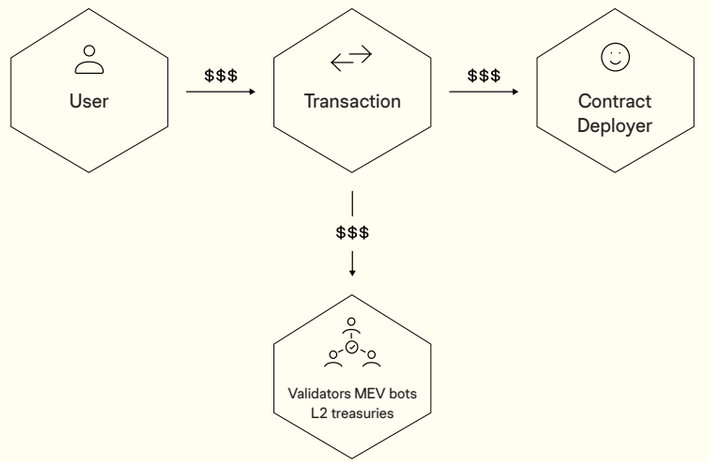
WHAT SETS IT APART?

On-chain Transparency	EIP-6969 utilizes Ethereum's blockchain to guarantee transparency in revenue distribution, ensuring developers are compensated based on actual contract usage.
Standardization	It offers a unified framework for rewarding developers across Layer 2 projects, promoting sustainable development practices.
Automated Payouts	Gas fee distribution is handled by smart contracts, streamlining payouts and minimizing administrative overhead, while ensuring developers are paid promptly.

Before EIP 6969

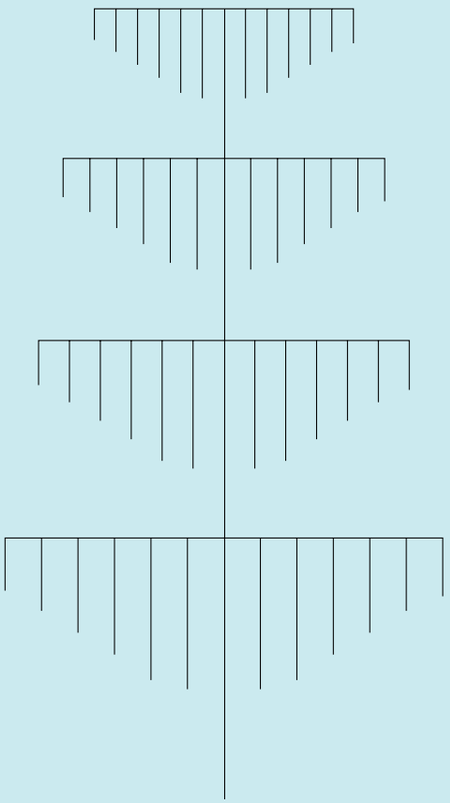


After EIP 6969



AUTO PGF

05



Benefits

1. No-cost funding
2. Low effort
3. Novel funding source

Limitations

1. Limited returns for funders
2. Dependency on protocol success
3. Complex implementation

TL;DR

PIONNERED BY MAREK OLSZEWSKI, GLO DOLLAR

AutoPGF (Automated Public Goods Funding) is a set of mechanisms that fund public goods automatically, such as through yields generated from protocol or token interactions.

Coined by Marek Olszewski in 2024, AutoPGF simply means automatic public goods funding. AutoPGF utilizes revenue from network activities to support ecosystem development. The idea gained traction as projects like Glo Dollar (a stablecoin that uses its yield to fund public goods) or Octant (a group of ETH stakers that distribute their funding to public goods) began to appear and grow.

AutoPGF creates a funding flywheel where protocol usage directly supports public goods, aiming to address sustainable funding challenges in blockchain ecosystems. It enables users to indirectly contribute to ecosystem growth through their regular onchain activities.

View on Allo.Expert

WHO SHOULD USE IT?

This mechanism is ideal for blockchain protocols and decentralized applications (dApps) that want to contribute to ecosystem growth and sustainability. It's particularly suited for protocols with consistent user activity and revenue generation.

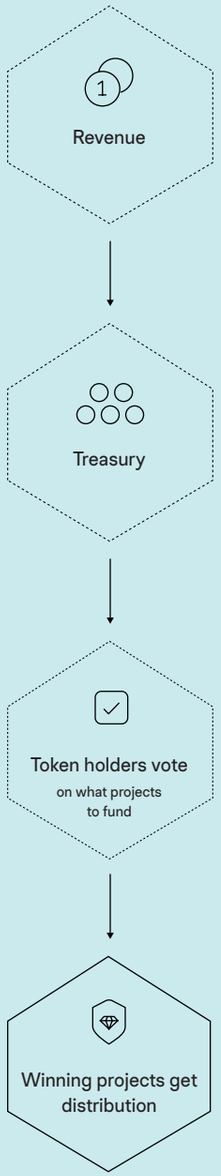
FUNDING STRATEGY

AutoPGF channels a portion of protocol revenue directly to public goods projects. This revenue comes from normal user activities. The key idea is creating a feedback loop: as public goods improve the ecosystem, more users engage with the protocol, generating more funding for public goods.

HOW DOES IT WORK?

AutoPGF generates revenue through fees or yields as users interact with the protocol (trading, staking, etc.). Instead of becoming profit, a portion of this revenue goes into a treasury for ecosystem public goods funding.

How is this capital then allocated? While this varies, a common construction is that the community, often token holders, votes on which projects to fund. This process happens automatically, creating a link between protocol usage and ecosystem development. Users support public goods simply by using the protocol, without additional costs. The system aims to create a sustainable funding cycle: more usage leads to more funding for public goods, potentially driving further protocol adoption.



AN EXAMPLE AUTOPGF MECHANISM

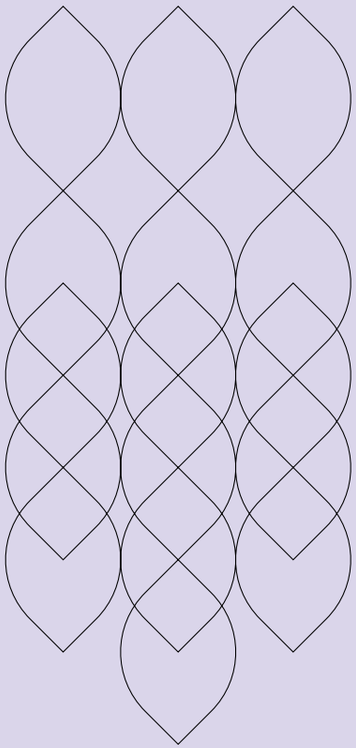
WHAT SETS IT APART?

Automated Yield Allocation	AutoPGF automatically directs a portion of protocol yields or fees to public goods funding, eliminating the need for manual donations.
Usage-Driven Funding	The amount of funding for public goods scales directly with protocol usage, creating a self-reinforcing ecosystem growth mechanism.
Governance-Enabled Distribution	Token holders or community members can participate in deciding which projects receive funding, aligning resource allocation with ecosystem needs.

FUNDING MECHANISM

QUADRATIC *ACCELERATOR*

06



Benefits

1. Guaranteed liquidity
2. Anti-rug pull measures
3. Sybil resistance

Limitations

1. Limited to pre-token projects
2. Regulatory uncertainty
3. Complexity for new users

TL;DR

DEVELOPED BY JUSTICE CONDER, TAMARA HELENIUS, AND GRIFF GREEN THROUGH GIVETH AND COMMONS STACK COLLABORATION

Quadratic Accelerator (Q/ACC) functions as a capital allocation mechanism by combining Quadratic Funding (QF) and Augmented Bonding Curves (ABC).

- QF allows small individual donations to have a large impact by amplifying the collective contributions.

- A bonding curve is a mathematical formula that determines the price of a token based on its supply, typically increasing the price as more tokens are issued or purchased.

Q/ACC was developed in 2024 to address challenges in securing chain commitment and fair token distribution. The combination of QF and ABC creates token launches with built-in liquidity, passive revenue streams, and default token utility.

View on Allo.Expert

WHO SHOULD USE IT?

Web3 projects see fair, sustainable token launches without VC dependence. This strategy is ideal for teams wanting to avoid high tokenization costs, focus on development, and prioritize transparent, community-focused growth with equitable token distribution.

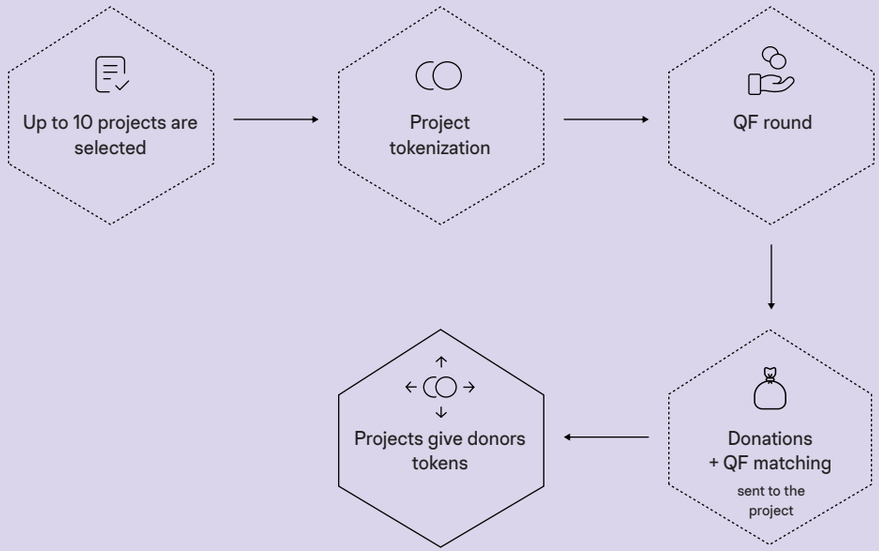
FUNDING STRATEGY

The Q/ACC funding strategy uses Augmented Bonding Curves to create initial liquidity and stabilize token prices from the start. It then leverages Quadratic Funding rounds to emphasize broad participation rather than concentrating funds from a few large investors.

HOW DOES IT WORK?

The Augmented Bonding Curve (ABC) provides initial liquidity by locking funds into a curve that sets token prices based on supply, ensuring price stability in the early stages. This is followed by QF rounds, where community donations are matched, prioritizing broad participation over total funds raised. This ensures that resources are broadly distributed to projects with strong community backing.

In addition to facilitating fair token distribution, the Q/ACC model generates passive revenue streams through continuous market interactions. It aligns the interests of the project and its supporters, encouraging long-term commitment and sustainable growth. This mechanism is ideal for web3 projects focused on building equitable, community-driven growth with a sustainable financial foundation.

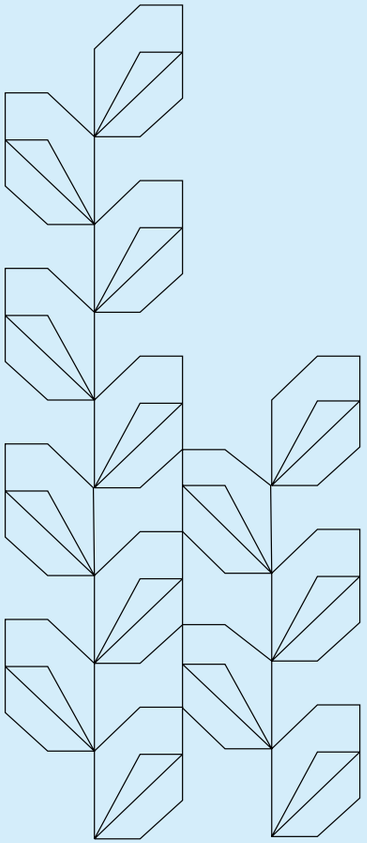


WHAT SETS IT APART?

Built-in Liquidity	Unlike other funding mechanisms, Q/ACC integrates Augmented Bonding Curves (ABC), creating immediate liquidity for tokens while establishing a price floor and ensuring stability from the start of the project.
Community-Centric Funding	By leveraging Quadratic Funding (QF), Q/ACC emphasizes broad-based community participation. This ensures that projects with more individual backers receive greater support, promoting fairness over capital concentration.
Long-Term Growth Alignment	Q/ACC aligns the incentives of the project team and the community, encouraging ongoing engagement and support, which contrasts with mechanisms focusing on short-term gains.

BUIDLGUIDL STREAMS

07



Benefits

1. Transparency
2. Verification
3. Recognition

Limitations

1. Capped Withdrawals
2. Users or forks end metrics too open-ended
3. Trust-based system

TL;DR

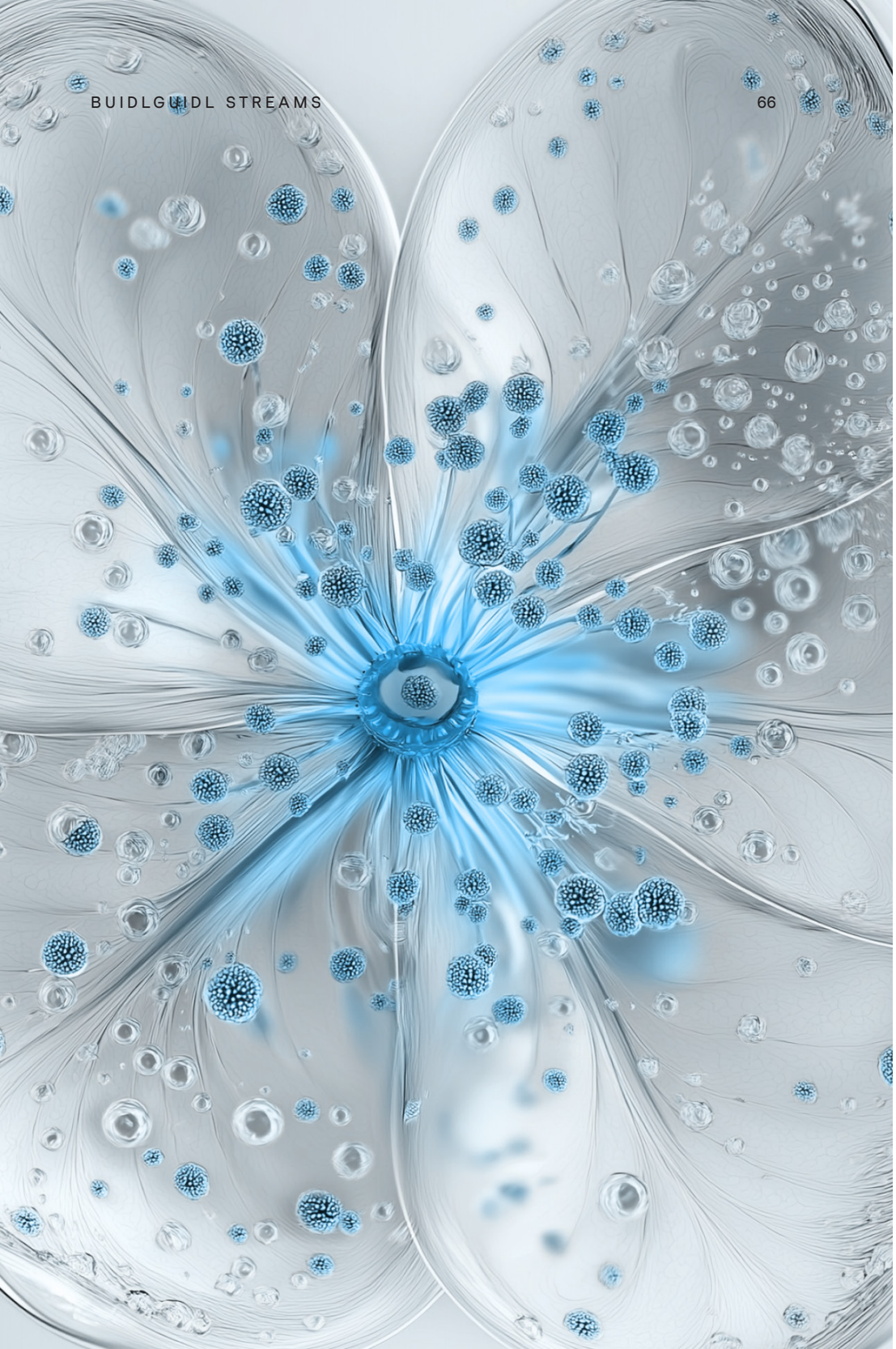
PIONEERED BY AUSTIN GRIFFITH

BuidlGuidl Streams provide Ethereum builders with a funding stream that allows for flexible withdrawals based on their contributions.

Originating from Austin Griffith's initiative to support impactful projects, BuidlGuidl Streams ensures consistent financial backing for builders creating products, prototypes, and tutorials in the web3 ecosystem. The mechanism emphasizes trust and flexibility, requiring builders very little to start a receiving a stream, but to state their reasons for withdrawals, creating more of a barrier to claiming it.

Streams are augmented with weekly calls to showcase notable contributions, helping identify projects with significant potential in the Ethereum community. Influenced by the core philosophy of the Ethereum ecosystem and leaders like Vitalik Buterin, BuidlGuidl Streams fosters a bias towards action that can lead to innovation.

View on Allo.Expert



WHO SHOULD USE IT?

BuidlGuidl Streams are ideal for Ethereum developers who enjoy contributing to the ecosystem and working on innovative projects without the constraint of predefined job descriptions.

FUNDING STRATEGY

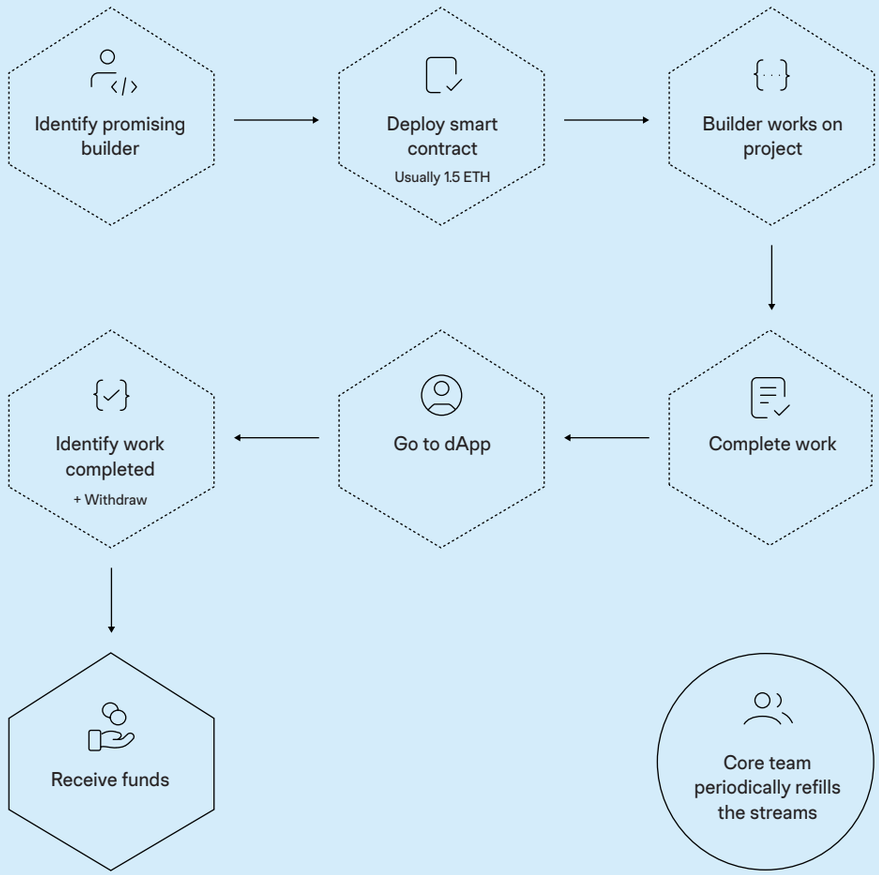
BuidlGuidl Streams allow builders to work on their projects independently, with financial support being allocated based on their efforts. It promotes ongoing development within the Ethereum space and helps builders focus on learning and creating innovative solutions. The contributor streams ensure transparency in salary and contribution and allow contributors to return to the same stream for repeated withdrawals.

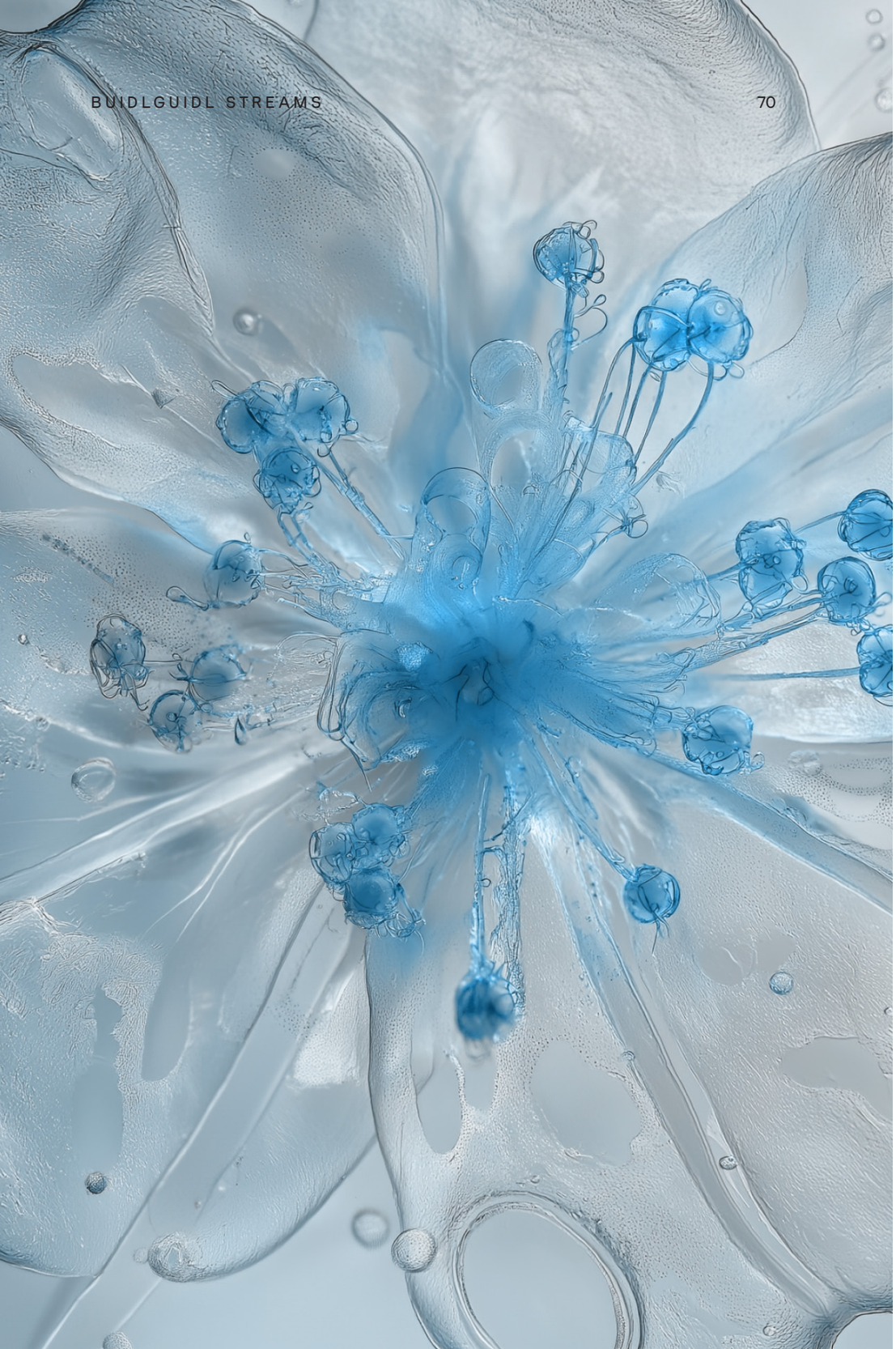
HOW DOES IT WORK?

BuidlGuidl Streams provide a sustainable way for builders to receive continuous funding while allowing them to explore diverse project ideas. First, builders are identified during Austins Weekly Friday calls, where the core team recognizes individuals making valuable contributions to the Ethereum ecosystem. For each selected builder, a smart contract is deployed that starts fully funded, allowing for immediate access to resources rather than dispensing funds gradually. Each contract permits a maximum withdrawal amount over a 30-day period—typically around 1.5 ETH.

As builders complete their work, they can withdraw funds from their stream, with the "meter" only running when funds are actually withdrawn.

When withdrawing funds via the website, builders must provide a reason for their withdrawal, detailing the work they have accomplished. The core team periodically refills these streams based on the builders' contributions and withdrawal patterns. As long as they continue to actively contribute to the ecosystem, builders can repeatedly access the same stream for additional withdrawals. In this way, contributors are dynamically funded based on their ongoing contributions.



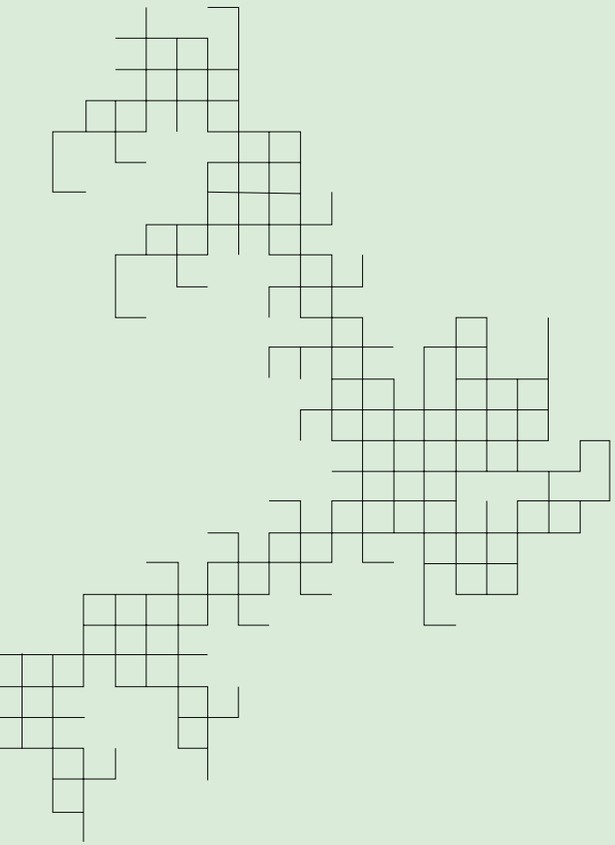


WHAT SETS IT APART?

Continuous and Flexible Funding	The mechanism enables ongoing financial support, allowing builders to work at their own pace on projects that benefit the community.
Autonomous Project Selection	There are no rigid project stages; builders have the freedom to self-select the projects they wish to pursue, promoting a highly independent and creative process.

