Open Source Economy

V0.4

WHITE PAPER

Building the foundation of open source 3.0

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1 ABSTRACT

Background

The open source (OSS) landscape, while fostering collaboration, openness and transparency, faces significant challenges. Traditional reliance on donations and consulting frequently results in inadequate financial support, inequitable contributors' compensation, and diminished project competitiveness. Consequently, efforts have been made to strike a balance by integrating aspects of conventional business models or seeking backing from private entities. However, these approaches frequently compromise the core values of open source and may potentially result in conflicts of interest.

Objective

This paper introduces a new open source economic model. The primary objective of this model is to create a self-sustaining ecosystem that remains faithful to the principles of open source, obviating the requirement for concessions.

We aim to:

- Provide **viable funding sources** to projects
- **Reward contributors** to enable them to sustain their livelihoods
- Attract **more donors and financial backers**
- **Empower** the community to influence projects
- Promote increased **decentralization and democratization** (with the extent determined by the project)

Our aim is to establish open source as a viable business alternative, readily embraced by projects and startups as a feasible means to build a sustainable enterprise. Moreover, this model holds the potential to be embraced by fully decentralized and democratic organizations that strive to create viable common good products.

Methods

The proposed "Open Source Economic Model" introduces mechanisms to:

- Offer bounties for issue-solving.
- Offer bounties to speed up the Pull Request review process.
- Allocate a portion of bounty rewards to projects that benefit the community, even if they might not typically attract bounties on their own.
- A customizable and tailored way of sharing incomes among all project stakeholders.
- Allow backers, whether through financial means or dedicated time and expertise, (like donors or contributors), to get rewarded for their early-stage project support.
- Grant backers voting rights for a decentralized governance.

Expected Results

The "Open Source Economy Model" presents a paradigm shift in the open source ecosystem. This model holds the potential to revolutionize the OSS landscape, allowing projects to thrive without compromising their core values. Our aim is to position open source projects on equal footing with their closed-source counterparts across all aspects of competition.

Note

The "Open Source Economy Model" will undergo development through its own framework, adopting a fully decentralized and democratic approach. This model is crafted by the open source community, for the open source community, and naturally, it will be open sourced.

2 INTRODUCTION

“Open Source Economy” is a model designed to unleash the true potential of open source. We aim to transform its development, attract investors, and enable it to rival closed-source alternatives.

Our project holds the potential to revolutionize the open source (OSS) landscape, ensuring the success and competitiveness of projects like never before.

Our model addresses the challenges that open source initiatives face while upholding the core values of openness, transparency, collaboration, and decentralization. We have a dual mission: enabling financial backers to support open source projects and empowering these projects to overcome obstacles.

In the current landscape, ***projects face difficulties relying solely on fully open source ideals***, such as donations or consulting. Consequently, they are forced to adopt compromised business models that balance OSS values with the need for funding. On the other hand, projects that adhere strictly to open source values often receive support from private companies or institutions. While these contributions are admirable, as we will see later, they also introduce challenges that stray from the core ethics of OSS.

The purpose of this paper is to ***explore viable solutions and strategies for establishing a self-sustaining OSS ecosystem***. The goal is to eliminate the need for compromises with open source values and view assistance from private institutions as a valuable bonus to the ecosystem rather than a survival necessity.

We provide tools to address the pressing challenges faced by projects, including understaffing, lack of funding, unresolved bugs, stagnant reviews, and centralized governance. These challenges have impeded the progress of projects for far too long. It is time to usher in a new era where open source projects can flourish and even surpass their closed-source counterparts.

Open Source Economy

Our vision for resolving the mentioned issues is as follows:

- ***Open Source Economic Model:***
  - Rewarding contributors
  - Empowering users and contributors to influence project development
  - Attracting financial backers
  - Providing significant funding while upholding OSS values

- ***Sustainability:*** Real revenue, driven by genuine user demand. Embrace sustainable growth, leaving speculative hype behind.

- ***Democracy and Decentralization:*** We offer a variety of tools to enable democratic governance in a decentralized manner. Like all democracies, governance can vary in its level of democracy and decentralization, based on the project's preferences.

- ***Freedom is key:*** All the proposals in this paper offer high customization. Actions are autonomous, requiring no explicit permissions.

With this proposal, we aim to establish open source as the foundational pillar of our industry, allowing it to rival closed-source solutions on every level.

3 BRIEF TOUR OF OPEN-SOURCE

Before diving deep into the "Open Source Economic Model", it's essential to first understand the fundamentals: what defines a project, who are the key players involved, and the typical workflow in an open source setting, especially for those new to the concept.

3.1 What is a Project?

In the context of open source, a "project" typically refers to a collaborative endeavor that involves creating, maintaining, or enhancing software or documentation, where the resulting work is made available to the public under an open source license. This license allows users to freely access, modify, and distribute the software or content, often with certain conditions.

An open source project can have various characteristics:

- ***Repository***
  Almost all open source projects have a code repository (like: GitHub or GitLab). This repository contains the source code, documentation, and often other resources related to the project.

- ***License***
  A defining feature of open source projects is their license. Licenses such as the GNU General Public License (GPL), MIT License, or Apache License dictate how the software can be used, modified, and redistributed.

- ***Governance Model***
  Some open source projects, especially larger ones, have a formal governance model which dictates how decisions are made, how contributors can become maintainers, etc. This governance can vary in its structure, being more or less decentralized and more or less democratic.

- ***Ownership***
  While many open source projects are started by individuals or loosely organized groups, they can also be owned or sponsored by private companies.

- ***Contributors***
  An open source project can have a single contributor or thousands of them. These individuals contribute code, documentation, design, or other resources to the project.

- ***Community***
  Larger open source projects often have a supporting community of users and developers. This community may communicate through mailing lists, forums, chat platforms, or other mediums.

Examples of open source projects include the Linux kernel, Google's Android OSS, Microsoft's Visual Studio Code, and countless libraries and tools available for various programming languages and purposes.

3.2 Key Players Involved

Within the landscape of open source projects, three main groups play pivotal roles in the project's journey and success: owners, teams, and users.

- ***Project Owners***
  A person or group of people or a legal entities (like a private company) who have the ultimate authority over the direction, management, and decision-making processes of the project.

- ***Project Team***
  An open source project can have a single contributor or thousands of them. These are individuals who contribute code, documentation, design, or other resources to the project.

They can be further categorized based on their privileges within the project:

- ***Maintainers*** *(or core contributor)*
  They are the "gatekeepers" of a project. They are responsible for overseeing, managing, and guiding the development of. Maintainers review and merge contributions, ensure the project's quality and direction, and often make important decisions about its future.
  It's worth noting that the roles of maintainer and owner can sometimes overlap.

- ***Contributors***
  They are individuals who voluntarily offer code, documentation, design, or other forms of assistance to an open source project. They submit their contributions, often in the form of "pull requests," for review and potential inclusion into the project (decided by maintainers). Therefor they don't have the same decision-making power as maintainers

- ***Users***
  Individuals or entities that utilize an open source project without necessarily contributing, which can be divided into:

  - ***Commercial Users***
    Businesses or organizations using the software for profit.

  - ***Non-commercial Users***
    Individuals or entities using it for personal or non-profit purposes.

As we'll explore further in this document, each stakeholder has distinct motivations. These can sometimes create tension, potentially leading to broader challenges within the open source ecosystem.

3.3 Typical Workflow

There are three main concepts to grasp to understand a typical open source workflow:

- ***Issue***

  An issue refers to a problem, bug, enhancement request, or proposal of a new feature within a project. Anyone can open an issue, whether it's the project's community identifying a task, a user reporting a bug, or someone suggesting an improvement. Issues serve as a means of communication and collaboration between contributors and users, facilitating discussions on whether to address the problem and determining the approach to solve it.

- ***Pull Request (PR)***

  A pull request involves a developer proposing a code change or contribution to an open source project. It can be a response to solving a documented issue or a direct code change proposed to the community without prior discussion in an issue. Initiating a pull request triggers a review process, inviting maintainers and other contributors to assess the proposed changes, provide feedback, and engage in discussions for necessary adjustments.

- ***PR review***

  Review is a critical step in the open source development workflow. It entails the thorough examination and evaluation of a PR’s code changes, documentation, and overall quality. During the review process, reviewers carefully analyze the proposed modifications, offer constructive feedback, and suggest improvements or alternative approaches. The objective is to ensure that the changes align with the project's guidelines, coding standards, and overall objectives. Reviewers may request clarifications, suggest additional tests, or highlight potential issues before approving the pull request for merging into the main codebase.

Armed with these three concepts, we are now prepared to explore the ideas presented in this paper.

4 PROBLEMS OF OPEN-SOURCE

Open source projects have revolutionized software development, promoting collaboration, transparency, and innovation. However, beneath the surface of these projects lie several challenges that affect the initiatives themselves, their contributors, and their users.

Ensuring the long-term sustainability of open source projects presents a significant challenge.

4.1 Limitations of the Current Business Models

We start by exploring the different business models most open source projects adopt and their limitations.

Most open source projects adhering strictly to open source's principles, like donations and voluntary contributions, often lead to financial challenges, impacting either the project maintainers or the project's sustainability. As a result, they have begun seeking compromises to maintain their OSS nature while incorporating elements of traditional business models to ensure sustainable funding. But as we will see, those compromises often create conflicts of interest and fragment the community.

Furthermore, most of those models often necessitate establishing a formal, centralized legal body to manage payments for services. This can lead to issues, especially when a major contributor to the project isn't affiliated with this centralized entity. As a result, there's a disconnect between those who contribute significantly to the project and those who receive compensation.

Let's first examine in detail financial models that align with open source ideals.

- ***Donation***

  One common approach for projects relies on donations from individuals and organizations. While this model can provide some financial support for the more visible projects, it often fails to ensure long-term sustainability. Grants–specially those for small projects–are typically inconsistent and unpredictable, making it difficult for projects to plan and allocate resources effectively. Additionally, the majority of users benefit from the software without contributing financially, leading to a significant imbalance in the distribution of costs and benefits.

- ***Consulting***

  Many projects offer consulting services tied to their open source software, providing expertise, customization, and support to other businesses in exchange for fees. While this can be a revenue stream, it comes with challenges. The model is dependent on continuously securing clients willing to pay for these services, which can be a demanding task. Not every project finds this approach feasible, especially smaller ones or those with limited market appeal. Furthermore, the income from consulting might not be enough to support the ongoing development and upkeep of the open source project. And more concerning, this model might face competition from consulting firms that are not associated with the project. There's also a potential downside: some open source projects might be tempted to limit their documentation or make their code more complex, aiming to increase the number of businesses seeking their consulting services.

In light of the limitations faced by numerous projects in sustaining themselves solely through donations or consulting services, alternative approaches have been explored. These approaches seek to find a balance between upholding open source principles and acquiring the necessary funding. However, it introduces a new set of challenges stemming from the compromise made with the OSS philosophy. We are going to see some examples of those models.

- ***Dual-licensing***

  It is a strategy where software is available under both an open source license and a proprietary license. While this model can generate income, it often divides the open source community and the proprietary users, leading to conflicts and fragmentation. To avoid the risk of the software being forked and distributed under a permissive license, the OSS version is typically protected by a copyleft license (which strictly restricts commercial use), thereby mandating that any derivative work must also be non-commercial in nature. Aggressive licenses like GPL and AGPL are examples of this.

- ***Selling optional proprietary extensions***

  This model is an extension of the Dual-licensing seen above. This model offers a core version of the software as open source while providing additional features or enterprise versions under a proprietary license. While this model allows for monetization, it can create challenges in maintaining a balance between open source and proprietary components. There is a risk of limiting the development of the OSS version in order to drive users towards the proprietary offerings. This can hinder collaboration and restrict the benefits of open source software to a select group of users.

- ***Selling proprietary updates***

  Another approach entails maintaining all software versions under a free and open source license but abstaining from offering released artifacts like security updates or update scripts. In this scenario, users are presented with the option to either pay for the update software or embark on a laborious process of manually upgrading to the next version.

In summary, many projects find themselves unable to depend solely on donations and the consulting model, relegating them to a supplementary rather than primary means of support. Consequently, these projects are faced with a choice: either remain small in order to sustain themselves within these financial models, that align with open source ideals but limit their competitiveness or reluctantly adopt compromised models out of necessity

rather than preference. Despite their dedication to OSS values, navigating these alternative models proves to be a challenging task.

4.2 Open Source Projects Led by Private Companies

Many open source projects owe their success to the leadership and financial support provided by private companies. In numerous cases, donations, funding, and manpower come directly from these companies, which contribute to the ecosystem of open source software. There are two primary avenues through which this support is extended: either the projects originate from an institution and later transition to open source, or they are initially open source and receive funding from private enterprise at a later stage.

