



TAIKAI

Whitepaper

The Web3 Innovation Economy

Version 1.0

November 2023

This page is purposely left blank.

Table of Contents

| | |
|---|-----------|
| Figures | 4 |
| Glossary | 5 |
| 1. Executive Summary | 8 |
| 2. Business Use Case | 9 |
| 2.1. Challenges faced by innovators | 9 |
| 2.1.1. Developing a strong idea | 9 |
| 2.1.2. Securing funding | 10 |
| 2.1.3. Networking | 10 |
| 2.2. Market Analysis | 11 |
| 2.2.1. Grants | 12 |
| 2.2.2. Incubators | 12 |
| 2.2.3. TAIKAI Garden | 13 |
| 3. Ecosystem Design | 15 |
| 3.1. Ecosystem Goals | 15 |
| 3.2. High-Level Design | 15 |
| 3.3. TAIKAI Garden Tools | 17 |
| 3.3.1. Project Sandbox | 18 |
| 3.3.2. Mentors Sandbox | 21 |
| 3.4. Innovation Farming | 21 |
| 3.4.1. Overview | 21 |
| 3.4.2. Qualification for Innovation Farming | 25 |
| 3.4.3. Farm Ranking Score Function | 26 |
| 3.4.4. Voting Power | 27 |
| 3.4.5. Assessments and Consensus | 28 |
| 3.4.7. Rewards | 31 |
| 3.4.8. ROI | 32 |
| 3.4.9. Use Case | 33 |
| 3.5. TKAI Token Model | 38 |
| 3.5.1. Token Contract | 38 |
| 3.5.2. Token Utility | 38 |
| 3.5.3. Token Distribution | 43 |
| 3.6. Blacklist | 44 |
| 3.6.1. Blacklist for a Project NFT owner | 45 |
| 3.6.2. Blacklist for a wallet | 45 |
| 3.7. Governance | 46 |
| 4. References | 48 |

Figures

| | |
|--|----|
| Figure 1. Key resources that lead to a successful project. | 9 |
| Figure 2. Comparison of different initiatives for early-stage support. | 12 |
| Figure 2. Level of Community Involvement for the different funding structures. | 14 |
| Figure 4. Key distinctive factors between grants, incubators and TAIKAI Garden. | 15 |
| Figure 5. Ecosystem goals tree. | 17 |
| Figure 6. The Web3 Sustainability Loop applied to TAIKAI Garden. | 19 |
| Figure 7. Project's life cycle in the ecosystem. | 20 |
| Figure 8. Distribution of rewards per sprint time-wise. | 25 |
| Figure 9. Distribution of rewards per sprint time-wise. | 26 |
| Figure 10. Innovation Farming's resource network. | 28 |
| Figure 11. Innovation Farming's resource network. | 29 |
| Figure 12. Potential project's score function score. | 31 |
| Figure 13. Possible voting across projects. | 32 |
| Figure 14. Potential outcomes that arise from an update and respective assessment. | 33 |
| Figure 15. The use of veTKAI resources across Innovation Farming. | 34 |
| Figure 16. The process through which a project update undergoes validation/invalidation. | 35 |
| Figure 17. Rewards distribution per Innovation Farming sprint. | 36 |
| Figure 18. TKAI's use as a medium of exchange. | 41 |
| Figure 19. TKAI's use towards feeless peer-to-peer interactions. | 42 |
| Figure 20. TKAI's use towards staking. | 43 |
| Figure 21. Table of a wallet's veTKAI holdings per sprint with 100 TKAI staked. | 45 |
| Figure 22. Plot of a wallet's veTKAI holdings per sprint with 100 TKAI staked. | 46 |
| Figure 23. TKAI Allocation. | 48 |
| Figure 24. Span of interactions allowed by active and blacklist projects. | 49 |
| Figure 25. Span of interactions allowed by active and blacklist wallets. | 50 |

Glossary

\$TKAI = TKAI's market price in US Dollars.

Accelerator - In a business context, it is a program or organization that provides support, resources and mentorship to early-stage startups to help them rapidly grow and develop their businesses

Angel Investment - Financial support provided by typically high-net-worth individuals known as "angels" to early-stage startups in exchange for equity ownership or convertible debt in the company.

Blockchain - A distributed digital ledger technology that records transactions across multiple computers in a way that secures security, transparency and immutability of the data.

Burning - In the context of blockchain technology, it is the process of permanently removing cryptocurrencies or tokens from circulation by sending them to an address from which they cannot be spent or accessed, increasing scarcity of the remaining ones.

CIV - In the context of TAIKAI Garden, it represents the number of validate updates a project has during an Innovation Farming sprint.

Crowdfunding - A fundraising method that involves raising small amounts of money from a large number of people, typically via the Internet, to finance a project, business venture, or charitable cause.

dApp - Stands for *Decentralized Application* and it is a type of software application that operates on a blockchain and carries characteristics that come from the use of that technology.

DAO - Stands for *Decentralized Autonomous Organization* and is a type of organization or entity that operates through rules encoded as computer programs on a blockchain.

ERC-20 Token - A standard for fungible tokens created and managed on the Ethereum blockchain.

ERC-721 Token - A standard for non-fungible tokens created and managed on the Ethereum blockchain.

Ethereum - An open-source blockchain platform that was created to enable the development of dApps and smart contracts.

Farm Project - In the context of TAIKAI Garden, it is a project which is participating in Innovation Farming.

Governance - Within the context of web3, it represents the structures that enable decentralized networks to make collective decisions, manage resources, and govern the rules that underpin blockchain-based platforms.

Graduated Project - In the TAIKAI Garden context, it is a project that has completed its participation in Innovation Farming.

Grants - Financial awards or funds provided by organizations, foundations or individuals to support specific projects, activities, research, or initiatives.

Hackathon - A collaborative and time-bound event in which individuals or teams come together to work intensively on creative and innovative projects.

Igniters - Programs or initiatives designed to kickstart and accelerate the growth and development of projects.

Incubators - Programs that provide support, resources and guidance to early-stage startups and entrepreneurs to help them develop and grow their businesses.

Innovation Farming - In the context of TAIKAI Garden, it is the incentivization program that funds the best performing projects and rewards the community for contributing to their development.

Innovation Farming Batch - In the context of TAIKAI Garden, it is a macrocycle in Innovation Farming that lasts for 6 Innovation Farming sprints.

Innovation Farming Sprint - In the context of TAIKAI Garden, it is a microcycle in Innovation Farming that lasts for two weeks.

Innovation Farming Threshold - In the context of TAIKAI Garden, it is the minimum amount of TKAI the Project NFT owner must lock from the moment Innovation Farming sprints are selected until the end of the Innovation Farming participation

Mentors Sandbox - In the context of TAIKAI Garden, it is a dedicated space for mentors to showcase themselves, share their insights and make themselves available for mentoring.

Mentorship Threshold - In the context of TAIKAI Garden, it is the minimum amount of TKAI a wallet must be staked to apply and be visible for a mentorship role.

Project NFT - In the context of TAIKAI Garden, it is the native ERC-721 token that provides ownership and rights over a project.

Projects Sandbox - In the context of TAIKAI Garden, it is a dedicated space for projects to showcase themselves and share their updates.

Quadratic dispute - In the TAIKAI Garden context, it is the process by which project updates are reviewed by the community and relies on the use of the root of owned veTKAI.

score function - In the context of TAIKAI Garden, it is the algorithm that ranks Farm projects in Innovation Farming.

Seed Project - In the context of TAIKAI Garden, it is the default project state upon minting a Project NFT.

Smart Contract - A self-executing blockchain-based contract that automatically enforces and executes the terms when predetermined conditions are met.

Staking - Pledging a token or cryptocurrency as collateral to support a network's operations, and in return, earning rewards.

TKAI - TAIKAI's native ERC-20 token.

Token - In the context of blockchain technology, it is a digital or cryptographic representation of an asset or value.

Token Economics - A field of study and design that focuses on the economic principles and mechanisms governing the creation, distribution, and use of blockchain-based tokens within a digital ecosystem or network.

Token Economy - A system that uses blockchain-based tokens as a form of currency or reinforcement to motivate and reward desired behaviors.

Treasury - In the context of web3, it is a pool of digital assets or cryptocurrencies that are controlled by a DAO, a smart contract, or a similar mechanism.

Validation Threshold - In the context of TAIKAI Garden, it is the minimum amount of veTKAI a Farmer must own to have validation rights in TAIKAI Garden.

Venture Capital - A form of private equity financing provided to startups, emerging companies, or small businesses with high growth potential.

veTKAI - In the context of TAIKAI Garden, it is a native token that represents voting power and provides access to validation powers.

Wallet - In the context of web3, it is a digital tool that allows management, storage, and interaction with cryptocurrencies, digital assets, and tokens on a blockchain network.

Web3 - A new paradigm for the internet that is more decentralized, user-centric and enables trustless peer-to-peer interactions based on blockchain technology.

1. Executive Summary

TAIKAI Garden is a product extension of [TAIKAI](#), a hackathon platform that connects organizations with innovators to create solutions, acting as a means to provide continuous resources to projects under development.

The birth of the ecosystem answers the need for sustained and democratized access to support in the post-hackathon phase of a traditional open-hackathon model. Whereas in the short-lived event there is complete access to funding, networking and mentorship, the same doesn't hold true in later stages. As a scarce number of projects continue their development, innovation throughput and its respective documentation is minimal if not non-existent, avoiding retention or even incrementality.

TAIKAI Garden redefines the innovation landscape's *status quo* by connecting innovators to an inclusive and collaborative environment. Through an incentive substrate, project owners are empowered to transform their ideas into impactful businesses. By rewarding both innovators and other participants that collaborate in project developments, opportunities are equalized for leveraging innovation throughput within the ecosystem.

Hence, this document introduces a new paradigm for decentralized development: a permissionless Web3 Innovation Economy. Through a blockchain-based token economy, TAIKAI Garden aligns the interests of all participants and capitalizes on top of the already existing network of TAIKAI. Interactions are fueled by the native ERC-20 token, **TKAI**, creating a symbiotic relationship between innovation and incentives.

Agents can assume several roles at the same time, distinguished between:

- **Project Owners:** entrepreneurial individuals that have initiated a project within the ecosystem and are responsible for developing it.
- **Mentors:** knowledgeable peers who share insights with the community through an on-demand manner.
- **Farmers:** active community members who are incentivized to both vote on the most promising projects and validate/invalidate updates or other assessments .

The ideal vision for which the ecosystem will take shape is one in which it is fully decentralized and fully autonomous. The reasons behind this are plenty, from Web3 values compatibility to scalability and capital efficiency. Achieving this desired state is one that only comes from empirical experimentation given the system's complexities. Therefore, until that desired state is achievable, the ecosystem will be managed in its entirety by **LayerX**'s Team and will eventually transition into a DAO for proper community-based management.

2. Business Use Case

2.1. Challenges faced by innovators

In the dynamic landscape of innovation, many disruptive ideas will emerge, but most of them will perish. For instance, in hackathons, one of the most recognized initiatives to promote innovation, a mere 5% of the projects will have continuation 6 months after the end of the event. Similarly, 20% of startups fail within their first year of existence and up to 75% end up failing (Nolte, Chouta & Herbsleb, 2020).

Several factors may contribute to the low survival rate of these projects, as innovators need to face different hurdles to be able to materialize their ideas. Besides having a strong idea – one that is aligned with market needs – we argue that two main resources are key to promoting success: access to funding and to a network of mentors and other innovators.



Figure 1. Key resources that lead to a successful project.

2.1.1. Developing a strong idea

An innovation journey typically starts with one idea. While hackathons and ideation sessions are fertile ground for innovation, a new idea may spark anywhere, anytime. However, not all ideas are worth pursuing.

What makes an idea strong?

- **Relevance:** An idea that addresses a genuine need of a community.
- **Uniqueness:** An idea that stands out for bringing new approaches to existing problems, offering advantages over existing solutions.
- **Feasibility and viability:** An idea that is practical and achievable, financially sustainable and has a coherent business plan.
- **Value alignment:** An idea that resonates with the values of the community that it targets.