INVESTMENT DAOS

08



Benefits

1. Transparent Governance
2. Decentralized Decision-Making
3. Profit Sharing

Limitations

1. Regulatory Uncertainty
2. Potential for Inefficient Investments

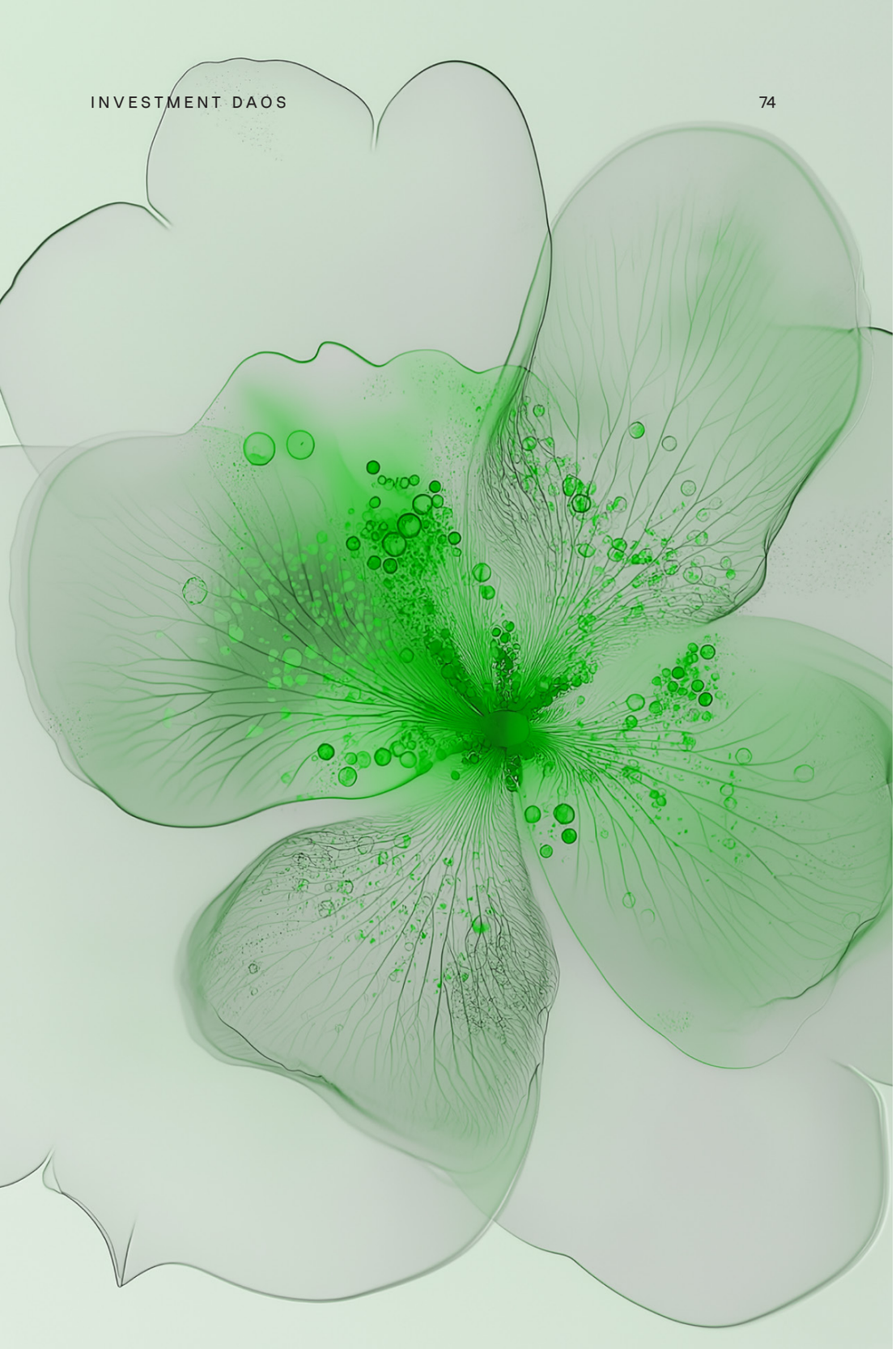
TL;DR

POPULARIZED BY METACARTEL VENTURES, SEED CLUB, AND ORANGE DAO

Investment DAOs function as a funding mechanism by decentralizing venture capital, allowing community members to collectively make investment decisions.

View on Allo.Expert

They were popularized by Metacartel Ventures, Seed Club, and Orange DAO, which adopted a community-centric approach. This model democratizes venture capital by spreading decision-making power across a larger group and shifting power away from traditional centralized investors.



WHO SHOULD USE IT?

This model is ideal for groups or individuals seeking flexible and community-driven funding.

Small investors, who may not meet the capital requirements of conventional investments, can participate through governance tokens, gaining decision-making power and sharing in profits.

Additionally, communities looking to pool resources while retaining democratic control over fund allocation can ensure that all participants have a say in capital decisions.

FUNDING STRATEGY

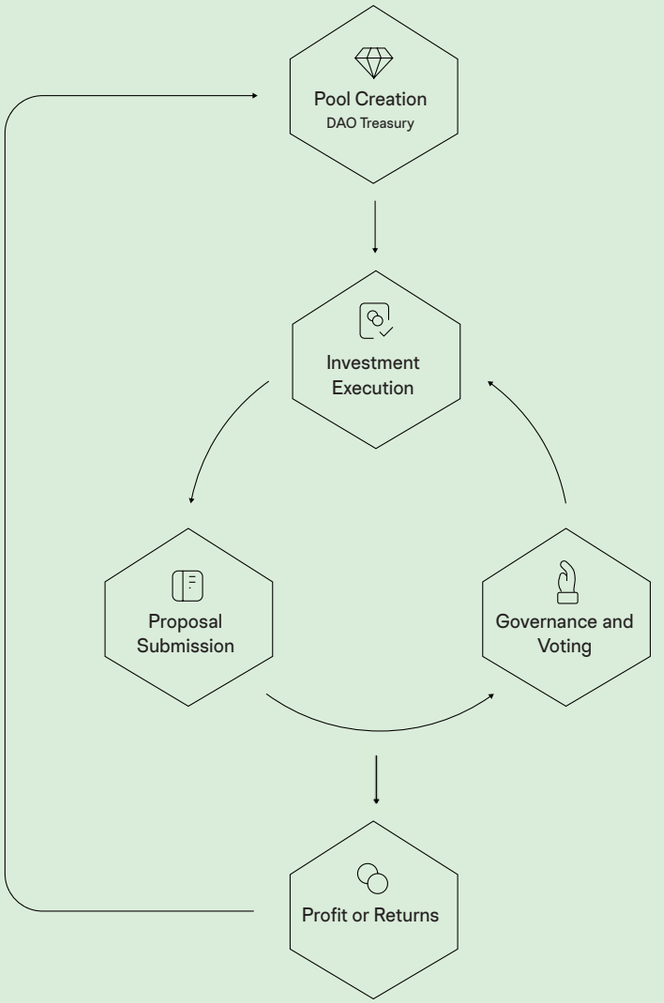
Building on traditional VC frameworks, investment DAOs incorporate features of crowdsourcing, crowdfunding, and cooperative models to support collective funding through community voting and enhanced investor engagement. These collectives pool resources and may target investments in venture capital, real estate, intellectual property, or various other asset classes.

HOW DOES IT WORK?

Investors contribute to a DAO-controlled treasury by purchasing governance tokens, which grant them voting rights to influence investment decisions. Some investment DAOs also generate funds through mechanisms like staking to ensure ongoing capital availability for future investments. Funds are allocated based on votes cast by token holders, with each member's voting power proportional to the number of governance tokens they hold. Additionally, some DAOs match funds to amplify the impact of community contributions.

The disbursement of funds can occur either upfront as a lump sum or be tied to specific milestones, depending on the project and DAO's structure. Projects must submit a proposal detailing their vision, roadmap, and funding needs, which are reviewed and voted upon. The funding process generally includes three stages: Proposal Submission - where propsective investments pitch. Voting - where a go/no-go decision is made. And finally, investment execution - where tokens are exchanged.

Funding rounds can be either fixed or rolling. DAOs like Hydra Ventures have fixed funding cycles such as quarterly or biannual rounds, during which investment decisions are made collectively. Others, like Seed Club, operate on a rolling basis, making funding decisions continuously as long as capital is available.



WHAT SETS IT APART?

Decentralized Governance

Traditional VC ecosystems concentrate decision-making power among a few individuals or firms, while investment DAOs allow all token holders to engage in voting, rather than by a small group of partners.

Profit Sharing

Profits from successful investments are distributed among all token holders, aligning community incentives and enabling broader financial benefits.

Transparency

VCs often lack transparency and inclusivity, focusing on capital control by a central governing body. Investment DAOs have a public and immutable record of all decisions and transactions, ensuring transparency throughout the investment process.

Flexibility

Investment DAOs can take different forms, from directly funding projects to investing in other DAOs, allowing for diverse approaches to supporting innovation.

EXAMPLES

Hydra Ventures

Hydra Ventures operates as a "fund of funds," aggregating capital to invest in other DAOs. They believe participants within their ecosystem possess greater expertise in evaluating investment opportunities than traditional venture capital firms.

Orange DAO

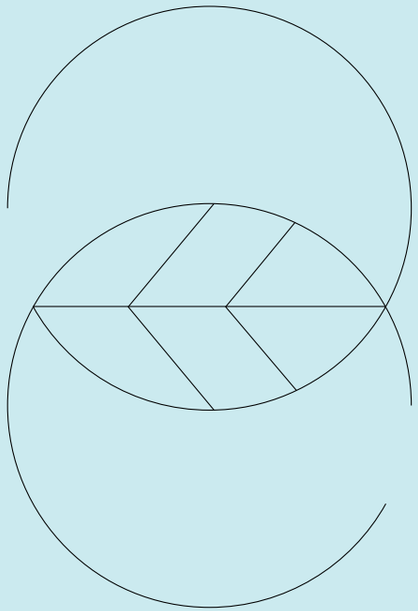
Orange DAO is composed of more than 1,000 Y Combinator alumni and is designed to back and invest in web3 startups. With $80 million in raised capital, Orange DAO leverages the expertise and networks of its members to source and evaluate early-stage crypto and blockchain ventures.

Seed Club Ventures

Seed Club Ventures is the investment arm of Seed Club. They have launched a $25 million fund to invest in projects that build DAO infrastructure, web3 applications, and decentralized communities.

LOTTO PGF

09



Benefits

1. Community building
2. Effective crowdsourcing
3. Engagement / Gamification

Limitations

1. Risk of perverse Incentives
2. Requires a strong sense of community
3. Fairness

TL;DR

DESIGNED BY OTTODAO

LottoPGF functions as a capital formation mechanism that allows anyone to launch customizable, fully onchain “Lottos” to fund causes they care about. These lotteries are secured on Ethereum, featuring verifiable randomness and unbiased winner selection. By bringing the traditional lottery system onchain, LottoPGF aims to address the transparency, fairness, and verifiability challenges commonly found in conventional lotteries.

OttoDAO, the team behind LottoPGF, has already launched early versions of the protocol. As of October 2024, LottoPGF has attracted over 16,000 unique addresses who have played more than 40,000 tickets across five different blockchain networks.

In the web3 public goods funding space, where most mechanisms focus on resource allocation, LottoPGF shifts attention to capital formation. It does this by incentivizing retail donations, reducing reliance on large sponsors, and enhancing neutrality. This approach aims to make public goods funding more accessible, engaging, and community-driven.

View on Allo.Expert

WHO SHOULD USE IT?

This mechanism is well-suited for communities with strong commitment and vision, groups wanting to incentivize donations, charities, and emerging nations like network states or pop-up cities, as it enhances transparency and community involvement.

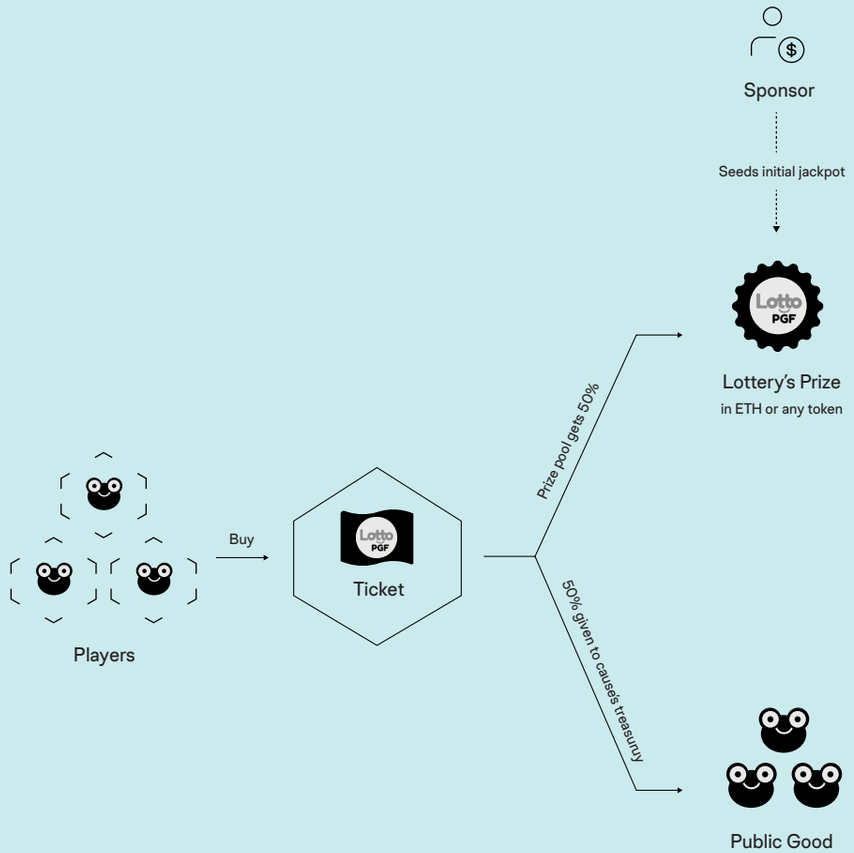
FUNDING STRATEGY

LottoPGF allows anyone to create customizable, permissionless lotteries to fund public goods. Powered by verifiable random functions (VRFs), which generate cryptographic randomness for fairness, lotteries can be single or recurring, with flexible options for fund disbursement and prize redistribution.

HOW DOES IT WORK?

LottoPGF rounds begin with configuration options such as the ticket price, token (like an ERC-20), and determining how funds are split between the prize pool and the public good. Ticket buyers can choose to support one or multiple causes. Organizers can also adjust the odds of winning and customize the frequency of draws, whether recurring or a single round. In single-round lotteries, if no winner is found, the prize pool is evenly distributed among all participants.

The way funds are allocated can vary, from direct support to creating a matching pool. Depending on the setup, disbursements are either from direct support or milestone-based. The entire system is permissionless, meaning anyone can deploy the protocol without needing approval.

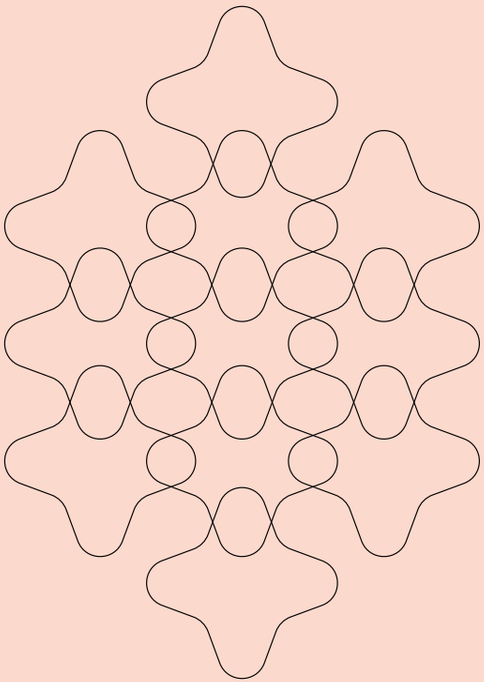


WHAT SETS IT APART?

Capital Formation Focus	LottoPGF shifts the focus from traditional capital allocation to capital formation, allowing communities to raise funds for their LootPGF campaigns.
Integration with Other Mechanisms	It can be used in combination with capital allocation mechanisms like Quadratic Funding (QF) or RetroPGF, replacing the need for a a sponsor.
Engaging and Fun	The onchain lottery format introduces a fun, dynamic element for communities, making fundraising more interactive and exciting for participants.

DAO ICOS

10



Good at

1. Investor control and protection
2. Transparency
3. Decentralization

Not good at

1. Complexity
2. Adoption
3. Volatility

TL;DR

PIONEERED BY VITALIK BUTERIN

DAO ICOs function as a capital allocation mechanism by integrating elements of DAOs to allow investors to vote on fund releases, enhancing transparency and governance.

View on Allo.Expert

Vitalik Buterin proposed them as a conceptual model that leverages Ethereum's smart contracts to create a secure and democratic decentralized fundraising method. They give investors more control over fund management, addressing fraud and mismanagement risks that have plagued traditional ICOs.

WHO SHOULD USE IT?

DAO ICOs are ideal for blockchain projects and decentralized organizations that need continuous community involvement and oversight. They are particularly suited for projects that benefit from increased investor control over fund release, improved transparency through smart contracts, and fraud prevention by limiting upfront access to funds and tying disbursements to project milestones.

FUNDING STRATEGY

A DAO ICO is a hybrid fundraising model that combines elements of ICOs and DAOs. It gives contributors the power to vote on the release of funds after the fundraising stage.

HOW DOES IT WORK?

During a contribution period, investors purchase governance tokens using ETH/DAI. The funds raised are securely stored in a DAOICO treasury.

After the contribution period, a voting process is established where investors can decide how much of the funds are released at each stage of the project's development. This control mechanism, often referred to as the "tap," allows the amount of funding to be increased or decreased based on the project's progress and performance.

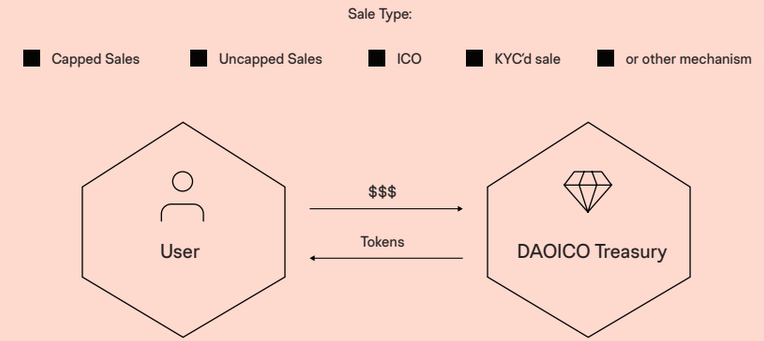
Additionally, if the project fails or underperforms, investors have the option to vote for a refund, enabling them to retrieve any remaining funds.

WHAT SETS IT APART?

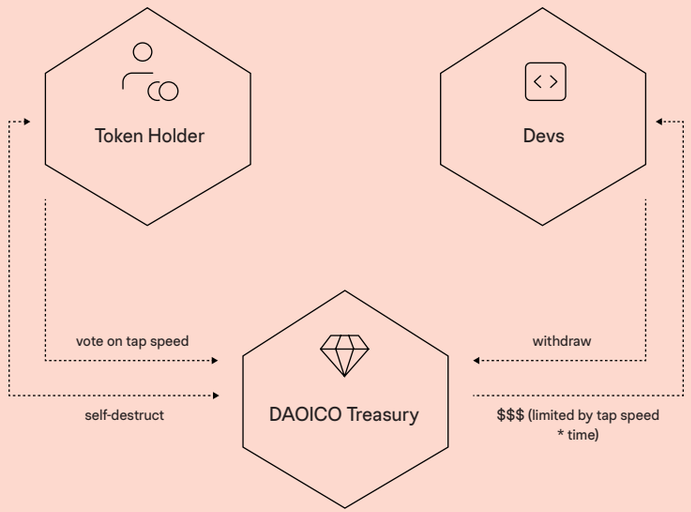
More Investor Control

Unlike traditional ICOs, DAO ICOs grant investors continuous control over fund distribution. This allows them to monitor the project's progress and ensure that funds are used appropriately.

1. Contribution Mode



2. Launched Mode



EXAMPLES

Fluidity

Fluidity was an experiment focused on financial products that leveraged DAICO principles, including decentralized voting to manage funds and control over the ongoing allocation of resources, based on milestones and project performance.

The Abyss DAICO

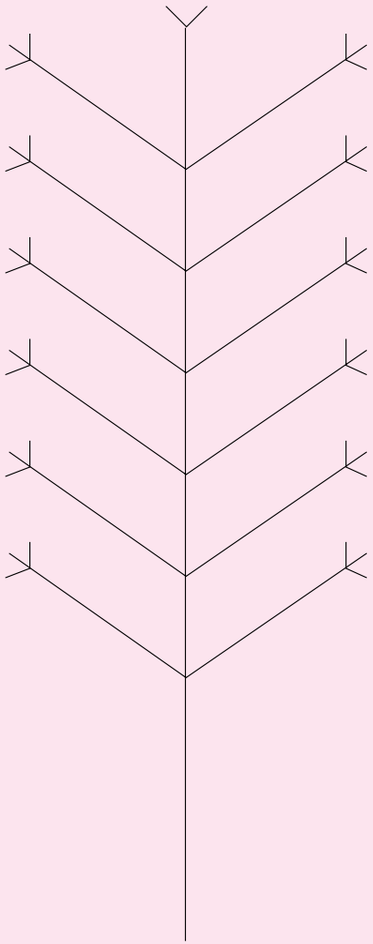
The Abyss was one of the first projects to experiment with a DAICO-like approach. It introduced a system where token holders could vote on whether to continue funding the project or refund the remaining funds if progress was unsatisfactory.

The Raiden Network

While Raiden itself wasn't a full DAICO, its ICO integrated some elements of governance and accountability. They utilized a model in which certain milestones needed to be hit before more funds could be unlocked, which aligns with DAICO principles of better managing capital release.

SOCIAL IMPACT BOND (SIB)

11



Benefits

1. New Capital
2. Collaboration
3. Outcome Focus

Limitations

1. Risk Transfer
2. Complexity
3. High Costs

TL;DR

DESIGNED BY SOCIAL FINANCE LTD

View on Allo.Expert

Social Impact Bonds (SIBs) function as a funding mechanism by allowing private investors to fund public social programs, with returns dependent on achieving specific social outcomes.

SIBs were first introduced by Social Finance Ltd. in 2010. They transfer the risk of program failure from the public sector to private investors, ensuring that government payments are only made if the program successfully achieves its goals. This model supports collaboration between governments, non-profits, and investors, aligning financial returns with meaningful social impact while promoting accountability and performance-driven outcomes.

WHO SHOULD USE IT?

This mechanism is ideal for governments, impact investors, and non-profits looking to tackle social issues with a focus on long-term impact without risking taxpayers' money. SIBs are particularly attractive for organizations looking to implement evidence-based, performance-driven programs that address complex social challenges.

FUNDING STRATEGY

The SIB funding strategy is based on legal agreements in which investors fund social programs and are repaid by the government with interest if the programs meet predetermined success metrics.

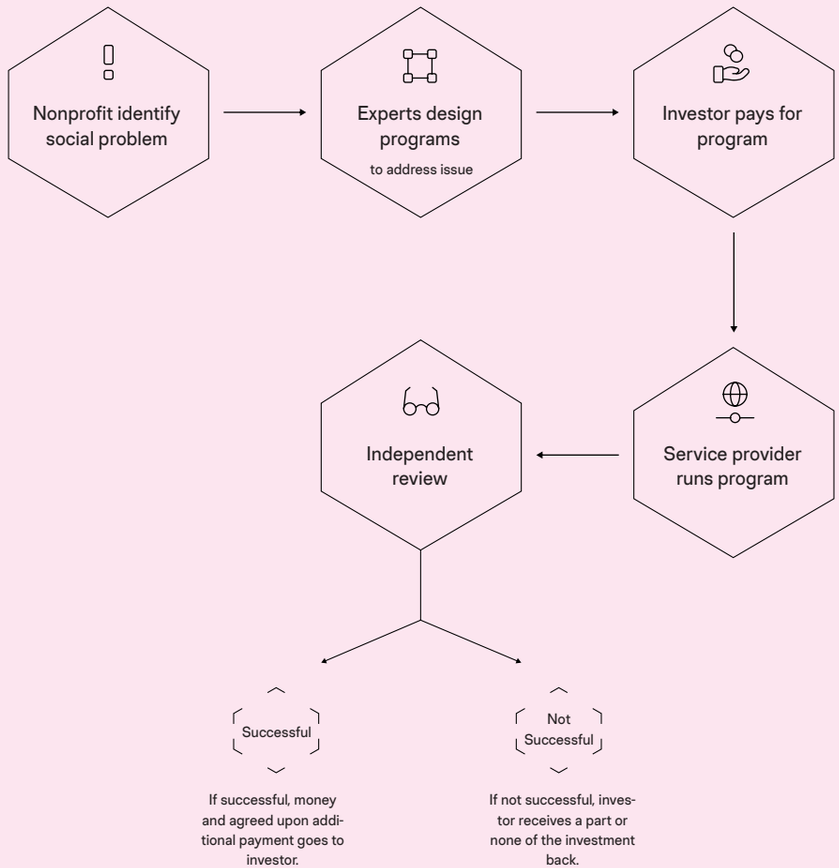
HOW DOES IT WORK?

Government agencies, non-profit organizations, or community leaders identify a pressing social issue, which could be anything from reducing homelessness to improving educational outcomes for at-risk youth. Once the need is identified, experts design a program to address the issue(s).

After the program is designed, private investors step in to provide the necessary funding. Once funding is secured, experienced non-profit organizations are brought in to provide services and support to the target population as outlined in the program design.

Post-execution, an independent third-party evaluator is brought in to assess the program's performance. This evaluator collects and analyzes data throughout the program's duration to measure its progress against the predetermined success metrics.

If the evaluation shows that the program has achieved its goals, the government fulfills its commitment to repay the investors. This repayment includes the initial investment plus an agreed-upon return, which serves as a reward for the investors' risk-taking and an incentive for future investments in social programs. If the program fails to meet its predetermined success metrics, investors may lose part or all of their initial investment.



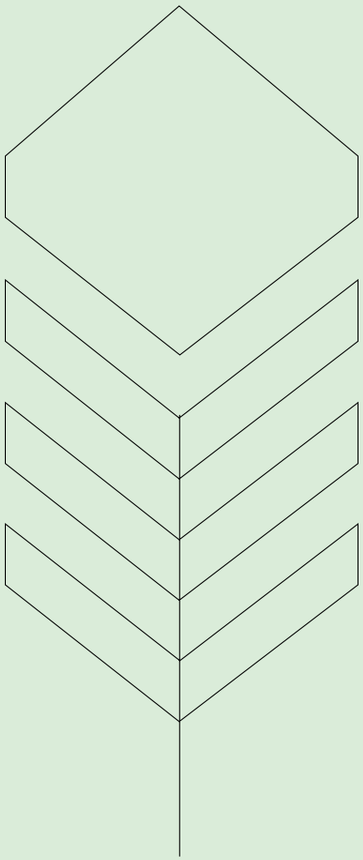
SOCIAL IMPACT BOND (SIB)

WHAT SETS IT APART?

Aligns financial returns with social impact	Creates a system where economic gains are tied directly to achieving positive social outcomes, incentivizing investors to support programs that drive meaningful change rather than just financial profit.
Encourages innovation in social service delivery	Provides flexibility in designing programs, allowing non-profits to experiment with new approaches to longstanding social problems.
Promotes evidence -based policymaking	With SIBs, the government and other stakeholders rely on data and measurable impact to determine program success, which helps inform decision-making and policy development.

HARBERGER TAXES

12



Benefits

1. Market liquidity
2. Fair pricing and access
3. Increases asset and re-source productivity

Limitations

1. Owner uncertainty
2. Consistent re-valuation
3. Tax burdens

TL;DR

DESIGNED BY ARNOLD HARBERGER
POPULARIZED BY GLEN WEYL AND ERIC POSNER

Harberger Taxes function as a funding mechanism by taxing assets based on self-assessed values, encouraging efficient use and benefiting societal welfare.

View on Allo.Expert

Harberger Taxes, introduced by economist Arnold Harberger in the 1960s, are typically applied to land and real estate but can also be used for intellectual property and digital assets, including NFT market-places. The idea has gained traction through the works of economists Glen Weyl and Eric Posner.

WHO SHOULD USE IT?

This funding strategy is beneficial for any community aiming to enhance resource allocation, curb monopolies, and generate revenue for public goods. Communities can utilize these taxes to fund operations, expand their treasuries, or redistribute funds among members. This mechanism can also support sustainable resource use while ensuring that value creation is effectively rewarded without the need for traditional taxation.

FUNDING STRATEGY

Harberger Taxes create a new kind of “partial common ownership” somewhere between private and common ownership. The goal is to reduce inefficiencies from hoarding and speculative behavior. Under this system, assets remain available for sale at the owner’s declared value, creating a balance between ownership desire and tax obligations.

HOW DOES IT WORK?

Harberger Taxes can be implemented onchain, where smart contracts handle the key processes: setting the sale price, collecting taxes, managing continuous market interactions, and reassessing ownership. The processes in this mechanism are highly customizable. To begin, owners must self-assess the value of their assets, such as land, intellectual property, or other valuable resources, and be willing to sell at that declared price. Then, a set percentage of this self-assessed value is taxed regularly, with the rate and frequency predefined.

