

Grant Ships Pilot Retrospective

Introduction

Grant Ships is a competitive grant allocation game designed by The DAO Masons, where multiple subDAOs (aka Ships) compete to best allocate funds within a given domain.

Through a grant from Arbitrum Foundation via Plurality Labs and Thrive's Thank ARB program, 90,000 ARB was allocated for the Grant Ships Pilot program to be distributed in two rounds of 45,000 ARB each.

This document is a retrospective on the Grant Ships 'maiden voyage' - Pilot round 1 - where 3 ships competed to best allocate funds within the "Gaming on Arbitrum" niche.

Pilot round 1 ran from April to June, 2024. Pilot round 2 begins in late July and runs through August.



Evolving the Perfect Grants Program

The premise that Grant Ships is built on is that explicit and visible competition, accountability and selection pressure on grants programs will force them to mature into something that is both effective and aligned with the desires of the DAO.

We've identified 4 areas within the "Evolutionary Flywheel" that are each necessary to create this kind of progress. We've broken down our observations on how Grant Ships performed within each of these during the Pilot Round.

Evolutionary Flywheel



Was the platform able to provide specific feedback to each ship so that they could improve and adapt for the next round? Was it useful and was there enough?



Innovation B-

Did the Platform allow Ships to develop funding strategies and implement their vision?

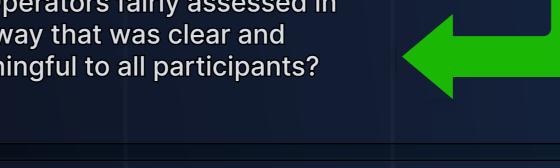


Competition A-

Did the platform allow Ships to compete with each other at making the best allocation decisions in a fair game with evenly enforced rules?



At the end of the round, were Ship Operators fairly assessed in a way that was clear and meaningful to all participants?



Breakdown

On the following page we've rated ourselves on each of these areas with notes on what went well and what needs to improve. We hope that by optimizing each portion of the flywheel that we will see Grant Ships begin to 'evolve' ideal grants programs over time.

daomasons.com grantships.fun

What Went Well

Having every action taken by each Ship Operator published transparently onchain allowed the Ships to learn from each other as well as compete with each other. These parts of the flywheel worked well and we see ways to make them work even better.

Innnovation B-

Ships were able to deviate and strategize on unique funding patterns.

We were able to support strategies that went beyond the functionality of our smart contracts.

Ship Operators were able to implement their unique strategies and test them out on our platform.

Funding Contracts were limited and did not support novel funding mechanisms (ex. Quadratic)

Interface was even more rigid than contracts and was streamlined for direct grants w/Milestones only.

Balance between simplicity and flexibility was skewed toward simplicity at this early stage of development. This enhanced UX, but came at the cost of flexibility.

Competition A-

Just by its nature, the Grant Ships game is a competitive environment that was immediately sensed by the Operators.

A fair and well-documented ruleset enforced by the contract code and impartial facilitators created a level playing field and a naturally meritocratic environment.

Application UX ensures very low information assymmetry

Contracts ensure fair, standardized rules and timing.

Application UX could have done more to increase the intensity of competition.

Better Domain scoping, funding goals, and review criteria could have focused the competition.

Better enforcement of deadlines will increase competition.

What Needs to Improve

The signal we used as a "fitness function" was delegated Arbitrum votes. Despite our best efforts, we had low voter turnout with only 5,393,040 ARB represented, where a typical Arbitrum AIP vote will receive 100 million + votes in signal. Most voters did not leave meaningful feedback on why they chose to vote the way they did.

Fitness Function C-

The TCR voting interface and contracts were low friction and easy to use.

Update: The community vote with airdropped SBTs was a success raising us from F+ to C-.

Community voters provided meaningful reviews, and a more balanced, less strategic voting signal.

Operators felt compelled to encourage voters to participate and "vote for us", blurring the line between 'fitness function' and 'competition'

Strategic voting (voting to skew the results vs. honest representation of merit) was prevalent during Arbitrum vote.