Despite this commendable support, this practice brings about its own set of challenges. These may include centralizing decision-making, limiting engagement from the community, and shifting the focus from user needs to commercial gain. There might be a misalignment between the interests of private companies and those of the pure open source community, making the dependence on private corporations for the functioning of OSS initiatives especially concerning.

A typical example is the "**Fund, grow and abandon**" strategy (in analogy to the "*Embrace, extend, and extinguish*"), where corporates might take over an open source project:

- ***Fund***

  A private company becomes a significant sponsor of the open source project or funds initial development. This involves offering considerable resources and funds, along with engaging numerous contributors who align with the project's principles and culture at first.

  It's important to note that the company's contributions often come in the form of headcount rather than direct funding. This grants the company a higher degree of control over the project, as donations are subject to the community's decision.

- ***Grow***

  Initially, this contribution is welcomed by the initial members, as the company's support enhances the project's capabilities. The community embraces the private contributors, appreciating their involvement, and involving them more and more in the decision-making process. However, as the private company gains majority control, they gradually seize decision-making power and steer the project in a direction that aligns with their own needs and interests. This marginalizes the original community members and contributors, leading them to feel excluded and eventually causing them to leave. Consequently, the future of the project becomes solely dependent on the private company's decisions and actions.

- ***Abandon***

  At this stage, the project is very vulnerable to the private company withdrawing its support, whether by intention or accident. This can transpire through various means, such as the enterprise declaring bankruptcy, shifting its priorities, or even deciding to commercialize the open source project in a manner that deviates from its original alignment, leaving the OSS version unsupported.

  The consequences of discontinuing regular support can be severe. The departure of key contributors poses significant challenges for the community, as the sudden loss of their knowledge and expertise makes it difficult to fill the gap. The remaining contributors may face an overwhelming workload, and in the worst-case scenario, the project can appear stagnant or inactive, which discourages new contributors from getting involved. This scenario can lead the project to be obsolete or even collapse.

The contribution of private companies, while initially welcomed, can pose significant risks to the open source community. If a prominent project suddenly becomes abandoned, it diminishes trust in the open source ecosystem. This outcome may not be intentional, as private companies are driven by their own short-term objectives and priorities. While they may initially find a project attractive, they can later pivot or withdraw their support due to their changing needs or even financial difficulties.

4.3 Misaligned Incentives

Within the open source project landscape, three main groups stand out: owners, teams, and users. Dive deeper into the "*Key Players Involved*" section for more details. Each of the stakeholders possesses unique motivation. This often results in friction points which, can lead to larger systemic issues.

Now, let's delve into these conflicts in greater detail:

- ***Owners and Maintainers VS Contributors***
  Open source projects greatly benefit from external contributions from a diverse range of contributors. However, the maintainers and/or owners often retain control over the direction of the project and its decision-making. This power dynamic can lead to conflicts over ownership, credit, and influence. Contributors might feel that their efforts aren't adequately recognized or rewarded, especially if the maintainers don't share financial success or maintain a clear governance structure. On the other hand, maintainers and owners may be cautious about giving up control, especially if owners are private entities or if specific maintainers played a pivotal role in the project's initial achievements.

- ***Owners VS Maintainers and Contributors***
  Almost worst case scenario - a big corporation abusing OSS spirit (while remaining legally correct) and commercializing OSS software without paying the upfront costs of creating it (e.g. Amazon productizing ELK as Open Search)

- ***Owners, Maintainers and Contributors VS Non-Commercial Users***
  Open source projects are typically free to use, which can lead to a sense of entitlement among non-commercial users. They might demand rapid bug fixes and feature improvements without considering the limited resources of contributors. The challenge here is to manage user expectations while still delivering value.

- ***Owners, Maintainers and Contributors and Commercial Users***
  Commercial users can indeed derive significant value from open source software without directly compensating contributors. This can create a dilemma for projects where there's a fine line between contributing back and using the software without giving back. Some open source licenses, like the GNU General Public License (GPL), attempt to address this by requiring modifications to be open sourced as well. Other licenses, like the Apache License, offer more flexibility. Balancing the benefits of widespread adoption with the need for contributions can be a delicate challenge.

  A significant concern arises when a large corporation takes advantage of the principles of open source (while adhering to legal norms) to monetize open source software without contributing to its initial development costs. An illustrative example is Amazon's transformation of ELK into Open Search.

- ***Commercial VS Non-commercial Users***
  Different types of users often have varying priorities and needs. Commercial users might require enterprise features, stability, and support, while non-commercial users might focus more on accessibility and ease of use. Balancing these differing needs can be a challenge for maintainers who must decide how to allocate limited resources and development efforts.

The misalignment of incentives among participants in open source projects gives rise to significant conflicts, which, in turn, manifest as practical and impactful challenges for these projects. These challenges can impede development, erode community trust, and hinder the long-term sustainability of open source software initiatives.

4.4 Problems Faced by Projects

Open source projects, their owners, their contributors, and their users face substantial obstacles that hinder their advancement. Most of these problems can be understood as outcomes stemming from the previously discussed misaligned incentives. While these

challenges are more pronounced in projects that strive to strictly adhere to OSS values or lack support from private companies, it is important to acknowledge that other projects also experience them. In this section, we will examine the various obstacles that projects may encounter.

- ***Lack of funding***

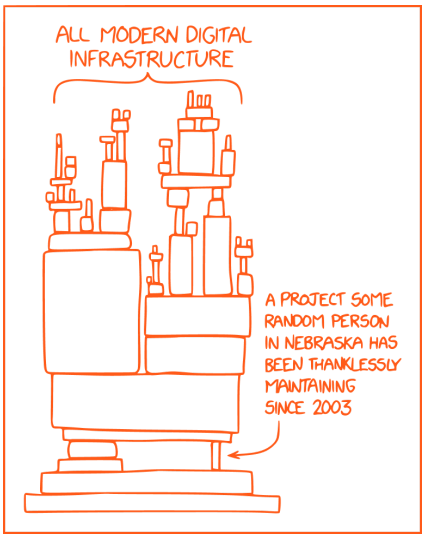
  Arguably, one of the most significant problems faced by open source projects is insufficient financial support. The bulk of these projects are developed and maintained by volunteers in their spare time and, thus, lack the resources often associated with commercial software development. This scarcity of funding leads to numerous other problems, like contributors' precarity and burnout.

- ***Contributors' precarity***

  Contributors to open source projects often find themselves in an unsecured position. They invest their time and expertise into these projects without any monetary compensation. While the community and personal fulfillment aspects are rewarding, they often don't contribute to the contributors' financial stability, leading to an unstable situation where talented developers might have to diverttheir efforts elsewhere to make ends meet.

- ***High turnover and burnout***

  Given the problems of lack of funding and contributors' precarity, it's not surprising that open source projects often experience high turnover rates and burnout. The combination of intense workloads, prolonged engagement without sufficient rest, and the absence of financial rewards often leads to contributor exhaustion. This burnout is particularly prevalent when certain contributors possess rare skills or deep knowledge of complex areas crucial to the project, placing significant demands on them and increasing their stress levels.



Consequently, many of these contributors eventually opt to explore alternative, typically paid, opportunities, leaving the projects understaffed in their wake.
The situation has been discussed in a popular webcomic xkcd.

- ***Selfish contributors***
  Some contributors are primarily motivated to contribute to an open source project because it helps them build an online reputation, which they can later leverage for better job opportunities and compensation. Having this purpose for contributing is not inherently problematic, and it is entirely legitimate to want to build a reputation. However, it becomes an issue when done in a self-interested manner.

  The process of welcoming new contributors is incredibly demanding for maintainers. It requires them to invest a significant amount of time and energy into onboarding new contributors, which includes explaining the project's structure, coding standards, and workflow processes. This investment can be quite demanding both in terms of time and energy. If a contributor joins a project with the sole intention of acquiring knowledge from community members and then leaves as soon as they have gained the required knowledge, the investment made by the maintainers and the community goes to waste. This selfish approach leads to an imbalance where the contributor gains significantly, but the community does not receive a fair return on its investment.

- ***Survivors decide everything***
  With high turnover rates and burnout, those who remain (often the project initiators or long-term contributors) are left to make all the decisions. This "survivorship bias" leads to a skewed direction of project development, where the remaining contributors' vision and preferences may not represent the broader user base or community.

- ***Contributor powerlessness***
  Regular contributors often experience a lack of decision-making authority within the project, as significant influence typically requires many years of consistent

contributions. Moreover, there is often no defined timeline or specific achievement criteria for individuals to be promoted to core developers, resulting in contributors potentially remaining without voting power for an indefinite period. This can be a frustrating experience, as it means the project may evolve in a direction that does not align with their preferences, leaving them with no decisive say in the matter.

- ***User powerlessness***

  Long-time users of the project face a similar dilemma as impotent contributors. If a new version is released that disrupts their specific use case, they find themselves powerless to influence the outcome. In the worst-case scenario, developers may implement hostile changes, even in the face of community opposition during their proposal stage. Unfortunately, there is currently no mechanism in place for these users to provide input or have their concerns addressed, ultimately leaving them unable to have a meaningful impact on the project's direction.

- ***Under-prioritized bugs***

  From the user's perspective, one of the most glaring problems is the existence of bugs that disrupt their workflow. Due to the resource constraints faced by many open source projects, bug reports may go unattended, leading to persistent issues that degrade the user experience. It is crucial to recognize that while these bugs may not be deemed critical by contributors, they can be of utmost importance to certain users, highlighting the differing perspectives and priorities involved.

- ***Pending reviews left unattended***

  The community's contributions, such as new features or patches, often encounter substantial delays in the examination process. This is primarily attributable to the insufficient allocation of dedicated resources to promptly handle these requests. Many projects experience a disparity between the demand for making changes and the availability of resources for conducting change evaluation. Consequently, the delayed assessments impede the progress of project development and can be disheartening for contributors.

- ***Dropped pull requests***
  Related to the delayed reviews, pull requests (proposals to change the codebase) can be ignored or forgotten. This is often due to the workload of the existing maintainers or centralized governance, leading to wasted effort on the part of the contributor and potential missed opportunities for improvement.

- ***Lack of development of features asked by users***
  Finally, given the challenges faced by open source projects and their contributors, there is often a disconnect between the development of new features and the needs of the user community. While users may request certain features, the limited resources, and contributor capacity may prevent these from being developed. This can result in software that doesn't fully meet the users' needs or expectations, limiting its potential impact.

In summary, open source projects face significant obstacles that hinder their ability to grow and compete in the market. Overcoming these challenges is not only vital for their survival but also essential for the long-term success and sustainability of the open source community. Only by addressing these issues can open source thrive and attract new projects committed to the principles of openness and collaboration.

5 INTUITION: HOW DOES THAT WORK?

Let’s now have an overview of the "Open Source Economic Model.” It operates on a project-by-project basis, independent of other projects. To better understand this concept, let's zoom in on the specific level of an individual project and explore the dynamics among various participants.

5.1 Fundamental Socioeconomic Pillars

We will delve into the fundamental economical and political synergies of our tokenomic model, which revolves around the following key aspects:

- ***Establishing income streams***
  To ensure the sustainability of open source, it's essential to cultivate a user base willing to invest in the project. This investment can take various forms, such as purchasing services, participating in a bounty system, or adopting a double-licensing model. Defining revenue streams is essential to secure a consistent inflow of funds.

- ***Meritocratic Compensation for Contributors***
  Once revenue is generated, it's crucial to fairly distribute funds to project contributors who have contributed to its success. Decision-making regarding fund allocation should involve the community to ensure fairness and transparency. Rather than being controlled by a few individuals, decision-making regarding fund allocation should be decentralized and meritocratic.

  Additionally, considering the interconnected nature of software dependencies, income generated by projects at higher levels of the dependency chain should be shared with the underlying software that forms the foundation.

- ***Attracting Financial Backers for a Well-Funded Project***
  Implementing this tokenomic model is not only crucial for the sustainability and growth of the project but also for its competitiveness against proprietary software

alternatives. By creating an attractive proposition for potential financial backers, we pave the way for their support through token acquisition. This support is vital for ensuring the project's sustained growth and prosperity, allowing us to compete effectively in the software market.

These core synergies serve as guiding principles for any open source project seeking sustainability and growth. They are essential for the benefit of the global open source community, ensuring that projects thrive and remain competitive in the software landscape. By doing so, we aim to foster a vibrant ecosystem where innovation flourishes, contributors are fairly compensated, and open source software continues to make a meaningful impact worldwide. Moving forward, we will explore how to effectively implement these principles in the following sections.

5.2 Disclaimer

To achieve decentralization and allow widespread participation without seeking permission from others, we will utilize tools developed over the past decade, such as smart contracts and cryptocurrencies. The perception of these tools varies depending on one's standpoint. You may either fully embrace the underlying values of cryptocurrencies, such as decentralization and transparency, or you may perceive them as potential vehicles for Ponzi schemes and scams.
If you fall in the last category, we won't dispute your perspective. Cryptocurrency is a tool that can be misused - and was a lot of time misused. However, it's essential to recognize that cryptocurrencies are merely tools that can also be utilized for their remarkable quality: decentralization.