Setting the right tax rate is crucial. If the rate is too high, it may discourage ownership, while a rate that's too low might not motivate efficient resource use. There are also modified versions of Harberger Taxes aimed at reducing owner uncertainty. One option is a transition period that lets owners retain possession after a sale, allowing them to reclaim the asset by paying a percentage of the buyer's declared value. Another approach ties the owner's tax rate to the highest bid, giving them the choice to sell when they want as long as taxes are paid. These adjustments ensure owners, not buyers, control the sale.

WHAT SETS IT APART?

Continuous Market Interaction	Harberger Taxes maintain a constant market environment where assets are always for sale. This keeps resources circulating, ensuring they end up with those who value them most and are willing to pay for them.
Taxation as an Incentive for Efficiency	Owners are regularly taxed based on their self-declared asset value, pushing them to assess the true worth of their property accurately. If they overvalue it, they pay higher taxes, which encourages more efficient and productive use of the resource.
Dynamic Asset Allocation	The constant possibility of sale and the tax on ownership can curb monopolies and lead to a more equitable distribution of assets.

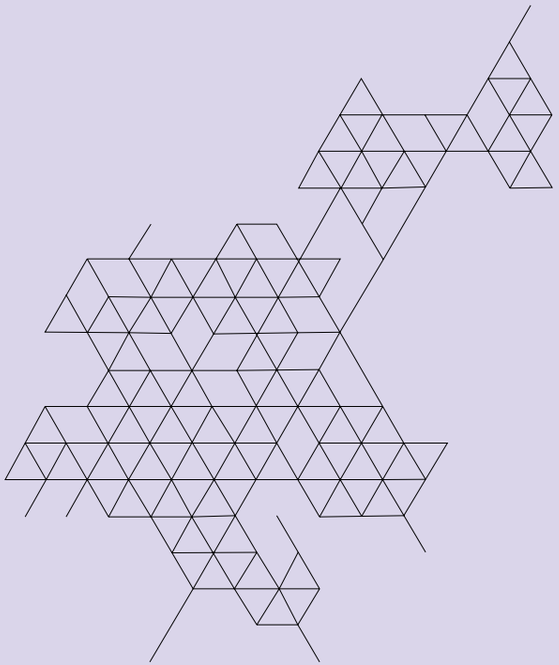
EXAMPLE

GeoWeb

GeoWeb is an open geospatial information network that fosters augmented, shared reality through the use of digital land registry smart contracts and partial common ownership. In this system, landholders must publicly declare a sale price for each of their land parcels using ETHx, a wrapped version of ETH that facilitates streaming payments. Landholders are required to pay a license fee to the network to maintain their parcel license. This fee is set at 10% of their declared sale price annually. They must also authorize a payment stream and keep ETHx in their wallet. Any market participant has the ability to initiate the transfer of a parcel by paying the current landholder their declared sale price.

ROUNDABOUT *PRODUCTION*

13



Benefits

1. Future-proofing
2. Resilient infrastructure
3. Scalability and efficiency

Limitations

1. Quick solutions
2. Immediate liquidity
3. Resource intensive

TL;DR

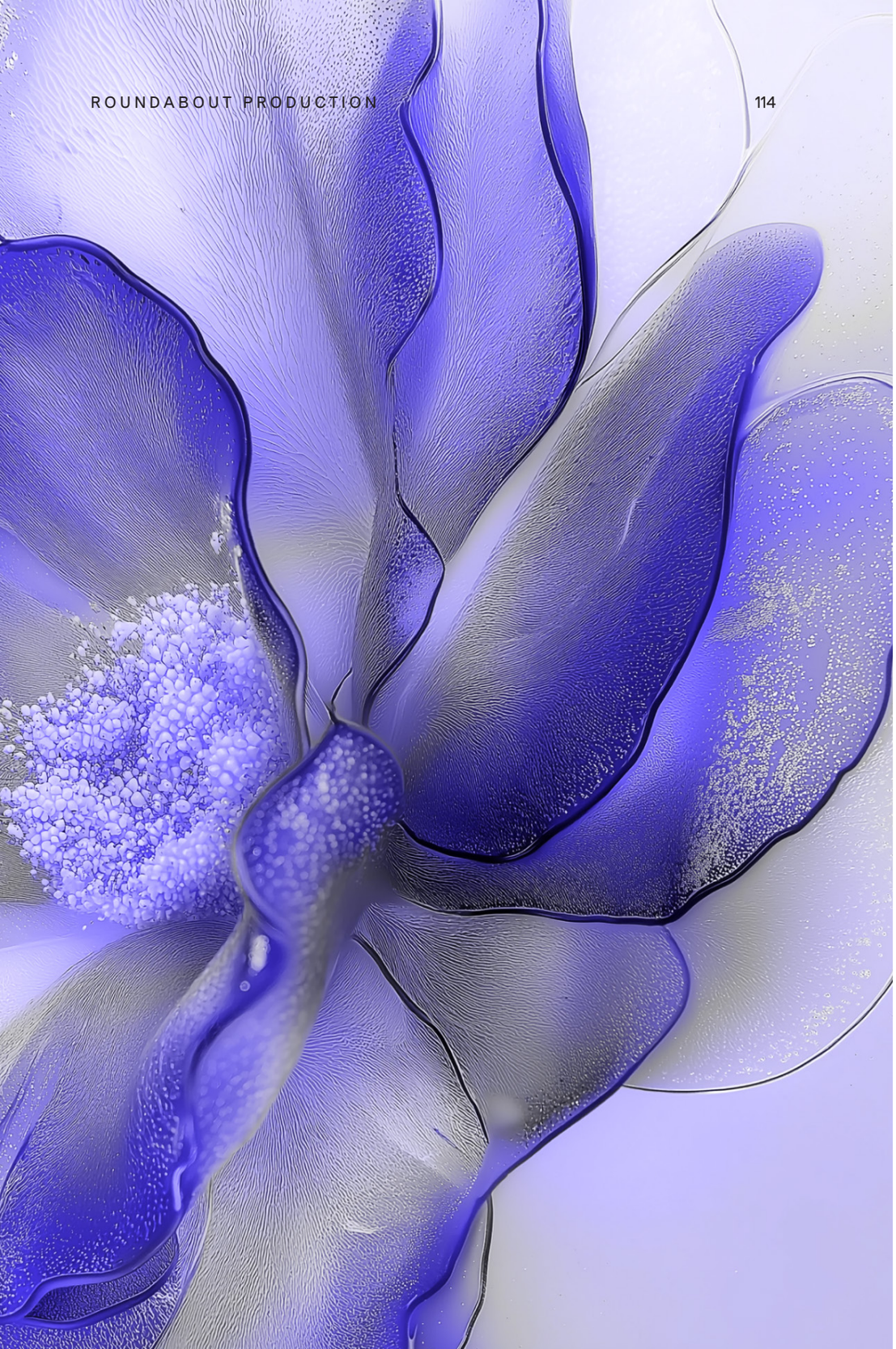
FORMALIZED BY EUGEN VON BÖHM-BAWERK

Roundabout production is when get more of something by first producing something else - For example, youd cut down more trees if you produce axes beforehand.

Roundabout production functions as a funding mechanism by investing in intermediate stages or foundational technologies to enhance productivity and support long-term profitability.

The concept of 'roundabout production' traces back to the Austrian School of Economics, particularly through the works of Carl Menger, Eugen von Böhm-Bawerk, and later, Ludwig von Mises and Friedrich Hayek. It was formally introduced in Böhm-Bawerk's 1891 book "The Positive Theory of Capital." Today, it is being used in web3 contexts to support projects with longer timelines for realizing sustainable profits.

View on Allo.Expert



WHO SHOULD USE IT?

This mechanism is best suited for projects or DAOs focused on building core blockchain infrastructure or scalable governance systems. It's ideal for organizations willing to make long-term investments in research and development rather than looking for immediate returns.

FUNDING STRATEGY

The roundabout production funding strategy involves investing in projects with complex, high-resource needs (e.g., Ethereum Layer 2 solutions, cross-chain bridges, decentralized storage). It emphasizes the core principle that a more strategic, long-term path ultimately optimizes processes and maximizes output over time, aligning well with the infrastructure needs in web3.

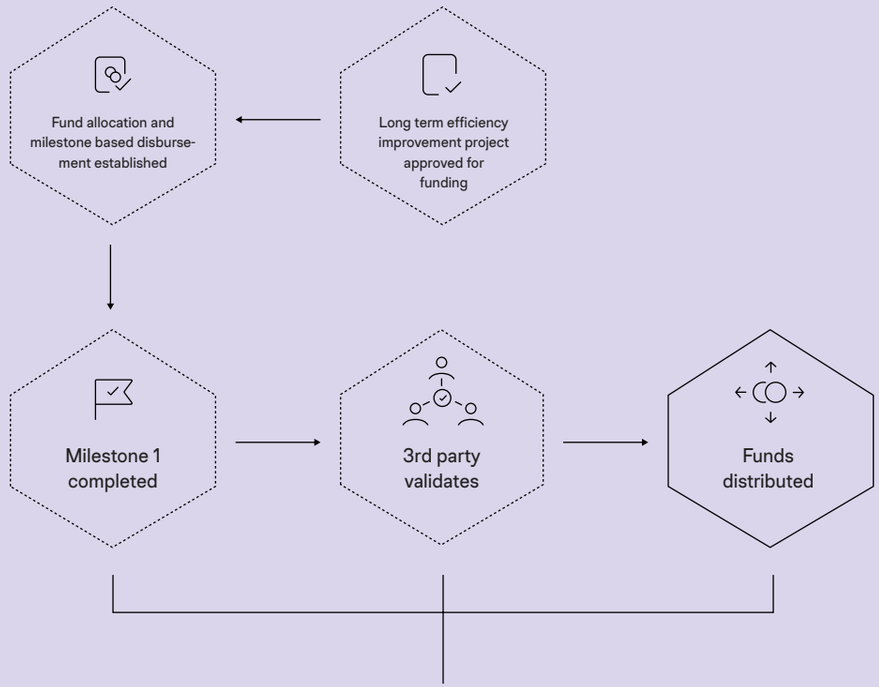
HOW DOES IT WORK?

The roundabout production process generally begins identifying long-term objectives (eg increase adoption of our product). Then the community sets out to find high leverage projects to meet these objectives.

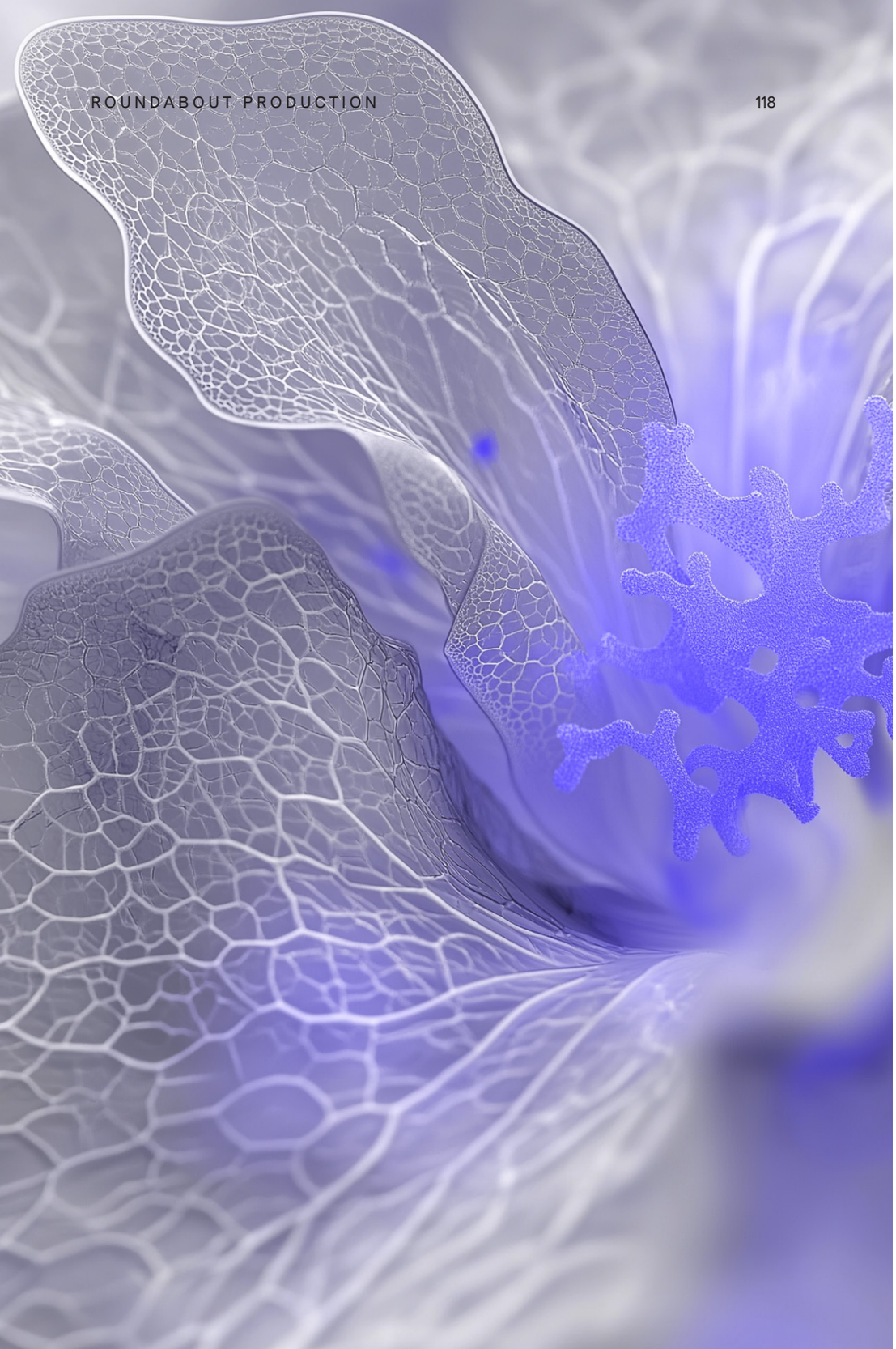
Fund allocation for roundabout production is direct and disbursement varies. Often, funds are provided on a milestone basis to ensure projects receive funds after achieving specific benchmarks. An additional option is for some funds to be distributed while others are locked in staking mechanisms to encourage long-term commitment.

In roundabout production, funding is first allocated to the identification, creation, and implementation of anything needed to improve the projects objectives. Next, these ideas are applied to more tangible outputs that can receive funding.

One example of roundabout production looks like in web3 is Ethereum's transition to Proof of Stake (PoS) in Ethereum 2.0. While this transition was lengthy and complex, it was crucial for enhancing scalability, energy efficiency, and security—foundational elements for the future growth of DeFi, NFTs, and other decentralized applications.



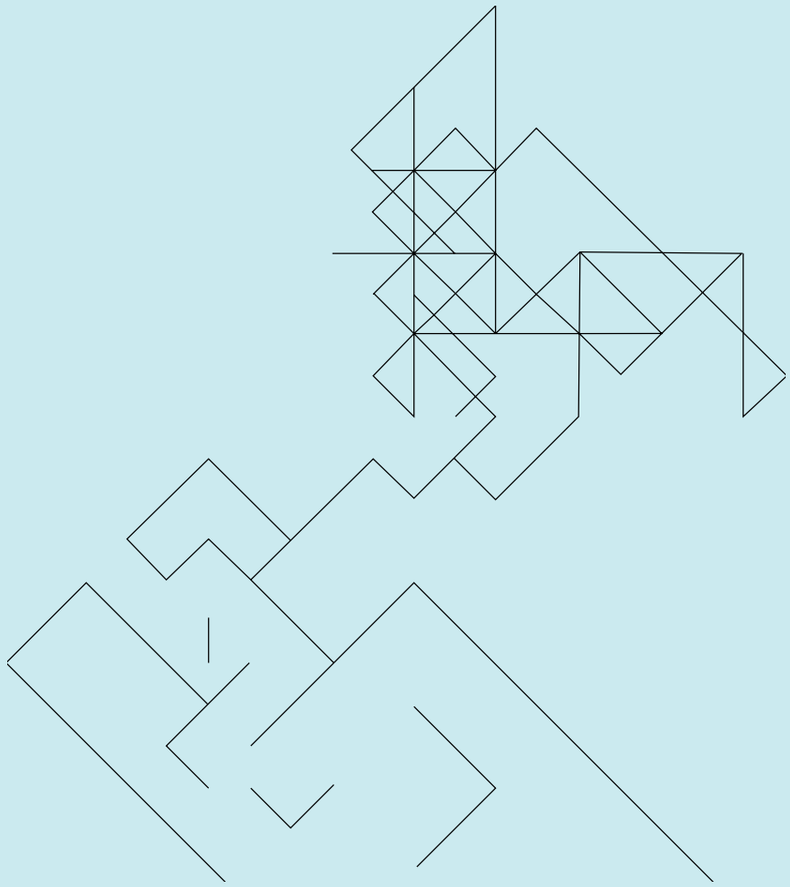
REPEAT THIS PROCESS FOR ADDITIONAL MILESTONES



WHAT SETS IT APART?

Focuses on Resilience	This mechanism focuses on long-term scalability over immediate gains. It requires patience and considerable upfront resources but paves the way for building resilient, future-proof infrastructure within the blockchain ecosystem. This long-term approach differentiates it from the typical short-term strategies of many mechanisms.
Flexibility	It is adaptable to various contexts, which allows it to be applied effectively across different industries and ecosystems.
Ecosystem-Centric Approach	Roundabout production often focuses on solutions that enhance the broader ecosystem rather than just individual projects. This ecosystem-centric perspective drives collective growth and innovation, benefiting all participants over time.

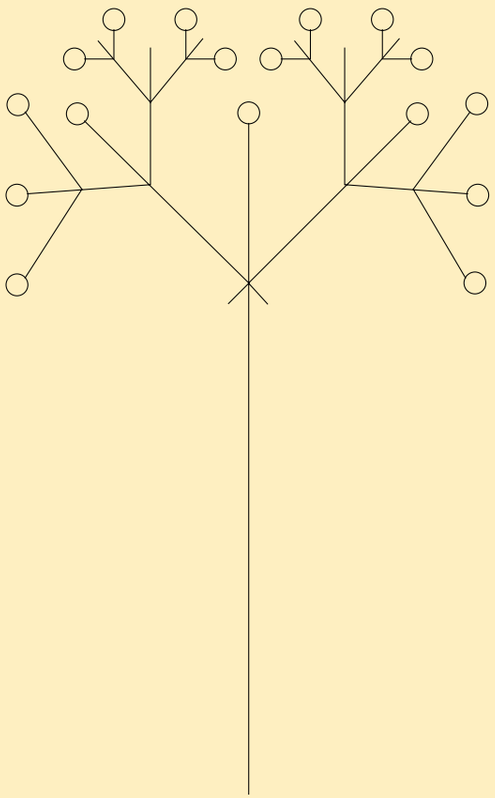
GOVERNANCE *MECHANISMS*



This section explores various tools and concepts that can be applied or adapted to influence how decisions are made and how value is distributed in onchain systems. While not all were originally designed for blockchain environments, each offers unique insights into challenges faced in onchain capital allocation. From economic models to voting systems and contribution metrics, these mechanisms provide a toolkit for addressing the complex issues of resource management, governance, and value distribution in decentralized contexts.

GNOSIS' MULTI-SIGNATURE *WALLETS*

14



Benefits

1. Enhanced Security
2. Flexibility
3. Transparency

Limitations

1. Operational Delays
2. Complexity for New Users
3. Higher Transaction Costs

TL;DR

DESIGNED BY SAFE (FORMERLY GNOSIS)

The Gnosis multi-signature wallet, now known as Safe, originated from Gnosis, a blockchain company founded in 2015 by Martin Köppelmann and Stefan George. Initially focused on prediction markets, Gnosis developed the Gnosis Safe in 2017 to address the need for secure digital asset management.

The Gnosis Safe started as a multi-signature wallet, requiring multiple approvals for transactions, which made it ideal for decentralized organizations (DAOs) and teams. Its security features and flexibility quickly made it a standard tool across the Ethereum network, widely adopted by DAOs, DeFi projects, and institutional investors.

In 2022, recognizing the Safe's broader potential, Gnosis spun it off as an independent entity, rebranding it as simply "Safe". Today, Safe supports over 7 million smart accounts, secures more than $100 billion in assets, and continues to evolve as a crucial infrastructure for decentralized asset management and governance in the crypto ecosystem.

View on Allo.Expert

WHO SHOULD USE IT?

This governance mechanism effectively supports DAOs in overseeing treasuries, funding proposals, and investment decisions. Enterprises can use Safe to manage corporate digital assets among various stakeholders, while public goods projects can adopt this tool for transparent and accountable fund allocation.

STRATEGY

By default, Safe Wallet operates using a multi-signature mechanism where funds are held in a smart contract, and any transaction requires a predefined number of signatures to proceed. Members submit proposals for transactions or fund allocations, and each signer must approve before the action is executed.

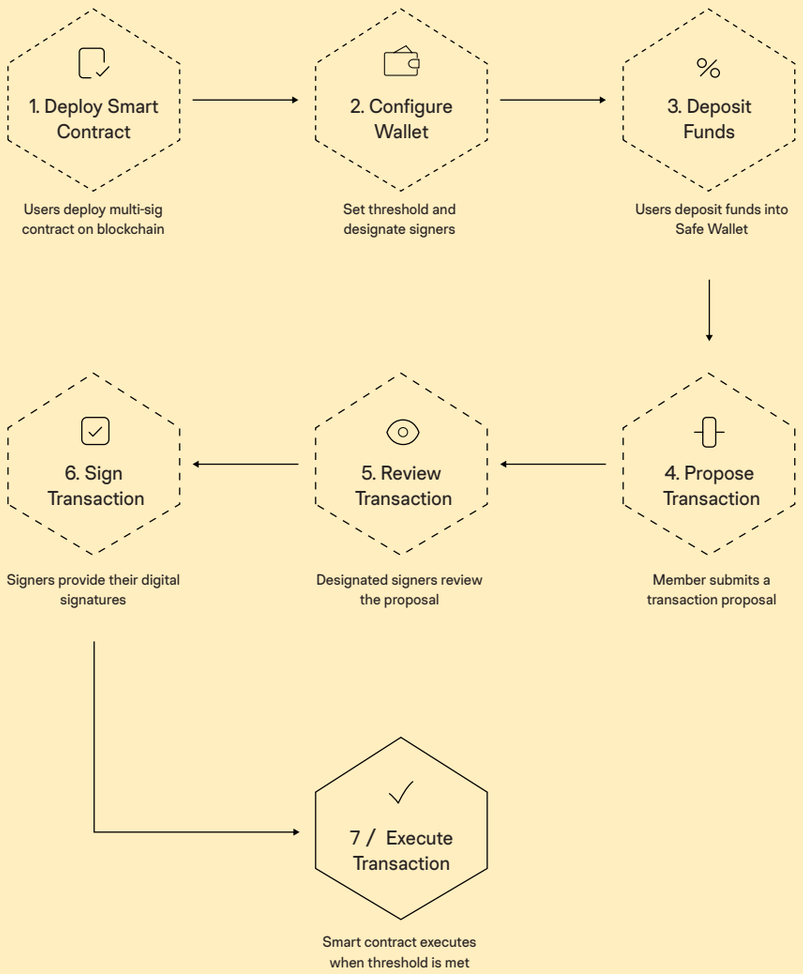
Alongside the multisig entrypoint, Safe is also a modular and extensible account standard that can be adopted to many different use-cases, allowing users to evolve their account over time to accommodate changing needs.

HOW DOES IT WORK?

Safe Wallet operates as a secure, multi-signature asset management tool built on Safe Smart Accounts. Users start by deploying a multi-signature smart contract on a blockchain like Ethereum. They then configure the wallet by setting a threshold of required signers for transaction approvals, ensuring no single user can act unilaterally.

Once configured, users or organizations deposit funds into the Safe Wallet. When a transaction needs to occur, a member submits a proposal, which is then visible to all designated signers. Each signer reviews the transaction, and if they approve, they provide their digital signature. Only when the predefined number of signatures is collected does the smart contract execute the transaction.

Safe Wallet also offers features like gasless transactions, where relayers cover gas fees, and transaction batching, allowing multiple transactions to be bundled into one for efficiency. All actions are recorded onchain, providing full transparency and accountability for secure fund management.



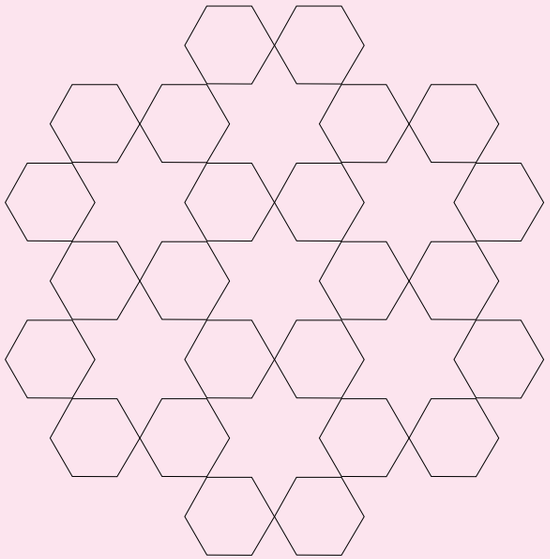
WHAT SETS IT APART?

Robust Security Features	Advanced cryptographic protocols ensure high levels of security.
Customization	Flexible threshold settings and signer configurations to fit diverse organizational needs. Organizations can define the number of required signatures (e.g., 2-of-3, 3-of-5, 5-of-7). Organizations can also leverage a large open source library of modular extensions to enhance their safe's capacity.
Seamless Integration	Compatible with various blockchain networks and dApps, enhancing usability.
User-Friendly Interface	Intuitive design facilitates ease of use for both technical and non-technical users.
Comprehensive Auditing	Provides detailed onchain records for transparency and accountability.

GOVERNANCE MECHANISM

STAR VOTING

15



Benefits

1. Voter expressiveness
2. Reducing strategic voting
3. Minimizes wasted votes

Limitations

1. Implementation costs
2. Transition complexity
3. Potential for voter fatigue

TL;DR

DEVELOPED BY MARK FROHNMAYER AND THE EQUAL VOTE COALITION

View on Allo.Expert

STAR Voting functions as a governance mechanism by reflecting voter preferences through a scoring and runoff process, ensuring fair and representative decision-making.

Created in 2014 by Mark Frohnmayer, STAR Voting aims to enhance electoral systems. It can be integrated into DAOs for decision-making and funding distribution. This helps ensure all voter preferences are accounted for in both phases.

WHO SHOULD USE IT?

This governance mechanism is ideal for DAOs managing elections with multiple candidates or proposals. It minimizes vote-splitting and increases voter satisfaction through nuanced preference expression, often resulting in broadly supported winners. It is also helpful for communities looking to enhance trust and participation.