2.1.2. Securing funding

After the idea is validated and deemed valuable, it might be challenging to access financial resources to develop it. At an early stage, innovators typically lack tangible results, making the funding of such ideas risky investments and less attractive to venture capital funds. Thus, early-stage innovators are often trapped between the need to access financial resources to develop their ideas and the need to develop their ideas to access financial resources.

2.1.3. Networking

Because networking addresses many of the problems early-stage innovators face, it is one of the most important factors behind the success of new and disruptive ideas.

Through networking, innovators may:

- Connect with mentors who are experts in their innovation field, improving their business models and market strategies.

- Learn about the experiences, failures, and successes of founders who have already navigated the innovation path.
- Share difficulties, strategies, and solutions with peers at the same stage of the innovation journey.
- Recruit new members for their team, including co-founders and technical experts.
- Learn about the market and potential customers for their projects.
- Meet potential investors, who may be more likely to take a chance in ventures endorsed by trusted connections.

Given the importance of networking, it comes as no surprise that it is a key aspect of some initiatives aiming to support innovators, such as incubators. Indeed, incubators of early-stage (pre-seed and seed) startups often list mentorship, talks, and seminars with previous founders, support from a cohort of peers, and meetings with potential investors as their main source of added value.

2.2. Market Analysis

In 2022 and in the first quarter of 2023, 315 major brands launched a total of 526 web3 projects (De Cata, 2023). With such a thriving market, it is no surprise that many different types of initiatives have been created to support ideas, projects, and early-stage projects to develop and thrive. From angel investors and venture capital firms, focused on providing funding and expecting a return on their investments, to incubators and accelerators offering safe environments and expertise for startups to thrive, they aim to meet the needs of every innovator.

Some of them are closer to what is proposed by TAIKAI Garden: support of early-stage ideas with a strong focus on both networking and funding.

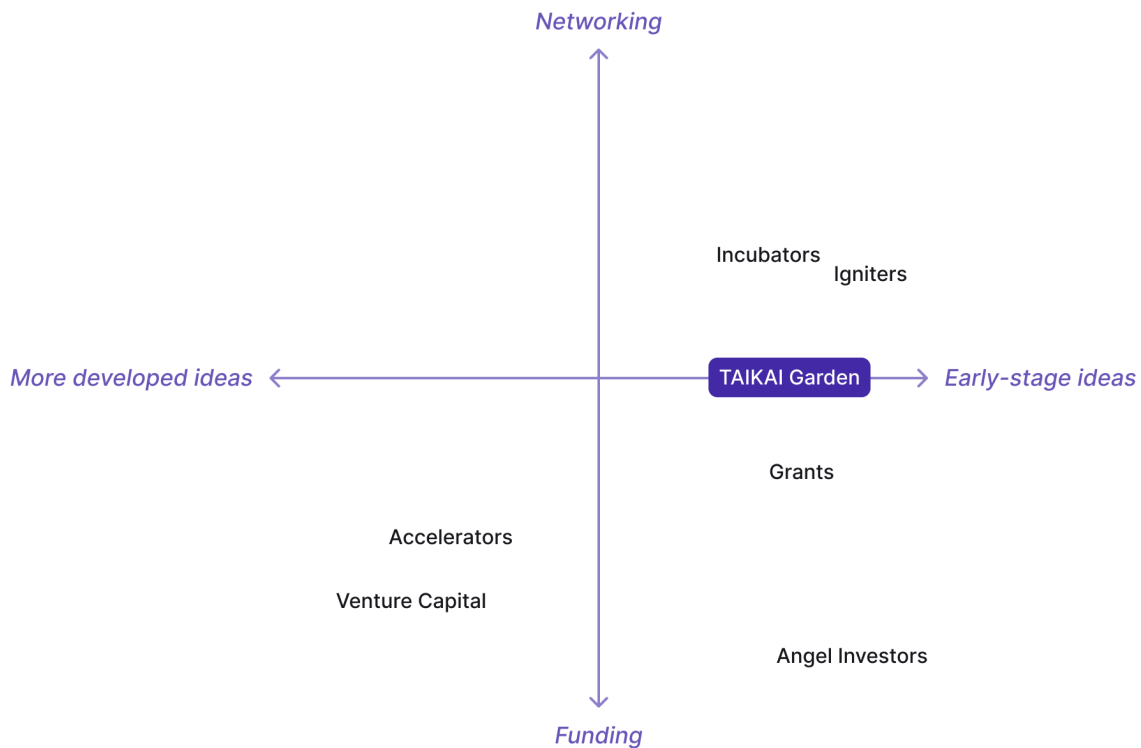


Figure 2. Comparison of different initiatives for early-stage support.

In the above matrix, grants are the closest initiatives to the TAIKAI Garden, due to their focus on early-stage ideas and potential community involvement. Incubators and igniters, with their focus on networking and mentorship, are the second closest initiative.

The next sections present a deep dive into grants and incubators, with a crucial emphasis on Web3 initiatives.

2.2.1. Grants

Grants aim to support innovators in raising funds for their projects and ideas, frequently at a very early stage of development. They tend to offer visibility to the projects they fund, by displaying the project on the platform.

More specifically, Web3 grant programs play a crucial role in fostering decentralized innovation and accelerating the growth of blockchain-based projects. Often, **grants focus on projects developed within a given ecosystem**, promoting its growth and innovation.

A benchmarking analysis of six Web3 grant programs with some degree of community involvement suggests that there are different strategies to promote such involvement. **Some organizations reserve the selection of the projects to their staff while others engage in specific community voting processes.**

Most grant programs focus on the development of Web3 projects, **either ecosystem-agnostic (3 grant programs) or ecosystem-specific (3 grant programs)**. However, some grant programs accept on or off-chain projects, as long as they align with the grant's purpose and values. Being ecosystem agnostic, and even Web3 agnostic, brings flexibility and diversity to the candidate projects pool.

2.2.2. Incubators

Incubators stand as pivotal players in shaping the trajectory of startups: **they provide a structured environment that fosters growth, establishes key connections with other individuals, and offers crucial support during the early stages of a startup's journey.**

A benchmarking analysis of five Web3 incubators reveals that they recognize the unique challenges and opportunities presented by this rapidly evolving landscape. These specialized programs **offer guidance on token economics, smart contract development, dApps and navigating the intricacies of blockchain ecosystems**. By doing so, they position startups to harness the transformative potential of Web3 and redefine industries from finance to supply chain. All the programs evaluated had a structured program with a fixed duration, **that varied from 8 weeks to, most commonly, 3 months.**

The focus on a **structured program may curb the startups' freedom and self-determination, and a one-size-fits-all program may not be able to meet the disparate needs of different projects**. As mentioned previously, networking is one of the main needs of startups, playing a pivotal role in their development.

These incubators leverage the value of mentorship, offering access to a substantial network of mentors, alumni, and a vast community of founders and builders. However, the diversity of approaches to networking and mentorship suggests the need to tailor the mentorship and networking programs to the nature of the incubator and the needs of the incubated startups. **Mentors in these programs are often rewarded through visibility and recognition of their expertise, without a formal incentive system, which may impact the mentors' motivation and their relationship with the startup founders.**

The financing system may also be very important for some projects and startups whereas others may not be willing to dilute the company's ownership. Other types of funding such as crowdfunding and grants may be more suitable for some innovators.

2.2.3. Different types of funding

Different types of funding initiatives have been created to help early-stage innovators in this matter. Below, we present these initiatives, ordered by their level of community involvement.



Figure 3. Level of Community Involvement for the different funding structures.

On the opposite side of angel investors, who are typically individuals looking for promising investments, we have entire communities of people looking for supporting ideas that resonate with them. Grants lay towards the middle: oftentimes awarded by a small group of people and sometimes awarded by an entire voting community.

2.2.4. TAIKAI Garden

From the previous analysis, most initiatives aim to either help projects secure funding or provide a structured path to becoming a business. **Few effectively focus on community contribution as a pathway to innovation.** Thus, there is room for an initiative that aims to **cater to all the innovators' needs within an incentivized network.**

| Characteristic / Organization | Grants | Incubators | TAIKAI Garden |
|-------------------------------|---|---|---|
| Focus | Fund early-stage projects. | Provide structured support to established early-stage startups. | Incentivize the development of early-stage projects through a token economy. |
| Program Structure | Financial support application. | Usually strictly scheduled and one-size fits-all. | Autonomous and flexible participation in the ecosystem. |
| Cost of participation | Usually free of charge. | Fixed entry price. Service fees. Equity ownership exchange. | Service fees (Chapter 3.5.2. Token Utility). |
| Funding Mechanism | Match Funding. Quadratic Funding. Donations. ... | Scheduled meetings with potential investors. | Innovation Farming (Chapter 3.4. TAIKAI Innovation Farming). Donations. |
| Time-to-Funding | Range from one time-payment to periodic. | Highly variable according to the program. | Periodic (Chapter 3.4. TAIKAI Innovation Farming). |
| Mentorship Access | None or scarce. | Usually scheduled with the program. | Peer-to-peer and on-demand (Chapter 3.3.2. Mentors Sandbox). |
| Community Involvement | Usually high. | Scarce or none. | High and crucial. |

Figure 4. Key distinctive factors between grants, incubators and TAIKAI Garden.

On the contrary to both types of programs mentioned, **TAIKAI Garden incentivizes ad-hoc development that meets the project's needs.** Whereas in the previous ones, there may be very clear milestones and success metrics, it is intended for the ecosystem to serve as **a space for creativity flourishing and to provide freedom for innovators to adapt to community input.**

On the other hand, the usual focus on building Web3 often means that grants and incubators focus on the development of a specific ecosystem. This potentially risks reducing the diversity of projects, overlooking those that may have the potential to make critical contributions to the

development of Web3 or the creation of public goods. Instead, **TAIKAI Garden is ecosystem / Web3 agnostic and inclusive**, thus enriching community diversification.

While innovators' participation in these programs is typically temporary, a **fundamental characteristic of TAIKAI Garden is its role as a development repository**. As projects come and go, **the ecosystem naturally and transparently documents their history, making it available for new innovators seeking inspiration**. This accessibility to past projects can potentially foster incremental progress and innovation.

On top of this, the opportunity for **early community engagement** highly benefits new-born projects. Establishing a Web3 community is often a challenging, resource-intensive and time-consuming endeavor. However, projects can **leverage their involvement in TAIKAI Garden to accelerate the growth of their community by actively involving participants in their development** and meeting potential customer needs.

To conclude, while the previous programs require an exhaustive assessment from an innovator application, the long-term view for TAIKAI Garden is that **it will become permissionless and decentralized by nature**. This means that any innovator will be able to create a project, develop it within a community, and potentially participate in the Innovation Farming program.

The next chapter further develops the TAIKAI Garden.

3. Ecosystem Design

3.1. Ecosystem Goals

The top-level goal is to democratize the access to resources that make projects thrive: **funding and a valuable network**. At a low level, particular relevance is given to:

1. **economic goals** that support value generation and the flow of resources.
2. **decentralization goals** aimed towards the empowerment of participants.
3. **strategic goals** that are aligned with the long-term vision & mission of LayerX.