Most ARB voters were not spectators of the game, and therefore voted based low-context decision-making, further distorting the signal.

Feedback C-

The voting interface allowed users to leave detailed feedback. Some voters did provide useful feedback this way.

It is easy for Ship Operators to view and read feedback from voters.

A secure Arbitrum TCR vote was held that provided signal to the Operators.

Most participants couldn't vote, but they were still able to provide feedback to Ship Operators.

Most voters were not spectators of the game, and therefore were not able to provide useful feedback.

Many of the participants or spectators with great feedback did not have ARB to vote with.

Because of the poor signal from voting, Ship Operators weren't left with a clear direction for the next round.

x.com/grantships x.com/daomasons

Prelude: The Build

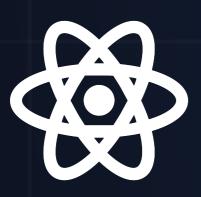
We were awarded a grant from Plurality Labs via Arbitrum Foundation to build Grant Ships in November 2023.

Originally we thought that we would be stitching together a few protocols (Hats, Gnosis Safe Zodiac Modules & Allo). After learning that these protocols would not easily integrate, we realized we would have to do some custom contract development and create a full application to support it.

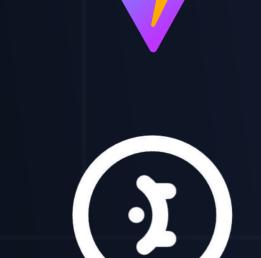
This expanded our scope significantly without increasing the grant payout, but we were committed to doing this right.

The Stack

Grant Ships was built as a React application using a variety of libraries and protocols.











Front End

React Vite Mantine Wagmi Viem

Contracts

Allo fork Hats Stem*

Backend

Subgraph Envio Pinata







A Allo

hats

*Stem is a new voting protocol developed in collaboration with PublicHaus and is now an active DAO Masons project.

Design: Principles

Grant Ships has 3 distinct user roles - Game Facilitator, Ship Operator and Grant Applicant - that form a simple hierarchy with Facilitators at top and Applicants at the bottom.

We wanted to keep experience as simple as possible for Applicants, Operators and Facilitators in that order.

To accomplish this we used the principle of "Complexity Flows Up" choosing to delegate complexity to Game Facilitators when possible, Ship Operators when necessary and Grant Applicants almost never.

We feel that Applicants should be focusing on their projects and Operators should be focused on making good allocation decisions. Facilitators should handle the rest.

This also means minimizing transaction counts, open browser windows and clicks per workflow as much as possible.

CHAPTER 1: The Funding Domain

Early in the development of Grant Ships, we sensed that the pilot would run most smoothly if allocation were targeted within a niche rather than targeting Arbitrum ecosystem as a whole. We called this niche the "funding domain"

We felt targeting a funding domain would make it easier to compare the performances of the Ships by isolating variables (apples vs oranges) and would make it easier to find grant-seeking project teams by tapping into existing niche communities.















We held weekly meetups for the first few months of our development to recruit operators, build community and scope out a funding domain.

In reality we felt like we wasted a lot of peoples' time because we weren't ready to recruit operators until the build was done and a Funding Domain was selected.

Choosing a domain scope is now part of our requirements for starting up a new funding round.

Domains Considered

We considered many domains including: Gaming, Governance, Stylus, ApeChain, DeSci, Regional Programs, ReFi and "WeirdFi"

Host Hunting

Without an "inside man" in any of these niches, we weren't able to properly engage with them.

We shifted our attention from choosing a niche, to finding an enthusiastic partner who would act as our "customer" and "host" for the duration of the funding round.

Domain Host: "Ali the Chain Gamer"



Longtime Member of Treasure DAO Game Dev Experience Enthusiastic about Indie Games Arbitrum Champion Understood the Assignment

Gaming on Arbitrum: A Trending Niche

We settled on Gaming on Arbitrum as the Funding Domain for the Grant Ships pilot. We knew that gaming was a trending niche on Arbitrum and we found a committed and enthusiastic domain host in Ali "The ChainGamer".

Note: We made this decision months before the Gaming Catalyst Program came into existence!