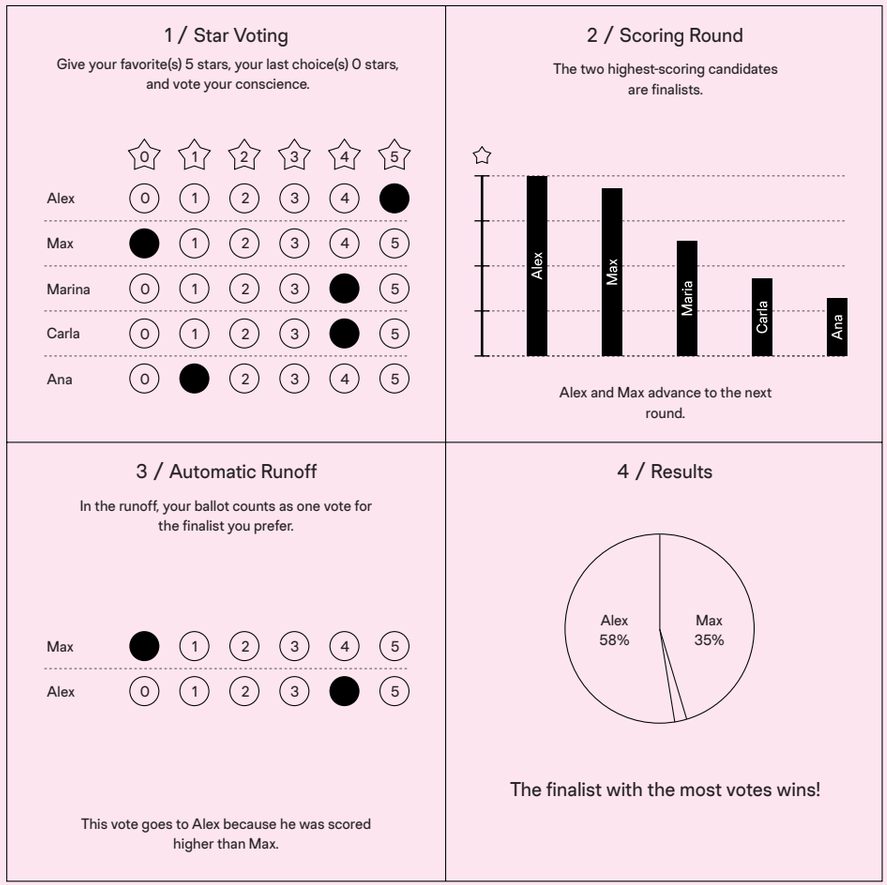
STRATEGY

STAR Voting is a system where voters score each candidate on a scale from 0 to 5 stars. The two highest-scoring candidates proceed to an automatic runoff, in which the candidate preferred by more voters wins. It is simple, expressive, and designed to reflect the will of the majority without the complications of Ranked-Choice Voting (RCV).

HOW DOES IT WORK?

Under the STAR system, voters give their favorite candidate five stars and can leave their least favorite blank or assign zero stars. They can rate the remaining candidates between 1 and 4 stars according to their preference and can give equal ratings to multiple candidates.

Next, the counting process begins and follows the Score Then Automatic Runoff (STAR) method. In this phase, the two highest-scoring candidates move on as finalists. Each voter's ballot then reflects their preferences, with their vote automatically assigned to their preferred finalist. The finalist with the most votes is ultimately declared the winner.



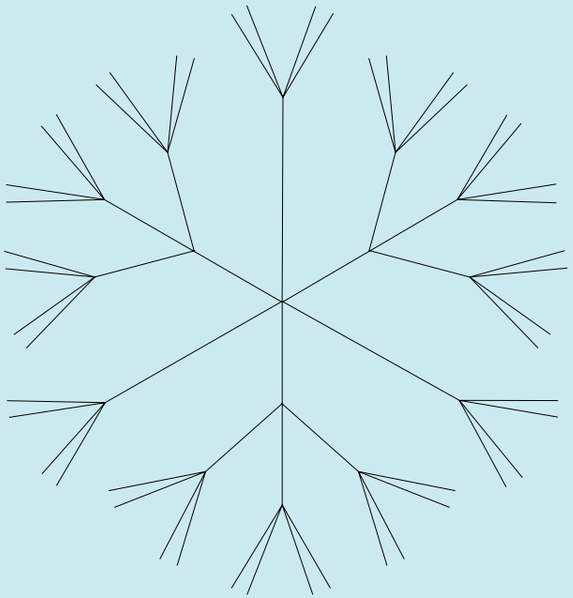
WHAT SETS IT APART?

Automatic Runoff	The system is designed to provide a clear and decisive outcome, similar to traditional runoff elections.
Equal Representation Principles	STAR Voting ensures that each voter's preferences are equally considered, resulting in outcomes that reflect broad support.
Expressive and Decisive	It combines the expressiveness of score voting with the decisiveness of runoff while avoiding the complexity typically associated with ranked-choice voting systems.

GOVERNANCE MECHANISM

RANKED CHOICE VOTING

16



Benefits

1. Encourages consensus
2. Increased voter satisfaction
3. Diverse representation

Limitations

1. Complexity
2. Implementation costs

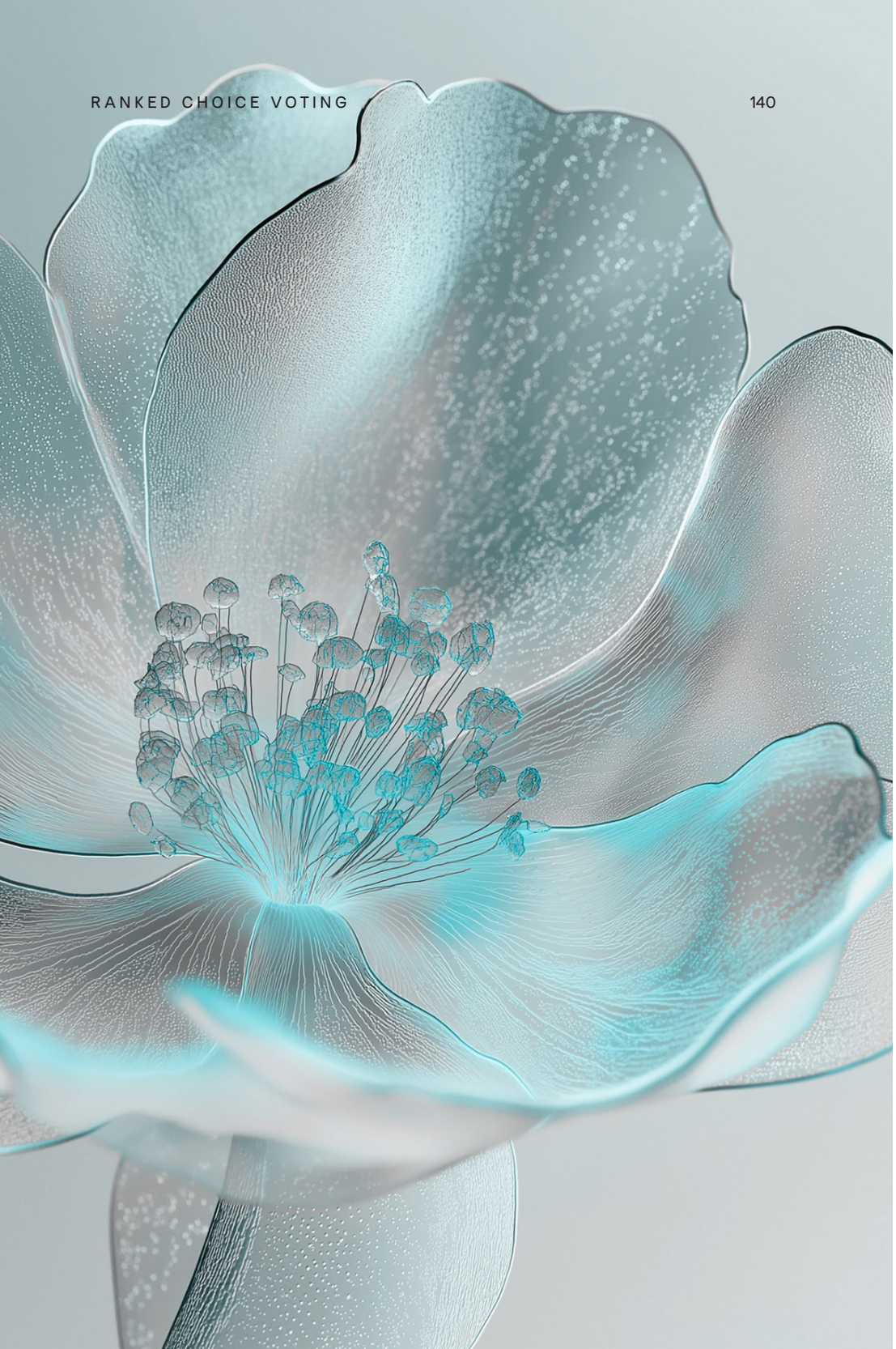
TL;DR

POPULARIZED BY FAIRVOTE AND ELECTORAL REFORM ADVOCACY GROUPS

Ranked Choice Voting (RCV) functions as a governance mechanism by ensuring elected candidates reflect majority preferences, allowing voters to rank their choices for more representative outcomes.

Originating in the 1850s as a proportional representation system, RCV was adapted for single-winner elections by William Ware in the 1870s. A more contemporary movement for RCV emerged in the early 2000s, addressing the limitations of plurality voting, with support from grassroots initiatives and organizations like FairVote, a nonpartisan group focused on voting reforms that aim to enhance electoral fairness and reduce polarization.

View on Allo.Expert



WHO SHOULD USE IT?

This governance mechanism is ideal for elections, organizational decision-making, and competitive contexts like funding allocation in DAOs. It enhances fair representation and community engagement, making it suitable for any entity seeking to foster trust and encourage active participation in governance.

STRATEGY

RCV allows voters to rank candidates by preference and can also function as a funding mechanism, enabling community members to rank proposals for funding allocation. This approach is influenced by traditional runoff elections, which seek a more efficient winner-determination process without separate runoffs; social choice theory, which addresses the fair aggregation of collective preferences; and voter behavior research, which highlights the strategic voting tendencies in plurality systems and the demand for more expressive voting options.

HOW DOES IT WORK?

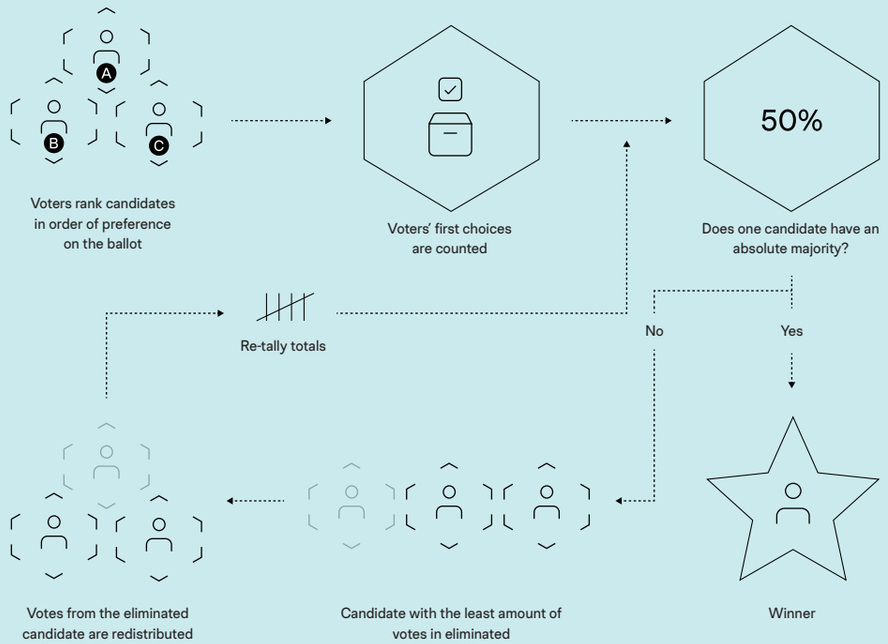
The RCV process begins with voters ranking candidates or proposals in order of preference on their ballots.

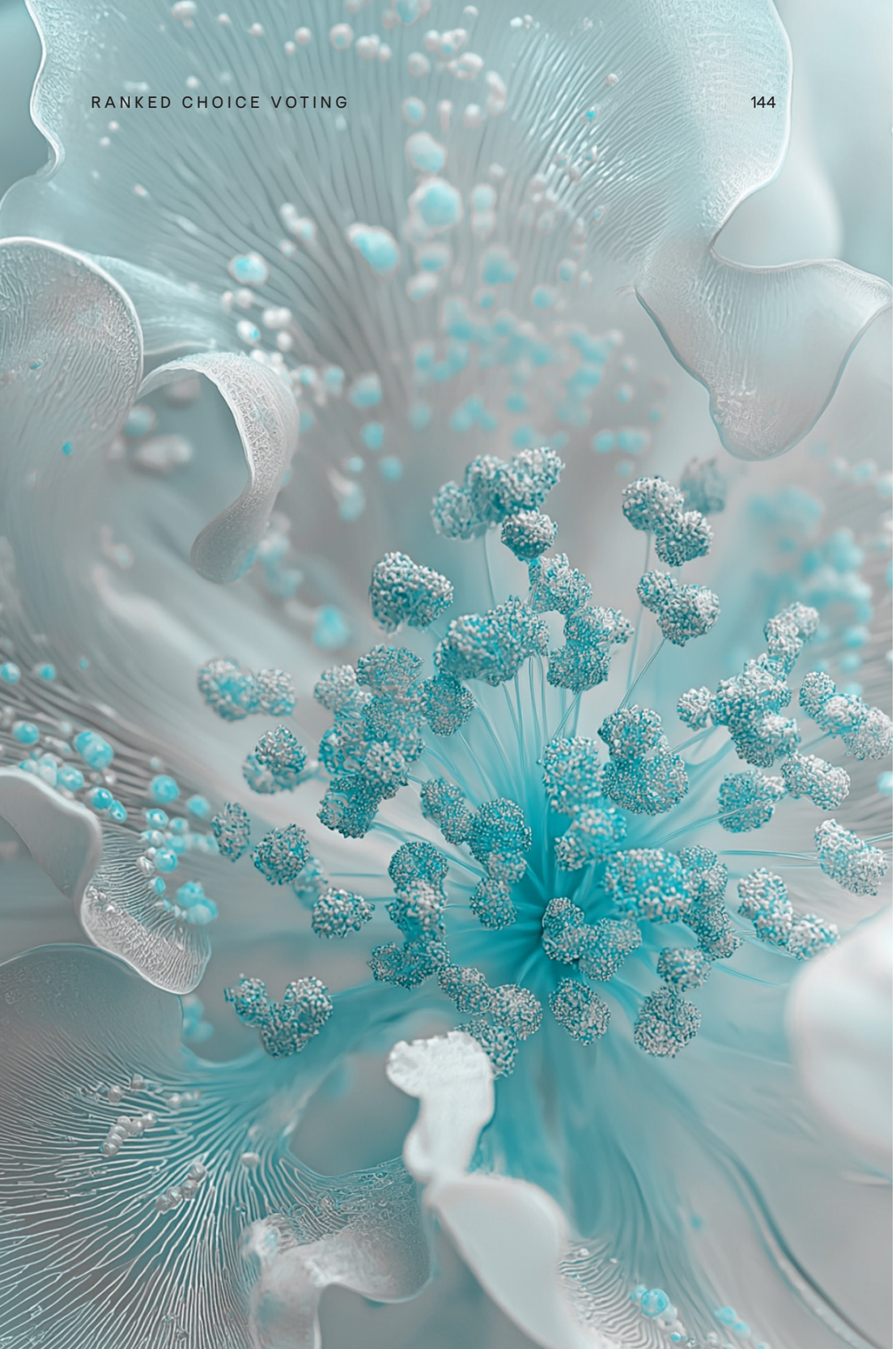
Here is a RCV Ballot:

Alex	0	1	2	3	4	●
Max	●	1	2	3	4	5
Marina	0	1	2	3	●	5

Each column represents a different ranking position, while the rows correspond to specific candidates or options. Voters must make only one choice per column and cannot skip columns.

Once the ballots are cast, the first-choice votes for each candidate are counted. If a candidate receives more than half of the votes, they win the election. However, if no candidate secures a majority of first-choice votes, the candidate with the fewest votes is eliminated, and their votes are redistributed based on voters' next preferences until a candidate achieves a majority. This elimination and redistribution process continues until a candidate receives a majority of the votes and is declared the winner.





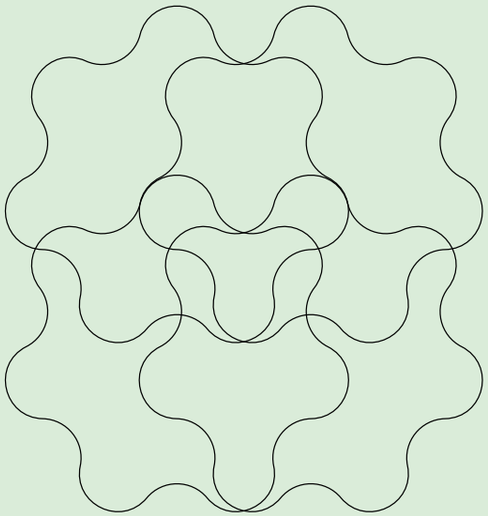
WHAT SETS IT APART?

Accommodates Multiple Preferences	RCV allows for a nuanced distribution of funding in DAOs and blockchain-based decision-making processes. It promotes inclusivity by reflecting a wider range of voter preferences.
Eliminates the Spoiler Effect	Voters can express true preferences without fear of "wasting" their votes.
Encourages Consensus Candidates	Studies indicate that RCV leads to increased voter satisfaction due to more representative outcomes. It fosters the election of candidates who appeal to a broader electorate.

GOVERNANCE MECHANISM

SOURCECRED

17



Benefits

1. Quantifying contribution value
2. Sybil resistance
3. Transparent and traceable reward allocation

Limitations

1. Preventing subjective weighting
2. Setup and maintenance complexity
3. Potential for gaming the system

TL;DR

DESIGNED BY DANDELION MANE

View on Allo.Expert

SourceCred functions as a governance mechanism by assessing individual contributions and distributing rewards based on the effort, complexity, and impact of those contributions.

It was conceptualized in 2017 and introduced in August of 2019 during an initiative called the CredSperiment, which aimed to provide a trial run of the technology to see if it could provide transparent and relational tracking of contributions based on intersubjective quality rather than quantity. Today, SourceCred is a series of plugins to measure contributions and allocate rewards.

WHO SHOULD USE IT?

This mechanism is ideal for DAOs, community managers, and project managers seeking to directly reward contributions based on their impact on the underlying project. It's additionally beneficial for those concerned with Sybil resistance, as it employs multiple strategies focused on transparency and easy community oversight.

STRATEGY

The SourceCred strategy involves distributing Grain, a tradeable community token, to contributors based on the number of non-transferrable Cred tokens their contributions have earned. This is done using a neutral framework that assigns scores and distributes tokens accordingly.

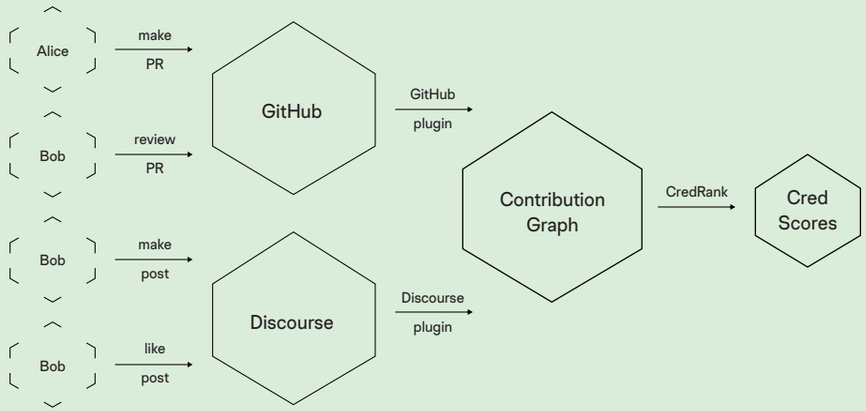
HOW DOES IT WORK?

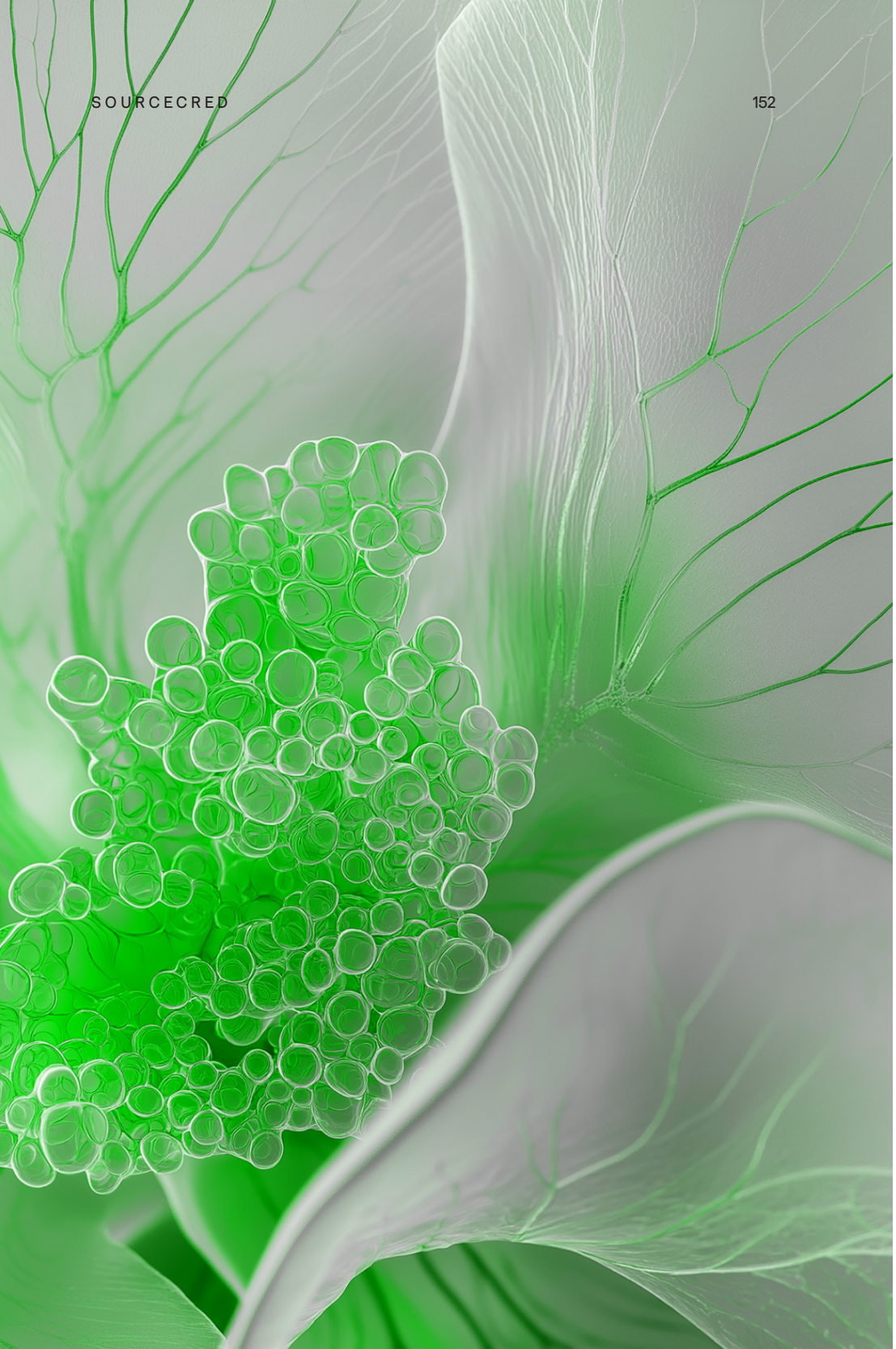
SourceCred uses an algorithm to determine the value a contributor adds to a project. This algorithm includes customizable plugins for community-specific moderation, and it operates transparently on publicly accessible data without storing community information. When a contribution is made, SourceCred attests to it and assigns an amount of "cred" based on its value to the project. This cred flows from the contribution to all the people and other contributions that supported it.

In the SourceCred mechanism, a project is represented as a node graph of contributions and people. The nodes are connected to allow Cred flow between them based on the support relationships between different contributions. The more connections a contribution has to other contributions in the project, the more opportunities it has to receive Cred. This structure provides a visual and measurable representation, known as the Cred Score, showing which contributions are foundational and which support future work within the project.

The SourceCred algorithm also uses "weights," a set of rules that determine how much Cred different types of contributions are worth. Each community can decide the weights for its Cred distribution, allowing it to define what it values most and which actions reflect those values.

Since Cred is non-transferable, it cannot be bought or sold, preserving its integrity as a measure of contribution. However, Grain, a community currency tied directly to one's Cred, can be exchanged. Grain is minted and distributed to contributors based on the Cred they have earned, allowing it to be transferred both within and outside the project.





WHAT SETS IT APART?

Visual analysis of captured value	The SourceCred system visually represents value capture within a project, allowing stakeholders to see what, where, and how value is generated.
Efficient resource allocation	By highlighting where the most value is generated, SourceCred can inform decisions about resource allocation within a project by directing efforts and support to areas and contributors that demonstrably create the most value.
Contribution-based assessment	Tracking and analyzing individual contributions for their impact offers stakeholders a straightforward understanding of how each input contributes to the project's overall success and progress.

OCTANT GLM
LOCKING MECHANISM

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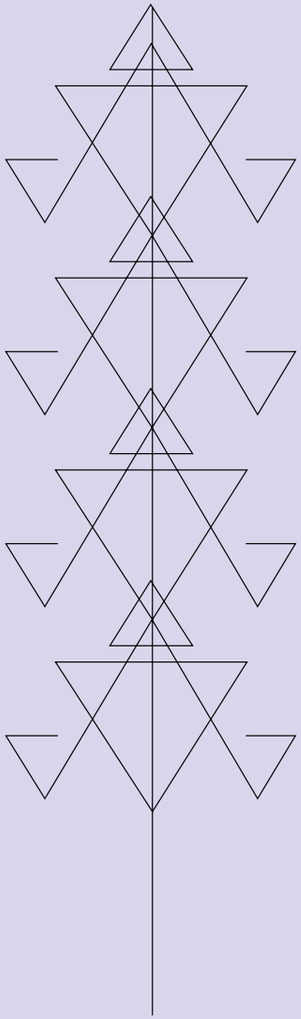


Benefits

1. Users maintain control of their assets
2. Locking incentives
3. Encourages long-term engagement

Limitations

1. Sybil and collusion resistance - requires protection measures
2. Reliance on ETH stake yield
3. Potential for whale dominance

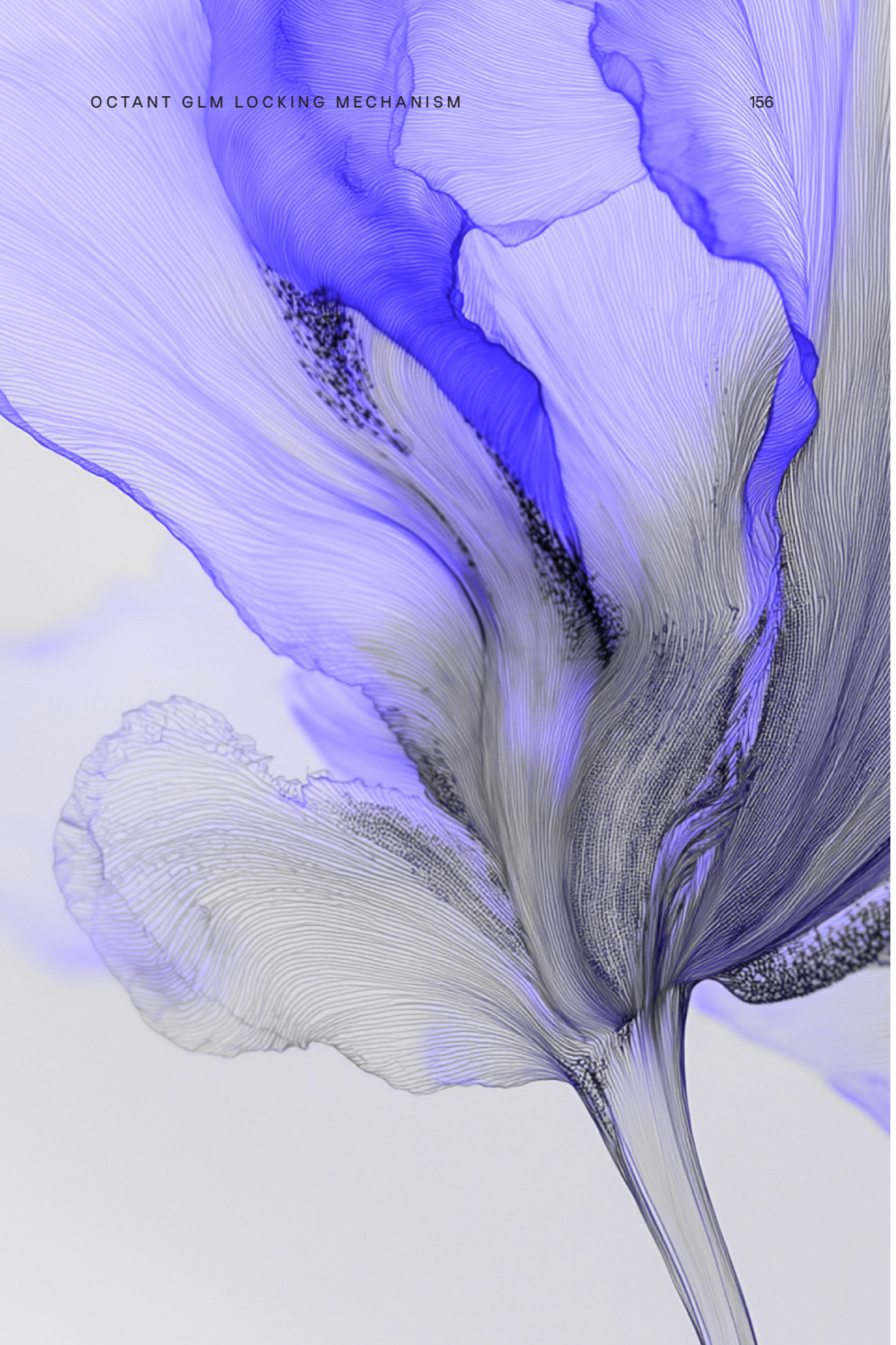
TL;DR

INVENTED BY THE GOLEM FOUNDATION

Octant functions as a governance mechanism by allowing token holders to lock tokens, gain governance rights, and influence funding decisions in decentralized systems.