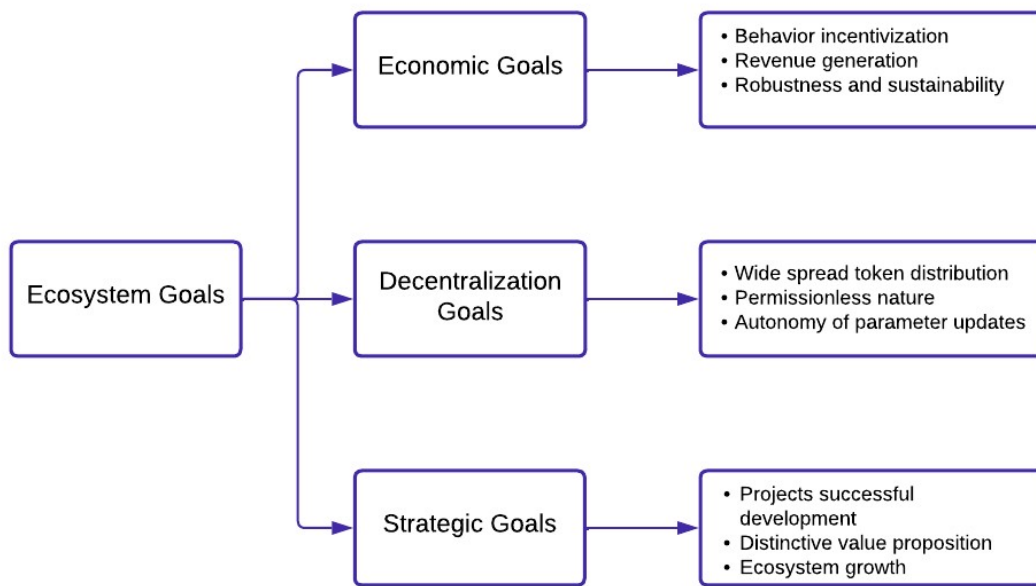


Figure 5. Ecosystem goals tree.

Since all goals are being pursued simultaneously, prioritization is required when looking at the bigger picture and a longer timeframe (Osolnik, 2022). Inherent trade-offs will be made upon LayerX's decision-making.

3.2. High-Level Design

The figure 6 below represents the inspiration for TAIKAI Garden's high-level design: **The Web3 Sustainability Loop** (McConaghy, 2020). At its core is a loop designed to foster 'snowball effect' growth within the ecosystem by **rewarding participants who consistently add value to it**:

1. The workers at the center perform work to add value;
2. Features and services generate revenues;
3. The revenue is looped back as network revenue to the community.

The last step creates a positive feedback loop such that, over time, more and more projects get funded. In the context of TAIKAI Garden, “**\$TOKEN**” refers to the native utility token **\$TKAI**, and “**Web3 Project Ecosystem**” refers to the TAIKAI platform as a whole.

A key question upon designing this ecosystem was: How do we **grow** the innovation economy and make it **self-sustaining**? These are questions for the **near-term** and **long-term**, respectively.

To address **growth** and **sustainability**, it is believed that **a healthier \$TKAI leads to a healthier token economy**. Hence, there should firstly exist drivers for TKAI demand:

- TKAI is required to access TAIKAI tools and services.
- TKAI is used for staking in TAIKAI Garden’s innovation ecosystem.
- TKAI is required to obtain veTKAI to vote on how rewards are allocated.
- Some TKAI is staked by the Treasury as a function of network revenue.

To address the **long-term** sustainability of the ecosystem, **\$TKAI is designed to increase with a rise in usage volume**, all things remaining constant. Here is how:

- First, **a rise in usage of tools leads to more TKAI being used**, leading to more TKAI demand, which then drives \$TKAI.
- Second, **a rise in usage volume leads to more network revenue, which goes into (a) Treasury staking and (b) Innovation Farming rewards**. Instead of buying back and burning a quota of the revenue like it is mentioned in the figure 6 bellow, Treasury staking increases value in the short-mid term through scarcity without compromising the network’s ability to grow fundamental value in the long term (Monegro, 2020). Innovation Farming rewards drive funds to workers who grow the usage of TAIKAI tools and act as a distribution method.

To precisely address the **near-term** growth of the ecosystem, **the Innovation Farming program is designed to drive the supply of projects in TAIKAI Garden**. Here is how:

- First, **40% of TKAI is intended to be distributed across the community through the program** via TAIKAI Treasury to ensure a baseline of funding regardless of usage volume.
- Second, **more tokens will be distributed in the earlier days than the later days** since network revenue will become the primary source for distribution.

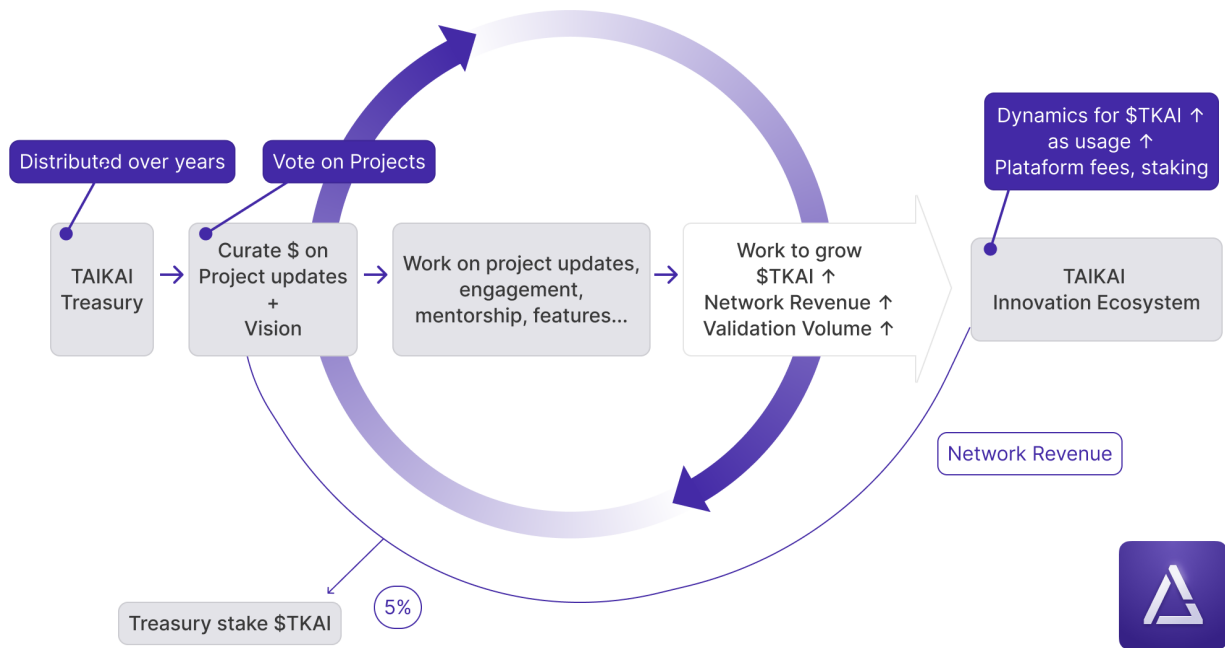


Figure 6. The Web3 Sustainability Loop applied to TAIKAI Garden.

Hence, TKAI's core dynamics are those of a **work token**, embedded within a loop for growth and sustainability (Samani, 2018). We elaborate the previous information further in the document.

3.3. TAIKAI Garden Tools

The ecosystem has 2 main tools:

- Projects Sandbox.
- Mentors Sandbox

3.3.1. Projects Sandbox

The Project Sandbox is dedicated to **showcasing projects within the ecosystem** and thus stands as a fertile ground for innovation, experimentation, and collaboration. It is the space where aspiring entrepreneurs, developers, and visionaries are empowered to shape their ideas into fully-fledged projects with a supportive community.

While participation in TAIKAI Garden by a project is intended to fulfill innovators' needs, **participation is not expected to be permanent**. Those who develop the projects are expected to **transition out of the ecosystem once their needs are satisfied, making room for new projects**. Hence, a project has a lifecycle within TAIKAI Garden.

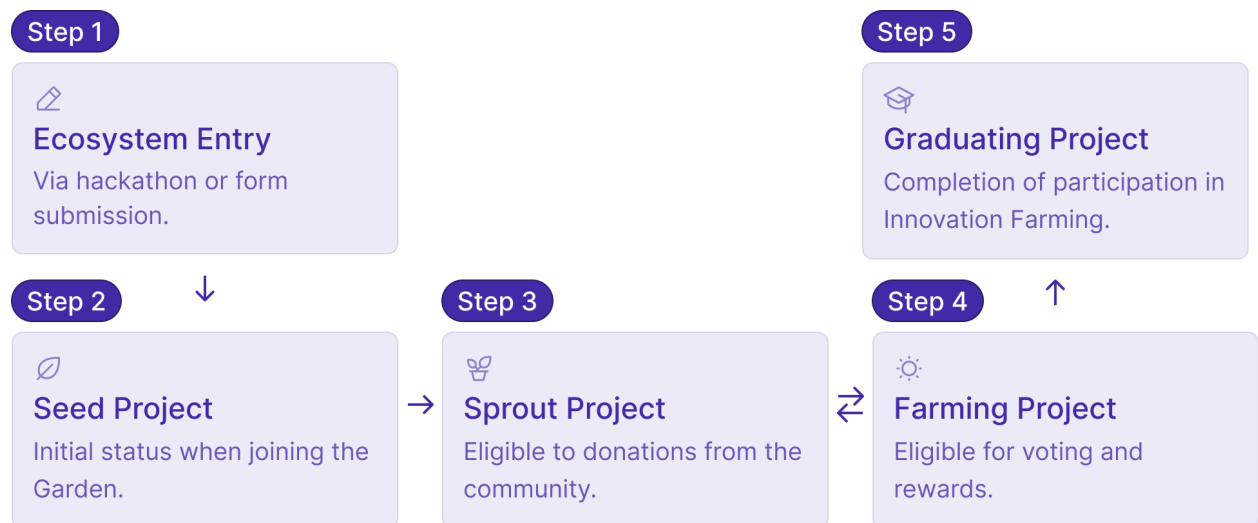


Figure 7. Project's life cycle in the ecosystem.

1) Project Sandbox Entry

The Project Sandbox has two possible entry methods:

- After a user's participation in a hackathon, the user is able to "add project to Garden" which will automatically fork/clone the project into the TAIKAI Garden for further development.
- The alternative approach is to create a project from scratch directly within TAIKAI Garden. This option is better suited for external projects aiming to showcase their work

on TAIKAI Garden, utilize its features, and eventually transition into the Innovation Farming stage.

There is no associated cost in creating your project in Project Sandbox, regardless of the path chosen, as the main purpose of it is to foster innovation and the creation of new projects.

2) Seed Project

By default, every project that joins the “Garden” is initially set as **Seed**. This allows the community and the Project owner to perform most of the possible interactions with the project.

Such includes:

- Posting project updates, a roadmap,...
Example: “Build a feature to automatically post updates from external platforms, such as GitHub and social media”.
- Community participant following/unfollowing project activity.
- Community participant interacting with a project update.

3) Innovation Farming Entry

The first essential step for a project to qualify for the **Innovation Farming** involves minting a Project NFT and setting up a project wallet, which can be overseen either by the project owner or by project members once permissions are established. The Project NFT is built upon the Ethereum ERC-721 token standard and serves as a non-fungible digital certificate that signifies ownership of a project within the platform, designating the wallet that is assigned as the project’s primary main authority. This extends to encompass editing rights, updates, and entitlement to potential rewards. A profile in the Project Sandbox is created and will serve as the online representation of the project in the platform. The Project’s profile should include:

1. The concept’s description.
2. The business model.
3. The current stage of development.
4. The team behind the project.
5. Goals from TAIKAI Garden participation.

6. Project's ethereum compatible wallet address.

The project NFT is minted, including also the previous information for external consultation and verification.

Since it is intended to provide space and freedom for experimentation, **projects that enter the ecosystem should put more effort into the vision instead of a business orientation.** This is due to the fact that success metrics could be hard to measure at an early stage of development and roadmaps could change dynamically due to community contribution. Thus, **the emphasis of participation should be on nurturing creativity and adaptability that make projects evolve into potential businesses** rather than starting as one.

4) Sprout Project

By minting the Project NFT, the Project moves from Seed to *Sprout*, becoming able to make the same interactions as a Seed, but also:

- Promoting project development in TAIKAI Garden.
- The project is able to receive donations from the Community

These actions allow the project owner to immediately engage with the community and leverage its exposure to further develop. While projects are not yet eligible for network rewards, as they have not qualified for Innovation Farming, they can work towards qualification for the Innovation Farming program. ([Chapter 3.4.2. Innovation Farming Qualification](#)).