Game Round Parameters

With Ali's help as our domain host, we set down the parameters for the funding round as follows:

"The core objective of this round is to encourage innovation in gaming on the Arbitrum network. Grant recipients are tasked with completing a project within the following categories:

- Developing a new feature for an existing game that introduces a unique game mechanic and incorporates onchain actions, or
- Creating a self-contained game with an engaging game loop and essential blockchain integration, or
- Producing tooling, programs or other deliverables that have a tangible and measurable impact on the Arbitrum gaming ecosystem."



Chapter 2: Operator Recruitment

Grant Ship Operators are primarily responsible for making funding allocation decisions within the funding domain. They agree to a compliance policy with a pledge to neutrality and good faith operations.

Their primary responsibilities are to:

- 1) Seek out skilled builders
- 2) Negotiate agreements to build within the funding domain
- 3) Hold them accountable for meeting their obligations
- 4) Publish the process and results

The Grant Ships app and Game Facilitators handle the rest, including KYC/KYB and compliance. This frees operators to focus on allocation decisions. For the pilot Operators were paid 10% of their allocated funding pool (1500 of 15000 ARB).



We wanted to select three individuals or teams who could commit to two rounds of focus. They needed to be engaged with the Arbitrum Ecosystem and have some experience with grant seeking and allocation practices.

Experience with onchain games was not a requirement, but was a bonus.

We had a long list of applicants at this point so we started interviewing.

The Ship Operators

We had 12 Ship Operator applications in total, and only room for 3 operators.

Ideally Operators for a round of Grant Ships are selected by a DAO through a vote. For our Pilot we had to screen, interview and choose ourselves based on what we felt was best for the allocation goals and for testing the app.

We interviewed many excellent candidates, and settled on our 3 finalists.

Blue Moon



"The mission is to source the coolest and innovative gaming projects and allocate capital in the most efficient way possible while hopefully having fun. Team Mates: Anna, ZER8"

x.com/zer8_future 凸

The Jade Shadow



"Funding features for existing games + funding small indie games within the Arbitrum ecosystem"

x.com/TheChainGamer 凸

Green Pill Dev Ship



"We're on a mission to greenpill the world by building games that tap into regenerative actions combining fun and impact."

x.com/gp_dev_guild 凸

Recruiting: Lessons Learned

- 1 We spent a lot of time meeting weekly with prospective Ship Operators while the app was in development, but without a defined domain a lot of this was a waste of time.
- 2 We spent too much time explaining and reexplaining the game in meetups and not enough time building the game domain and providing clear criteria to applicants.
- We had to filter out many applicants who seemed uninterested in funding our game scope 'Gaming on Arbitrum' and instead were more interested in funding their own communities and niches.
- In the future, we would enter with a Funding Domain selected and seek out reputable actors within that domain right off the bat.

Chapter 3: Project Magnet



22 Unique Projects

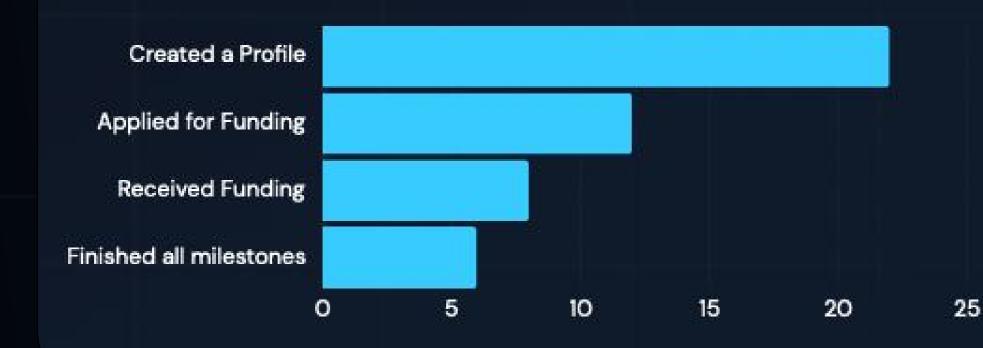
As the first round began, the Operators put out the call for projects and we had 22 games create profiles on Grant Ships. These profiles include game descriptions, logos and links to their game sites, Twitter, Telegram and other socials.