In our endeavor to build an economy for open source projects, we aim to avoid having a centralized entity controlling everything. Instead, we want contributors and owners to have complete control over their projects, enabling them to make their own decisions regarding what to do, who to collaborate with, and what to avoid. Therefore, we will harness the power of smart contracts and crypto assets, leveraging them in service of the OSS community.

5.3 Tailored Token per Project

To foster a decentralized and permissionless economy, it's essential for each project to possess a corresponding token. As will be further elaborated in the tokenomics section, the setup is immensely flexible, allowing projects to choose the type of token that aligns best with their needs.

This model functions autonomously, applying to each project individually, without any interference from others. We will zoom in on the operations at the level of a single project and delve into the primary uses and interactions of this token.

5.4 Being a Project Backer

Individuals who own project tokens are referred to as the project's backers. We will delve later into the reasons why all our individuals may want to acquire some project tokens and how they will acquire them. Despite their varied reasons, they all share the same benefits:

- ***Proof of backing***
  Project tokens can be acquired through either dedicating time and effort to the project or making donations (whether partial or complete) to support the project. These tokens serve as proof of active participation and involvement in the project It showcases the backer's contribution and dedication.

- ***Payement methods***
  These tokens serve as a means of payment, varying based on the project's income stream model. For instance, they grant the right to use the project in cases of double licensing. Another example, tokens can be utilized to influence the project's development by offering bounties for specific tasks, providing an avenue to shape the project's direction.

- ***Voting rights***
  If the project operates under a decentralized autonomous organization (DAO) model, holding tokens grants voting rights. This enables token holders to participate in governance decisions, such as proposing and voting on project updates, funding allocation, and other important matters.

- ***Value accrual***
  Beyond their functional uses, the tokens also hold intrinsic value (as we are later going to demonstrate in the Tokenomics sections), representing a stake in the project's success and growth. They align the interests of contributors with the project's long-term objectives, fostering a sense of ownership and shared purpose.

- ***Yield***
  Some projects may choose to give rewards to backers who lock in their tokens for a set time. This reward comes from actual earnings and depends on how well the project does. (We'll provide evidence for this later in the document.)

5.5 Concrete Example: Core Synergies of a Bounty System

In this paper, we focus on exploring one specific income stream for open source projects: a bounty system. However, it's important to note that the implementation details of the 3 Fundamental Socioeconomic Pillars described in this paper can be readily applied to other income streams as well.

We will delve into the fundamental synergy of our bounty system model, which revolves around the following key aspects:

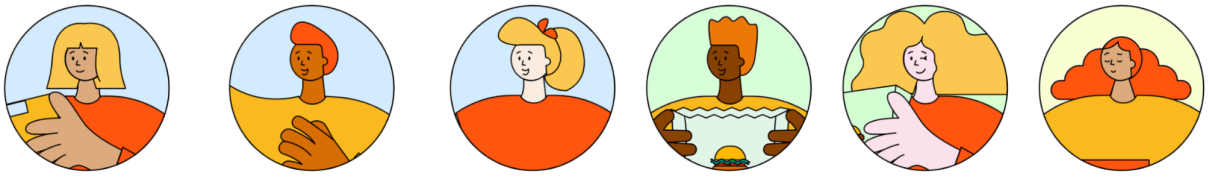
- ***Offering Project Tokens as Bounties for Issue Solving***
  By offering project tokens as bounties, we incentivize contributors to actively address and resolve issues within the project, fostering a collaborative and efficient development process.

- ***Offering a Bounty to Speed up the PR Review Process***
  To streamline the pull request (PR) review process, we utilize bounties as rewards, motivating reviewers to promptly assess and approve contributions.

- ***Compensating Contributors through Bounties***
  Contributors are duly compensated for their valuable input by receiving bounties, acknowledging their efforts, and encouraging ongoing engagement.

- ***Attracting Financial Backers for a Well-Funded Project***
  By implementing this tokenomic model, we create an attractive proposition for potential financial backers. These backers can support the project by acquiring tokens, thereby ensuring its sustained growth and prosperity.

In our hypothetical open source project, we have several key individuals:



Anissa
Core Contributor

Boris
Part-time Contributor

Chaaya
Potential new Contributor

Usher
User

Usha
User

Dona
Donor

- ***Contributors***
  - Anissa, *a core contributor (or maintainer),* who is in charge of the project's development and code quality (or one of its components). She is seeking to be rewarded for her labor and have more developers participating in this project.
  - Boris, *a part-time contributor,* who regularly contributes to the project. He is seeking to be rewarded for his labor.
  - *Chaaya, a potential new contributor.*

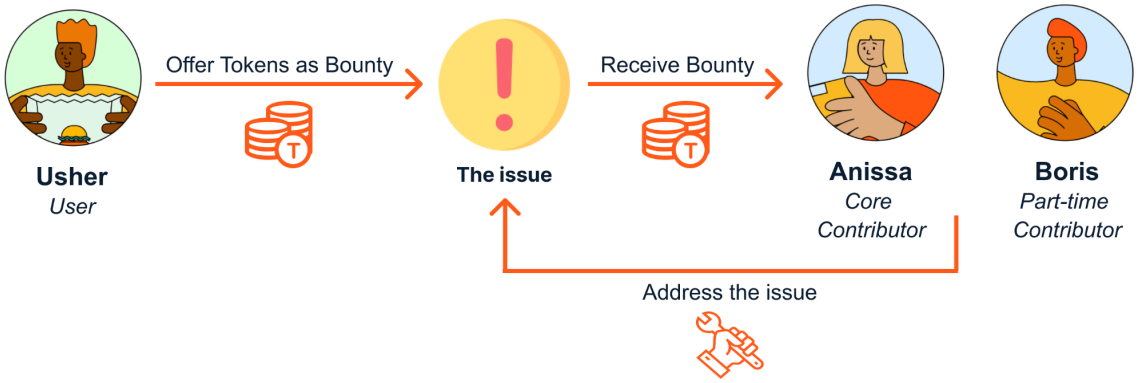
- ***Users***
  Usher and Usha, who actively utilize and benefit from the project. They wish to have a say in the project to meet their specific requirements.

- ***Donors****:* Dona, who believes in supporting meaningful endeavors, but also seeks acknowledgment for her contributions.

To foster an inclusive economy that caters to the interests of all participants within a decentralized and permissionless system, we discuss a system based on cryptocurrencies. This entails having or creating a corresponding token for our imaginary project, designed with a robust tokenomic model - meaning the token has real demand and utility.

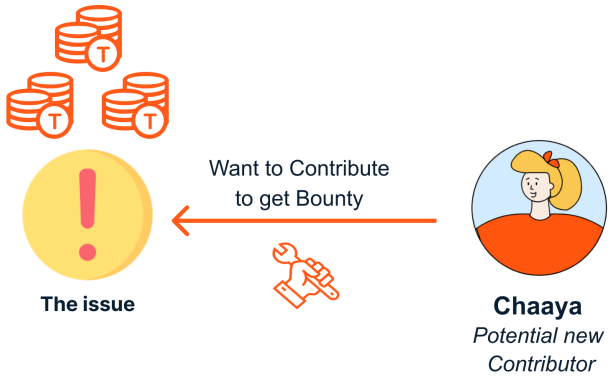
5.5.1 Offering Tokens as Bounties for Issue Solving

Consider Usher, one of our project users, who comes across a bug. As a typical open source user, Usher opens an issue, hoping for a swift resolution. However, Anissa and Boris, the contributors, may be busy with other commitments and may not prioritize this specific issue, or they might not even perceive this as a genuine problem. But from Usher's perspective, this bug is critical and needs immediate attention.
To prompt a faster resolution from the contributors, Usher purchases some project tokens and offers them as a bounty on his bug report. To motivate developers to tackle his problem, he needs to assemble a substantial bounty in tokens. Throughout this phase, additional users can also pitch in tokens to boost the bounty.



Anissa and Boris, noticing the bounty growing on this issue, decide to address it, thereby re-prioritizing their tasks. Boris will develop the necessary code changes and submit a pull request (PR), while Anissa will review it. Anissa and Boris will only earn the bounties pledged once the issue is resolved and the PR is merged, which drives them to resolve the issue promptly. This mechanism aligns perfectly with Usher's need for a swift resolution to his problem.

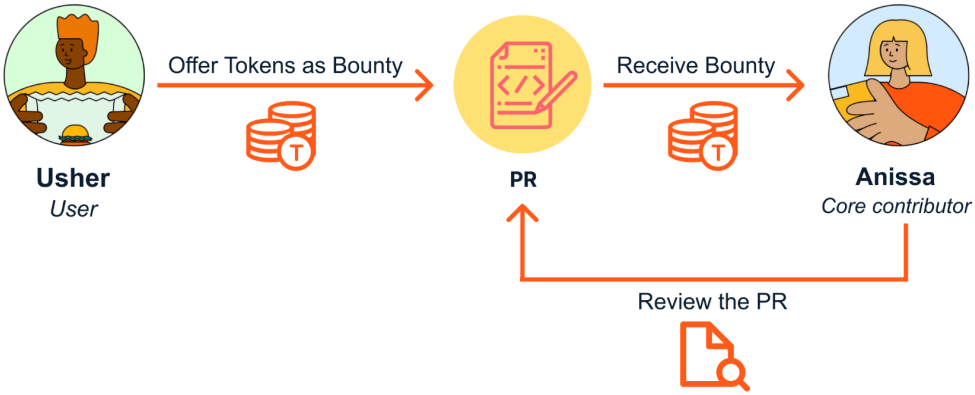
It is worth mentioning that if Anissa and Boris happen to be too occupied or uninterested in claiming the bounty, new contributors like Chaaya may emerge to submit a code change, especially if there is a suitable financial incentive. This approach can address the problem of understaffing and burnout in the project by encouraging more individuals to contribute and resolve issues.



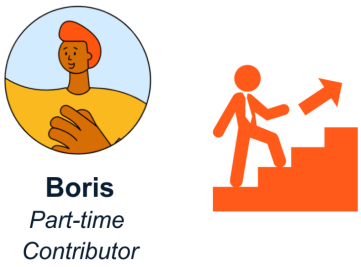
5.5.2 Offering Bounties to Speed Up the PR Review Process

Now, let's consider a similar scenario involving another user named Usha. Just like Usher, Usha encounters a bug and opens an issue. However, instead of waiting for someone else to address it, Usha takes the initiative to resolve the issue herself. But there's a catch – she requires a review from Anissa before her changes can be merged into the project. If the project is understaffed or if her proposal does not align with the core contributors' priorities, her pull request (PR) may experience delays in being reviewed and merged. Even worse, it is possible that her PR could be disregarded without much consideration.

Open Source Economy



Similar to offering bounties on issue resolution, users can also provide bounties for reviewing PRs. To ensure its prompt review, Usha can buy tokens and offer them as bounties to incentivize Anissa to prioritize and promptly review her PR. By attaching a tangible reward to the review process, Usha motivates the reviewers to dedicate their time and attention to her changes.



When core developers like Anissa identify a shortage of reviewers, she has the option to "recruit" additional individuals, like Boris or Chaaya, to be entrusted with the code review process. That is particularly true if the review bounties are lucrative enough. By doing so, she incentivizes the project to expand its core team capable of reviewing changes, thereby addressing issues of understaffing and burnout and cultivating a larger community familiar with the project.

5.5.3 Compensating Contributors Through Bounties

As we just discussed, our system allows users to offer bounties in the form of the project's token as an incentive for resolving their issues or reviewing their pull requests. The tokens received as bounties offer contributors like Anissa or Boris a range of possibilities. They can opt to sell the tokens on a market, to get a tangible remuneration, or they can choose to retain the tokens and become backers of the project, with all the benefits that it implies.

This system proves to be highly efficient in combating the issue of power centralization within an open source ecosystem. Even if Boris lacks official recognition and doesn't hold substantial authority in the project, his continuous contributions, rewarded with bounties, empower him to influence the project by offering his tokens in exchange for tasks he deems crucial. The more Boris contributes, the more tokens he earns, and consequently, the greater his ability to exert influence on the project's direction.