5) Farming Project

What distinguishes a Sprout Project from a Farming Project is **the qualification for Innovation Farming** ([Chapter 3.4.2. Innovation Farming Qualification](#)). Once participating in the program, the actions permitted in this stage include:

- All the actions referenced above at the Seed and Sprout stage.
- Farmer voting with veTKAI on the Project.

- Farmer assessing project update.
- Project qualification for rewards.

Throughout the program, projects should prioritize sharing authentic project updates to enhance their prospects of being featured in a Farming sprint.

A legitimate project update can be either:

- Product progression (e.g. GitHub repository, design, ideation...).
- User metrics (Social media engagement, product growth...).
- Addition of a new team member.
- Partnerships and collaborations (Enrollment in an accelerator program, participation in an industry event...).
- External funding (Grants, investment, crowdfunding...).

Each sprint of Innovation Farming will feature a selection of projects chosen through an algorithm that considers various factors, including the project's history of sprint participation, its relevance on the platform, the frequency of legitimate updates, and overall quality of the project. When a project is selected for inclusion in a sprint, the community will conduct a vote to choose the best projects, resulting in those that receive the highest rewards.

6) Graduate Project

Upon completion of Innovation Farming participation, **the project will transition into *Graduate***. This is the final stage of the project within the ecosystem and will only serve to:

- Project member(s) posting project updates.
- Community participants following/unfollowing project activity.
- Community participants interacting with a project update.
- Community participants donating to the project.

Most actions are restricted to encourage projects to gradually transition out of the ecosystem, making room for new ones.

3.3.2. Mentors Sandbox

Similarly to the Projects Sandbox, the Mentors Sandbox showcases all professionals in the ecosystem that provide insights, knowledge, and help to projects. Anyone that owns a wallet can apply to become a mentor as long as they follow the principles:

- Own the **Mentorship Threshold**, which is the minimum number of TKAI a wallet must stake.
- Complete a form application with the following information:
 - a) Professional name.
 - b) The activity they perform as professionals.
 - c) External media pages.
 - d) Mentorship services offered and conditions.

The mentorship application undergoes an assessment process completed by Farmers that own the Validation Threshold ([Chapter 3.4.5. Assessments and Consensus](#)). Mentors may perform the role as long as they meet the **Mentorship Threshold**. It is the minimum number of TKAI that must be staked in order for a profile to be visible and interactable at TAIKAI Garden with fees. **The Mentorship Threshold will start at 5.000 TKAI**. Once they unstake the threshold, the mentorship profile will be deleted and the process must be repeated in order to have the same rights.

3.4. Innovation Farming

3.4.1. Overview

Innovation Farming is the program that incentivizes **the supply of projects in TAIKAI Garden**. It consists of **sprints**, which are Innovation Farming **microcycles** during which *Farm* projects ([Chapter 3.3.1. Project Sandbox](#)) develop and participants engage with them for rewards. Sprints are **continuous**, which means that one starts after the previous finishes, and have a duration of **2 weeks**.

| | Sprints | Batches |
|---------------|------------------------------------|-------------------------|
| Cycle | Microcycle | Macrocycle |
| Duration | 2 Weeks | 4 Sprints (8 Weeks) |
| Farm Projects | The same in each sprint | Different in each batch |
| Rewards | Distributed by the end of a sprint | Not eligible |

Figure 8. Duration of cycles in the ecosystem.

During a sprint, **Farm projects are ranked based on a scoring function**. At the conclusion of a sprint, **a snapshot of the ranking is captured** and **rewards are distributed to both projects and their respective voters according to the rank position**. When a new sprint begins, **projects score functions are reset, voting allocation is reset** and **each participant's voting power increases** ([Chapter 3.5.2. Token Utility](#)). Besides rank rewards, **a separate rewards pool is destined to assessments** performed in the network by Farmers that possess the **Validation Threshold**. This pool is also distributed by the end of each sprint.

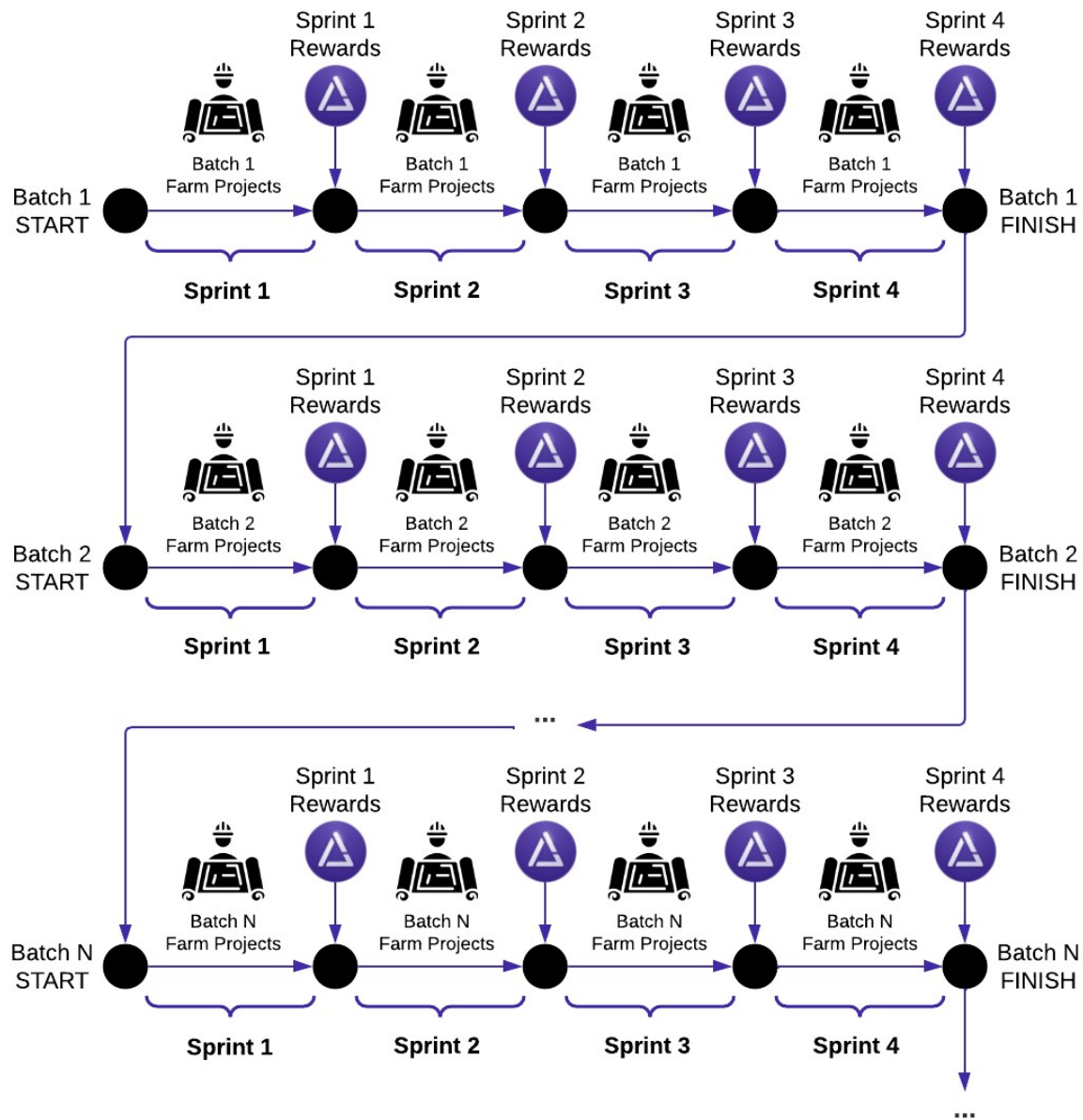


Figure 9. Distribution of rewards per sprint time-wise.

The program can be described as a resource network with (Frehlich & Miyazono, 2023):

1. **A funding source** to reward the community - Project NFT owners and Farmers. It is composed of a quota of the initial token distribution and the network's revenue. The first one will serve as a means to fund the program during its genesis to promote the near-term growth of the network and distribute TKAI among the community. Over time

and as the ecosystem grows, the program will be funded according to the network revenue.

2. **A distribution method** that lets the community decide how rewards are allocated. It is composed by a quantitative assessment of a project – voting – and a qualitative assessment of project updates – assessments. The binding of both assessments sorts the best projects according to a rank system. The higher a project is ranked, the more rewards the Project NFT owner and voters are eligible for.
3. **Rewards allocation** to Project NFT owners and Farmers (votes and assessments). Ranking rewards are based on the distribution method and reward Project NFT Owners and Farmers who vote on projects. Assessment rewards are based on the number of successful assessments performed by Farmers. The allocation of both reward pools is determined separately, meaning that the distribution method for one group does not directly affect the distribution of rewards for the other group.
4. **Measurable impact** influenced by rewards allocation. Active participation is rewarded with the intent to grow the network to its goals. A small percentage of the revenue is staked by the treasury to accrue value on the token according to its usage volume to incentivize both its use and long-term holding. **Treasury staking will start out at a rate of 3% of the network revenue and the stake will last for 2 years.** Each Treasury stake will take place in the beginning of each sprint.

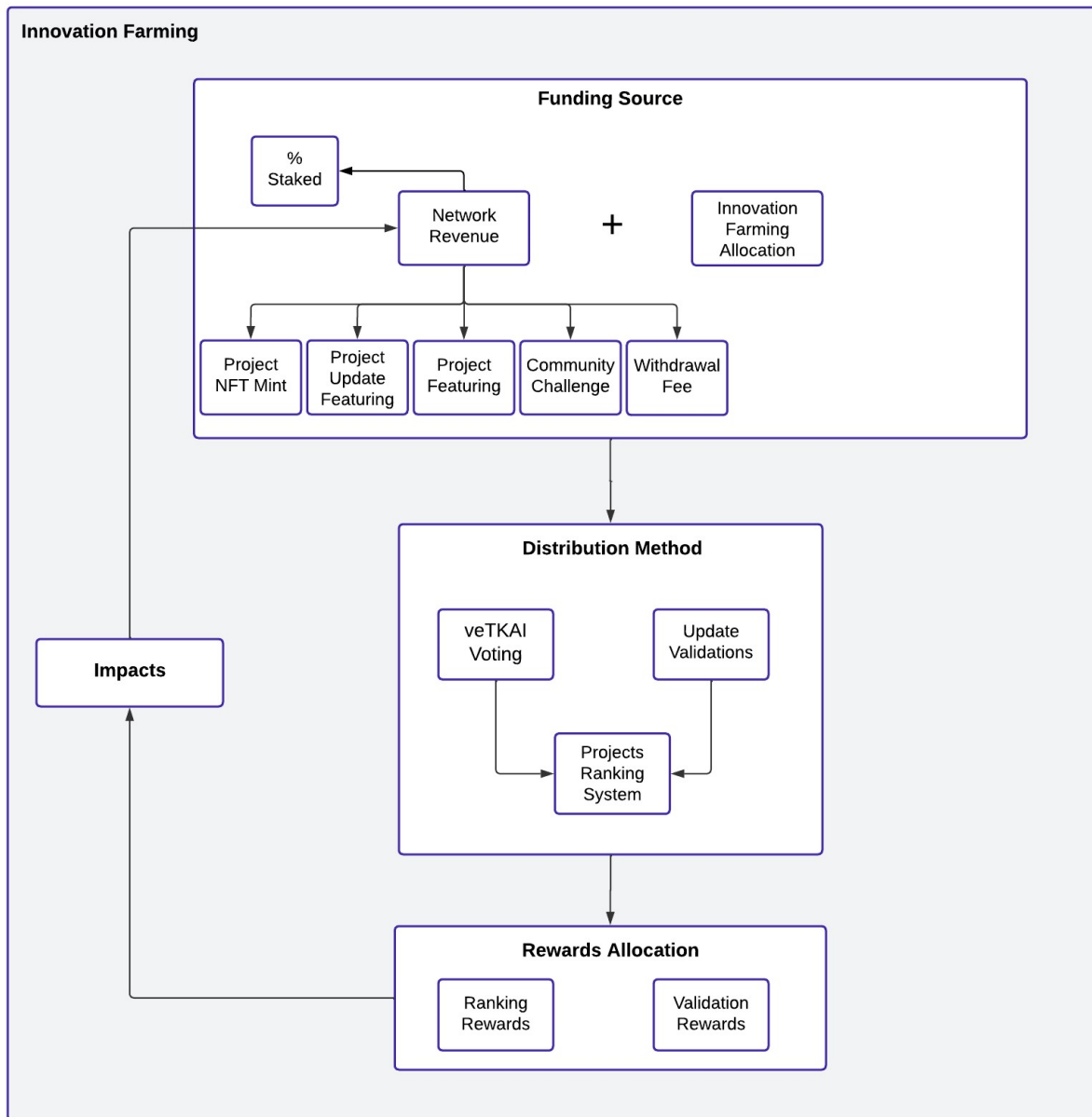


Figure 10. Innovation Farming's resource network.