Launched on the Ethereum mainnet on August 8, 2023, it is best known as a platform for participatory public goods funding, developed by the Golem Foundation and created to experiment with decentralized governance and sustainable PGF models. Leveraging 100,000 ETH staked, Octant funds recurring rounds where GLM holders lock tokens to earn rewards and governance rights while donations are boosted by matched funding.

View on Allo.Expert



WHO SHOULD USE IT?

This type of mechanism is best suited for those who aim to attract long-term participation from those committed to the growth of their ecosystem. It engages public goods supporters who favor direct project funding, with subtle gamification offering the chance for substantial rewards without any risk to their original contributions.

STRATEGY

Octant's operates through 90-day Epochs. The Golem Foundation stakes 100,000 ETH and allocates part of the staking returns to fund Octant, distributing the funds between User Rewards and Matched Rewards. Users lock GLM to partake in these rewards, which are calculated based on a time-weighted average.

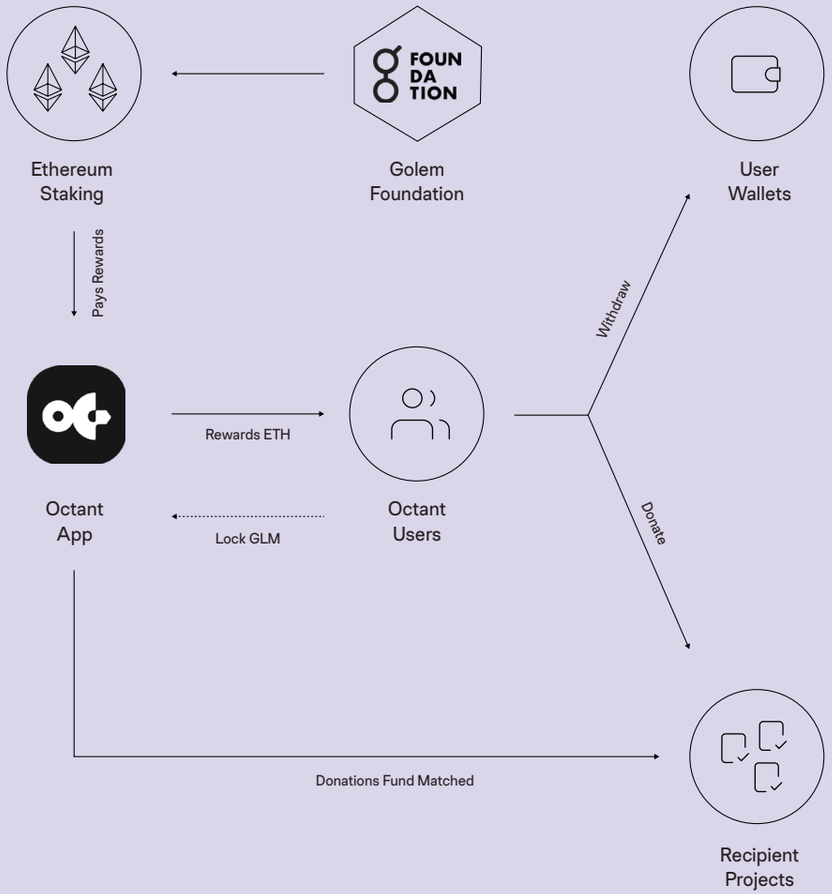
HOW DOES IT WORK?

Users are required to lock a minimum of 100 GLM tokens into a smart contract for a 90-day epoch. The more GLM that is locked, and the longer it remains locked, the greater the rewards and voting power assigned to the participant. This design incentivizes sustained engagement while allowing users to maintain full control of their assets.

The mechanism is non-custodial, meaning users retain complete control over their GLM tokens and can unlock them at any time. However, optimal participation and maximum rewards are achieved by maintaining the lock for the full duration of the epoch. The reward structure operates on a time-weighted average, ensuring that extended and substantial locks yield proportionally higher returns.

Voting power in governance decisions is directly proportional to the amount of GLM locked.
From Epoch Two onward, Octant has implemented a “minimal value strategy,” whereby voting power is determined by the smallest amount of GLM held in the lock during the epoch. This approach promotes consistency in locking behavior, as any reduction in the locked amount diminishes the participant’s influence and rewards.

When an epoch ends, participants enter an allocation window during which they can choose to either claim their rewards or donate them to public goods projects. Donations are enhanced through a matched rewards pool, increasing their impact. This model not only rewards individual engagement but also reinforces community-driven funding, aligning participant incentives with broader public goods support.



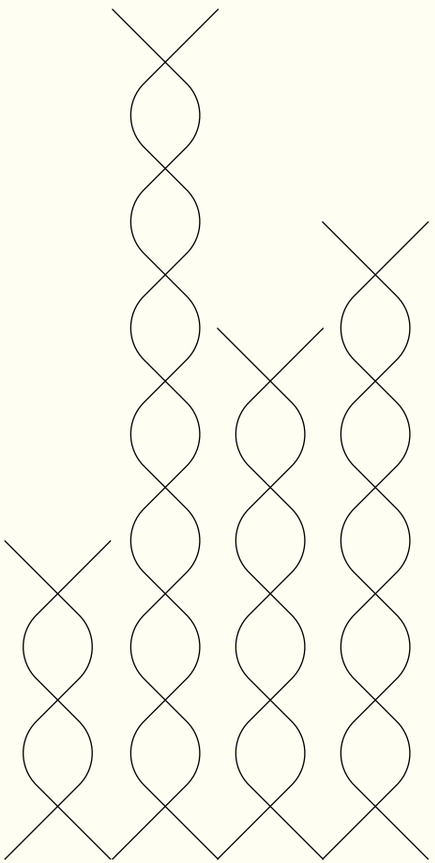
OCTANT GLM LOCKING MECHANISM

WHAT SETS IT APART?

Non-Custodial Design	Unlike many staking models that pool assets or require custodianship, Octant's mechanism ensures that users maintain full control of their GLM tokens at all times and allows flexibility in unlocking funds without penalties.
Time-Weighted Rewards	While many mechanisms reward solely based on the total amount staked, Octant uses time-weighted averages to calculate rewards, which encourages longer-term engagement.
Minimal Value Strategy	Many web3 platforms incentivize short-term, large stakes. In contrast, Octant calculates voting power based on the minimum GLM locked (starting from epoch 2), encouraging consistent participation and deterring short-term locking and unlocking strategies.
Interactive Allocation Process	By incorporating an allocation window, Octant introduces gamification, enabling users to adjust their funding strategies according to real-time community behavior. Few web3 mechanisms integrate this level of interactivity and flexibility in governance, making Octant's process both participatory and responsive.

BONDING *CURVES*

19



Benefits

1. Flexible fundraising
2. Transparent pricing
3. Automatic liquidity

Limitations

1. Complex implementation
2. Market manipulation susceptibility
3. Price volatility

TL;DR

POPULARIZED BY SLAVA BALASANOV (BANCOR), SIMON DE LA ROUVIERE, ABRAHAM OTHMAN

Bonding Curves act as a funding and pricing mechanism by using smart contracts to automatically adjust token prices based on supply, allowing continuous minting, burning, and price discovery.

Key contributors include Slava Balasanov (Bancor), Simon de la Rouviere, and Abraham Othman, who helped popularize the concept within decentralized finance (DeFi). Bonding Curves were first effectively implemented in Ethereum projects, enabling decentralized markets without centralized exchanges.

View on Allo.Expert

WHO SHOULD USE IT?

Bonding Curves will benefit projects seeking to solve liquidity challenges and implement a more dynamic token economy. They are ideal for teams looking to raise continuous funding without relying on centralized exchanges and investors who want a transparent and predictable mechanism for token acquisition and liquidation. Bonding Curves are also increasingly integrated into DeFi protocols and experimented with for non-financial use cases, offering versatile applications beyond simple token issuance.

STRATEGY

Bonding Curves allow projects to sell tokens at prices that increase as more tokens are minted, incentivizing early adoption. Conversely, tokens can be sold back to the contract at prices determined by the same curve, providing liquidity for token holders.

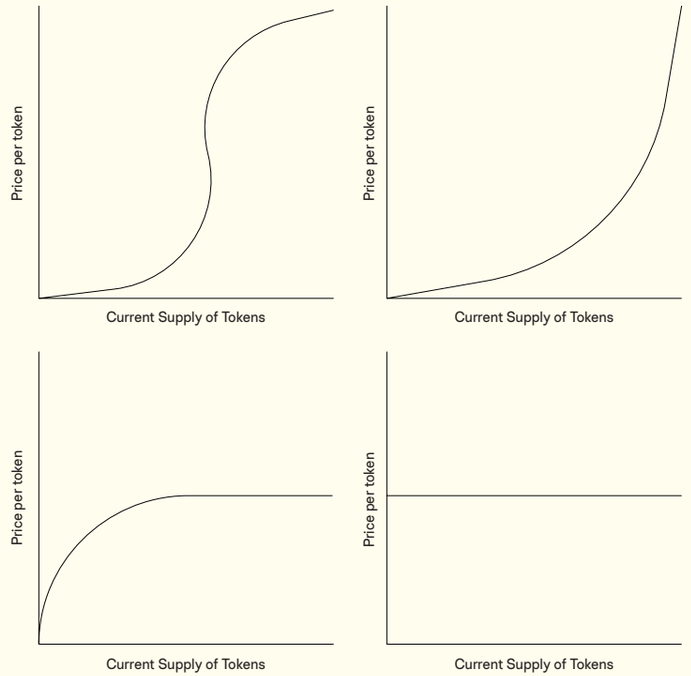
HOW DOES IT WORK?

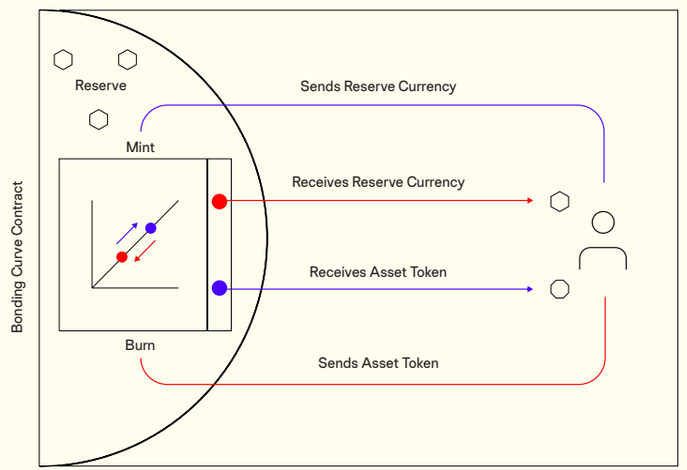
A project begins by deploying a smart contract with a predefined bonding curve formula, setting initial parameters such as the starting price and reserve ratio.

When users purchase tokens, they send funds (e.g., ETH) to the contract, which calculates the number of tokens to mint based on the current supply and curve formula. These newly minted tokens are sent to the user, while the received funds are added to the reserve pool. When users wish to sell tokens, they send them back to the contract, which calculates the amount of reserve currency to return using the bonding curve. The tokens are then burned, and the user receives the corresponding amount from the reserve pool.

This process continues indefinitely, with the price adjusting automatically as tokens are minted or burned. Key features include automated market-making, built-in incentives for early adopters, and a transparent, predictable pricing system. Additionally, customizable curve shapes allow projects to tailor the model to their specific needs.

*some of the many possible examples





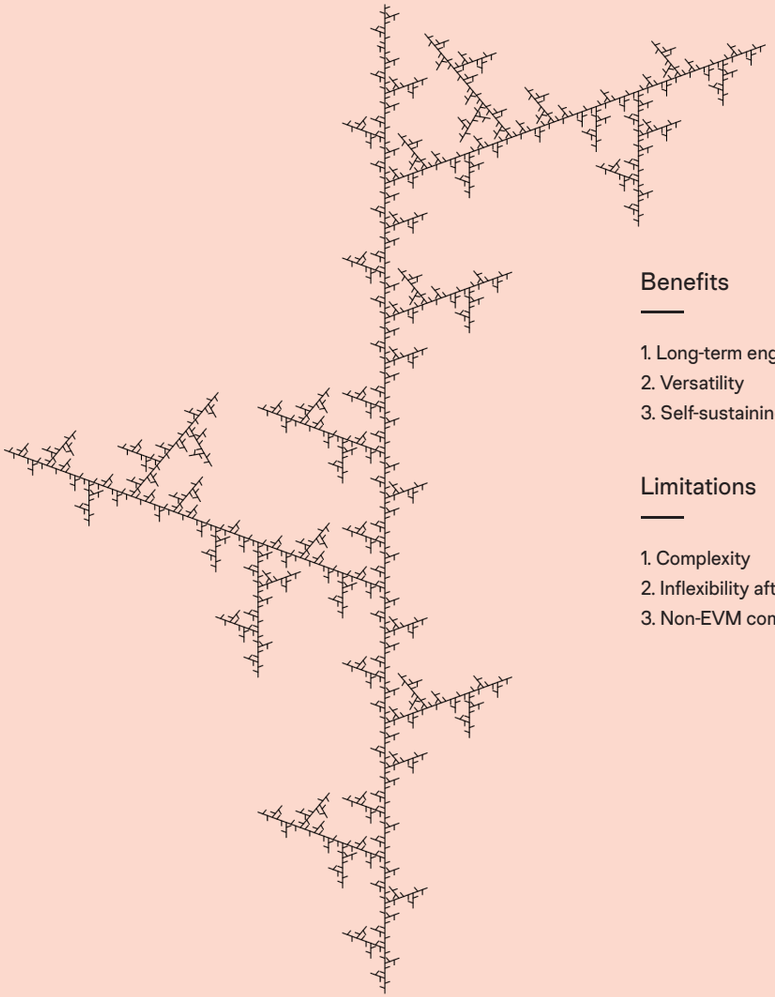
WHAT SETS IT APART?

Continuous Funding	Unlike traditional fundraising methods, bonding curves allow projects to raise funds continuously throughout their lifecycle.
Automatic Liquidity	The mechanism ensures that liquidity is available for token holders.
Price Discovery	The curve provides a clear and transparent method for price discovery based on supply and demand.
Customizable Tokenomics	Different curve shapes can be used to create various economic incentives and token distribution patterns.

GOVERNANCE MECHANISM

REVNETS

20



Benefits

1. Long-term engagement
2. Versatility
3. Self-sustaining ecosystems

Limitations

1. Complexity
2. Inflexibility after launch
3. Non-EVM compatibility

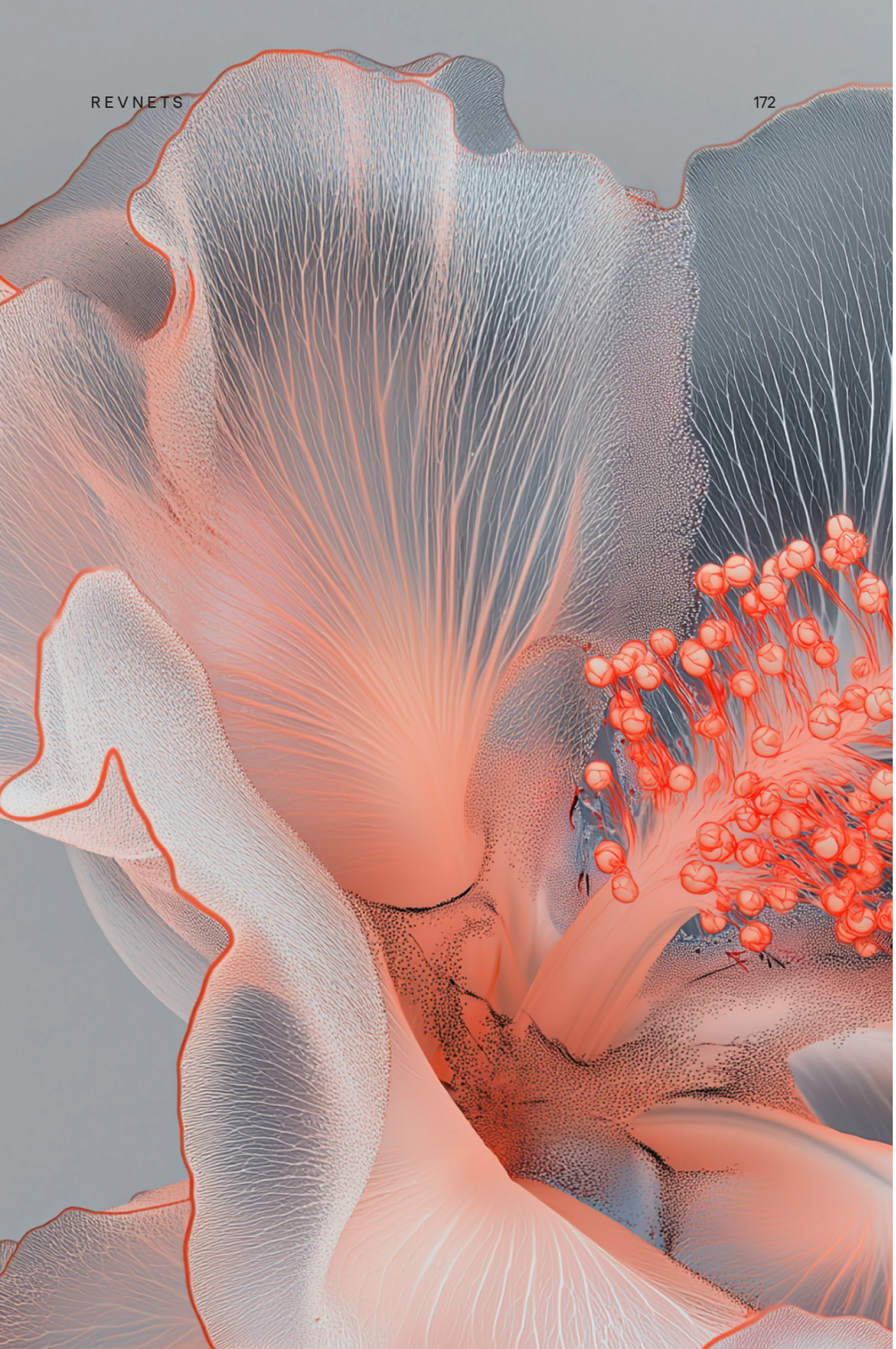
TL;DR

INVENTED BY JUICEBOX

View on Allo.Expert

Revnets function as a governance mechanism by using an onchain cap table to enable transparent, decentralized participation and revenue generation without governance or management overhead.

Invented by Jango and other Juicebox contributors (Robert Leonhard, JohnnyD, Wraith, Nowonder), revnets are built on the Juicebox v4 protocol—a crypto fundraising and DAO management platform. Structured as a Delaware-based LLC that invests in $REV tokens, this open-source mechanism focuses on providing a transparent and cost-efficient funding model that enables broad participation and revenue generation that can be used to address monetization, competitive advantage, and dependency dilemmas.



WHO SHOULD USE IT?

This mechanism is a good fit for leaders, creators, and investors looking to bootstrap and sustain projects without the burdens of active oversight. According to Jango, it serves as a hands-free, all-in-one growth engine which resolves the tension between open source productivity and private value capture.

STRATEGY

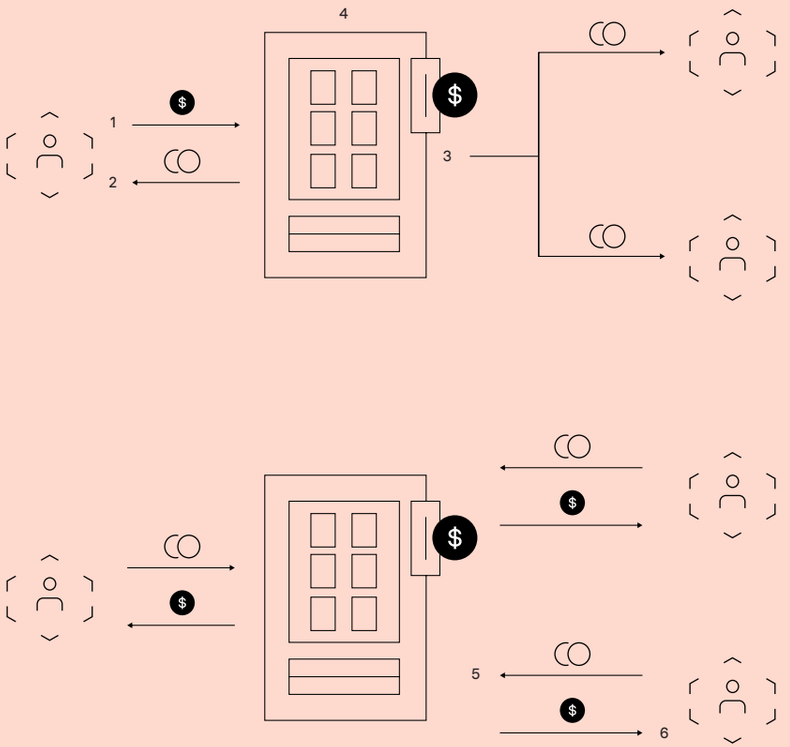
Revnets currently operate on Ethereum mainnet, Optimism, Arbitrum, and Base, offering a clear model for productive wealth creation and distribution within decentralized ecosystems. They act like a “digital vending machine” that accepts funds and issues unique tokens ($TOKENs). To access revnet funds, participants must return their $TOKENs, which incentivizes long-term engagement and creates a self-sustaining ecosystem. Since the cash-out value of each $TOKEN can never decrease, they also support loans.

HOW DOES IT WORK?

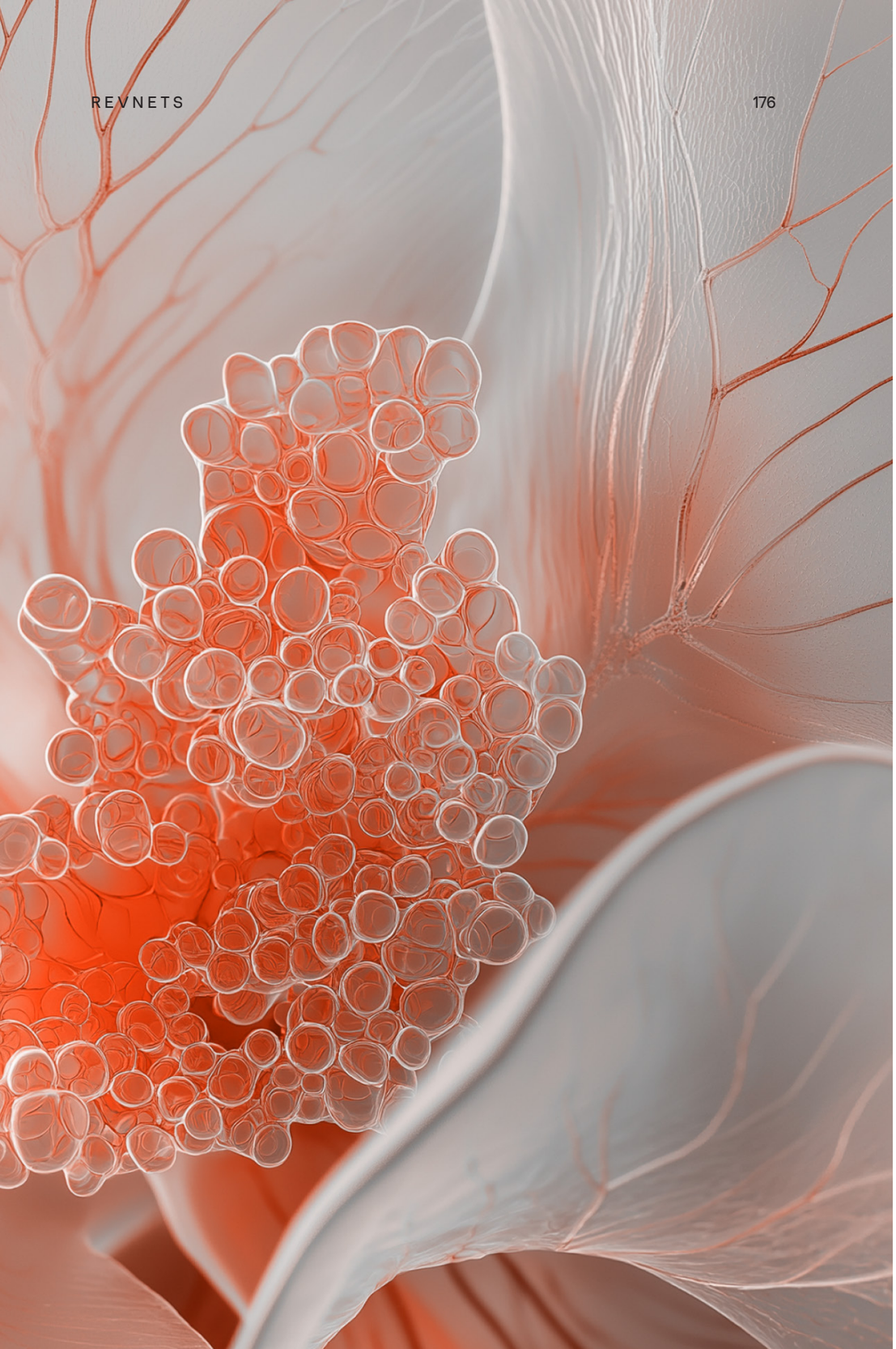
Revnets enforce three main rules that are preset and can change over time. First, there is always a set price at which the revnet issues new $TOKENs. If an Automated Market Maker (AMM) offers a better rate than the issuance price, incoming funds are redirected to the AMM. This rate can also be adjusted over time. The second rule concerns the $TOKEN split, allowing a percentage of purchased tokens to be allocated to a privileged account, with the split percentage customizable at set intervals. The final rule allows $TOKENs to be returned to the revnet for a share of its revenue, with a tax that increases the value of future cash-outs and rewards long-term holders.

Additionally, users can leverage $TOKENs as collateral to access loans, which can be repaid over time to regain the tokens. If the loan is not repaid, the collateral is liquidated by the provider. Repayment can last up to 10 years, and borrowers can choose different options, such as paying over time, pre-paying at half the cost, or a combination. Each loan from revnets incurs a 2.5% $NANA fee and a 0.5% $REV fee, which are used to fund the revnets issuance or buyback of $TOKENs.

1. A revnet can be paid in ETH, and/or other tokens (shown below as dollar bills).
2. The payments from (1) generate its own tokens at a given price, say 1 ETH buys 1,000 $TOKEN or NFT artifact (shown as circles).
3. A revnet can have a split in place that automatically sends a percentage of these new $TOKENs to a set of pre-established entities, say 20% split so that 100 $TOKEN goes to each of two builders and 80% goes to the payer of the 1 ETH.
4. The ETH stay in the vending machine.