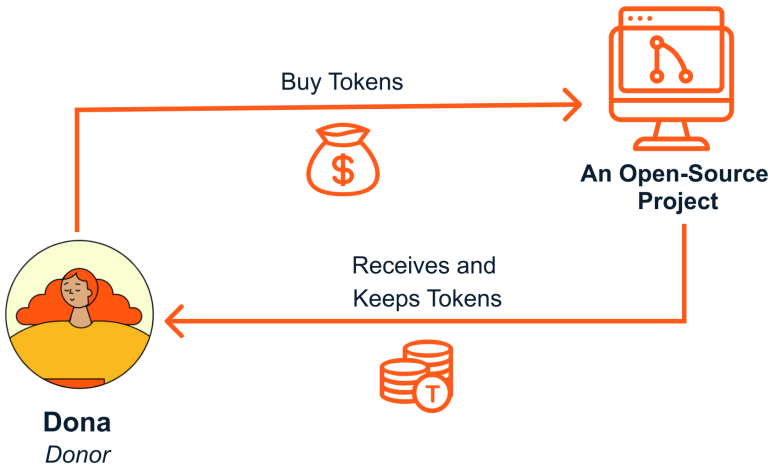
However, it is important to highlight that Boris was not the sole contributor to earn this bounty. In fact, without the open source project where the bounty was offered, Boris would not have received any bounty at all. Therefore, it is only fair that a portion of the bounty Boris receives is allocated to the contributors of this project. Similarly, like many software, this project likely relies on various dependencies that were programmed by other contributors. These contributors also deserve fair compensation, so it is reasonable that a portion of the bounty Boris receives goes to them as well.

5.5.4 Attracting Financial Backers for a Well-Funded Project

A financial backer could be a donor like Dona interested in funding the project by ideology. Now, when she decides to donate, she has two novel options:

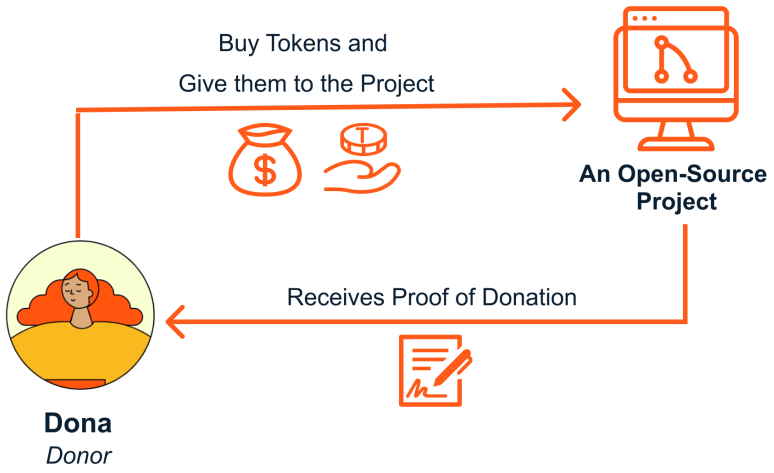
- ***Partial Donation***

  Dona acquires tokens directly from the project and retains them. Through this method, both the project and Dona benefit. The project receives funding, and Dona enjoys the perks of being a project backer.



- ***Full Donation***

  In this option, Dona still buys tokens from the project, but instead of keeping them for herself, she donates these tokens back to the project.



By doing this, she voluntarily renounces the rights typically associated with being a token holder (project backer). In return for her donation, she receives Proof of Donation, which could include various privileges and benefits specifically defined by the project. These benefits might be different from those provided to regular token holders. For instance, Dona might be recognized publicly as a donor on the project's website or receive additional voting power for specific decisions.

In both scenarios, Dona effectively becomes a backer of the projects, reaping the associated benefits, which may incentivize her to donate even more than she would have without receiving compensation. This mutually beneficial arrangement strengthens the project's financial standing and fosters a positive cycle of support and growth.

5.6 Aligned Incentives: Freedom is Key

The advantage of this arrangement is that contributors like Anissa and Boris, being compensated in the project’s tokens upon PR merging, have a vested interest in swiftly completing the merging process. Furthermore, the main objective of the developers like Anissa and Boris is to increase genuine earnings. Thus, efficient problem resolution establishes a pleasing customer experience, where the bounty is perceived as "good value" by the users, pushing them to use them more often.

This aligns contributors' motivations with the needs of our users, creating a win-win situation for everyone involved. Users' issues receive prompt attention and resolution, while contributors receive their deserved compensation.

Significantly, it is essential to note that all these actions are independent and unilateral. Usher and Usha do not require explicit permission from Anissa and Boris to proceed, nor are the contributors obligated to address the users' issues. Instead, their decision to work on the issues is driven by their own motivation and incentives.

By fostering such collaborative dynamics, the project creates an environment where users and contributors mutually benefit from their interactions. The successful resolution of users' problems strengthens the project's overall quality and enhances user satisfaction. In this way, the open source ecosystem thrives on the collective efforts and motivations of its participants.

6 TOKENOMICS SUMMARY

The Open Source Economy tokenomics model is designed with flexibility and sustainability at its core, creating a framework that adapts to the unique needs of each project rather than forcing projects to conform to a rigid system. Our model addresses the fundamental challenges facing open source projects today - underfunding, understaffing, and centralized decision-making - while remaining true to open source values.

Our tokenomics structure operates on two levels:

- the OSE token, which serves as the platform's gateway token
- individual project tokens, which are tailored to each project's specific requirements.

This two-tiered approach creates a powerful economic ecosystem that benefits all participants.

Key components are:

- **Project-Specific Tokens**: Each open source project on our platform has its own unique token, operating independently from other projects. This allows for customization while maintaining interoperability within the broader ecosystem. Projects can either create a new token or integrate an existing one, giving them complete freedom to implement the token structure that best aligns with their community's culture and goals.

- **OSE as the Gateway Token**: OSE serves as the central currency of our platform, facilitating transactions and providing stability to the entire ecosystem. While users can interact with the platform using fiat currencies through our user-friendly interface, these transactions are automatically converted to OSE behind the scenes. This conversion mechanism drives demand for the OSE token while creating a seamless user experience.

- **User-Friendly Interface**: Although our tokenomics model involves complex mechanisms, users experience a simplified interface where they can pay in

familiar fiat currencies. The platform handles all conversions automatically, ensuring that technical complexity never becomes a barrier to participation.

- **Sustainable Value Accrual**: Our tokenomics is built on principles of real utility and demand, not speculation. Token value is intrinsically linked to project success, with multiple mechanisms ensuring that as projects grow and prosper, so does the value of their tokens and the OSE ecosystem.

- **Controlled Volatility**: We've implemented systems to promote steady growth while minimizing speculation, creating a stable environment where projects can thrive and contributors can be fairly compensated without worrying about wild price fluctuations and speculations.

The following sections will explore each aspect of our tokenomics in detail, demonstrating how this model creates a self-sustaining ecosystem that empowers open source projects to reach their full potential while maintaining their core values of openness, collaboration, and community governance.

7 PROJECTS' TOKENOMICS

We've crafted the tokenomics with the aim that it should conform to each project's needs, rather than projects needing to bend to the system. Our focus is to benefit the community and resolve typical problems encountered in open source projects, including underfunding, understaffing, and centralization of decision-making.

As such, the foundational elements of our tokenomics are centered around several guiding principles:

- Token demand, directly tied to real business value and commercial success of project's
- Real value accrual, based on real revenue
- *Controlled volatility* and *minimal speculation* to encourage steady growth
- *High customizability* to match the unique working culture of each project community.

7.1 Set-up: a Tailored Token per Project

Promoting a decentralized and permissionless economy necessitates that each project has an associated token so that the model can function independently on a project-by-project basis. Each project can choose the token setup that is most compatible with their requirements.
Since our system requires a token, the token can come from two potential sources:

- ***Reuse of a preexisting token***
  For projects that already have a token, the utilization of the native token is strongly recommended. This approach enhances trust and momentum in the native cryptocurrency while simplifying the system by eliminating the need for multiple tokens. Furthermore, developers contributing to a web3 open source project typically have confidence in what they're developing and would usually prefer not to be compensated with a secondary token. Therefore, for simplicity, trust, and contributor motivation, we encourage projects to use their native token.

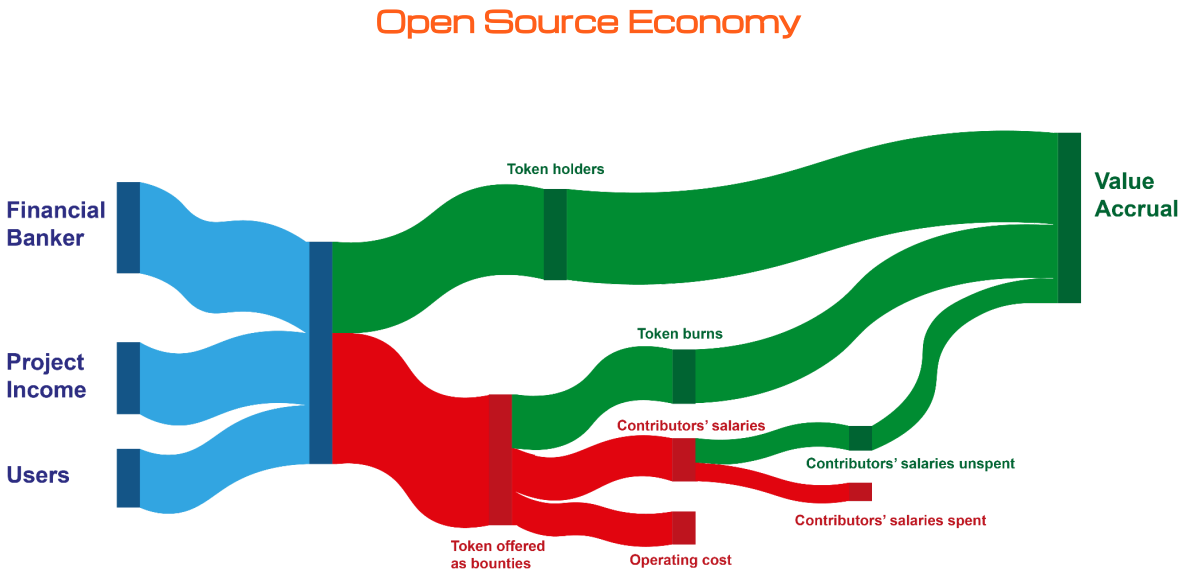
- ***Creation of a new token***
  If the project doesn't have a token or opts not to use it, a new token can be minted to build an economy centered around open source development. The objective of the “Open Source Economy” is to furnish well-tested smart contracts that facilitate easy token creation with just a few clicks, eliminating the need for specialized smart contract engineering skills.

All concepts explored in this section can be used to add extra utility to preexisting tokens, but from now on, we primarily focus on the case of freshly created tokens. The incentives discussed below are optional and opt-in. We believe that they are useful for creating a sustainable incentive structure for the project and token accrual over time.

7.2 Economics

The economic mechanisms within our tokenomics model are carefully engineered to create sustainable value for all participants. These mechanisms include token demand driven by real utility, value accrual based on project success, tax distribution systems, and specialized tools for volatility control and long-term growth.

All these economic tools and infrastructure will be provided by Open Source Economy, requiring no specialized blockchain knowledge from projects or contributors. Our platform handles the complex technical implementation, allowing projects to focus on what they do best - developing innovative open source solutions - while benefiting from a robust economic foundation that enables sustainability and growth.



7.2.1 Token Demand: Intrinsically Linked to Project's Success

The demand for the project token is primarily driven by real-world utility, as the token offers tangible benefits and functionality.

7.2.1.1 Marketplace-Driven Demand

Our platform enables open source projects to implement several ready-to-use business models by offering a range of professional services that enterprises are willing to pay for.

Revenue generated on our platform is initially received in fiat currency (e.g., dollars). These funds are then automatically converted to OSE tokens, which are subsequently used to mint project-specific tokens. This creates a seamless flow where users pay in fiat currency, but the transaction ultimately results in the creation of new project tokens, directly linking commercial success to token demand.

Here is a breakdown of what projects will be able to monetize on Open Source Economy:

1. Services
    a. **OSS Development:** bug fixes, new features, maintenance
    b. **Enterprise Support:** customer support, technical support, deployment support
    c. **Operations:** incident support, Maintenance, Supervision

    d. **Consultancy:** training and workshops, technology assessment, solution design
2. Licensing
    a. **Dual Licensing**: offering both open source and commercial licenses for different use cases
    b. **Open Core Model**: providing premium features or extensions beyond the core functionality
    c. **SaaS Offerings**: hosted and managed versions of open source software

As a project attracts more enterprise customers and sells more services through our marketplace, token demand increases proportionally, creating a direct link between commercial success and token demand.

By enabling open source projects to monetize their work through enterprise-ready services while maintaining their open source values, we create a virtuous cycle where project growth, service adoption, and token demand reinforce each other. This marketplace-driven token demand ensures that a project's tokenomics are backed by real economic activity rather than speculation.

7.2.1.2 Utilities

- **Voting rights**
  If the project opts for decentralized governance, the project token can grant voting rights. The success of the project increases the importance of governance decisions, sparking more interest in acquiring tokens for voting influence. This interest further drives token demand.

- **Customizable utility**
  Each project will have the flexibility to define additional unique utilities specific to their ecosystem needs and community requirements.