3.4.2. Qualification for Innovation Farming

In concurrency with the Innovation Farming rank system, a **second rank system will simultaneously take place to qualify Seed projects for the next Innovation Farming batch.** By the end of each sprint of a given batch, **the top 5 ranked projects are qualified,** transitioning them into *Farm* projects. Consequently, **previous Farm projects in the same**

batch also transition into Graduate projects, ceasing their participation in Innovation Farming. In essence, the system is built to periodically refresh projects in the program.

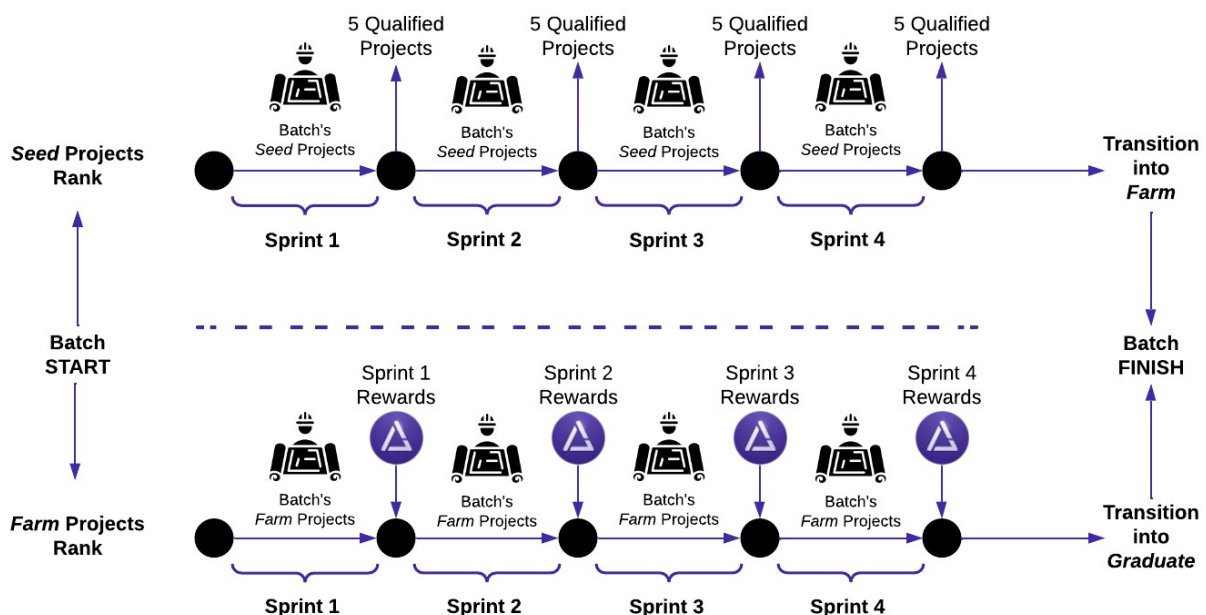


Figure 11. Innovation Farming's resource network.

The rank of a *Seed* project is **higher the more validated updates one has provided during a sprint** ([Chapter 3.4.5. Assessments and Consensus](#)) which is accounted for in the projects **CIV (Collaborative Innovation Volume)**. A CIV equal to 1 means that a project has 1 validated update. Hence, in order to qualify for Innovation Farming, **there must be proof that a project is developing it during a sprint**. At the end of a sprint, the CIV is reset and projects may attempt to qualify once more.

In case a project is qualified, the equivalent amount to the Innovation Farming threshold must be staked and cannot be unstaked until the end of the batch in which it is participating. The Innovation Farming threshold will start at 10.000 TKAI. In case the project doesn't meet the required threshold until the next batch, it is not included in the program and must repeat the process again to have a chance to qualify. Upon completion of the program, the Project NFT owner will be able to un stake TKAI required for Innovation Farming.

3.4.3. Farm Ranking Score Function

During the Innovation Farming program, the score function (SF) score for a *Farm* project i during sprint j is:

$$SF_{i,j} = \sum_{k=1}^l (V_{i,j,k}) * CIVScaleFactor * Min(3, CIV_{i,j})$$

where:

- $V_{i,j,k}$ = Ecosystem participant k 's veTKAI votes in project i amongst a pool of l voters on sprint j .
- $CIV_{i,j}$ = Number of project i 's validated updates on sprint j . Only the first three finalized updates are going to contribute to the Score function.
- $CIVScaling Factor$ = Constant defined on the protocol that reduces or increases the CIV contribution to the project Final Score.

The first term, $\sum_{j=1}^l (V_{i,j,k})$, reflects the sum of the ecosystem's participants belief in the relevance, quality or potential usage of the project and thus a **subjective predictor of success**. It represents the **cumulative veTKAI votes**.

The second term, $CIV_{i,j}$, which stands for Collaborative Innovation Volume, is a direct measure for a project's validated updates and a proxy for its relevance or quality in the ecosystem. Thus, it constitutes an **objective proof of success**. A project with **CIV equal to 1** means that the **project had 1 update validated** in that given sprint.

Hence, this score function can be summarized as a **binding of predictive success and actual success** in terms of their orders of magnitude. The score function also implies two constraints:

1. **A project with the absence of votes will either have a score of 0 or will not score in the ranking.** This is to guarantee that community participants vote on projects that provide proof of development or there is an expectation of such.
2. **A project with the absence of validated updates will not have a score in the ranking system, regardless of its votes.** Therefore, only projects that have developments get into the ranking. This creates an incentive for project owners to continuously develop their projects and provide proof of such.

| | CIV > 0 | CIV = 0 |
|------------|-----------|-------------|
| veTKAI > 0 | Score > 0 | Score = N/A |
| veTKAI = 0 | Score = 0 | Score = N/A |

Figure 12. Potential project's score function score.

Although this is the preliminary score function, we anticipate feedback from the community to further improve it.

3.4.4. Voting Power

Voting power is quantified by the **amount of veTKAI** a participant possesses and can be exercised through **token allocation across all Farm projects**. The token is obtained upon staking TKAI ([Chapter 3.5.2. Token Utility](#)). This voting process corresponds to the predictive aspect of a project's success and is valuable to the ecosystem by signaling projects in which the community has the most expectations. **The votes can be casted by the entire community except for the Project NFT owners and votes may only be directed to Farm projects** ([Chapter 3.3.1. Project Sandbox](#)).

Upon voting on a project which has a position in the Innovation Farming rank, Farmers become rightful to a proportional share of the rewards allocated. **If a Farmer has X% of the veTKAI votes of one project, he will have X% of the rewards that are destined for voters for the**

project's respective rank. In order to optimize reward potential with veTKAI voting, **the most effective strategy is to diversify allocations across a spectrum of projects instead of concentrating on a few.** The rationale behind this approach lies in the fact that when a Farmer votes for multiple projects, they automatically become eligible for a quota of the rewards of all the projects ranks they vote on a given rank. This approach not only benefits the Farmer but also provides each project greater visibility and exposure within the ecosystem.

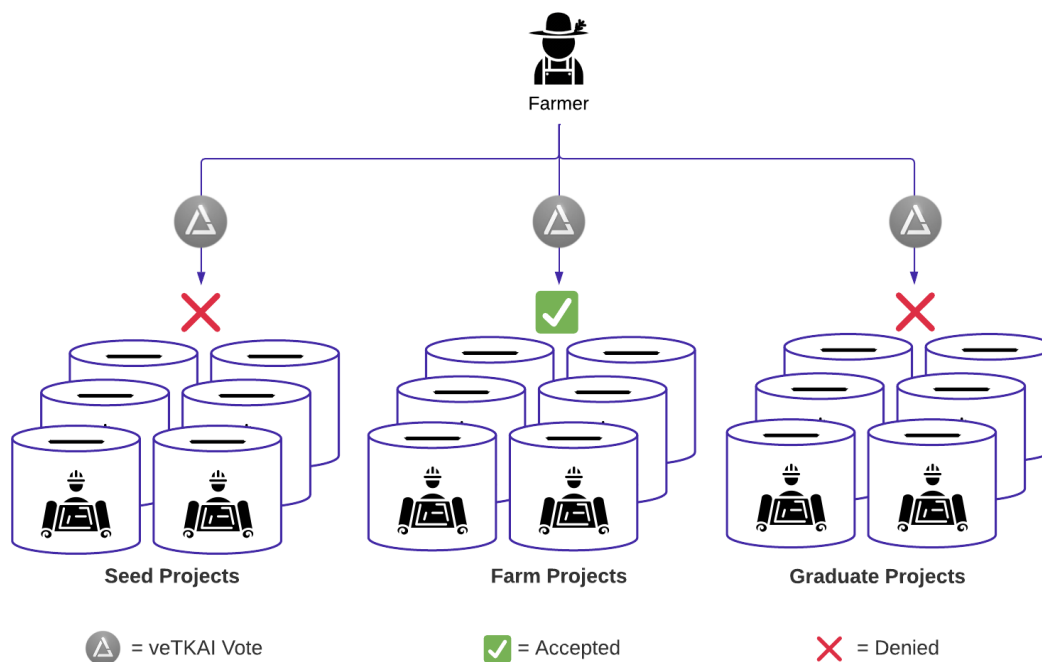


Figure 13. Possible voting across projects.

By the end of every sprint, votes are reset and back to the Farmers. Upon transitioning to the following sprint, veTKAI holdings increase linearly ([Chapter 3.5.2 Token Utility](#)).

3.4.5. Assessments and Consensus

Assessments consist of **analyzing if either a project update or a mentorship proposal is legitimate** (Chapters [3.3.1. Projects Sandbox](#) and [3.3.2. Mentors Sandbox](#) respectively). In order to be able to validate a project update, a farmer must meet or surpass the **Validation Threshold**. It is the minimum amount of veTKAI that must be stated in order to have assessment powers. The Validation Threshold will start at **3000 veTKAI**.

Once a farmer holds the Validation Threshold, **they may either validate or invalidate an update or a mentor application**. This assessment serves as **evidence that the participant reviewed the previous** and expressed their judgment on whether it is legitimate or not.

However, this system is **not free of manipulation**. Farmers may be inclined to deter results for personal benefit or collusion by presenting an illegitimate assessment.





| Project Update or Mentor Application / Farmer Assessment | Legitimate Assessment | Illegitimate Assessment |
|--|---|---|
| Legitimate Update / Application |  Validation Intended outcome. |  Invalidation Unintended outcome. |
| Illegitimate Update / Application |  Invalidation Intended outcome. |  Validation Unintended outcome. |

Figure 14. Potential outcomes that arise from an update and respective assessment.

Hence, **a dispute mechanism is implemented**. After an assessment is provided, it is followed by **a period during which the community may dispute it**. This period lasts **48 hours** at the kickstart of the ecosystem. During this period other validator agents can upvote or downvote the updates provided in the platform.