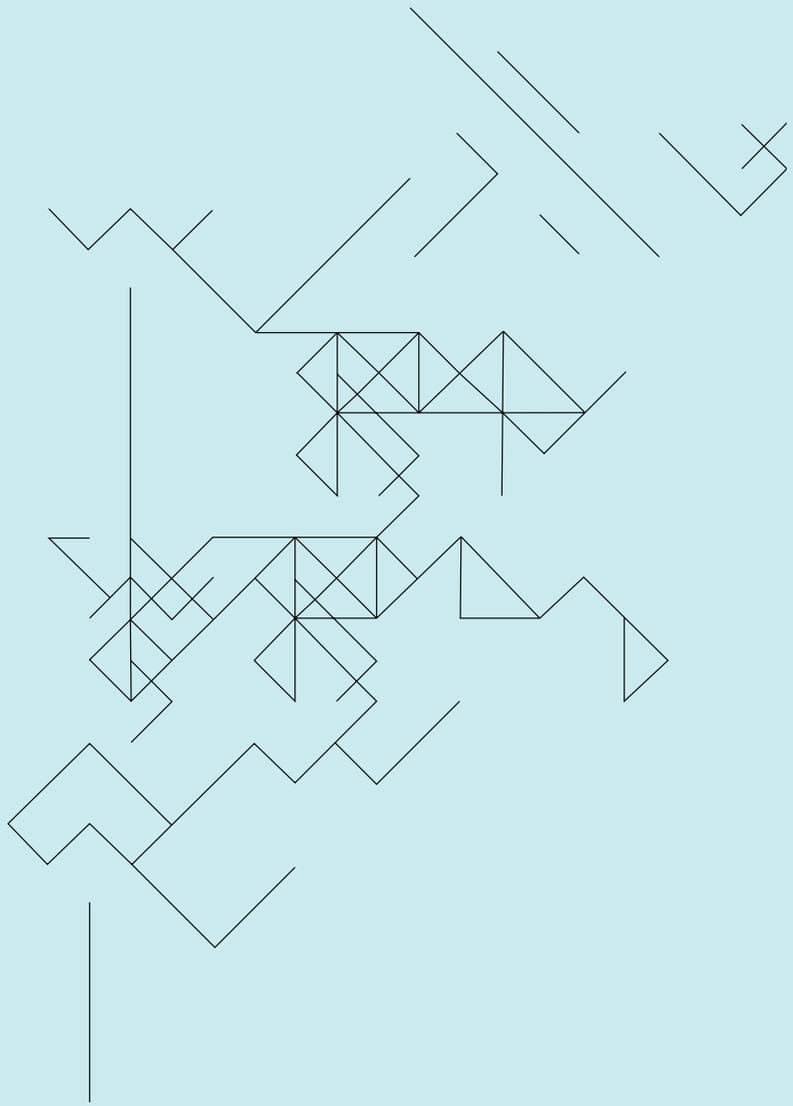
5. In order to get the 1 ETH back out, a $TOKEN holder has to cash out, which incurs a tax.
6. This means if one of the builders wanted to cash out their 100 $TOKENs right away, they would get less than the proportional 0.1 ETH if a tax was in place, leaving revenue on the table for those who cash out later.



WHAT SETS IT APART?

Governance-free	Apart from the initial parameter settings, there is no governance interference, alleviating the risk of associated inefficiencies and funding take-overs.
Liquid	Open markets boost liquidity and minimize opportunities for market manipulation. Utilizing automated market makers ensures efficient management of this liquidity.
Omni-chain	Revnets operate across various EVM-compatible networks, allowing token transfer between chains. They can also grow to accept money on new EVM compatible networks.

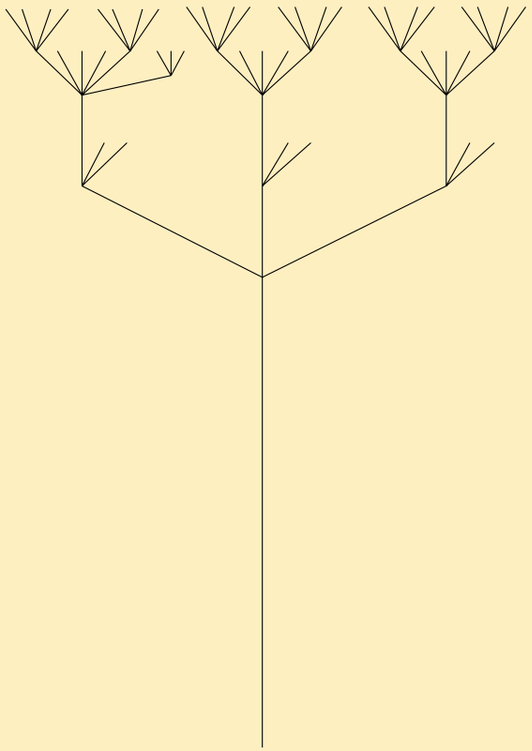
COOPERATIVE *MODELS*



View on Allo.Expert

This section explores various tools and concepts that can be applied or adapted to influence how decisions are made and how value is distributed in onchain systems. While not all were originally designed for blockchain environments, each offers unique insights into challenges faced in onchain capital allocation. From economic models to voting systems and contribution metrics, these mechanisms provide a toolkit for addressing the complex issues of resource management, governance, and value distribution in decentralized contexts.

ROTATING SAVING AND *CREDIT ASSOCIATIONS (ROSCA)* 21



Benefits

1. Quick lump sums
2. Disciplined savings
3. Community bonds

Limitations

1. Scaling up
2. Default protection
3. Returns not guaranteed

TL;DR

View on Allo.Expert

Rotating Savings and Credit Associations (ROSCAs) function as a cooperative model by enabling individuals to pool capital collectively.

Emerging around 200 B.C. in China, ROSCAs are informal financial systems in which individuals agree to cooperatively pool capital. These systems operate outside formal banking and adapt to different cultural contexts. They provide participants a way to access lump sums for significant expenses, such as weddings, medical bills, or business investments.

WHO SHOULD USE IT?

This mechanism is best for tight-knit, trust-based groups with shared goals. It provides a simple, low-barrier financial solution for communities. While it's often used by resource-constrained groups without access to formal financial services, it also works well for inclusive communities focused on fair resource distribution.

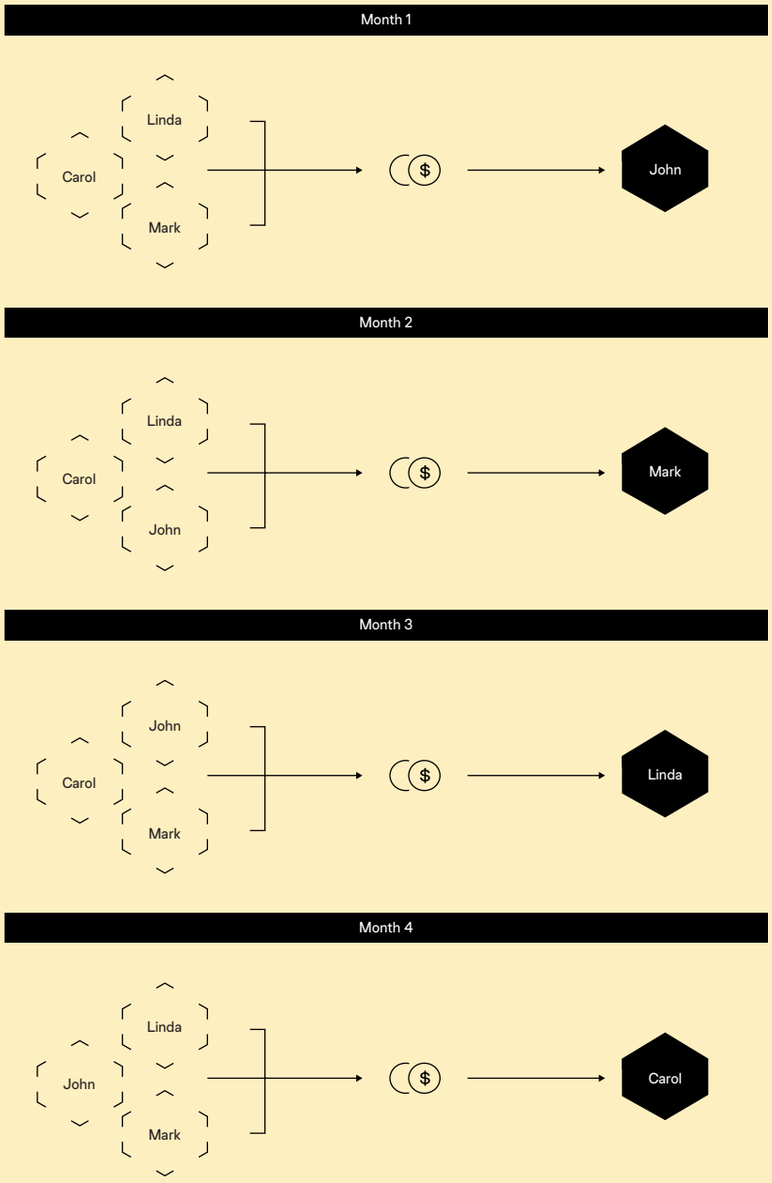
STRATEGY

ROSCAs are comparable to DAO treasuries, but participants are guaranteed a return. While not inherently onchain, they can be transitioned using smart contracts and enhancing transparency with all activities recorded on the blockchain. This system enables individuals to bypass traditional credit or banking institutions and operates with an interest-free structure.

HOW DOES IT WORK?

ROSCAs are contingent on all participants agreeing to contribute a fixed amount of money at regular intervals, such as weekly or monthly. The total amount is given to one member at a time, and the order of distribution can be predetermined, randomly selected, or decided by need or bidding.

Members take turns receiving the pot, ensuring each person benefits once during the cycle. After everyone has received the pot, the group starts a new cycle, adjusting the terms as needed. While adapted differently across regions, the core principles remain consistent, with variations in meeting frequency, contribution amounts, and fund distribution rules.



ROTATING SAVINGS AND CREDIT ASSOCIATIONS (ROSCA)

WHAT SETS IT APART?

Simple Structure	Operates with a straightforward design, requiring only regular contributions and trust among members.
Trust-Based Regulation	Relies entirely on social ties and mutual trust, making it self-regulating without formal contracts.
Fair Distribution	Every participant has an equal opportunity to receive the pot once per cycle, ensuring fairness.
Flexible Adaptation	Can be tailored to different needs, with flexible options for how and when funds are distributed.

EXAMPLES

Kiva

Kiva uses a similar community-based lending model to provide microloans to underserved communities worldwide. By leveraging technology, Kiva allows individuals to lend small amounts to entrepreneurs and individuals globally, offering a modern spin on the ROSCA concept but with broader reach and transparency.

Worldcoin Savings Circles

Worldcoin has explored creating digital savings circles, where users form small groups to contribute and withdraw funds in a decentralized way, bringing the communal aspect of ROSCAs into the digital world using cryptocurrency.

Chamasoft

A Kenyan startup digitizes traditional ROSCAs (called “Chamas” in East Africa) by offering a platform that manages the group’s contributions, expenses, and payouts, showing how the practice can be updated with modern financial technology.

BASE PAINT - PIXEL ARTIST REVSHARE

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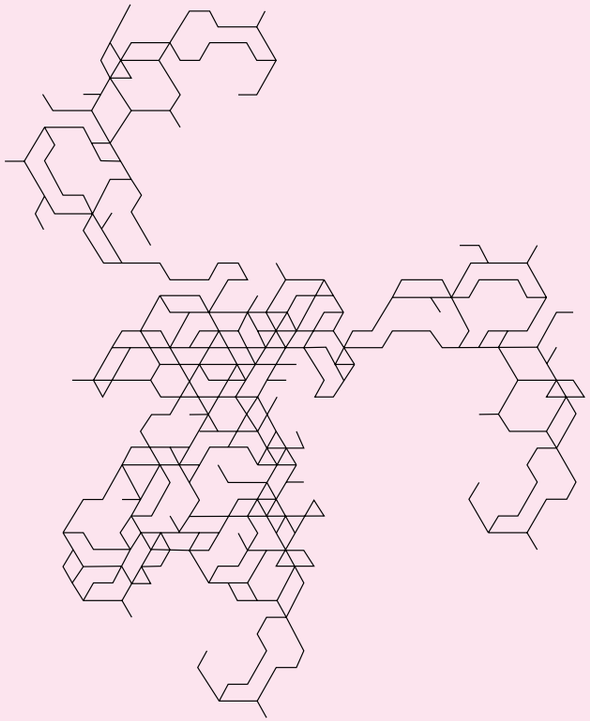


Benefits

1. Community-driven collaboration
2. Revenue-sharing for artists
3. Quadratic voting for theme selection

Limitations

1. Complexity for new users
2. Potential for pixel vandalism
3. Limited control over brush upgrades/downgrades

TL;DR

DEVELOPED BY ZACH HERRING AND W1NT3R.ETH

BasePaint is an example of a cooperative mechanism as it allows decentralized collaboration through a pixel art revenue-sharing system, where participants collectively create and share in the economic value generated. BasePaint offers a decentralized, shared pixel canvas that enables artists to create and mint digital artwork as NFTs collaboratively.

Pixel artist revenue sharing has emerged as a solution to make digital artwork creation and distribution more community-driven. By allowing a collective of artists to contribute to shared canvases and mint their work as NFTs, BasePaint provides a decentralized and open platform for digital creativity.

View on Allo.Expert

WHO SHOULD USE IT?

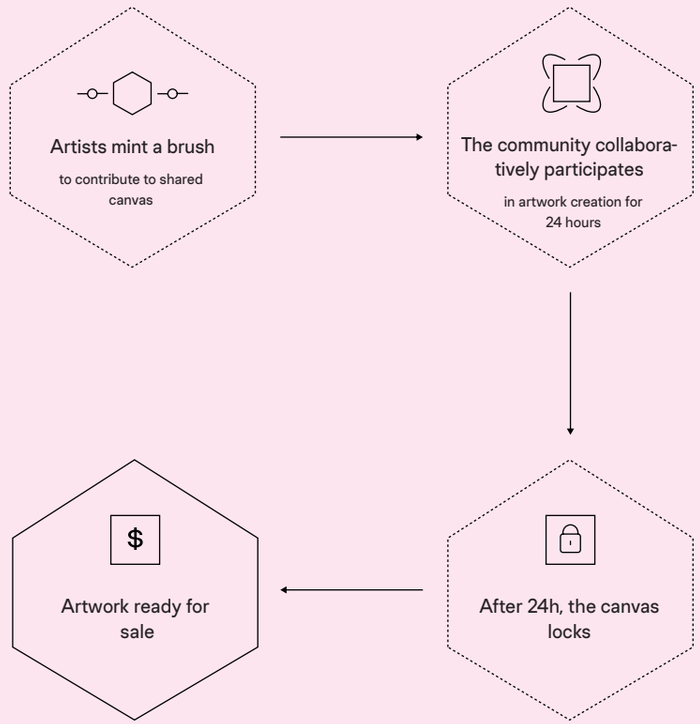
This mechanism is well-suited for digital artists, NFT enthusiasts, and communities interested in decentralized art creation, curation, and ownership. This methodology is for revenue sharing and artist collaboration.

STRATEGY

BasePaint operates through daily open-edition NFT sales, with the profits distributed among contributors based on the number of pixels they paint. Collectors buy the art NFT, and artists receive 90% of the profits, while 10% goes to the protocol.

HOW DOES IT WORK?

Artists mint a brush to contribute to a shared canvas. The community creates artwork collaboratively over 24 hours. When time is up, the canvas locks. Open edition NFTs of the completed artwork are then minted. Profits from the open-edition sale are distributed among the contributing artists based on the number of pixels painted relative to the total number of pixels contributed.



WHAT SETS IT APART?

Onchain Collaborative Art	BasePaint allows multiple artists to contribute to a single digital canvas, resulting in a collaborative artwork that is then minted as an NFT. This collective approach to digital art creation is distinctive in the NFT space.
Transparent Onchain Revenue Sharing	The platform uses smart contracts to distribute 90% of the profits from NFT sales directly to the contributing artists based on their pixel contributions. This transparent and fair revenue-sharing model is built directly into the blockchain mechanism.
Quadratic Voting for Theme Selection	BasePaint employs Quadratic Voting to allow the community to select daily themes and color palettes. This democratic approach to decision-making ensures that the community determines creative direction in a way that prevents domination by a few large stakeholders.
Artwork is stored Onchain and is CC0	Anyone can recreate any BasePaint canvas from the onchain data and use the artwork in whatever way they see fit. Multiple derivative art projects have been made, passing revenue back to the original artists.

COOPERATIVE MODEL

BREADCHAIN - ONCHAIN CROWDSTAKING MECHANISM

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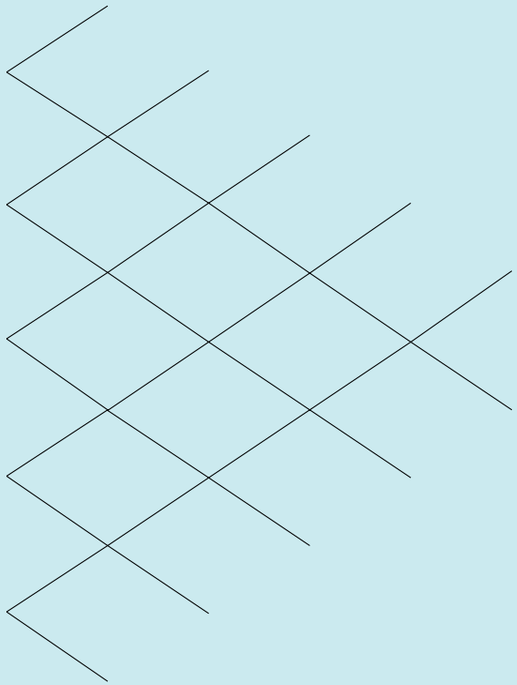


Benefits

1. Economic resilience
2. Community participation
3. Equitable distribution of resources

Challenges

1. Human Scalability issues
2. Regulatory hurdles
3. Balance between centralization and decentralization

TL;DR

Breadchain functions as a cooperative model by advancing post-capitalist values through a decentralized funding approach that fosters solidarity and equitable resource distribution.

Breadchain emerged as a decentralized cooperative with an onchain crowdstaking application that allows users to stake DAI in exchange for BREAD tokens, representing their contribution to the cooperative. The yield generated from staking is distributed democratically through a voting process every 30 days. This mechanism enhances transparency, empowers members, and directs resources toward projects that align with cooperative principles and mutual support.

View on Allo.Expert

WHO SHOULD USE IT?

Breadchain is perfect for individuals and communities seeking to build decentralized collectives that emphasize shared, mutual benefits over profit-driven objectives. Web3 communities exploring innovative economic models that focus on community well-being and transparent governance will find Breadchain a powerful tool. It encourages collaboration between projects and demonstrates how blockchain technology can be leveraged to foster social good beyond mere financial speculation, driving collective action and equitable resource distribution within a cooperative framework. It can also serve as an alternative to traditional investment options like venture capital, as it offers a form of bootstrapping to support their growth.

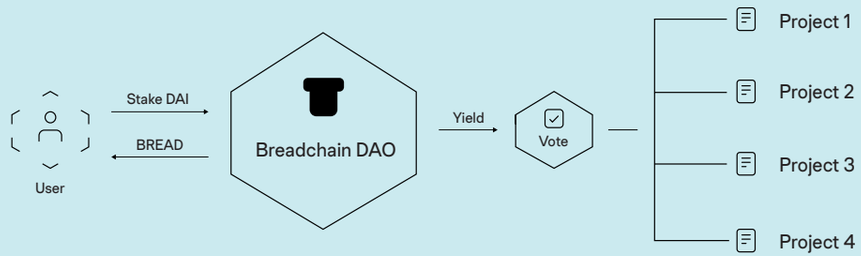
STRATEGY

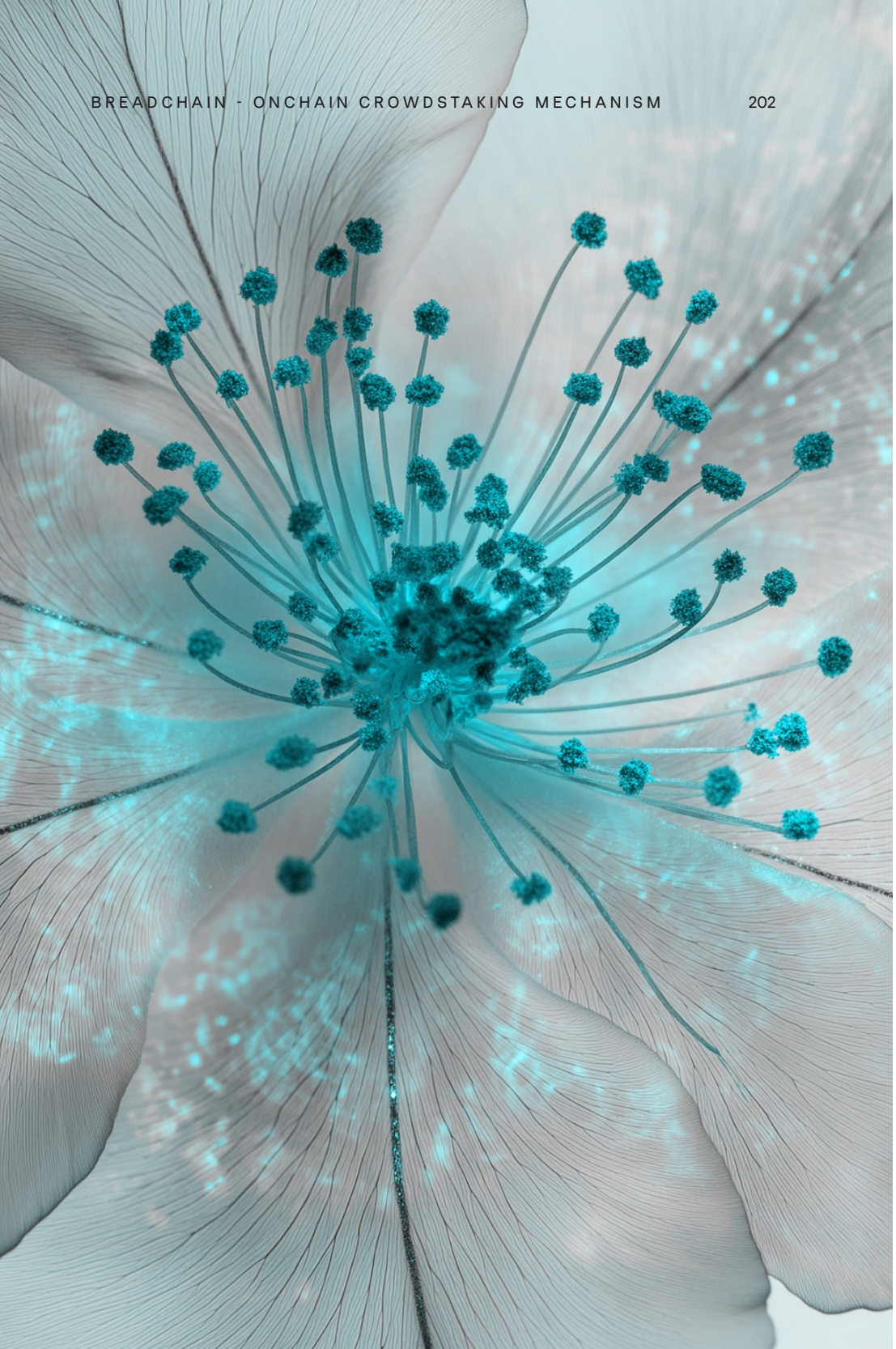
The strategy of Breadchain's cooperative model revolves around pooling resources from its members through the Crowdstaking Protocol, where participants stake xDAI in exchange for BREAD tokens.

HOW DOES IT WORK?

In the Breadchain crowdstaking model, users participate by converting xDai into BREAD tokens, which serve as their stake in the cooperative. To get started, users connect their wallets to the Breadchain Crowdstaking App and convert xDai into BREAD tokens at a 1:1 ratio. The staked xDai generates yield, which is pooled to fund cooperative projects. Every 30 days, members use their BREAD tokens to vote on how this generated yield is allocated to different community-endorsed projects, ensuring democratic decision-making.

Participants have flexibility as they can “burn” their BREAD tokens at any time to reclaim their original xDai investment. This process maintains engagement while allowing members to exit when needed, making it a flexible and community-driven approach to decentralized funding.

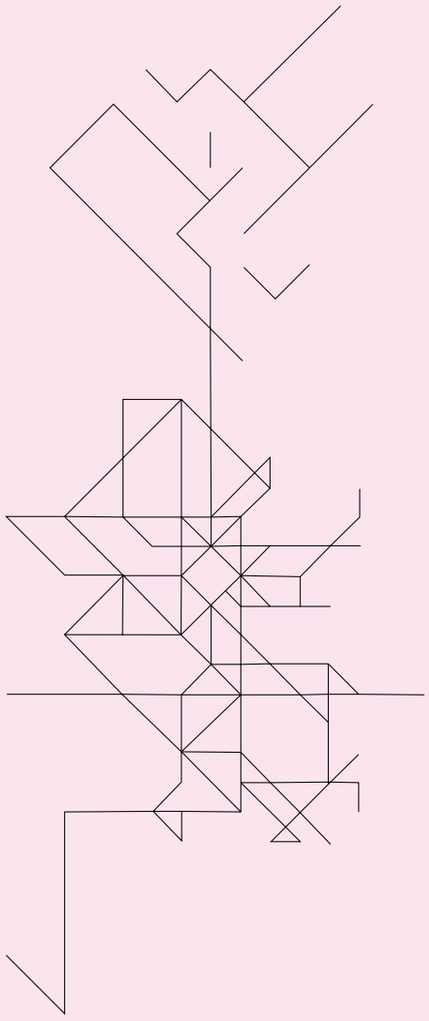




WHAT SETS IT APART?

Democratic Decision -Making	Members vote on how pooled resources are allocated, ensuring a community-driven governance model.
Flexibility	Users can burn BREAD tokens to retrieve their xDai at any time, offering flexibility and control over their funds.
Decentralized Funding	Breadchain focuses on supporting post-capitalist projects, using blockchain technology to promote transparency and equitable resource distribution.

APPLIED
USE CASES



This section explores various tools and concepts that can be applied or adapted to influence how decisions are made and how value is distributed in onchain systems. While not all were originally designed for blockchain environments, each offers unique insights into challenges faced in onchain capital allocation. From economic models to voting systems and contribution metrics, these mechanisms provide a toolkit for addressing the complex issues of resource management, governance, and value distribution in decentralized contexts.

ARTIZEN: *ARTIFACTS*

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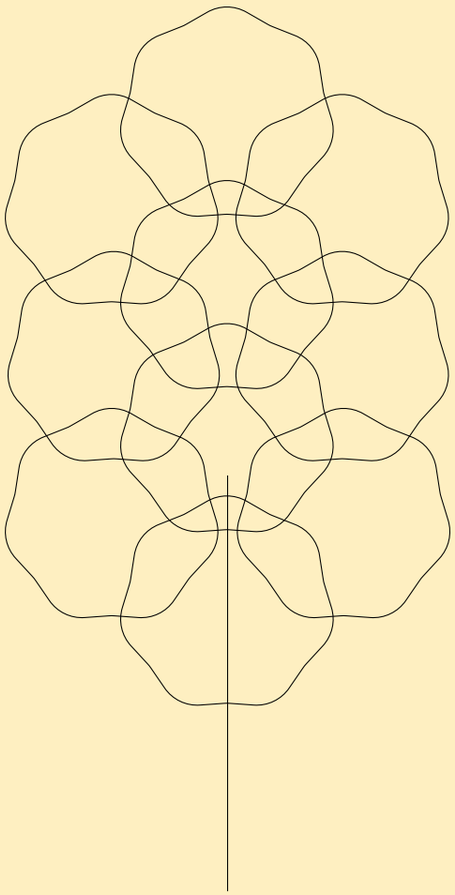


Benefits

1. Democratizing creator funding
2. Fair distribution
3. Decentralized community curation

Limitations

1. Technical barriers
2. Community dependency
3. Volatility of NFT market

TL;DR

DESIGNED BY RENÉ PINNELL

View on Allo.Expert

Artizen's Artifacts use case aims to reduce biased, bureaucratic, and inefficient funding systems for creators of digital goods through its transparent, community-driven platform. Designed by René Pinnell, Artizen has rewarded $1,662,228 through the sale of Artifacts as of 10/2024.