7.2.1.3 Financial Backers

Historically, successful open source projects attract more financial support from community members and organizations who believe in their mission or user their solution. Traditional donation models, however, create a one-sided relationship where backers contribute funds without receiving tangible participation rights in the project's ecosystem.

Our model transforms this dynamic by allowing financial backers to acquire project tokens rather than simply making one-way donations.

In summary, these real-world applications and utilities, directly tied to the project's success, stimulate demand for the project token.

7.2.2 Token Distribution and Selling Pressure and Liquidity

While users pay for project services in fiat currency, developers receive project tokens as compensation for their contribution..

Token holders, whether they are platform users (eg: enterprises, financial backers) or project developers, may sell their tokens for several key reasons:

- Get the funds for their (past) contributions - stakeholders can convert their tokens to fiat currency whenever they need funds
- To reallocate resources to other open source projects that better align with current interests
- Natural lifecycle evolution as early backers reduce holdings while new contributors enter
- Reduced desire to participate in project governance

The Augmented Bonding Curve mechanism ensures token selling minimizes market volatility by burning sold tokens according to a predefined curve. The exit tribute ensures

a portion of each sale remains with the project, creating sustainable funding even as token holders change over time.

7.2.3 Real Value Accrual

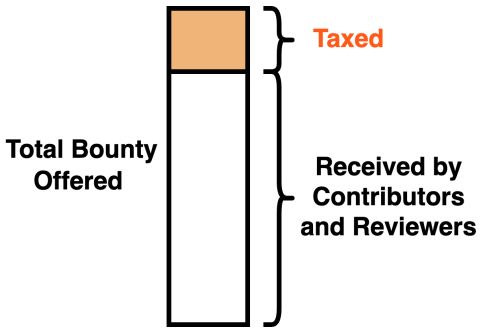
Our tokenomics system establishes sustainable mechanisms for generating project revenues and ensuring token value appreciation over time. Unlike speculative models, our approach ties token value directly to real economic activity within the ecosystem.

7.2.3.1 Tax Mechanism

We implement a simple yet effective tax on two key actions:

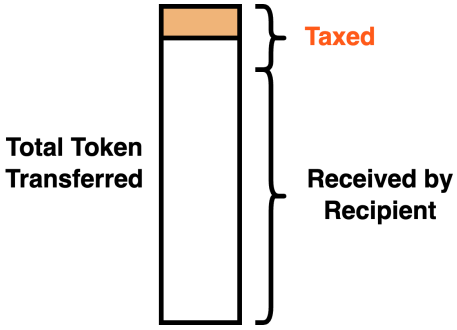
- ***Income Distribution Tax***

  When project income (such as bounties) is distributed, a small percentage is collected as tax. Since this tax applies to genuine economic activity, it creates value accrual based on real revenue and project success.



- ***Token Transfer Tax***

  A minimal tax applied to token transfers discourages excessive speculation while promoting the use of tokens for their intended purpose within the ecosystem.

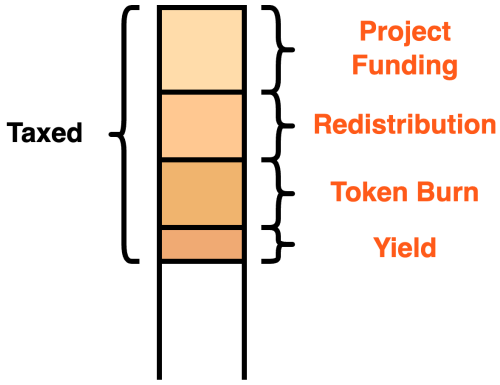


7.2.3.2 Value Distribution

The taxes collected play a crucial role in our ecosystem by providing vital support to the project's revenue and driving growth in token value. This mechanism ensures that participants have a direct, ongoing stake in the project's success, fostering long-term engagement and encouraging sustained contributions.

By linking financial rewards to continued participation, we create a system where the value generated by the project benefits everyone involved, driving the project's growth and ensuring its sustainability over time.

The collected taxes are allocated to support multiple aspects of the ecosystem:



- ***Token Burn (sending tokens to the “zero address”)***
  A portion of taxed tokens are permanently removed from circulation by sending them to a "zero address." This mechanism benefits all token holders by gradually reducing supply as the project grows.

- ***Staking Rewards (Yield)**:*
  Token holders who stake their tokens for predetermined periods receive a share of the collected taxes, encouraging long-term commitment and reducing market volatility.

- **Project Treasury**
  Funds directed to the project treasury support ongoing development, infrastructure, and community initiatives.

- **Ecosystem Dependencies support**
  A portion of the collected tax is allocated to support essential, yet often overlooked, dependencies within the open source ecosystem. Many projects rely on foundational software and libraries that operate "behind the scenes," and the developers maintaining these crucial components frequently lack adequate funding. This tax revenue helps compensate these developers and ensures the continued health and sustainability of the entire open source landscape.

This tax system creates a self-reinforcing cycle where project success directly benefits all participants. As projects generate more revenue, more taxes are collected, driving token value through both decreased supply and increased utility.

All features offer high customization to match each project's specific needs, with adjustable parameters for tax rates and allocation percentages.

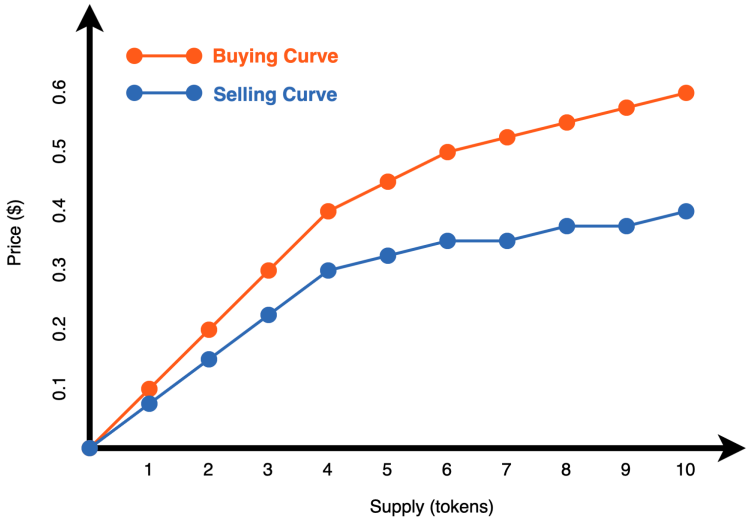
7.3 Sustainable Tokenonomics Implementation

In order to encourage sustainable growth, reduce market volatility, and limit speculative activities, we plan to utilize an Augmented Bonding Curve smart contract.

7.3.1 What is an Augmented Bonding Curve?

An ABC is a smart contract-based system that manages the issuance and pricing of tokens. It's an evolution of the traditional bonding curve - a mathematical function that is rooted in traditional finance. The curve is "augmented" to introduce additional features, such as funding allocations and reserve pools. With ABC the token supply is not fixed.

In a typical bonding curve model, tokens are minted or burned in response to purchases or sales, and the price is determined by two mathematical functions. One curve for purchasing the token, and one curve for selling the token. This allows the token supply to expand and contract in response to market demand, and the price to increase as more people buy in.



The Augmented Bonding Curve model enhances this by introducing a reserve pool of funds. This pool acts as a communal treasury: when someone buys tokens, a portion of their payment is locked in the reserve, and when they sell, funds are released from the

reserve to compensate them. This provides a buffer against price volatility and a source of ongoing funding for the project.

In addition to the ABC mechanism of buying from and selling to the bonding curve, we can have a secondary market that allows for direct peer-to-peer trading of tokens. This allows the market price to deviate from the bonding curve price when the community feels it is necessary.

How does it work?

- **Minting and burning**: When users purchase project tokens, new tokens are minted and added to the circulating supply, increasing the token price along a pre-defined curve. Conversely, when users sell tokens, tokens are burned and removed from circulation, decreasing the token price along a separate curve.

- **Liquidity reserve**: A portion of the funds received from token purchases is deposited into a reserve pool, which is looked at in ABC and ensures liquidity for token holders wishing to sell.

- **Project treasury**: A portion of the purchase price is directed toward the project's treasury, providing a continuous funding stream. This portion is called “**Exit tributes**”.

7.3.2 Benefits for Projects’ stakeholders

- ***Steady Growth Price***: A well designed ABC promotes a consistent, albeit gradual, price increase in conjunction with the rise in token supply. This tends to stabilize token valuation, minimizing abrupt price spikes and dips, especially if an exit tribute is in place.
  Indeed, price manipulation requiring modifying the circulating token supply, becomes way more costly.

- **Reduced speculation**: The ABC's design discourages speculative trading by making it more costly to quickly buy and sell tokens. Projects can scale naturally, with token prices reflecting actual adoption and success.

- **Preventing Token Value Plummeting to Zero**:
  Our system is designed to ensure that a token retains its value over time, even in the face of sell-offs or significant market fluctuations.

  This is achieved through a combination of mechanisms that minimize the risk of tokens becoming worthless:

  - **Guaranteed Floor Price:** ABC, in combination with token burning, establishes a guaranteed floor price. When tokens are sent to the "zero address," they remain part of the total supply but become permanently inaccessible. This mechanism serves as a mathematical safeguard, preventing tokens from falling below a certain value threshold, even if everyone decides to sell their tokens. As the project grows and more tokens are burned, this minimum value naturally increases over time, further stabilizing the token's worth.

  - **Controlled Price Fluctuation:** Through the reserve pool mechanism, each token in circulation is proportionally backed, helping maintain price stability. When tokens are sold back to the curve, they are burned according to a predefined mathematical function. Unlike traditional markets, where panic selling can drive prices to unsustainable lows, ABC's algorithm ensures that even if a significant number of token holders decide to exit simultaneously, price discovery remains orderly and constrained by the curve's inherent properties, preventing a catastrophic collapse in value.

- **Liquidity guarantee:** The Augmented Bonding Curve's reserve pool functions as a built-in liquidity mechanism that addresses one of the most critical challenges faced by project tokens – reliable exit options. When users purchase tokens, part is automatically locked in the reserve pool. This creates a guaranteed liquidity

foundation that enables token holders to sell their tokens back to the curve at any time, with the price determined transparently by the mathematical function of the curve.
This setup provides several key advantages: continuous market access, price stability protection, confidence for participants and project sustainability. Token holders can participate with confidence, knowing they have guaranteed exit options that won't destabilize the project or harm its long-term viability.

- **Community ownership**: By tying token value to the success of the project, the ABC fosters a sense of ownership among token holders. They are incentivized to contribute to the project's success, creating a virtuous cycle of growth and collaboration. The project treasury can be governed by token holders, giving the community a direct stake in the project's financial well-being.

- **Fair launch & price discovery**: The ABC allows for a fair and transparent token launch, with the token price gradually increasing as more users participate. This organic price discovery eliminates the need for artificial price setting.

7.3.3 Practical Implementation & Examples

Augmented Bonding Curves (ABCs) are implemented in our ecosystem with customizable parameters, allowing each project to configure its curve according to specific needs without requiring technical blockchain expertise.

Open Source Economy provides all the necessary tooling with customizable parameters, allowing each project to configure its ABC according to its specific needs without requiring technical blockchain expertise.

Additionally, our ABC implementation simplifies liquidity management for projects, as the smart contract automatically handles reserve pools and pricing algorithms according to predefined parameters.

Note on Currency Representation:
For clarity in the following examples, we will use dollars to represent token prices, as this is the format displayed on the Open Source Economy front-end. However, in practice, the actual flow operates as follows:

- Project tokens are minted and redeemed using OSE tokens.
- OSE tokens can be acquired using various currencies (crypto or fiat) on our platform, as well as on DeFi and CeFi platforms.
- The Open Source Economy front-end provides a seamless routing algorithm that facilitates the conversion between fiat currencies and project tokens.

For simplicit, in this section, we will assume that project tokens are quoted directly in dollars.

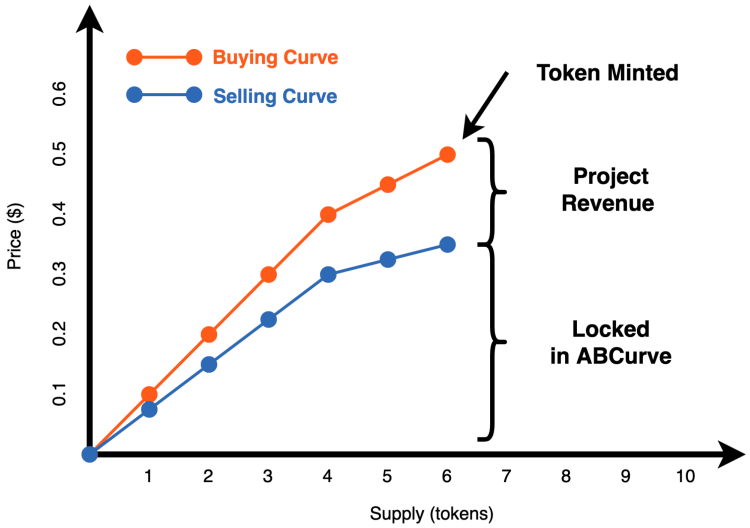
For additional details about OSE, please refer to the "OSE: The Core Token" section.