At the conclusion of this period, if the positive assessments (upvotes) outnumber the negative assessments, the update is deemed legitimate and is finalized within the system. This consensus mechanism validates updates only when more than 50% of the voting validators on the system support them.

Let's consider the following example:

Bob Updated this project at 9:30 on 13th October 2023 saying:

“Nebula Project hired a new project manager Santal Rotko and delivered the first MVP to the public on <https://nebula.io>”

During the next 48 hours there were 10 Upvotes and 5 Downvotes, so, at 9:30 on 15th October 2023 the update is considered valid and finalized on the system and contributes to the sprint rewards as a valid update.

In the MeanTime Alice published an update on 14th October 2023 saying:

“Foo Project has raised a pre-seed round of 10M by a16Z”.

During the next 48 hours there were 4 Upvotes and 5 Downvotes, so, at 9:30 on 16th October 2023 the update was considered invalid and finalized.

This approach is more equitable and resistant to manipulation, as it prevents a small number of large veTKAI holders from disproportionately and unfairly influencing the outcome of assessments.

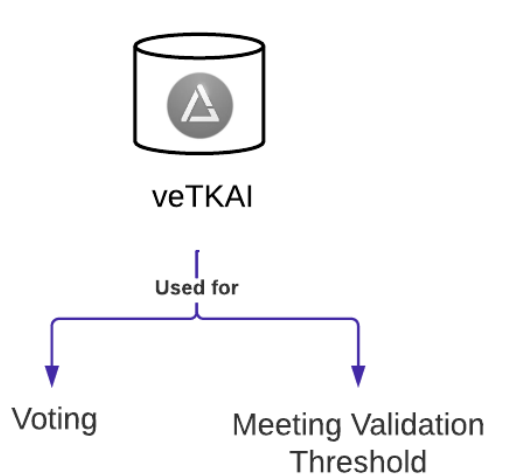


Figure 15. The use of veTKAI resources across Innovation Farming.

Although only those with the Validation Threshold may propose an assessment, **the entire community has the chance to express on a project update assessment** even if they don't hold the Validation Threshold.

In case the assessment of either validation or invalidation is not disputed after 48 hours, the assessment is considered final. While a validated update increases CIV by 1, an

invalidated update has no effect on it. If the validation/invalidation is disputed, a new Farmer that holds the Validation Threshold may provide a new assessment - and the process repeats.

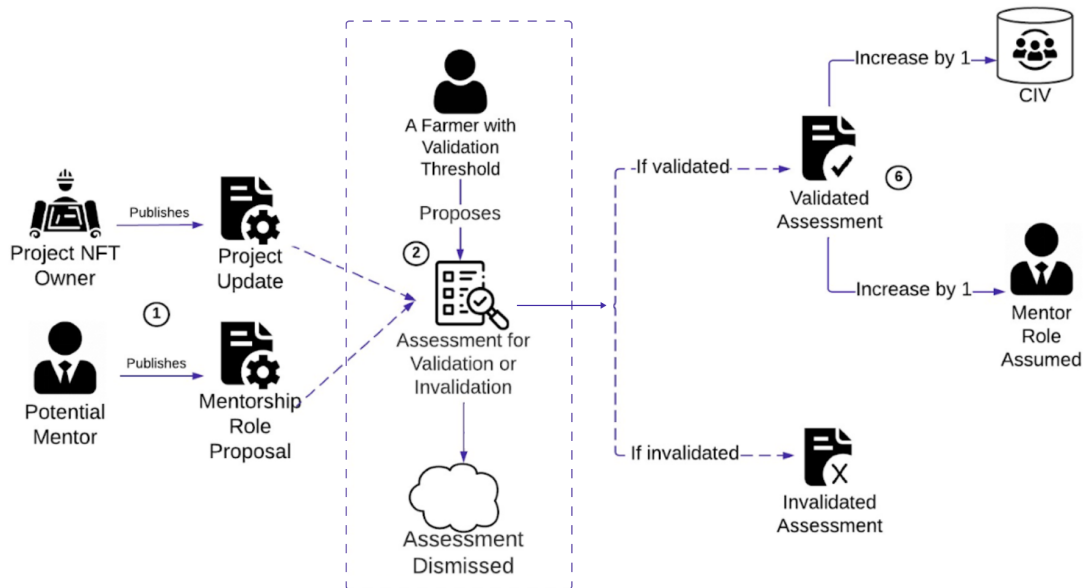


Figure 16. The process through which an assessment is made.

Farmers that successfully provide an assessment, whether it is validation or invalidation, are then worthy of **a rate of the total rewards addressed to assessments in the sprint**. In contrast with voting on projects, **rewards to those who make assessments are not dependable on projects ranking but rather on the total number of assessments made**. While the quota of a Farmer's voting rewards is proportional to a project's vote sum, **the quota of a Farmer's assessment rewards is proportional to the total number of successful assessments during a sprint**. Therefore, the more successful assessments a participant provides, the larger his share. Check [chapter 3.4.8. Use Case](#) for further understanding.

3.4.6. Rewards

It is intended to reward all projects that have a score in the ranking system. Since there will be a ceiling of 20 projects in the Innovation Farming program simultaneously at the kickstart of the program, **20 ranking positions with rewards will exist**. Rewards will start out to obey the following split:

- 70% to Project NFT owners;
- 30% to the community, which is then split between:
 - 15% to project's veTKAI voters;
 - 15% to successful assessments.

The following table quantifies the ranking rewards at the kickstart of the program:

| Project Rank | Total Rewards | Project NFT Owner (70%) | veTKAI Voters (15%) | Update Validators (15%) |
|--------------|---------------|-------------------------|---------------------|-------------------------|
| 1st | 56.000 TKAI | 39.200 TKAI | 8.400 TKAI | N/A |
| 2nd | 46.00 TKAI | 32.200 TKAI | 6.900 TKAI | |
| 3rd | 37.000 TKAI | 25.900 TKAI | 5.550 TKAI | |
| 4th | 29.000 TKAI | 20.300 TKAI | 4.350 TKAI | |
| 6th | 16.000 TKAI | 15.400 TKAI | 3.300 TKAI | |
| 5th | 22.000 TKAI | 11.200 TKAI | 2.400 TKAI | |
| 7th | 11.000 TKAI | 7.700 TKAI | 1.650 TKAI | |
| 8th | 7.000 TKAI | 4.900 TKAI | 1.050 TKA | |
| 9th | 4.000 TKAI | 2.800 TKAI | 600 TKAI | |
| 10th | 2.000 TKAI | 1.400 TKAI | 150 TKAI | |
| 11th-20th | 1.000 TKAI | 700 TKAI | Scarce or none. | |
| Sum | 240.000 TKAI | 168.000 TKAI | 36.000 TKAI | 36.000 TKAI |

Figure 17. Rewards distribution per Innovation Farming sprint.

At the end of each sprint, LayerX will:

1. Take a snapshot of the ranking.
2. Calculate the share of rewards for each Ethereum address.
3. Distribute TKAI accordingly, the total sum being that sprint's budgeted TKAI.

4. Reset all projects' score function scores for the following sprint.
5. Declare the score function for use in the following sprint.

In cases where a rank is not assigned to a project due to a lack of validated updates, the corresponding rewards for that same rank will remain in the TAIKAI Treasury. The same will take place in case a project is included in the ranking (CIV>0) but does not have votes casted. In that situation, although rewards would be distributed to the Project NFT owner, rewards destined for Farmers would not.

While these are the first parameters to distribute rewards, we anticipate feedback from the community to further improve it.

3.4.7. ROI

When referring to ROI, we are recalling the Farmers TKAI return by participating in Innovation Farming by taking both roles of voting and validating. It is the income these agents are entitled to in relation to their staked assets.

ROIs are calculated using the stake up with the sprint rewards, as follows:

$$ROI_i = \frac{VotingRewards + AssessmentRewards}{StakedTokens}$$

$$VotingRewards = V(i, j) \times \frac{V(j)}{RV(j)}$$

$$AssessmentRewards = A(i) \times \frac{RA}{A}$$

Staked Tokens = Total TKAI staked by farmer i.

i = Farmer i.

j = Project j.

V(j) = Total veTKAI voted on project j.

V(i,j) = veTKAI voted on project j by farmer i.

RV(j) = Project j rank rewards addressable to voters.

A = Total number of successful assessments.

$A(i)$ = Number of successful assessments by farmer i .

RA = Rewards addressable to validators.

$S(i)$ = Total TKAI staked by farmer i .

The previous ROI function is dependent on six main variables:

- 1) Total Innovation Farming rewards.
- 2) Rate of Innovation Farming rewards addressed to votes.
- 3) Rate of Innovation Farming rewards addressed to successful assessments.
- 4) Rate of votes amongst the total number of votes on a project.
- 5) Rate of validations amongst the total amount of validations.
- 6) Total TKAI staked.

At the kickstart of the program, the **first three variables are exogenous to the Farmer and determined by LayerX**. For instance, **Innovation Farming rewards are variable since they are purposely adjusted** and publicly announced to the community at the beginning of a new sprint. On the other hand, although the total amount of Innovation Farming rewards addressable to votes and successful assessments should remain fixed over the long run, **it is still subject to changes to comply with ecosystem incentives**. It is intended for changes in parameters and rewards to be decided by the community once conditions are favorable.

The last three variables are the ones Farmers can control and can build their strategies upon. The first one is regarding how Farmers allocate their veTKAI amongst the pool of projects and thus signal development expectations. **The best strategy to maximize rewards when voting is to disperse the veTKAI portfolio across a wide range of projects.** This is due to the fact that by voting on several projects a Farmer is also applying to be worthy of all the rewards across the entire pool of projects. Thus, Farmers are incentivized to distribute their holdings across a varied span of projects instead of focusing on a few, giving more exposure to each project.

The second one is based on the number of successful assessments proposed for updates. **The best strategy to maximize rewards via validations is to provide as many legitimate assessments as possible.**

The last variable is regarded as the staked assets. As a rule of thumb, **the longer TKAI is staked, the more rewards a Farmer is potentially empowered to receive.**

3.4.8. Use Case

Meet Bob, an active Farmer in the \$TKAI ecosystem. Bob stakes his TKAI tokens, votes on projects, and validates assessments to earn rewards. Let's explore how the ROI is applicable in his scenario using the formula above.

Bob's Activities

1. **Staking:** Bob stakes 100 TKAI tokens.
2. **Voting:** He votes on Project Alpha and earns rewards.
3. **Assessing:** He validates assessments and earns additional rewards.

Calculating Bob's ROI

- **Voting Rewards (P):** Bob earns 100 TKAI tokens from voting on projects.
- **Assessment Rewards (Q):** Bob earns an additional 50 TKAI tokens from validating assessments.
- **Staked Tokens (RS):** Bob has staked 1000 TKAI tokens.

Using the formula:

$$Bob's ROI = \frac{(100 TKAI + 50 TKAI)}{1000 TKAI} = \frac{150 TKAI}{1000 TKAI} = 15\%$$

Outcome

Bob's ROI is 15%, meaning the rewards he earned (from voting and assessments) represent a 15% return on the tokens he staked.

Key Takeaways

- **Engagement Rewards:** Bob improves his ROI by actively participating in voting and assessments.
- **Balanced Approach:** By engaging in both activities, Bob ensures a balanced and optimized ROI.

- **Strategic Participation:** Bob can strategize his future participation based on his ROI and desired outcomes.

Understanding and calculating the ROI allows Bob to gauge the effectiveness of his participation in the \$TKAI ecosystem. It helps him make informed decisions on staking, voting, and validating assessments, ensuring a balanced and rewarding experience.

It is important to mention that since all Farmer's rewards are active - that is, they require work in the ecosystem - the ROI can vary in every sprint. Upon concluding the Innovation Farming sprint, the rewards are distributed to Farmers and to Project NFT owners. Score functions, including CIV and voting, are reset and a new sprint begins.