WHO SHOULD USE IT?

This type of mechanism is ideal for creators in the fields of art, science, technology, and culture who aim to keep their communities fully involved in funding decisions. It encourages projects to prioritize their fanbase, often resulting in community growth. This approach attracts mission-driven brands and sponsors interested in contributing matching funds, as well as supporters ready to invest in their favorite projects through collectible purchases.

FUNDING STRATEGY

Artizen's funding strategy relies on projects selling cultural artifacts. By selling digital artifacts as NFTs, Artizen unlocks additional match funds, giving creators and supporters a stake in each project's success. Sponsors pool and match the funds based on artifact sales, using a logarithmic formula to distribute match funding fairly.

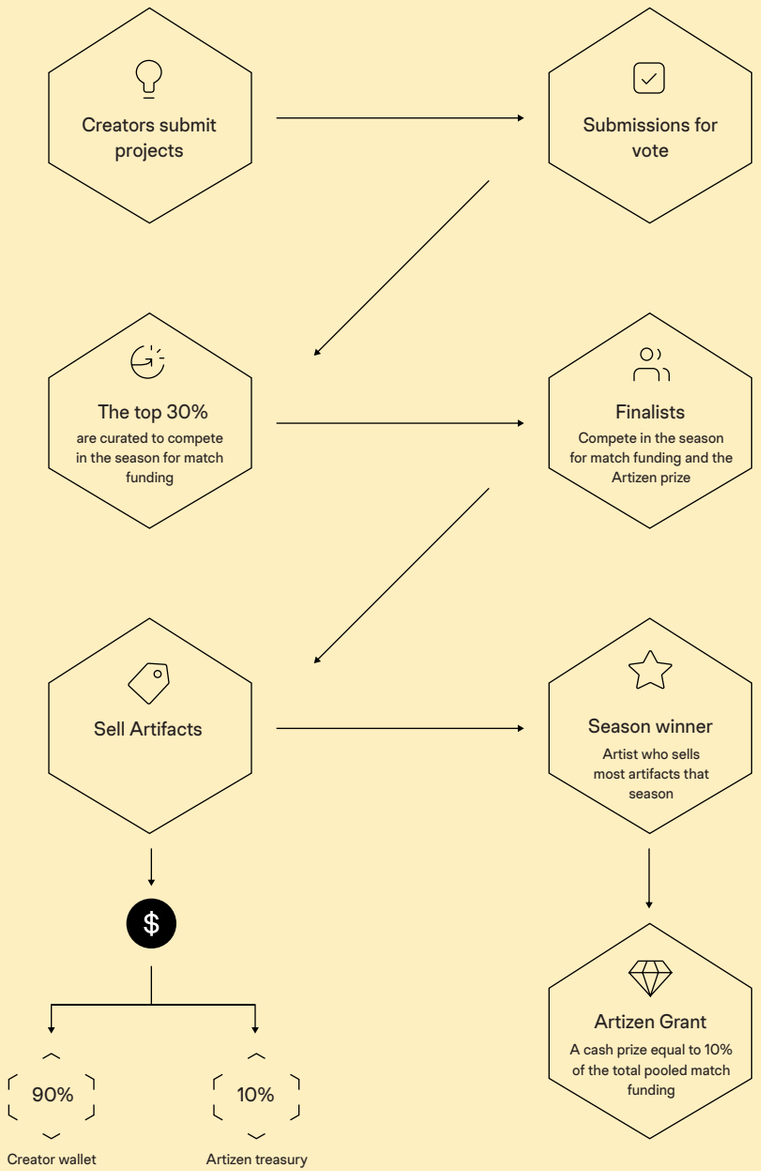
HOW DOES IT WORK?

Artizen established curation guidelines that each project must meet for eligibility. Only creators with a project that meet these and qualify for at least one of their sponsors can submit to the Artizen Fund.

Creators first submit their projects to the Artizen Fund, where the community votes on all entries. The Artizen community then votes on the projects submitted, and the top 30% are curated to compete in the season for match funding and the Artizen prize. Artizen community members gain voting power by executing net positive actions on the platform, such as owning an artifact, sponsoring match funds, submitting projects, etc.

Curated projects compete by selling their artifacts, usually for 0.01 ETH or US$25. For each artifact sold, 10% goes to the community treasury to maintain the platform, and 90% goes to the project's creator.

The more artifacts a project sells, the more match funding it unlocks. The project that sells the most artifacts in a Season wins a cash prize equal to 10% of the total pooled matching funds. At the end of the season, matching funds are distributed to qualified projects using a logarithmic match funding formula to ensure fair distribution.



WHAT SETS IT APART?

Equitable Funding

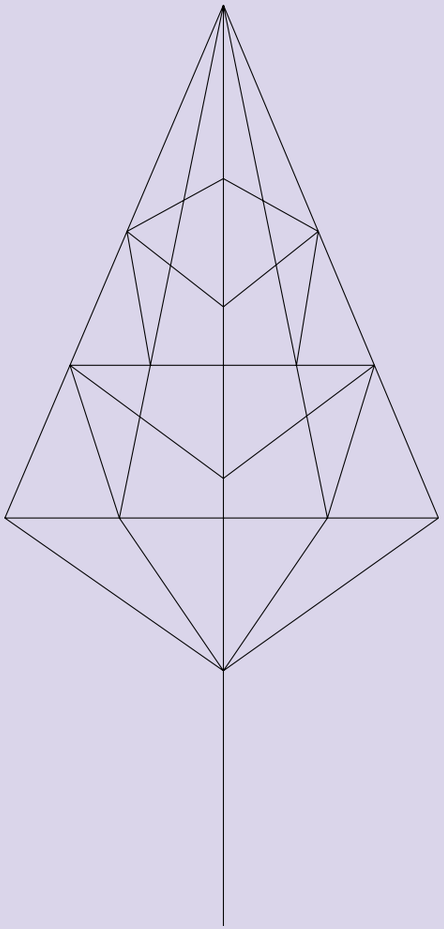
Artizen's logarithmic match funding formula ensures that all projects, regardless of popularity or fanbase size, receive substantial matched funds, promoting a fair funding process.

Transparency

Artizen promotes transparency in its funding process by involving the community in project curation. Additionally, the public nature of the artifact purchasing process and the matching fund formula allows the community to track artifact purchases and verify how funds are distributed independently.

TIME-LOCKED CONTENT RELEASE: PLEASR

25



Benefits

1. Decentralized ownership of rare assets
2. Active community engagement
3. Incentivized participation

Limitations

1. Sustaining long-term engagement
2. Complex reward structures
3. Balancing accessibility and exclusivity

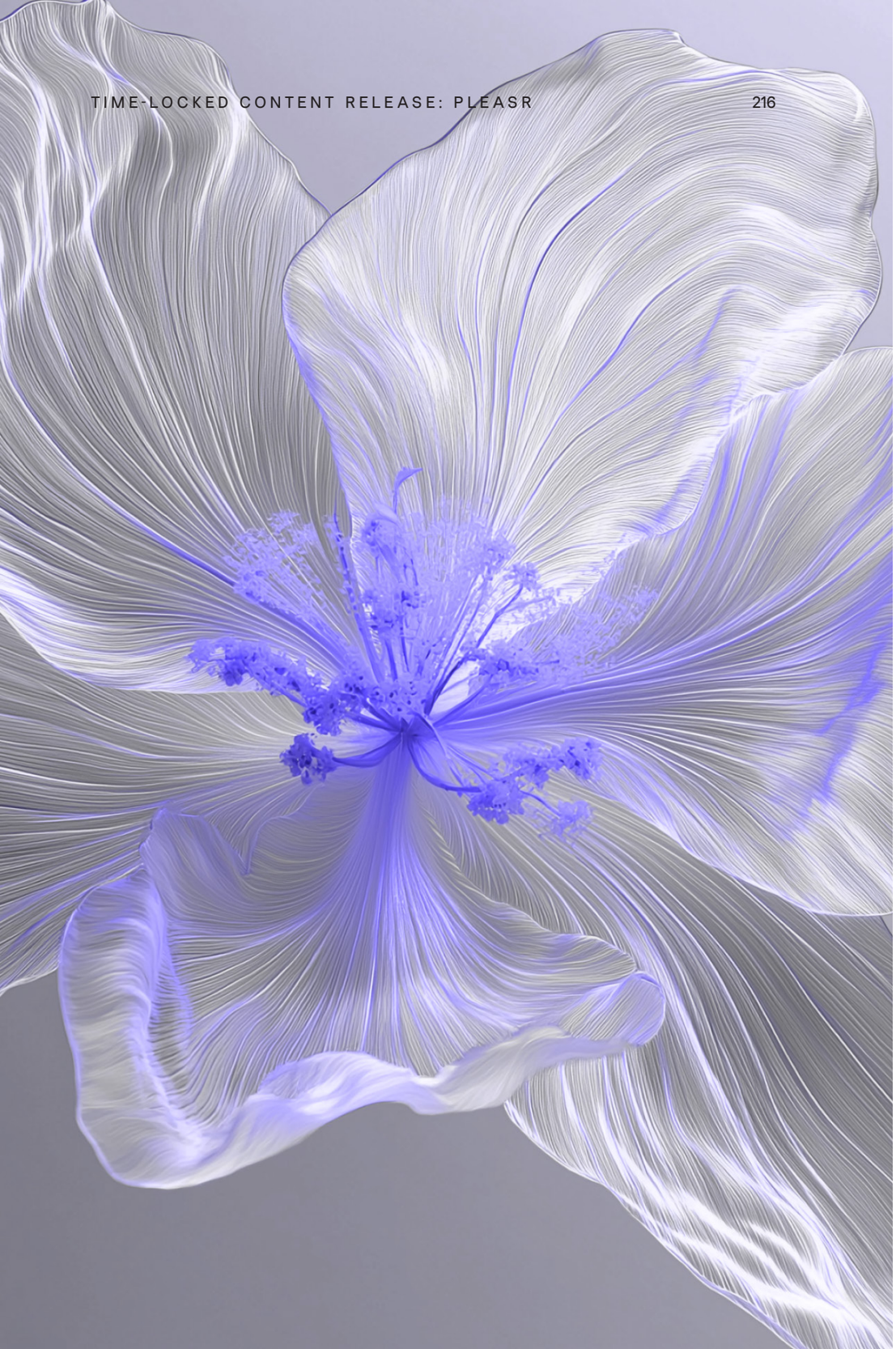
TL;DR

ORIGINATED BY PLEASR

Pleasr DAO's time-locked content release is a use case that illustrates an innovative model that exemplifies the potential of decentralized ownership and engagement in reshaping how valuable physical and digital art is distributed.

Created by Wu-Tang Clan in 2014 as a protest against the devaluation of music, the album "Once Upon a Time in Shaolin" was sold to Martin Shkreli in 2015 for $2 million. After being seized by the U.S. government, PleasrDAO acquired the album in 2021 for $4 million. They then developed the time-locked release mechanism to allow participants to accelerate the album's release through $1 purchases, each reducing the timeline.

View on Allo.Expert



WHO SHOULD USE IT?

This mechanism is ideal for DAOs, artists, and organizations seeking decentralized ownership and community engagement for rare assets. It suits projects looking to democratize access to exclusive content while maintaining its rarity. The approach allows even small participants to influence the release of valuable cultural works, making it particularly useful for projects with devoted fan bases or communities.

RELEASE STRATEGY

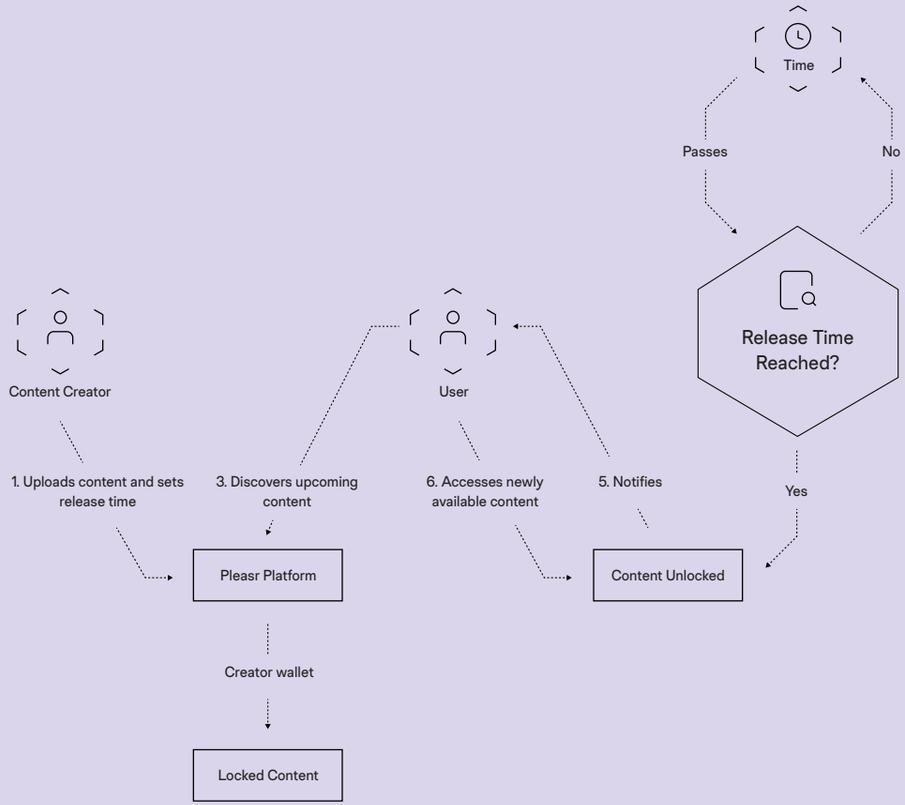
The Time-Locked Content Release uses token purchases to accelerate the album's release date. Engagement is driven by a points system where users earn Wu Points via quests or token purchases (1 point per 0.01 ETH). These points determine a user's Wu Rank on the leaderboard. Top-ranked participants gain increased voting power in PleasrDAO proposals. This approach balances accessibility and exclusivity, allowing broad participation while maintaining the album's scarcity.

HOW DOES IT WORK?

The Time-Locked Content Release mechanism begins with the album locked for an extended period of 88 years from its original sale date in 2015, setting the initial release for 2103. Fans can purchase encrypted digital copies for $1 each, with each purchase shortening the release timeline by 88 seconds. Buyers receive tradable $ALBUM tokens representing their digital copies. Tokens can be acquired through direct purchases, gameplay rewards, or community contributions.

To boost participation, the developers included additional engagement layers in the system. Participants can mint commemorative items and earn points (Wu Scores) based on their contributions. Top contributors receive extra benefits, such as private event access. The initial release timeline was backfilled to account for the time that has passed since the asset's original sale in 2015.

As community involvement increases, the release timeline shortens. When the timeline finally reaches zero, the content is released to all token holders, completing the decentralized unlocking process. This creates a dynamic where the community's actions directly reflect the perceived value of the music, transforming a passive waiting period into an active, community-driven experience.



TIME-LOCKED CONTENT RELEASE: PLEASR

WHAT SETS IT APART?

Community-Driven Release	Unlike traditional time-locked releases, this mechanism allows the community to actively influence the release timeline.
Fractional Ownership of Rare Assets	It enables partial ownership of valuable physical artifacts through digital tokens.
Balancing Accessibility and Exclusivity	The mechanism respects the original intent of limited access while allowing broader participation.
Value Demonstration	Community actions directly reflect the perceived value of the content, creating a dynamic interplay between accessibility and rarity.
Modernizing Artistic Intent	It updates the concept of limited-access art for the digital age, addressing modern discussions about the value of creative works.

IMPACT CERTIFICATES: HYPERCERTS

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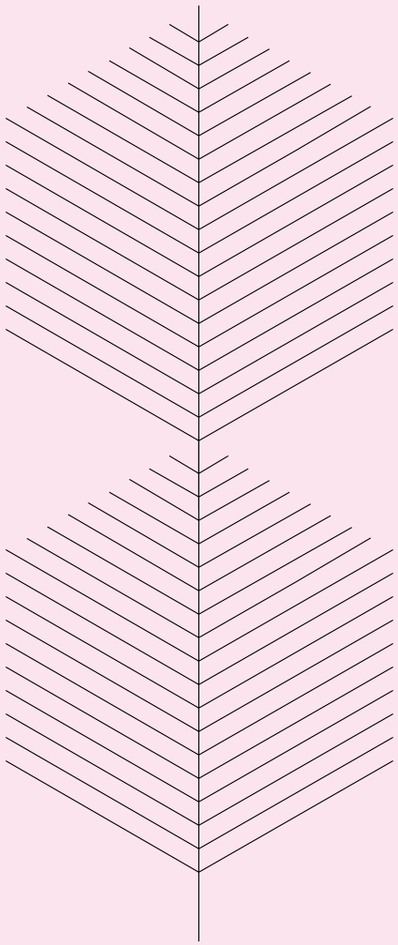


Benefits

1. Transparency
2. Incentivization
3. Interoperability

Limitations

1. Complexity
2. Technological Familiarity
3. Market Saturation

TL;DR

ORIGINATED BY PROTOCOL LABS

Hypercerts is a use case that ensures onchain recording of contributions to facilitate transparent verification and auditing of impact-driven projects. This enhances efficiency in funding and evaluation processes.

View on Allo.Expert

Hypercerts, an innovative implementation of Impact Certificates, was created in December 2022 by Protocol Labs and the Hypercerts Foundation. These Ethereum-based smart contracts are semi-fungible tokens representing impactful work and its outcomes, using NFTs to encode information about contributors, work performed, and resulting impact.

WHO SHOULD USE IT?

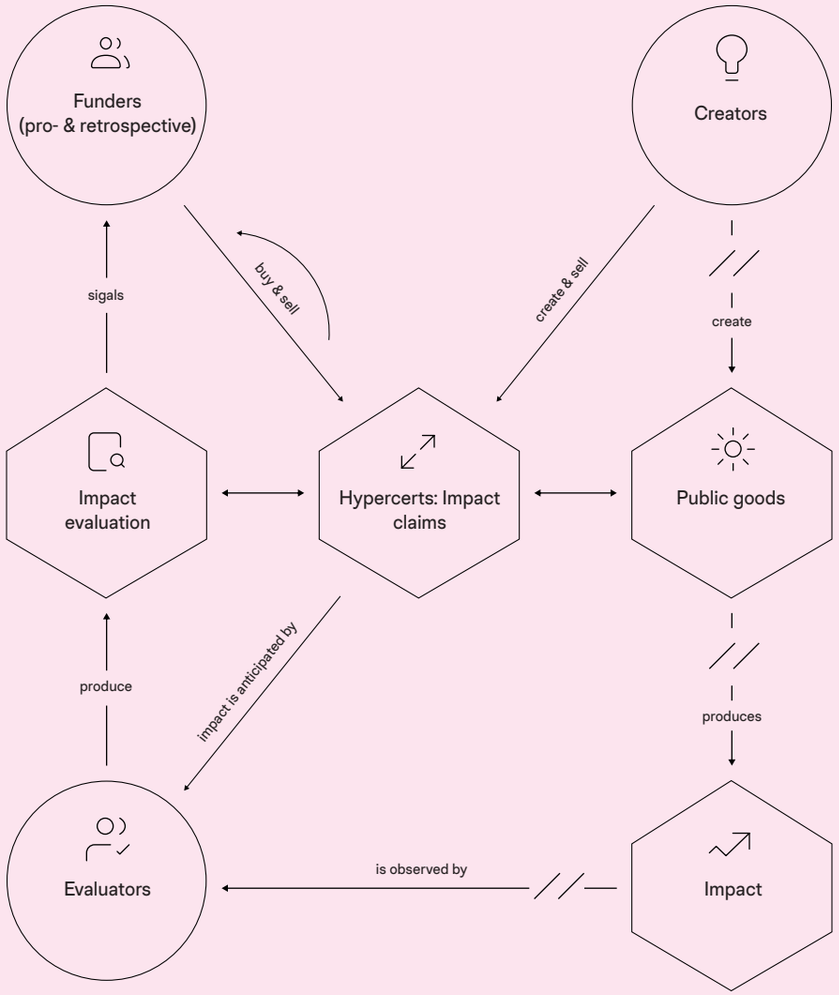
Hypercerts serve a diverse group in the impact ecosystem. Impact creators use them to claim and monetize work. Donors and funders track contribution effectiveness. Investors support and monitor impactful projects. Evaluators and researchers gain a standardized impact assessment format. Beneficiaries share their perspectives. Grant managers verify funded projects. Impact markets utilize them as an accounting unit.

HOW DOES IT WORK?

Hypercerts utilize ERC-1155 semi-fungible tokens, storing data on IPFS. They offer two issuance methods: retroactive and proactive. Retroactively, tasks are completed, and then certificates are minted to represent the work. Funders purchase these, acknowledging the existing impact. Proactively, funders issue RFPs and allocate funds upfront. Upon task completion, certificates are minted for funders, recognizing their initiative. This dual approach allows Hypercerts to adapt to various funding scenarios, supporting both completed work and future impact investments.

WHAT SETS IT APART?

Standardized Impact Representation	Uses ERC-1155 tokens to create a universal format for impact claims.
Flexible Issuance	Supports both retroactive and proactive funding approaches, adapting to various project timelines.
Decentralized Evaluation	Enables multiple stakeholders to assess and verify impact claims independently.



SOCIAL FUNDING MECHANISM: DEGEN

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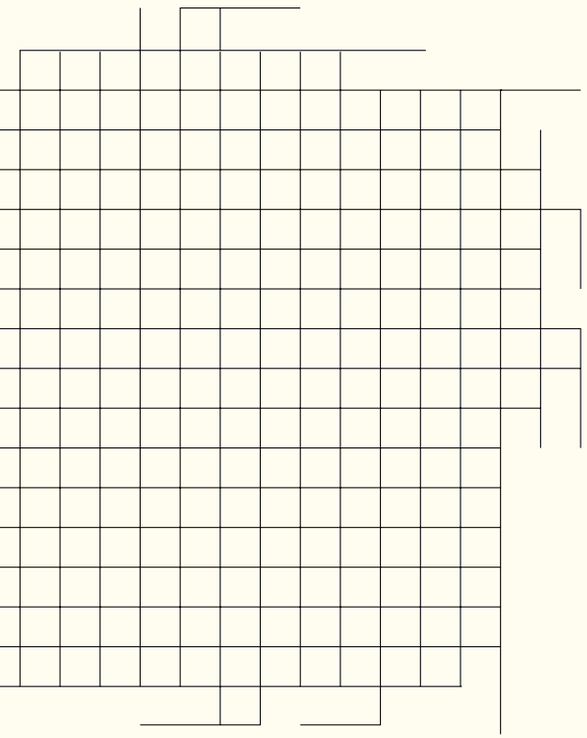


Benefits

1. Non-dilutive tipping
2. Enhanced community engagement
3. Integration of social and financial activities

Limitations

1. Reliance on token distribution methods
2. Potential for limited liquidity
3. Speculative

TL;DR

PIONNERED BY JACEK TROCIŃSKI

View on Allo.Expert

The DEGEN use case is an onchain social funding mechanism within the Farcaster ecosystem, incentivizing user participation through various reward systems like airdrops, liquidity mining, and an active presence on the Degen Chain.

Launched in January 2024 by Jacek Trociński, DEGEN is an ERC- 20 token that gained fast popularity by March 31, 2024 the $DEGEN token surged to a $780 million market cap.

WHO SHOULD USE IT?

This mechanism is ideal for content creators, influencers, and network builders looking to monetize their online presence through community tips and tech-savvy users interested in exploring innovative web3 technologies. It not only supports content creators but also fosters a vibrant community dynamic where members are incentivized to contribute positively to the ecosystem, knowing that their contributions can be directly rewarded by their peers.

FUNDING STRATEGY

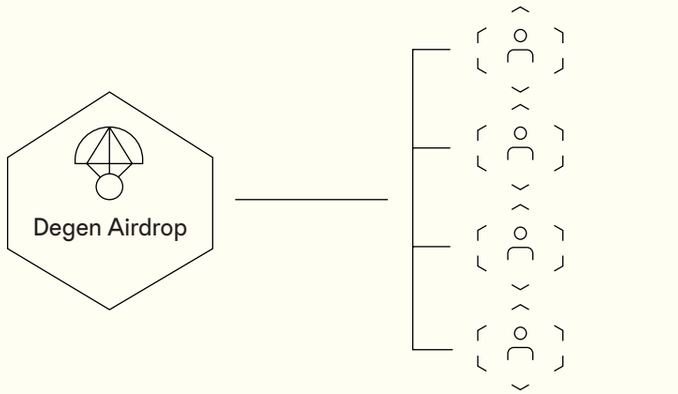
DEGEN's funding strategy leverages community engagement and onchain liquidity mechanisms. It allocates 25% of its token supply to liquidity mining programs and pools on platforms like Uniswap and Aerodrome, incentivizing user participation and liquidity provision. This approach aims to create a sustainable ecosystem that rewards active community members while maintaining DEGEN's primary function as a social funding mechanism on Farcaster.

HOW DOES IT WORK?

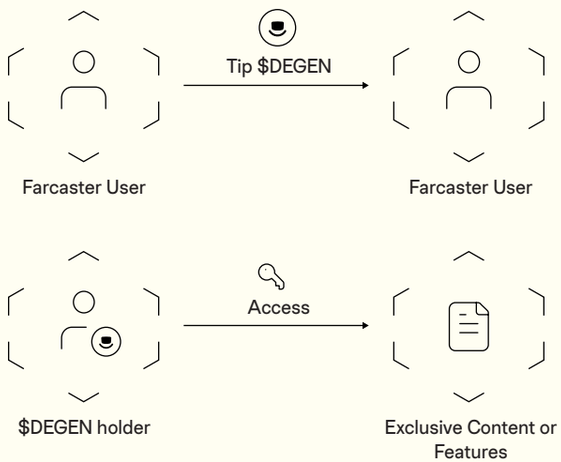
To participate, users must hold at least 10,000 DEGEN tokens and make three casts (posts) on Farcaster. This qualifies them for daily tip allowances, which reset at 8am UTC. Users can tip others for quality content without reducing their DEGEN balance, fostering community engagement. Accumulated tips are distributed through monthly airdrops, rewarding active participants.

To get started, users can bridge ETH to Base using Coinbase Wallet, then swap for DEGEN using the contract address 0x4ed4E862860beD51a9570b96d89aF5E1B0Efefed. Tipping is as simple as replying to a cast with the desired DEGEN amount. Tips received accumulate for the next airdrop event, where users can claim their rewards.

1. Initial Distribution



2. Post Distribution



WHAT SETS IT APART?

Onchain Governance	Unlike traditional funding methods, DEGEN token holders can directly influence funding decisions through onchain voting mechanisms.
Community-Driven	The success of the token and the funded projects are directly tied to community engagement and growth.
Liquidity Incentives	By being listed on decentralized exchanges like Uniswap, DEGEN creates liquidity incentives for supporters.