7.3.3.1 Token Mint

Token minting refers to the process of creating new project tokens through the Augmented Bonding Curve smart contract. When a user purchases tokens, the ABC mathematically calculates the appropriate price based on the current supply and creates new tokens to add to the circulating supply. This increases the total number of tokens in existence, with each successive token priced higher according to the bonding curve formula. Unlike traditional fixed-supply models, minting allows for dynamic token issuance that responds to actual demand while ensuring price stability.

When someone purchases a token through the bonding curve

- The curve mathematically determines the token price based on the current supply
- A portion of the purchase amount is locked in the ABC smart contract to ensure future liquidity
- The difference between the purchase price and the locked amount goes directly to the project treasury



Example:

If someone buys the 7th token for $0.50 while the selling price to revert to a 6-token supply is $0.35:

- $0.35 is locked by the ABC smart contract to guarantee future liquidity
- $0.15 flows directly to the project treasury as usable funding

This creates immediate value for the project while maintaining system stability.

Benefit: The token minting mechanism provides projects with upfront funding while ensuring price discovery happens gradually and predictably, protecting both early and late participants in the ecosystem.

7.3.3.2 Token Redeem

Token redemption refers to the process where token holders sell their project tokens back to the Augmented Bonding Curve smart contract in exchange for dollars. Unlike token burning, redemption actively decreases the circulating supply, as the returned tokens are removed from circulation when sold back to the curve.

The bonding curve mathematically determines the redemption price based on the resulting supply.

Reserve-Backed Redemption System:
When tokens are redeemed, the payment comes directly from the reserve pool that was established during the token minting process. This reserve-backing mechanism functions similarly to how the gold standard once backed fiat currencies like the US dollar, creating intrinsic value for each token. Every project token is backed by a proportional amount of OSE tokens locked in ABC's reserve, ensuring that redemptions are always honored according to the mathematical curve.

Example:
If the current token supply is 10 tokens and someone redeems the 10th token:

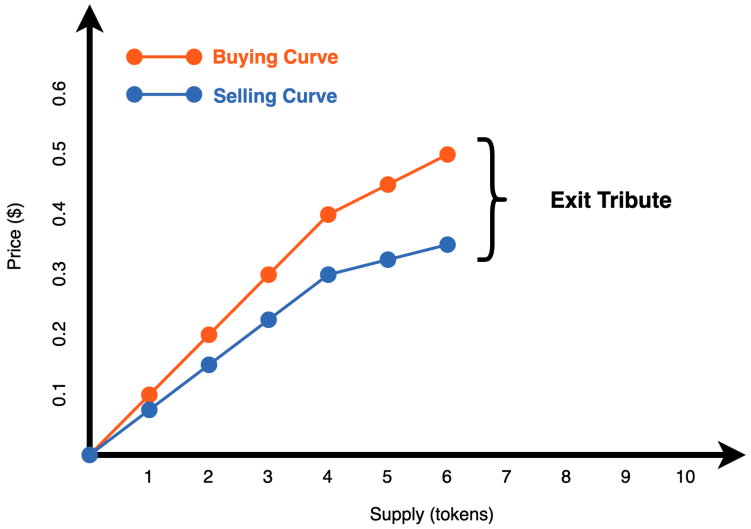
- The bonding curve calculates the redemption price at $0.45 (lower than the purchase price due to exit tributes)
- The ABC smart contract releases $0.45 from its locked reserves to the token holder
- The total token supply decreases from 10 to 9
- The new price for purchasing the 10th token would be $0.50, while the redemption price for the 9th token would now be $0.40. This amount is locked by the ABC smart contract to ensure the possibility for token holders to sell a token at this price.

Benefit: The token redemption mechanism ensures liquidity for token holders while protecting the project from sudden mass withdrawals, creating a more resilient and sustainable economic model.

7.3.3.3 Exit Tributes

Exit tributes create a deliberate discrepancy between the buying and selling curves of the Augmented Bonding Curve. This mechanism establishes different prices for purchasing

and redeeming tokens at the same supply level, ensuring that selling tokens always returns slightly less than the current purchase price.



Example:

In our ABC implementation, if the current supply is 50 tokens:

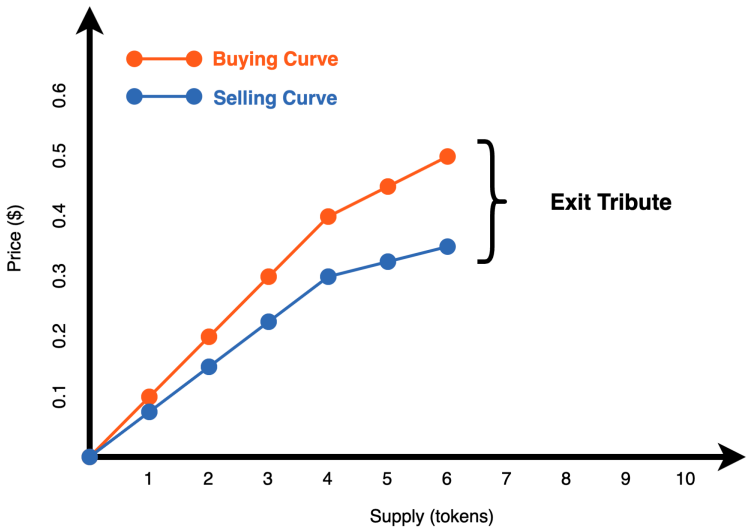
- The price to purchase the 51st token might be $2.00
- The redemption price to sell back to a supply of 49 tokens would be $1.75
- The difference of $0.25 (12.5%) represents the exit tribute

If a user purchases a token for $2.00 and immediately tries to sell it, they would receive only $1.75, with the $0.25 difference flowing to the project treasury. This creates a natural disincentive for short-term speculation while generating additional funding for the project.

Benefits:

- Creates a sustainable funding stream for project development independent of new token purchases
- Significantly reduces harmful market manipulation by making quick buy-sell strategies financially unattractive
- Protects long-term token holders by discouraging speculators from causing price volatility

- Encourages users to carefully consider their investment decisions before purchasing tokens



7.3.3.4 Token burn

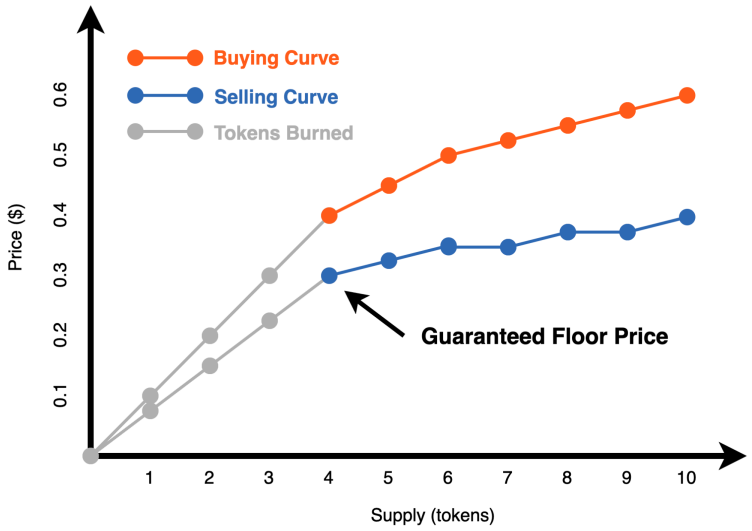
Token burning (‘burn”) in our system permanently removes tokens from circulation by sending them to a special "zero address," occurring automatically during certain actions. Unlike tokens sold back to the Augmented Bonding Curve, burned tokens remain in total supply but become forever inaccessible, creating a strengthening price floor protection mechanism over time.

Example:

Consider a project with a total supply of 10 tokens, where 3 tokens have been burned through various project activities:

- The burned tokens remain counted in the total supply (10 tokens)
- Only 7 tokens remain in actual circulation
- If all 7 token holders decided to sell their tokens back to the curve
- The first seller might receive $0.40
- The second might receive $0.375

- The prices would continue decreasing according to the curve
- The last token would be redeemed at no less than $0.30, the mathematically guaranteed floor price



As more tokens are burned through project activity, this floor price naturally increases. If the project later burns 2 more tokens, leaving only 5 in circulation, the new floor price might rise to $0.35, providing even stronger protection for token holders.

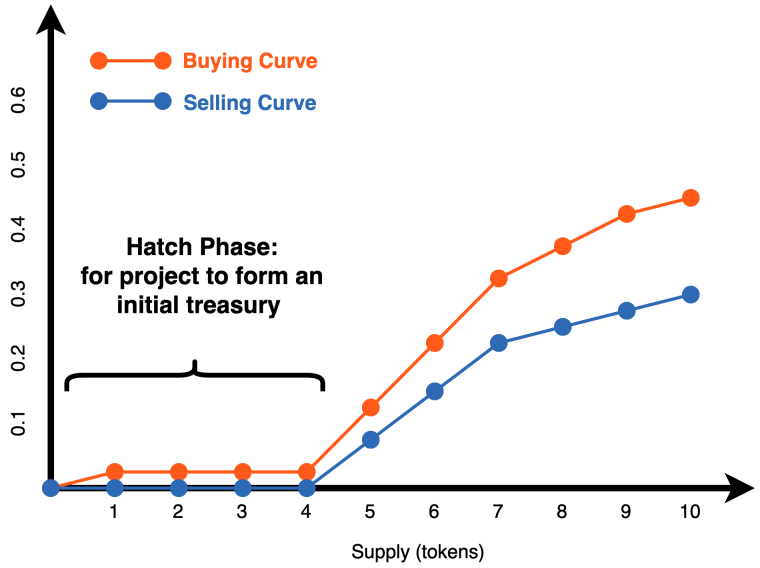
Benefits:

- Creates a mathematical guarantee against tokens becoming completely worthless
- Rewards early supporters as the floor price naturally rises with project success
- Aligns interests between the project and token holders as both benefit from increasing activity
- Provides psychological security for investors, encouraging more participation in the ecosystem
- Creates a virtuous cycle where project success directly translates to stronger price protection

7.3.3.5 Hatch Phase

The Hatch Phase is an initial period in a project's tokenomics lifecycle where tokens are offered at an intentionally lower price to bootstrap the project's treasury and community. During this limited-time phase, the project mints tokens to form its initial funding pool, enabling it to kickstart operations by offering bounties to early contributors.

While these early-phase tokens may initially have minimal value, they have significant growth potential if the project succeeds, incentivizing early participation and support.



Example:

Consider a new open source project implementing our tokenomics model:

- During the Hatch Phase, the first 1,000 tokens might be priced on a significantly flatter curve
- After the Hatch Phase ends, the curve steepens

The project uses these initial funds to establish momentum, attracting contributors who recognize both the immediate token rewards and the potential for token appreciation as the project progresses beyond its initial phase.

Benefits:

- Provides essential early-stage funding without traditional investment structures
- Rewards the earliest supporters and believers in the project
- Creates a committed initial community with aligned incentives
- Enables the project to quickly address critical early development tasks
- Establishes token liquidity from day one of the project's operations

7.3.3.6 Ensure Low Volatility on the Secondary Market

The secondary market refers to the trading environment where token holders can buy and sell project tokens directly with each other, outside of the Augmented Bonding Curve mechanism.

While the primary market (the ABC) issues new tokens or redeems existing ones at mathematically determined prices, the secondary market operates based on peer-to-peer transactions where prices are determined by direct negotiation or through decentralized exchanges.

These secondary markets typically allow for more immediate trading but can experience greater price volatility without proper stabilization mechanisms.

If the project sets its ABCs as recommended, the primary market's price will be assuredly designed to have a steady price increase in correlation with the token supply rise. This design discourages token supply manipulation due to the associated cost of “Exit Tributes”.

The goal, then, to ensure low volatility, is to align the behavior of the secondary market as closely as possible to that of the primary one. We can achieve this through the introduction of arbitrage bots and AMMs.

- **Arbitrage bots** help maintain stability by ensuring that prices don't stray too far from the ones of the primary market.

- Simultaneously, **AMMs** ensure that the secondary market has sufficient liquidity to handle large orders without substantial spread, effectively absorbing volatility.

7.3 Why Not Just Use a Fiat or a Stablecoin?

It can be debated that there's no necessity for new tokens to establish a business model. The income could simply be provided in an existing currencies (dollars, euros, BTC, USDC, and others). Others might argue for a custom token, which doesn't necessarily have to incorporate a value appreciation mechanism and could maintain a stable price over time.

However, this overlooks the vital objectives of the "Open Source Economic Model":

- ***Attracting more financial backers*** to attract sufficient funding for open source projects, enabling them to achieve sustainable growth and long-term success.