3.5. TKAI Token Model

3.5.1. Token Contract

TKAI's token contracts are:

Polygon: 0x8829d36F6680bE993f5444198E8cbFa8f02eDe96

Ethereum: 0x7C5b267ED81009aa7374B5CA7E5137Da47045bA8

3.5.2. Token Utility

a) Medium of Exchange

TKAI serves as payment for accessing gated services. These payments are deducted from the user's balances and contribute to the TAIKAI treasury as network revenue.

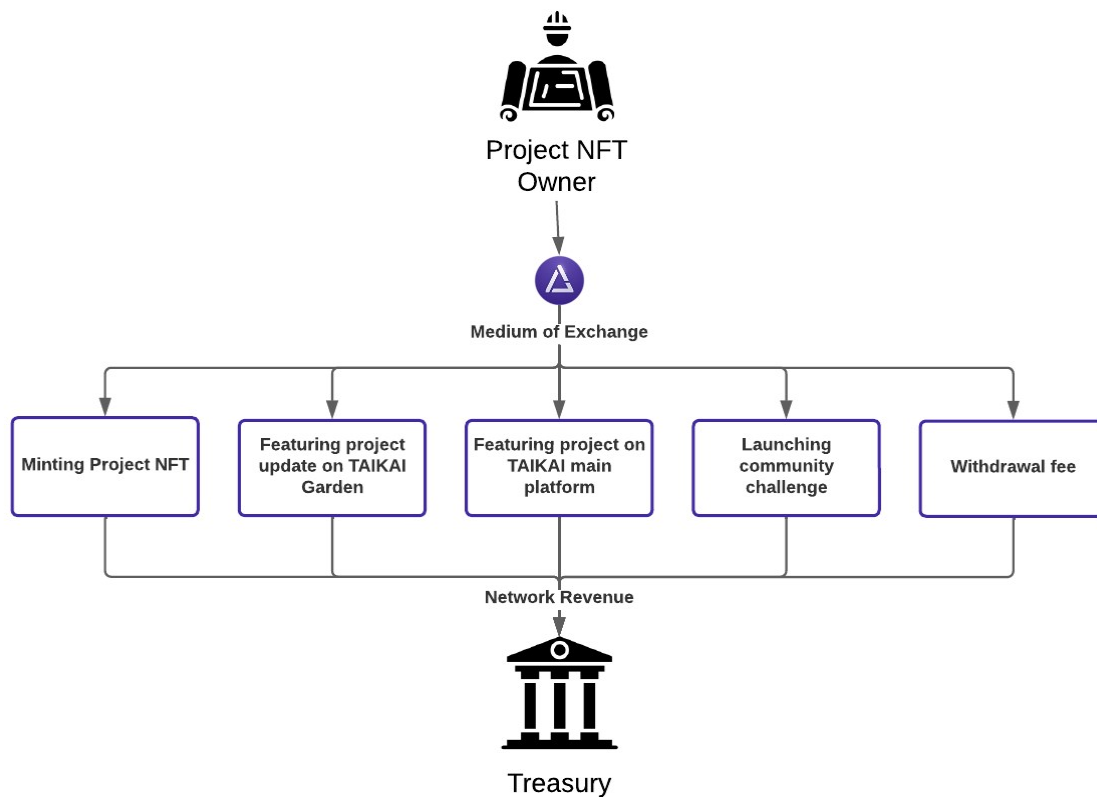


Figure 18. TKAI's use as a medium of exchange.

Minting Project NFT: A project owner may mint the ERC-721 token that provides ownership and publishing rights on TAIKAI Garden on behalf of the project developed. Once the Project NFT is minted, the wallet to which it is allocated is the wallet that can perform the actions within the ecosystem and potentially claim rewards.

Featuring a project on TAIKAI's main platform: The project owner may increase the project's exposure by highlighting it to the whole ecosystem, that is, both TAIKAI Garden and the hackathon platform capture the attention of both general users and potential customers.

Featuring a project update on TAIKAI Garden: The project owner may increase the project update's exposure by highlighting it on TAIKAI Garden in order to capture the attention from Farmers. This mechanism encourages continuous interaction, feedback, and collaboration, strengthening the overall fabric of TAIKAI Garden's interconnected network.

Solutions, ideas, or contributions based on the challenge's guidelines. As the ecosystem scales, further services provided by TAIKAI will be added.

b) Feeless peer-to-peer interactions

Users will have the freedom to engage in peer-to-peer transactions such as mentorship and donations without any fees charged.

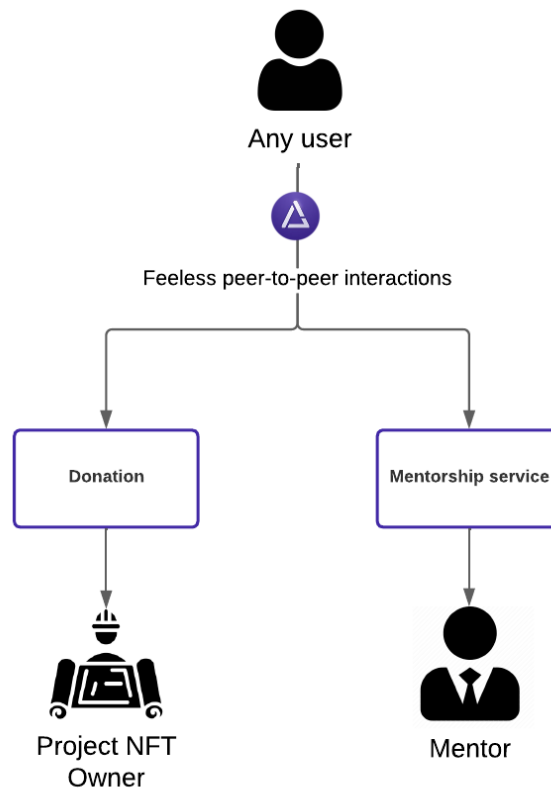


Figure 19. TKAI's use towards feeless peer-to-peer interactions.

Mentorship service: TAIKAI Garden embraces on-demand mentorship as a cornerstone of its ecosystem, offering a robust and dynamic platform for knowledge exchange and guidance. Experts, industry veterans, and skilled practitioners have the opportunity to share their wisdom with project owners and the general community members one-on-one without the need for a direct intermediary in these interactions.

Donation: Participants have the opportunity to contribute to a project in the ecosystem. By donating TKAI to Project Owners, active Farmers, and valuable mentors directly, individuals amplify the collective impact of the ecosystem. It's a way for members to actively shape the development of TAIKAI Garden, enticing community-driven spirit by the shared goal of fostering innovation and entrepreneurship.

c) Staking

TKAI can be staked to access several rights while at the same time incentivizing long-term holding and commitment to the platform's goals.

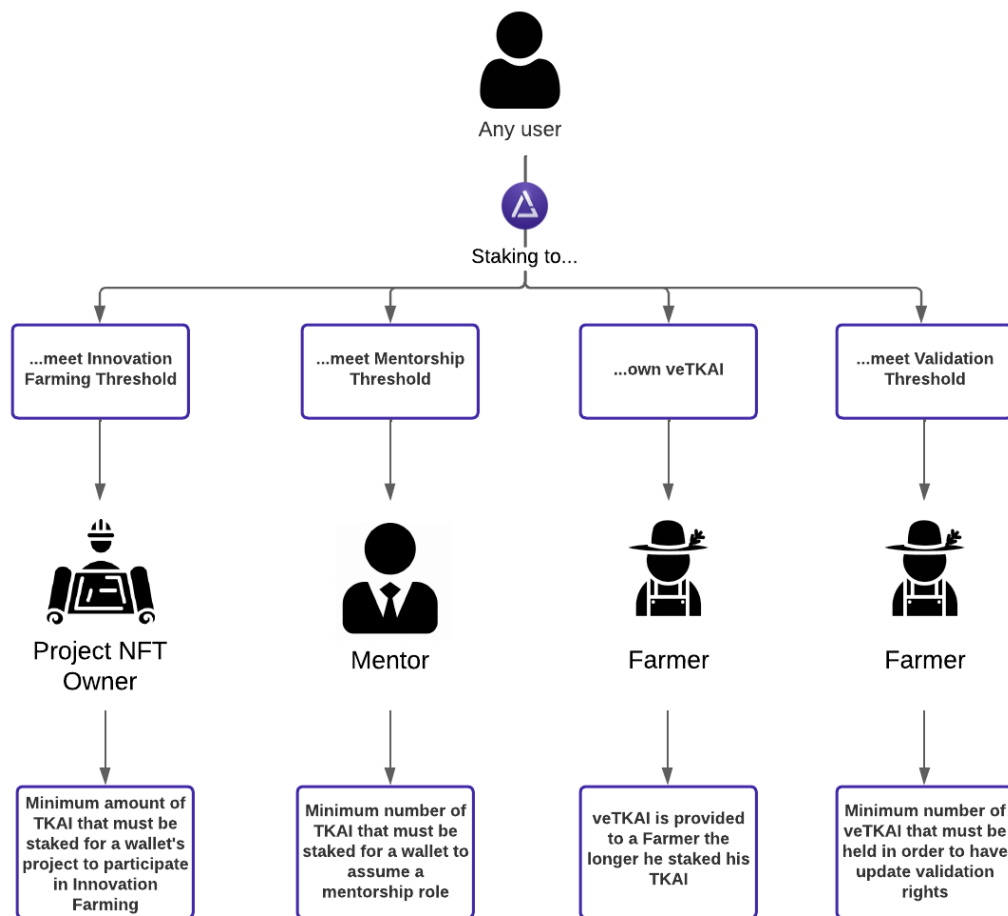


Figure 20. TKAI's use towards staking.

Although TKAI can be unstaked at any moment in time, users should be aware of a few constraints that may arise from doing so:

- In case a *Farm* project unstakes below the Innovation Farming threshold, the participation in the program comes to an end and it turns its status to *Graduate* project. Therefore, in order for a project to fully reap the most benefits out of Innovation Farming, the Innovation Farming Threshold should be kept.
- In case mentors un stake below the Mentorship threshold, their role as mentor in the ecosystem is disabled. In order to become a mentor once again, the application should be undertaken.
- In case a user unstakes any amount of TKAI, the entirety of veTKAI holdings is revoked.

d) Access to Voting Power

Upon staking TKAI, a wallet is eligible to receive veTKAI and provides both **voting and validation powers**. The token is neither transferable nor tradable since they are locked in the private wallet of the user.

veTKAI holdings increase according to time: **the longer TKAI is staked, the more voting power is owned. veTKAI holdings increase per sprint and are totally reset whenever any amount of TKAI is unstaked.**

The maximum amount of veTKAI a holder can own is **the same amount of TKAI staked** and can be achieved after **52 sprints**, at a rate of approximately 1,96% per sprint (1/51), which is equivalent to 104 weeks or 2 years. During the first sprint in which TKAI is staked, **a wallet's veTKAI holdings are null and from the second sprint onwards, it increases linearly every sprint.**

| Sprint | TKAI Staked | veTKAI Holdings |
|-------------|-------------------------------------|-------------------------------------|
| 1st Sprint | <input checked="" type="checkbox"/> | $0 * 1,96\% * X = 0$ |
| 2nd Sprint | <input checked="" type="checkbox"/> | $1 * 1,96\% * X$ |
| 3rd Sprint | <input checked="" type="checkbox"/> | $2 * 1,96\% * X$ |
| ... | ... | ... |
| 51st Sprint | <input checked="" type="checkbox"/> | $50 * 1,96\% * X$ |
| 52nd Sprint | <input checked="" type="checkbox"/> | $51 * 1,96\% * X = X$ |
| 53rd Sprint | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 54th Sprint | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| ... | ... | ... |
| Nth Sprint | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |

Figure 21. Table of a wallet's veTKAI holdings per sprint with 100 TKAI staked.