IMPACT BASED FUNDING: OPTIMISM RPGF

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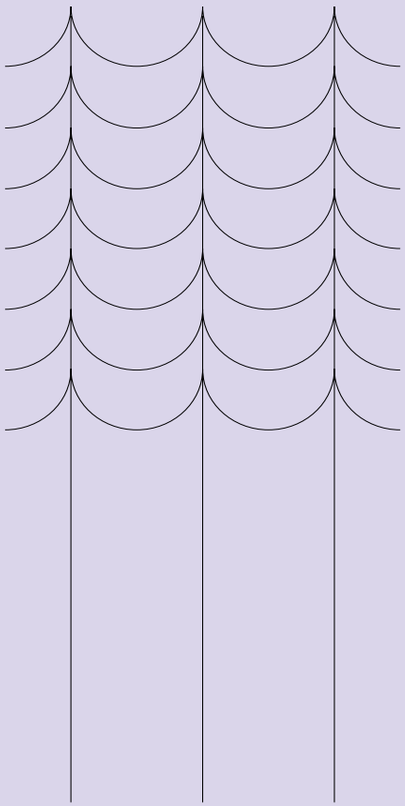


Benefits

1. Data-driven decision making
2. Alignment with ecosystem goals
3. Transparent resource allocation

Limitations

1. Complexity in metric design
2. Potential for gaming the system
3. Challenges in measuring intangible impact

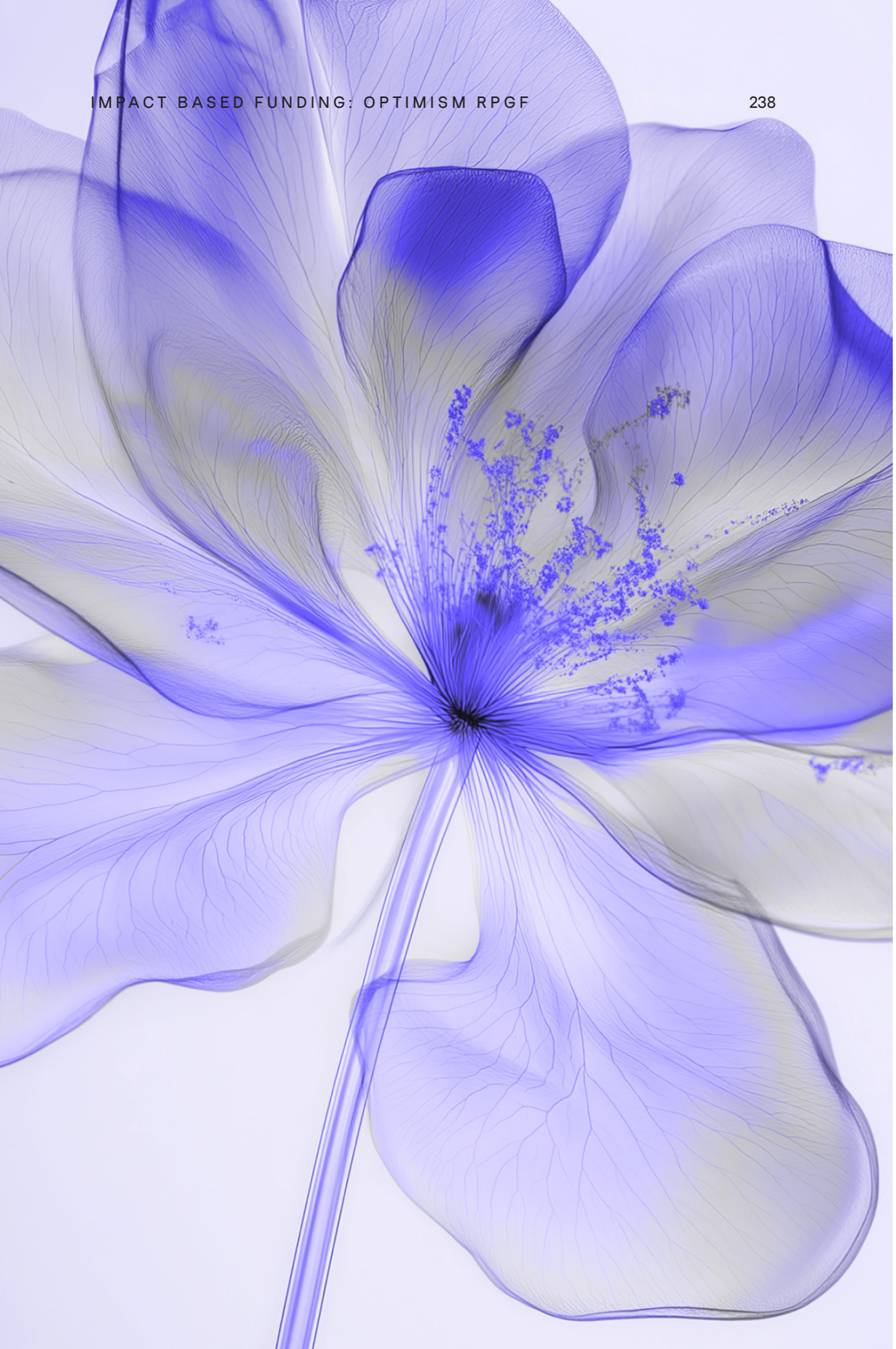
TL;DR

POPULARIZED BY OPTIMISM

Optimism's Retroactive Public Goods Funding functions as a capital allocation mechanism by rewarding projects based on their demonstrated value through Impact-Based Metrics (IBM), which evaluate contributions using clear, measurable criteria.

This approach emphasizes assessing past contributions rather than predicting future needs, fostering a data-driven method for funding public goods. In collaboration with Gitcoin and Open Source Observer, Optimism developed IBM to assess and reward projects based on their demonstrated impact, ensuring that public goods builders are fairly compensated for their work within the ecosystem. This model ensures that resource allocation is transparent, equitable, and directly aligned with long-term ecosystem growth.

View on Allo.Expert



WHO SHOULD USE IT?

This approach is ideal for grant managers, program managers, and community leaders in web3 ecosystems who want to distribute resources based on clear, measurable impacts rather than speculative future promises.

FUNDING STRATEGY

Optimism's Retro Funding is centered around Impact-Based Metrics (IBM) to evaluate and reward projects based on value already created. Resources are distributed based on measurable past impact, incentivizing projects to deliver meaningful value without relying on speculative predictions.

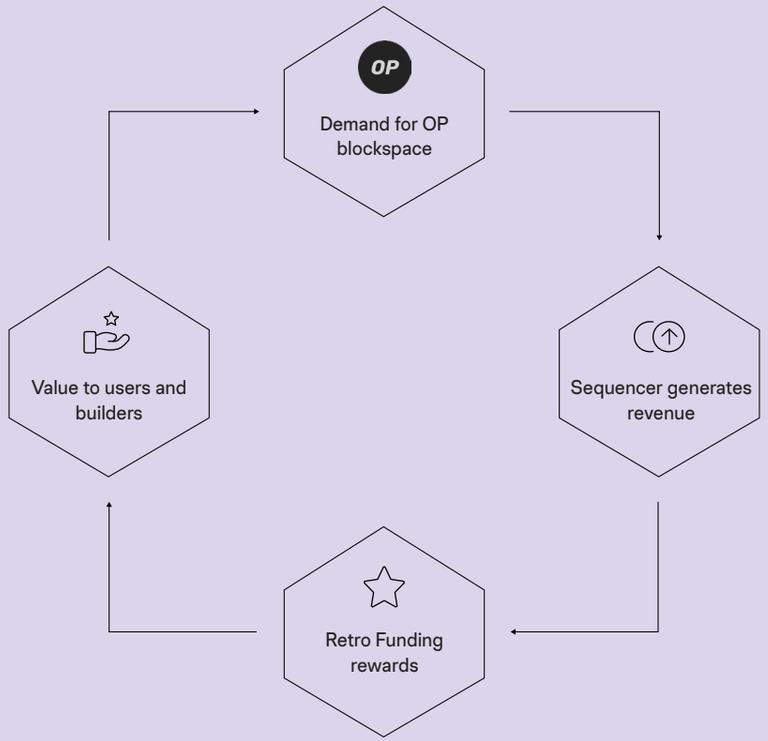
HOW DOES IT WORK?

Optimism's Retro Funding involves aligning projects with Optimism's roadmap, establishing specific on-chain criteria, and implementing a User Trust Model to ensure credibility.

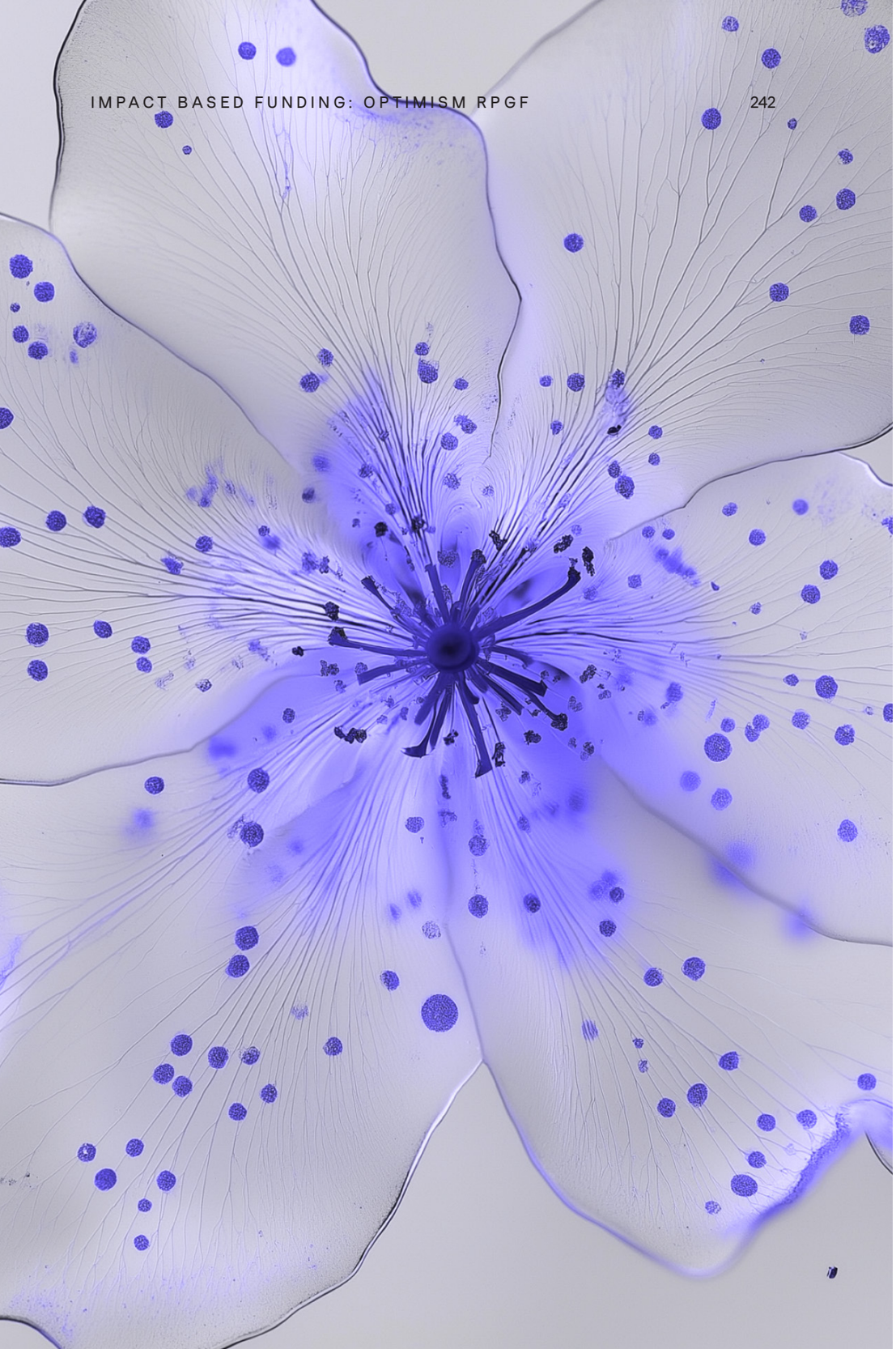
Projects must meet specific onchain criteria, such as active usage and the deployment of contracts on the Superchain. To ensure consistent, verifiable, and transparent evaluations, impact metrics are standardized. Funding is then allocated based on the project rankings according to their meassurement of impact metrics.

To choose which impact metrics to fund, badgeholders (participants with voting power) are given the choice of which impact metrics they want to reward. They can preview which projects would receive funding for each impact metric. Then when their decision is made, they submit their ballots.

At the end of the round, ballots are then tallied, and funds are distributed according to the ballots preferences.



THE OPTIMISM RETRO FUNDING FLYWHEEL



WHAT SETS IT APART?

Data-Driven Impact	Uses onchain data to measure the impact of projects over time, minimizing bias and subjectivity.
Ecosystem Alignment	Metrics are designed to reward projects that contribute directly to Optimism's strategic goals, ensuring that incentives align with broader ecosystem success.
Transparent Evaluation	Clear, measurable criteria allow for transparent assessments of each project's contributions, fostering accountability within the system.
Retroactive Focus	By rewarding projects for value already created, the system encourages long-term contributions, promoting sustainable development and ecosystem growth.

CONCLUSION

Throughout this book, we've explored innovative funding models designed to create a more transparent, democratic, and efficient system for capital allocation. These models, already making a significant impact within decentralized ecosystems like Gitcoin and Ethereum, demonstrate the potential of Decentralized Finance (DeFi) to solve traditional inefficiencies in funding public goods and collective action initiatives.

We stand at the frontier of what's possible. We have a once-in-a-generation opportunity to reshape the way resources are distributed across industries and communities. Hopefully this book serves to stimulate progress, both in the minds of its readers and the ecosystem as a whole.

REFLECTION ON KEY CONCEPTS

At the heart of this exploration is the recognition that onchain capital allocation can overcome the entrenched limitations of traditional systems, including gatekeeping, rivalrous decision-making, and opaque governance structures. Mechanisms like Artizen Artifacts combat biased, bureaucratic, and inefficient funding systems for digital goods creators with their transparent, community-driven approach. At the same time, onchain social funding tools such as DEGEN utilize social media's built-in attention to enhance support and engagement, showcasing the versatility of decentralized strategies in tackling various collective challenges—from environmental sustainability to technological progress.

FUTURE OUTLOOK

As onchain capital allocation mechanisms continue to evolve, their applications will likely extend beyond blockchain. The rise of Decentralized Autonomous Organizations (DAOs) and token-based ecosystems offers exciting opportunities to disrupt conventional industries such as real estate, scientific research, and even government services. The challenge will be scaling these models to accommodate diverse sectors while maintaining their core principles of transparency and inclusion. In particular, challenges like ensuring robust governance, preventing collusion, and adapting to new regulatory frameworks must be addressed to sustain long-term growth.

VISION FOR THE FUTURE

Looking ahead, onchain capital allocation can become a powerful tool for addressing large-scale challenges like climate change, poverty, and wealth inequality. These models enable communities to allocate resources according to their unique needs and values, creating a world where funding decisions are no longer dictated by centralized institutions but by collective wisdom and real-time feedback loops. The future holds the promise of a decentralized, pluralistic ecosystem where resources are distributed efficiently, fairly, and in alignment with the public good.

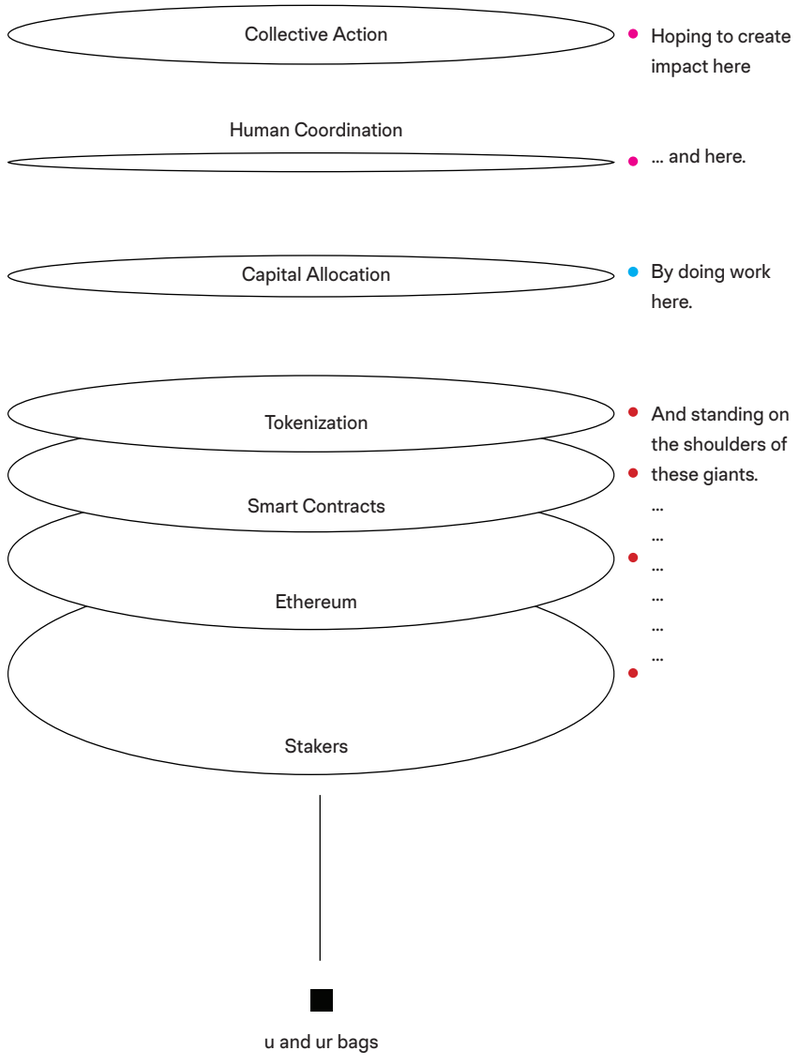
In sum, onchain capital allocation is not just a novel idea but a pathway toward progress - locally and globally. As we continue to build and refine these systems, we have the opportunity to create a future where capital flows freely to the causes that matter

most, driven by collective action, innovation, and the desire for positive impact. Let this be a call for all of us to participate, innovate, and push the boundaries of what decentralized ecosystems can achieve. Together, we can fund what truly matters and build a more just and prosperous world.

To explore tools and resources for onchain capital allocation, head to https://allobook.gitcoin.co/, where you'll find insights for implementing secure, efficient, and transparent capital distribution systems that bring the strategies in this book to life.

CALL TO ACTION

The path forward requires active experimentation and participation from a global community. As onchain funding models expand, their success will depend on continued testing, refinement, and adaptation to different contexts. We encourage readers not only to implement these mechanisms but also to contribute to their evolution. Whether you're a developer, researcher, or an everyday participant, your involvement is key to creating more equitable, sustainable systems for resource allocation.



FUNDING MECHANISMS

AutoPGF (Automated Public Goods Funding)

AutoPGF (Automated Public Goods Funding) is a mechanism that funds public goods through yields generated from protocol or token interactions.

Quadratic Accelerator (Q/ACC)

Q/ACC combines Augmented Bonding Curves for liquidity with Quadratic Funding rounds to match community donations, driving long-term engagement by aligning incentives between protocol, project, and community.

Investment DAOs

Expanding on traditional venture capital, Investment DAOs pool funds and make collective investment choices, with governance rights proportional to staked tokens and profits distributed based on time-weighted participation.

Social Impact Bonds (SIBs)

Private investors fund social programs, with government repayment based on meeting success metrics. If these targets are hit, investors get their capital back plus a return, calculated using time-weighted performance to incentivize long-term impact.

Roundabout Production

This mechanism focuses on long-term, strategic project invest´with incremental resource allocation. Rewards are distributed based on resource commitment duration and project success, encouraging sustained support for complex initiatives.

Participatory Budgeting

Participatory Budgeting is a democratic process where community members decide how to allocate a portion of public or organizational funds.

Bounties

Rewards offered for completing specific tasks, with payouts structured to incentivize timely and effective contributions. Bounties are calculated based on task complexity and solution value, driving targeted problem-solving and innovation.

Harberger Taxes

A property ownership model where owners self-assess their asset's value, pay taxes on that value, and must sell to any buyer offering that price. This mechanism aims to balance efficient resource allocation with fair taxation and use.

Block Rewards Fundings

Block rewards are incentives given to miners or validators for successfully adding a new block to the blockchain. These rewards usually come in the form of newly created cryptocurrency and transaction fees, encouraging participants to secure and maintain the network.

Impact-Based Metrics: Optimism RPGF

Optimism RPGF (Retroactive Public Goods Funding) is an impact-based funding model that rewards projects based on their proven impact, rather than upfront promises, incentivizing impactful contributions to the ecosystem.

LottoPGF

LottoPGF is an onchain capital formation mechanism that lets anyone create customizable "Lottos" to fund causes. Secured on Ethereum, it ensures transparency, fairness, and verifiable randomness, addressing the issues of traditional lotteries.

DAO ICOs

DAO ICOs are token sales conducted by Decentralized Autonomous Organizations (DAOs) to raise funds for projects. These sales allow communities to directly participate in the funding and governance of the project through token ownership.

EIP 6969

EIP-6969 introduces a smart contract-based revenue-sharing mechanism, allowing developers to receive a portion of gas fees generated through interactions with their contracts.

Octant GLM Locking Mechanism

Participants lock GLM tokens for 90-day funding epochs, gaining governance rights and rewards. Rewards are calculated using time-weighted metrics based on locking duration, with donations boosted by matched funding to incentivize long-term support.

STAR Voting

Voters rank candidates or options, with the two top-ranked choices entering a runoff. Votes are redistributed based on preferences, ensuring outcomes reflect long-term community consensus while minimizing strategic voting manipulation.

Sourcecred

Sourcecred is a reputation and contribution-tracking system that

	rewards community members based on their contributions to a project. It assigns "cred" to individuals for their work, enabling fairer recognition and compensation within decentralized communities.
Gnosis Multi-Signature Wallet	The Gnosis multi-signature wallet (now Safe) is a secure asset management tool that requires multiple approvals before executing transactions, providing decentralized control and enhanced security.
Bonding Curves	Bonding Curves act as a funding and pricing mechanism by using smart contracts to automatically adjust token prices based on supply, allowing continuous minting, burning, and price discovery.
Revnets	Operates as an onchain cap table and incentive machine without governance overhead. Acts like "digital vending machines," issuing $TOKENs when funds are provided. $TOKENs can be collateralized for loans, creating a flexible capital allocation system.
Ranked Choice Voting (RCV)	Ranked Choice Voting (RCV) is a voting system where voters rank candidates by preference rather than choosing just one. If no candidate wins a majority, the lowest-ranked candidates are eliminated, and their votes are redistributed until one candidate secures a majority, promoting more consensus-driven outcomes.
Base Paint - Pixel Artist Revshare	A collaborative pixel art platform where artists contribute to collective artwork and share generated revenue. Rewards are distributed based on contribution time and consistency, encouraging ongoing participation and creativity.
Buidl Guidl Streams	BuidlGuidl Streams functions as a cooperative model by providing Ethereum builders with a fully funded smart contract that allows for flexible withdrawals based on their contributions.
Rotating Savings and Credit Associations (ROSCA)	Participants contribute to a collective savings pool, taking turns to withdraw funds. This system provides a simple, interest-free alternative to traditional banking, helping members fund major expenses.

Breadchain - Onchain crowd staking mechanism	Decentralized funding model where participants receive tokens representing their staked assets which grant them voting power over how funds are distributed to community-driven projects.
Artizen (Artifacts)	Digital artifacts representing artistic contributions are tokenized. Rewards are distributed to creators over time based on their work's sales and match funding, creating a sustainable ecosystem for digital artists.
Pleasr - Time-Locked Content Release	Content creators release digital works with time-locked contracts, unlocking when predetermined milestones or funding levels are reached. Rewards are distributed based on how early and consistently supporters back the project.
Hypercerts Impact Certificates	Hypercerts are tokenized certificates that record contributions to impact-driven projects using semi-fungible tokens. They enable verification, auditing, and funding of impactful work.
Social Funding Mechanism	Originating from the web3 social platform Farcaster, DEGEN supports community signaling, reputation building, marketing, free minting, voting, and project endorsement. It creates a dynamic funding ecosystem by leveraging social media's built-in engagement.

GLOSSARY OF TERMS

1. Augmented Bonding Curve

A mechanism combining bonding curves and continuous funding for efficient resource allocation and token price discovery.

2. Automatic Runoff

A voting method eliminating lowest-ranked choices and redistributing votes until a majority is achieved.

3. Automated Market Maker (AMM)

A decentralized trading mechanism where liquidity pools are used to automatically execute trades, instead of traditional order books.

4. Bonding Curve

A mathematical curve defining the relationship between token price and supply, ensuring price responsiveness to demand.

5. Bounty

A reward for completing specific tasks, often in software development, encouraging open participation.

6. Bug Bounty

A specific bounty for finding and fixing software vulnerabilities or bugs.

7. Capital Allocation

The process of distributing financial resources efficiently to achieve desired outcomes.

8. Capital Formation

The process of creating or accumulating capital assets for future wealth generation.

9. Cross-Chain Bridge

Technology enabling token or data transfer across different block chain networks.

10. Crowdsourcing

Obtaining input, ideas, or funding from a large group, typically via the internet.

11. Custodial Wallet

A digital wallet where a third party controls the user's private keys.

12. DAO (Decentralized Autonomous Organization)

A self-governing organization run by smart contracts with collective decision-making.

13. Decentralization

Distribution of control away from central authorities to increase security, transparency, and autonomy.

14. Decentralized Finance (DeFi)

A blockchain-based financial ecosystem providing traditional services without intermediaries.

15. Decentralized Storage

Data storage across multiple nodes on a blockchain or distributed network.

16. Flywheel

A business model where momentum builds as more users or activities increase system effectiveness.

17. Gamification

Use of game-like elements in non-game contexts to increase engagement and motivation.

18. Gasless Transactions

Blockchain transactions where the sender doesn't directly pay the gas fee.

19. Hackathon

An event for intensive collaboration on technical challenges within

a set timeframe.

20. Impact Bonds

Financial instruments paying returns based on achieving specific outcomes.

21. Impact Investing

Investments aiming for both financial returns and measurable positive social/environmental impact.

22. Initial Coin Offering (ICO)

A fundraising method selling new cryptocurrencies or tokens to investors.

23. Liquidity

An asset's ability to be quickly converted into cash without affecting its market price.

24. Logarithmic Formula

A mathematical function used in blockchain mechanisms for managing token supply and pricing.

25. Market Making

Process of providing liquidity to ensure smooth trading and price stability.

26. Miner

Blockchain network participant validating transactions and earning rewards.

27. Minimal Viable Strategy

A strategy using minimal resources to achieve a working solution or product launch.

28. Multi-Signature Wallet (Multi-Sig)

A digital wallet requiring multiple signatures to authorize transactions.

29. Multi-Sig Signer

A participant holding one of the keys required for multi-signature wallet transactions.

30. Non-Custodial Wallet

A wallet where the user controls their private keys and funds.

31. Non-Transferable Tokens

Tokens that cannot be transferred or sold once issued.

32. Nodes

Computers or devices connected to a blockchain network for transaction validation and security.

33. Onchain

Actions or processes occurring directly on the blockchain with permanent public records.

34. Permissionless

A system allowing participation without central authority approval.

35. Price Volatility

The degree of variation in an asset's price over time.

36. Proof of Stake (PoS)

A consensus mechanism selecting validators based on their staked tokens.

37. Proof of Work (PoW)

A consensus mechanism where miners solve puzzles to validate transactions and create new blocks.

38. Public Goods

Resources or services benefiting all, often underfunded due to their non-excludable nature.

39. Quadratic Funding

A funding mechanism distributing matching funds based on the square root of individual contributions.

40. Semi-fungible Token

A digital asset that can initially be traded as a fungible token (interchangeable with others of the same kind) but later becomes non-fungible when its context changes.

41. Social Impact

The effect of an activity on society or the community.

42. Staking

Locking up cryptocurrency tokens to support network operations and earn rewards.

43. Sybil Resistance

Mechanisms preventing single entities from creating multiple fake identities in decentralized systems.

44. Time Lock

A smart contract feature restricting access to funds or actions until a specified period has passed.

45. Time-Weighted

A method of calculating values or rewards based on time spent in a specific state.

46. Token Burn

Permanently removing tokens from circulation to reduce supply and increase scarcity.

47. Token Lock

Temporarily restricting tokens from being sold or transferred.

48. Token Mint

The process of creating new tokens within a blockchain ecosystem.

49. Tokenizing

Converting an asset or right into a digital token on a blockchain.

50. Transferable Tokens

Tokens that can be freely transferred or traded between users.

51. Trust Model

The framework defining how blockchain participants interact and establish security without central authority.

52. Validators

Participants in Proof of Stake systems who validate transactions and secure the network.

53. Verifiable Random Functions (VRF)

Cryptographic algorithms generating verifiable random values for fairness and security.

54. Vote-Splitting

A voting strategy allowing voters to distribute votes across multiple options or candidates.