- ***Motivating and retaining high-quality, experienced contributors*** is essential for the success of these projects. It's important to ensure that their commitment is rewarded in the long term, with increasing returns as they continue to contribute.

If we only utilize a stablecoin or a token without value appreciation tied to the project's success, what motivation do backers have to join a project? Contributors will receive a bounty whose value doesn't grow over time along with the project's success. Therefore, why tackle issues now rather than later? The same question applies to financial backers, why donate now instead of later? It's true that, during a project's early stages, becoming a backer can be risky. It is often more beneficial to support projects that have already proven successful rather than those still struggling to gain recognition.

For open source projects to thrive, be well-funded, and attract ample developers, we require a system that allows backers to bet on the future. This means the token's value appreciation must be tied to the project's success. Simply put, we propose offering backers a greater quantity of tokens (for an equivalent level of involvement) if they lend their support at a project's inception rather than at a more mature, successful stage.

By meeting this condition, backers are encouraged to donate and collect bounties as early as possible, while the project reaps the benefits of sincere support that drives its success. This strategy doesn't just promote early contributions but also aligns the backers' interests with the project's long-term success.

7.4 Why Not a Fix Token Supply

In the previous section, we saw the mechanisms of token-based taxation and burn. Usually, such approaches are paired with a fixed token supply to ensure a deflationary model.

While this may sound good in theory (as the value of existing tokens should increase as the total supply decreases), it can lead to hoarding. Let's delve deeper into the potential issues with this model:

- ***Disconnection Between Current Price and Total Token Supply***
  In a fixed supply model, a few entities, sometimes one, often retain the majority of unsold tokens. This creates two categories of supply: the circulating supply (tokens currently in the market) and the total supply (all tokens, including those held backby the project).

The price of the token is typically based on the circulating supply, not the total supply. This could lead to a discrepancy between perceived and actual token value, especially if the project decides to release more tokens into the market, which can suddenly dilute the value of circulating tokens.

- ***Token Value Could Plummet to Zero***
  In a scenario of a sell-off, where demand for the token diminishes significantly, the token price can fall drastically, potentially even reaching zero. This extreme depreciation might occur due to various factors such as lack of product adoption, departure of key project contributors, regulatory changes, or negative sentiment in the broader crypto market.

- ***Risk of Centralization and Manipulation***
  If a small group of holders controls a significant portion of the token supply, it opens the door for potential market manipulation. These could take the form of schemes such as "Pump and Dump" or its inverse, "Dump and Pump".

Source: www.blockchainresearchlab.com

In the latter scenario, these dominant token holders may artificially lower the token's price by offloading a large number of their tokens. This can spark panic amongst other holders, prompting them to hastily sell off their tokens. As a result, the dominant token holders can seize the opportunity to repurchase more tokens at this reduced price. This entire process leads to greater centralization of the project, posing a significant risk.

For all of these reasons, we prefer to implement a better model than a fixed token supply.

8 OSE: The Core Token of the Platform

In the previous sections, we outlined how the Open Source Economy model provides tokenomics that any open source project can adopt to achieve sustainability and growth. Now, we turn our attention to OSE—the foundational token that powers our entire ecosystem.

The OSE token is not merely another cryptocurrency; it is the lifeblood of the Open Source Economy platform. As we build this platform to transform open source funding and sustainability, we remain committed to our core principles: full transparency, decentralized governance, and practicing the same tokenomic model we advocate for projects.

This chapter explores the OSE token's fundamental role in the ecosystem, detailing its utilities, value accrual mechanisms, and how it serves as a gateway between traditional financial markets and the open source economy we're creating.

8.1 Core Functions of the OSE Token

The OSE token is designed to serve multiple critical functions within our platform, creating a self-reinforcing ecosystem where the success of individual open source projects directly contributes to the value and utility of OSE itself. This symbiotic relationship ensures that as the Open Source Economy grows, so does the strength and stability of its core token.

8.1.1 OSE Token Fundamentals

8.1.1.1 Utility: Powering the Open Source Economy

The OSE token provides essential utilities that drive the functioning of our entire ecosystem:

8.1.1.1.1 Governance Rights

OSE serves as a governance token, empowering holders to shape the platform's future through democratic participation. Token holders can propose and vote on platform

improvements, fund allocation decisions, and policy changes. This ensures that the Open Source Economy evolves according to the collective wisdom of its community rather than centralized control. Our governance model, inspired by Switzerland's direct democracy system as detailed in 9 - Decentralized Governance, provides both efficient operation and community oversight.

8.1.1.1.2 Service Access

OSE token holders gain privileged access to platform services, including reduced fees for marketplace transactions, priority access to new features, and enhanced support options. This creates practical utility that encourages token acquisition beyond speculative purposes.

8.1.1.2 Gateway Token: Medium of Exchange

OSE acts as a crucial medium of exchange, facilitating liquidity and economic interactions among projects. This creates a unified financial ecosystem where value flows seamlessly between different open source initiatives, enabling collaboration and resource allocation based on real market demand.

Within the framework of the Augmented Bonding Curve (ABC), all project tokens are priced in OSE rather than external currencies.

Choosing OSE as the base unit for project token pricing provides several significant advantages:

- **Community Control**: OSE operates within a controlled environment governed by the community of its users, rather than being subject to the whims of broader market dynamics or the policies of external financial entities. This community control ensures that the value and stability of OSE are more closely aligned with the interests and successes of the open source projects it supports.

- **Stability Over Volatility**: cryptocurrencies like ETH are known for their high volatility, which can introduce significant financial risk and uncertainty to projects

whose tokens are pegged to such currencies. This volatility is often influenced by factors unrelated to the actual performance or success of the projects themselves, such as broader economic conditions, speculative trading, and regulatory news. By using OSE, projects can avoid these external fluctuations, focusing more on development and community engagement.

- **Avoidance of Stablecoin Failures**: the collapse of certain stablecoins, such as UST, has highlighted the risks associated with relying on these supposedly stable financial instruments. Stablecoins can fail due to issues like poor design, mismanagement, or a lack of sufficient backing assets. By anchoring to OSE, projects avoid the risk of their token's value being tied to the fate of these external assets.

- **Risk-Free Consideration**: the OSE token's value and stability are closely tied to the health and security of the Open Source Economy platform. If the platform encounters issues such as security breaches or operational failures, the OSE token could also be negatively impacted. Thus, open source projects that depend on the Open Source Economy for growth can also rely on the stability and reliability of the OSE token.

- **Ecosystem Collaboration Effect**: by integrating project tokens within the OSE framework, all participating projects become part of an interconnected network. When one project gains adoption, it increases activity on the platform, which benefits all participants. This creates positive feedback loops where improvements in one area strengthen the entire ecosystem.

- The OSE Gateway function is particularly powerful because by acquiring OSE, users gain access to the entire ecosystem of project tokens

8.1.1.3 Value Accrual: Sustainable Growth Mechanisms

Unlike tokens dependent solely on market speculation, OSE integrates several sustainable value accrual mechanisms directly linked to the platform's economic activity:

- OSE locking upon project token minting
- OSE burning with each project income
- OSE burning with each project token burn

These mechanisms ensure that OSE's value is actively tied to and supported by ongoing platform activities, fostering sustainable growth and stability.

8.1.1.3.1 Locked Liquidity

When new project tokens are issued via their Augmented Bonding Curves, a portion of OSE tokens are locked within the smart contract as reserves. This reduces circulating supply while providing guaranteed liquidity for project tokens. The more projects join and grow on the platform, the more OSE becomes locked, further strengthening its value proposition.

8.1.1.3.2 OSE burning with each project income

A 10-25% fee is applied to all revenue generated by projects participating in the Open Source Economy. Critically, **20% of these tokens are permanently burned**, creating a deflationary pressure that reduces supply as platform activity increases. This mechanism ensures that the token's value is directly linked to the real economic activity of the platform.

The value of OSE is intrinsically tied to the success of projects in the Open Source Economy. As projects flourish and generate more revenue, more OSE tokens are acquired for fee payment, increasing buying pressure. Simultaneously, the burn mechanism reduces circulating supply, creating a virtuous cycle where project success translates to OSE value appreciation.

8.1.1.3.3 OSE burning with each project token burn

When project tokens are burned through their own tokenomic mechanisms, the OSE tokens locked under that project's Augmented Bonding Curve are also permanently burned. This creates a powerful compounding effect where:

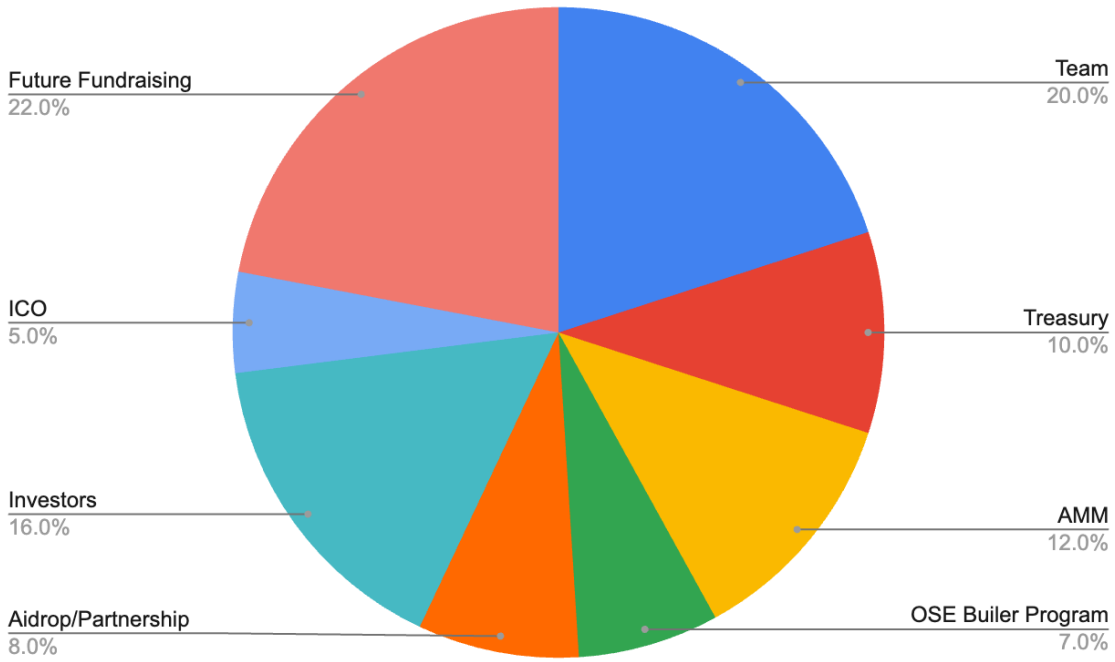
- These project token burns trigger proportional OSE burns
- The OSE supply reduction benefits all projects in the ecosystem

This nested burning mechanism accelerates the deflationary pressure on OSE.

8.2 OSE Token Allocation

The OSE token has a fixed total supply of 1,000,000,000 (1 billion) tokens, designed with a carefully structured allocation that supports the long-term sustainability and decentralized governance of the Open Source Economy platform.

Our distribution model follows a principled approach that strategically balances team incentives, platform development, community engagement, and investment opportunities to ensure both immediate viability and future growth potential.
This thoughtful allocation ensures that all stakeholders - from early supporters and development teams to community members and strategic investors - have aligned interests in the platform's success.



Team Allocation (20%)

- Vesting Period: 5 years with 20% annual unlocking
- Purpose: Attract and retain top talent
- Strategic: Ensures long-term team alignment with project success
- Includes founder, key personnel, core developers, operations team

Platform Infrastructure (22%)

- **Treasury (10%)**:
    - Funds ongoing platform development
    - Supports ecosystem initiatives
    - Emergency reserve
    - Strategic partnerships
    - Strategic growth opportunities

- **Automatic Market Maker (12%)**:
    - Ensures consistent market liquidity
    - Supports price stability
    - Reduces trading volatility
    - Enables efficient market operations

Community and Ecosystem (15%)

- **OSE Builder Program (7%)**:
    - Incentivizes platform development
    - Rewards ecosystem contributors
    - Supports developer community
    - Drives innovation
- **Airdrop/Partnership (8%)**:
    - Community building initiatives

    - Strategic partnerships
    - User acquisition
    - Ecosystem expansion

Investment Rounds (43%)

- **Investors (16%)**:
    - Allocated to initial investors from incubation to TGE
    - 4% already granted to our initial investors
- **ICO (5%)**:
    - Token generation
    - Public and private token sale
    - Community participation
- **Future Fundraising (22%)**: Reserved for future fundraising via OTC deals.

This allocation structure balances immediate operational needs with long-term strategic growth. By reserving a significant portion for future fundraising while ensuring adequate resources for team incentives, platform development, and community engagement, we create a sustainable foundation for the Open Source Economy ecosystem. The five-year vesting period for the team allocation demonstrates our commitment to the platform's long-term success, while the dedicated AMM allocation ensures market stability from day one.