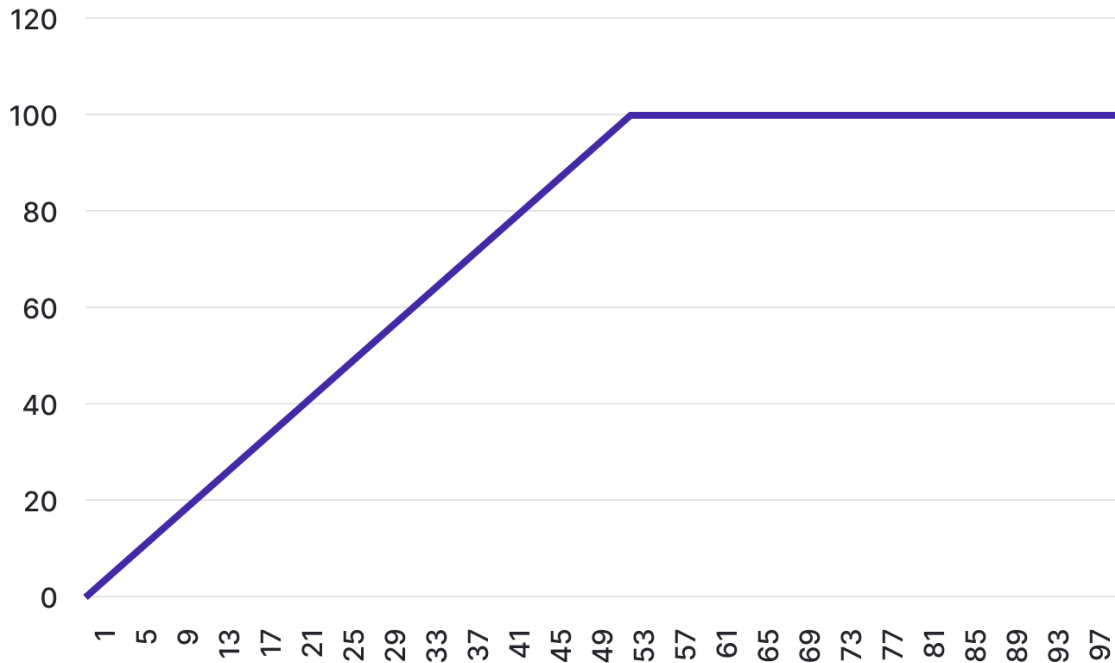


Figure 22. Plot of a wallet's veTKAI holdings per sprint with 100 TKAI staked.

3.5.3. Token Distribution

TKAI's total supply of 300M preminted tokens will be initially allocated to the treasury and will be fully distributed over the course of 120 months to the ecosystem. Below is a detailed description of the different categories for the token allocation and the respective vesting.

a) Hackathon Rewards

Rewards allocation towards TAIKAI hackathon participants from previous and future editions, including hackers, juries, and mentors, in an approximately linear vesting schedule over the next 120 months. Monthly allocation volume will be highly dependent on hackathons frequency and personalization. On launch, approximately 15% of the supply will be distributed amongst previous hackathon participants, dating from 2019.

b) Innovation Farming

Rewards towards highly rated projects and their respective farmers in TAIKAI Garden in each batch. This is to ensure we have an adequate reserve for rewards distribution over time in the following 120 months and for product market fit iteration. Rewards volume will always be set prior to the batch's period and LayerX will always inform the community of changes regarding them.

c) Team, Equity Partners and Advisors

Allocation towards LayerX team and its equity partners & advisors, responsible for planning the strategy and execution for the TAIKAI Garden development. The allocation will be cliffed for 6 months after the launch and, once the cliff period is over, 10% will be distributed. Over the following 36 months, the remaining allocation will be distributed linearly.

d) Hacker External Communities

Allocation towards Web3 communities that are devoted to goals that approximate those of TAIKAI. The distribution will be made linearly over the course of 36 months.

e) Liquidity Provision

Allocation towards enlisting the token on tradeable markets. The entirety of the supply towards this allocation will be placed in both centralized and decentralized exchanges in a maximum time frame of 24 months.

\$TKAI Planned Allocation

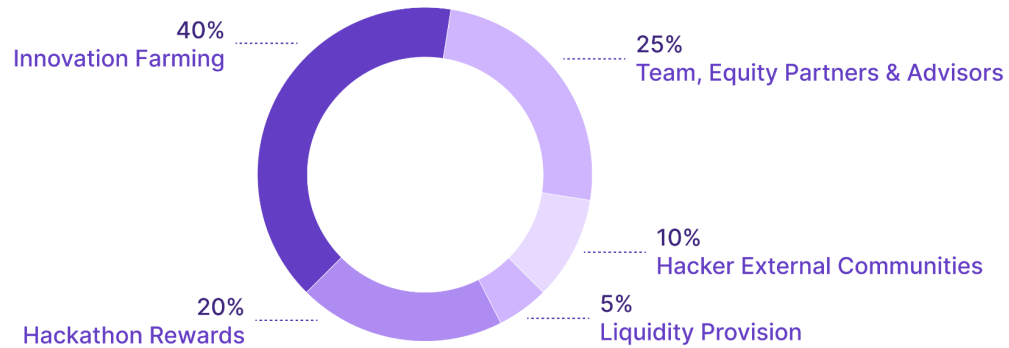


Figure 23. TKAI Allocation.

3.6. Blacklist

Blacklist is **a process to handle IP violations, sensitive content, and unethical behavior** in TAIKAI Garden. It can be either applied to a **project** or a **wallet**. Once entering the blacklist state they are largely constrained **temporarily** or **permanently**. Although all Blacklisting processes will be made public to the community, **LayerX reserves the right to subjective and justified judgments**.

3.6.1. Blacklist for a Project NFT owner

Being blacklisted as a project has implications for how the project is displayed in TAIKAI Garden and the span of interactions that are possible with it.

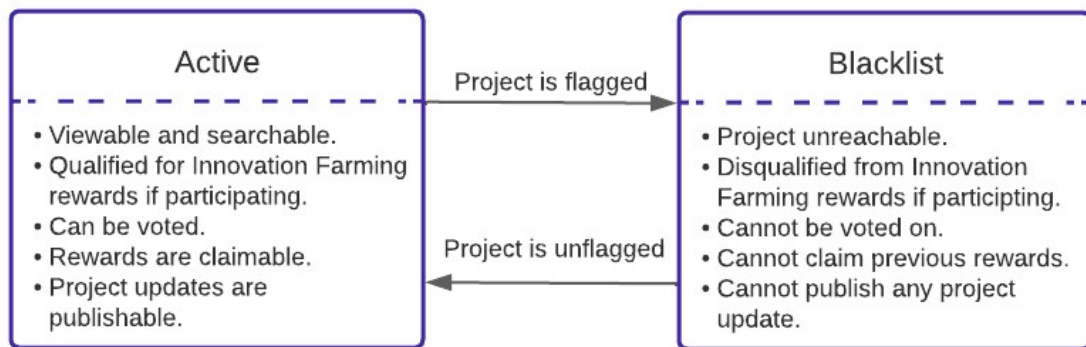


Figure 24. Span of interactions allowed by active and blacklist projects.

A project is flagged if at least one of the conditions is met:

- **LayerX** receives a report of intellectual property (IP) violation, including but not limited to:
 - Trademark Violation.
 - General IP rules (EU?USA?..).
- **LayerX** receives a report of impersonation (e.g. posting a project under the guise of a different entity).
- **LayerX** receives a report of bribery, and false information laid out accusing project owners.
- **LayerX** proactively raises doubts about IP violations, sensitive data, impersonation, or otherwise.

The project may be unflagged back if at least one of the conditions is met:

- The reporter submits a retraction in writing to support@taikai.network.
- The project owner clarifies the situation by writing to support@taikai.network within 14 days after entering the Blacklist.

3.6.2. Blacklist for a wallet

Being blacklisted as a wallet has implications for how the actor profile is displayed in TAIKAI Garden and what actions the actor is permitted to perform. Once blacklisted, the actor may stay there, or leave the blacklisting status if certain conditions are met.

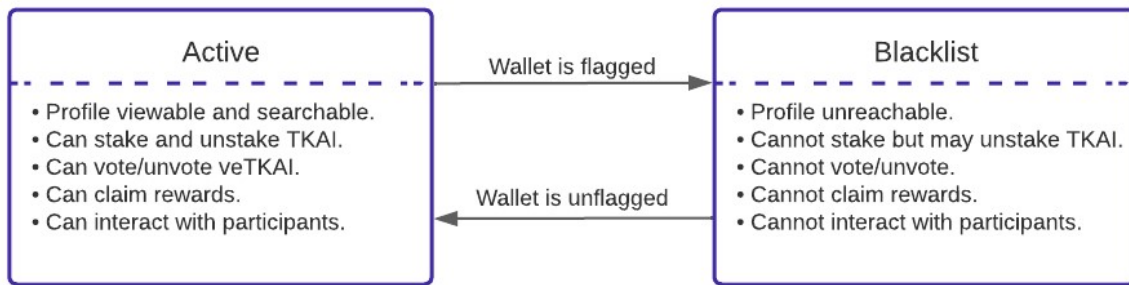


Figure 25. Span of interactions allowed by active and blacklist wallets.

A wallet is flagged if at least:

- LayerX receives a report of impersonation.
- LayerX receives a report of abusive, harassing, or hate speech.
- LayerX receives a report regarding spam, unsolicited promotions, or irrelevant content to the community.
- LayerX proactively identifies the previous ones.

The wallet can be unflagged back if at least one of the conditions is fulfilled:

- Reporter submits a retraction in writing to support@taikai.network.
- The wallet's user submits an explanation by writing to support@taikai.network who then decides at its discretion whether to revoke blacklist status.

3.7. Governance

Governance in TAIKAI Garden relies on four main components:

1. Flow of resources:
 - veTKAI Voting;
 - Validations;
 - Rewards allocations;
2. Parameterization:
 - Thresholds;
 - Reward amounts;
 - Rates;
3. Blacklisting:

- Projects;
- Wallets.

4. Features.

As mentioned in previous chapters, the **flow of resources will always be governed by the community in regard to Innovation Farming**. Note that governance, in this context, is not about specific decisions for protocol or software but more directly about value creation within the ecosystem.

Regarding the topics of **parametrization**, **blacklisting**, and **features**, during the kickstart of the ecosystem, the power over them will be entirely up to LayerX's discretion, and will regularly make decisions public after each Innovation Farming sprint. In the long term, LayerX's support to TAIKAI Garden will become minimal, to the point in which its operations are fully autonomous and fully decentralized.

4. References

1. De Cata, A. (2023, April 11). Latest Report Uncovers Trends in Web3 Adoption by Top Brands of 2022 and Q1 2023. NFT Tech. <https://www.nfttech.com/newsroom/web3-report>.
2. Frehlich, M., Miyazono, E. (2023, July 15). A case study: Network Goods in Protocol Labs. Youtube. https://www.youtube.com/watch?v=s6JI648wh_A.
3. McConaghy, T. (2020, September 1). The Web3 Sustainability Loop. Medium. <https://blog.oceanprotocol.com/the-web3-sustainability-loop-b2a4097a36e>.
4. Monegro, J. (2020, September 7). Stop Burning Tokens - Buyback and Make Instead. Placeholder. <https://www.placeholder.vc/blog/2020/9/17/stop-burning-tokens-buyback-and-make-instead>.
5. Nolte, Chouta, & Herbsleb (2020). What Happens to All These Hackathon Projects? – Identifying Factors to Promote Hackathon Project Continuation. Proc. ACM Hum.-Comput. Interact., Vol. 4, No. CSCW2, Article 145.
6. Osolnik, J. (2022, November 24). Monitoring and Mitigation of Economic Risk. Medium. <https://medium.com/block-analitica/monitoring-and-mitigation-of-economic-risk-ed342202eb95>.
7. Samani, K. (2018, February 13). New Models for Utility Tokens. Multicoins Capital. <https://multicoins.capital/2018/02/13/new-models-utility-tokens/>.