8.3 Impact on the Global Open Source Community

The performance of the OSE token plays significant roles in supporting the global open source community and its projects. As the price of the OSE token rises, the open source economy garners more funding. This financial boost enables the platform to develop further and support various initiatives that are vital for open source community growth.

Key activities funded by this economic upswing include:

- **Development and Expansion**: Ongoing enhancements to the platform ensure it meets the evolving needs of its users.

- **Launchpads and Incubators**: These initiatives are crucial for nurturing new projects, providing them with the resources and guidance needed to succeed.

- **Community Support**: Grants are issued to promising projects to aid their development, while funds are also allocated for community-building activities.

- **Promotion and Advocacy**: Increased funds allow for more robust marketing campaigns and advocacy efforts, raising awareness and adoption of open source projects globally.

Furthermore, the success of any single open source project within this economy can have a ripple effect, benefiting numerous other projects. When one project thrives, it not only raises the profile of the platform but also increases the overall credibility and visibility of all associated projects. This shared success fosters a collaborative environment where innovation is continuously fueled by collective achievements, thus strengthening the entire open source ecosystem and creating a virtuous cycle of innovation and support.

8.4 The Power of Quoting Project Tokens in OSE

To illustrate how our tokenomics creates real-world value, let's examine how it would function with Linux - one of the world's most important open source projects - as an example.

This demonstration will show the powerful synergy between project success, token economics, and ecosystem growth in a clear, tangible way.

Disclaimer: Ensuring User-Friendly UX/UI
All complex processes detailed in this documentation, including currency conversions and token allocations, are handled by the Open Source Economy platform's backend. Users

interact with a simplified interface that shields them from these technical details, ensuring a seamless transaction experience.

8.4.1 The Linux Token Example

Imagine Linux joins the Open Source Economy platform, creating its own token (LIN) to support sustainable development, reward contributors, and provide governance rights to stakeholders. Here's how our tokenomics would work in practice:

Initial Setup:

- Linux creates their LIN token, which is priced in OSE and priced via an Augmented Bonding Curve
- Current OSE market price: 10$ per token
- Initial ABC parameters set by the Linux community for gradual, sustainable growth

8.4.1.1 Value Flow Mechanism

The Linux token economy operates through a transparent, two-tiered value exchange system that creates tangible benefits for all participants. This mechanism ensures value flows efficiently between users, the Linux project, and the broader ecosystem through the following process:

1. **Linux Token Minting Flow**
    - Enterprise user needs Linux support services worth $1,000
    - Platform converts payment to 100 OSE tokens (at $10/OSE)
    - These OSE tokens mint LIN tokens according to the current ABC price
    - LIN tokens are distributed to the enterprise user (for governance/services)

2. **OSE Token Distribution**
    - 80% of OSE tokens (80 OSE) are locked in Linux's ABC smart contract as reserves

- 20% of OSE tokens (20 OSE) go directly to Linux's project treasury for development

3. **OSE Token Burn**
    - 10-25% transaction fee applied (3 OSE tokens)
    - 20% of this fee (0.6 OSE tokens) is permanently burned
    - Remaining fee allocated to platform development and ecosystem growth
    - Additionally, when LIN tokens undergo burning events (through their own tokenomic mechanisms), the OSE tokens locked in the Linux ABC smart contract are also proportionally burned, creating a compounding deflationary effect that benefits the entire ecosystem

8.4.1.2 Demand Drivers

The Linux token ecosystem benefits from multiple demand sources that reinforce each other:

Direct Token Buyers:

- **Service Users**: Enterprise customers purchasing technical support, custom development, or priority feature implementation
- **Governance Participants**: Community members seeking voting rights on Linux's development priorities and treasury allocation
- **Financial Backers**: Individuals and institutions wanting to support Linux and getting a share in its success

Indirect OSE Demand:

- All Linux token acquisitions require OSE, creating a continuous demand flow.
- As more enterprises adopt Linux services through the platform, OSE demand increases proportionally.

- Growing Linux token market cap increases locked OSE tokens, reducing circulating supply.

8.4.1.3 Value Accrual Demonstration

When a major cloud provider decides to purchase $50,000 of Linux enterprise support through our platform:

1. The payment is converted to 5,000 OSE tokens
2. These tokens mint LIN tokens via the Augmented Bonding Curve
3. The tokens are distributed:
    - 4,000 OSE (80%) locked in the LIN smart contract
    - 1,000 OSE (20%) to Linux's treasury
    - LIN tokens to the cloud provider for service access
4. From the transaction fee:
    - 30 OSE permanently burned (reducing overall supply)
    - 120 OSE allocated to platform development

This single transaction simultaneously:

- Funds Linux development with 1,000 OSE ($10,000)
- Reduces OSE circulating supply by 4,030 tokens
- Provides the cloud provider with governance rights and service access
- Supports platform growth and development

As more enterprises utilize the platform, these effects multiply, creating substantial value for Linux, OSE holders, and the entire ecosystem.

8.4.2 Impact on the Global Open Source Community

The performance of the OSE token plays significant roles in supporting the global open source community and its projects. As the price of the OSE token rises, the open source economy garners more funding. This financial boost enables the platform to develop further and support various initiatives that are vital for open source community growth.

Key activities funded by this economic upswing include:

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- **Launchpads and Incubators**: These initiatives are crucial for nurturing new projects, providing them with the resources and guidance needed to succeed.

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9 DECENTRALIZED GOVERNANCE

This apply to any open source project and among others, meaning also to Open Source-Economy.

We will outlines a governance model for Decentralized Autonomous Organizations (DAOs) inspired by Switzerland's political system, which combines the efficiency of centralized decision-making with robust mechanisms for direct citizen involvement. The model suggests a structured governance approach where a central body makes informed decisions quickly, while still being controlled by the DAO members through direct democratic rights akin to the Swiss rights to propose and counteract laws. This framework aims to balance efficiency with accountability, ensuring that those at the top are responsive to the community they serve.

9.1 Background: Swiss Political System as a Model

Switzerland, with a population exceeding 8 million, has thrived under a political system that marries centralized governance with citizen empowerment. The Swiss system features two key democratic instruments:

- **Right to Propose Legislation (ie. Initiative)**: Citizens can propose new laws.
- **Right to Counteract Government Decisions (ie. Referendum)**: Citizens can veto laws passed by the government.

Both the mechanisms require the collection of a significant number of signatures before it can officially proceed to a vote. This preliminary filtering process is crucial as it allows only the most supported or critically important issues to advance, reducing the risk of spam and ensuring that the focus remains on substantive matters.

These mechanisms ensure that while the government can act efficiently, its power remains checked by the population, preventing corruption and ensuring alignment with the public's best interests.

9.2 DAO Governance Model

To implement an efficient decision-making DAO, we will establish key governance structures inspired by the Swiss political system.

- **Centralized Decision-Making with Decentralized Control**
  Establish a central governance body within the DAO that is responsible for swift and knowledgeable decision-making. This body would operate under strict oversight mechanisms empowered by DAO members, mirroring Swiss federal authorities' efficiency but controlled through direct democracy tools.

- **Implementation of Direct Democracy Tools**
  - **Initiative Right**: Like Swiss citizens, DAO members should have the right to propose new policies or changes directly.

  - **Referendum Right**: Members should have the ability to call for a vote to reject decisions made by the central body, ensuring a balance between swift decision-making and member oversight.

- **Mechanisms for Reducing Noise and Temporization**
  Introduce a signature gathering phase for proposals, requiring a minimum threshold of member support before a vote. This process filters out less popular or less critical issues, reducing decision fatigue among members. Additionally, introduce a mandatory deliberation period before any major decision to prevent rash or manipulated voting ("temporization").

- **Legal and Structural Framework**
  To uphold the decentralized ethos of the Open Source-Economy entity, it is crucial to avoid traditional corporate structures, which typically lead to shareholder centralization. Instead, establishing a foundation in Switzerland offers a strategic solution. This foundation will act as the legal entity for the Open Source-Economy entity and will extend its governance model to encompass all other open source

projects under its umbrella.

Operating from Switzerland, which is renowned for its stable legal environment and favorable stance towards innovative governance models, the foundation is dedicated to protecting member rights and promoting open source contributions. This unified approach ensures that the principles of decentralization are maintained across the entire spectrum of open source initiatives, fostering a cohesive and supportive environment for growth and innovation within the sector.

The governance model for DAOs, inspired by the Swiss political system, aims to blend centralized efficiency with decentralized control. By adopting direct democratic rights and establishing a legal decentrelized entity, DAOs can enhance their governance structures to be more robust, transparent, and aligned with the interests of their communities. This model not only promises improved operational efficiency but also fosters a deeper sense of ownership and engagement among members, potentially setting a new standard for DAO governance worldwide.

10 THE PLATEFORM

Open Source-Economy is a platform designed to empower open source projects by allowing them to seamlessly adopt a decentralized business model. This platform eliminates the need for projects to manage marketing, sales, legal, accounting, and other domains traditionally necessary to generate income, enabling them to focus on development.

10.1 Main Features

The Open Source-Economy platform offers several essential features to the community:

- **Predefined Business Models.** We propose predefined business models tailored to the open source ethos, as outlined in the “Project's tokenomics” section. These models serve as blueprints for projects seeking sustainable revenue streams while adhering to open source principles.

- **Selling Tools:** Our platform provides selling tools to help projects effectively apply and manage their business models. These tools include features for setting up subscription services, managing one-time payments, and facilitating other monetization strategies that suit the nature of open source work.

- **Invoice Generation**: The platform automates the invoice generation process, ensuring that payments made to open source projects are promptly and accurately documented.

- **Legal Framework**: We provide a robust legal framework that aligns with international standards to ensure that all transactions are legally sound. This not only helps in complying with global regulations but also builds trust among users and contributors.

- **Marketing Templates**: Open Source-Economy offers a range of marketing templates that projects can customize. These templates are designed to be easily

adapted to different branding strategies, helping projects maintain a consistent and professional online presence.

10.2 Launchpad for New Projects Main Features

Open Source-Economy acts as more than a platform—it's a springboard for new and emerging open source projects. By providing initial visibility, essential tools, and community support, we ensure that new projects get off to a strong start:

- **Visibility and Exposure**: New projects are featured on the platform, giving them immediate exposure to a large and engaged community of developers, users, and potential investors.

- **Resource Allocation**: We provide resources such as access to our network of experienced developers, project management tools, and industry contacts that can help new projects navigate the early stages of development and growth.

- **Mentorship and Guidance**: New projects can benefit from mentorship from experienced leaders in the open source community who provide guidance on technical development, community building, and project management.

10.3 Funded Initiatives

The success of our platform enables the funding of numerous initiatives aimed at supporting the broader open source ecosystem:

- **Community Support**: We offer grants and other forms of support to help promising projects scale and improve their infrastructure.

- **Promotion and Advocacy**: Increased funding allows for more substantial marketing campaigns and advocacy efforts. These initiatives are crucial for raising awareness about the benefits of open source projects and increasing their

adoption on a global scale.

- **Events**: Hosting and sponsoring events such as conferences, hackathons, and workshops facilitate collaboration, knowledge sharing, and networking within the open source community.

- **Lobbying for Legal Evolution**: We actively advocate for the evolution of laws and regulations to ensure that open source remains accessible to all. Through lobbying efforts, we aim to guarantee the protection and promotion of open source principles, fostering an environment conducive to innovation and collaboration.

Open Source-Economy is dedicated to creating a supportive ecosystem where open source projects can flourish. By providing essential tools, predefined business models, and robust community support, we enable these projects to focus on innovation while building sustainable revenue streams. This, in turn, drives the growth and success of the open source community, contributing to a more open and technologically empowered world.

11 CONCLUSION

Open source has proven to be an invaluable force driving innovation and collaboration, empowering communities to collectively create and improve software freely. Its transparent and inclusive nature fosters a rich ecosystem of shared knowledge and advancements, making it a cornerstone of modern development.

However, this remarkable paradigm is not without its challenges. Key issues include lack of funding, contributors' precarity, and high turnover and burnout. These hurdles often render open source projects less competitive compared to their closed-source counterparts, hindering long-term stability and growth. Despite the boundless potential and numerous accomplishments, many OSS initiatives struggle to maintain momentum, unable to secure the necessary resources to succeed.

Our solution is conceived as a revolutionary step in reshaping the open source landscape, aiming to elevate OSS projects to a level of funding and success akin to their closed-source peers. By focusing our efforts on constructing an open source economic model, we are directly addressing critical pain points in the current ecosystem, such as contributor and user powerlessness, which obstruct genuine value creation and project revenue. We hope to not only preserve the intrinsic values of OSS development but also propel it into a new era where projects can thrive without compromising their essence.