We believe that Grant Ships has potential as a project portfolio page and we have added expansion of the project page features to the roadmap.

8 Projects Funded

Of those 22 projects, 12 applied for at least 1 grant from a Ship Operator and 8 were selected to receive funding. Of those, 1 project received funding from 2 Ships, and 1 project received funding from all 3 ships, for a total of 11 grants.





22

Project Profiles Created



















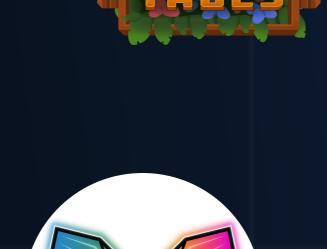
























Mad Props! from Project Leads

"If Grant Ships had a more robust way to show off your project with multimedia, playable links and more options for customization would you invest time in your Grant Ships profile as a way to promote your game to players and potential funders?"



100%

Of funded projects reported they would invest time and energy in their project profiles on Grant Ships

Feedback from projects and operators both show a need for a project profile solution for web3 projects. We are prioritizing this feature set in our upcoming updates. See Roadmap section toward the end.

"Yes I definitely would. We already got some good feedback about our project through Grant Ships, I think that could be a big big help for us and other builders."

- AR World

"Yes, definitely. I suggest
Grant Ships make it
mandatory to upload at least
3 project pictures, and an
optional video upload for a
demo"

- GMetarave: Beats

"Yeah 100%. If you turned Grant Ships into something where even investors would look through projects, I would spend much more time customising our profile."

- Smithonia

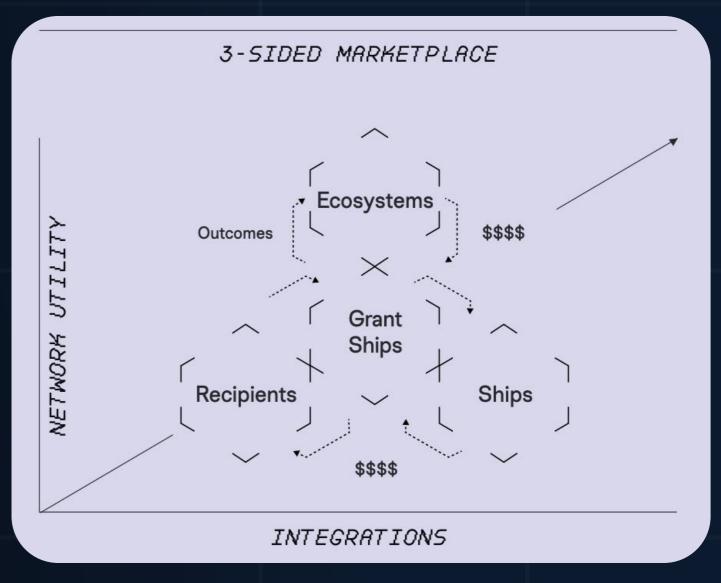
"Sure" - Cloudlines
"Sure" - Monkey Empire
"Yes" - The Beacon

3 Sided Market

Web3 Projects need a way to show off their projects to the Web3 community.

Projects are one part of our 3 sided marketplace: Projects, Grant Allocators, Web3 Ecosystems

We plan to improve this part of Grant Ships to bolster the marketplace.



Source: Onchain Capital Allocation Handbook, by Kevin Owocki, 2024. Used with permission.

Versatile Voting with Stem Protocol

The voting portion of the platform was one of the most challenging to write. To pull it off we collaborated with DAOHaus founder Dekanbro to create a new protocol called "Stem Protocol". Stem is a set of smart contracts that allows you to create any configuration of TCR vote you can imagine with support for automatic contract execution based on vote results.

github.com/DAOmasons/stem-voting 凸

Chapter 4: The Funding Round

The first funding round began on April 22 and concluded June 9. This was originally a 4 week funding round but we chose to extend it by 3 weeks.

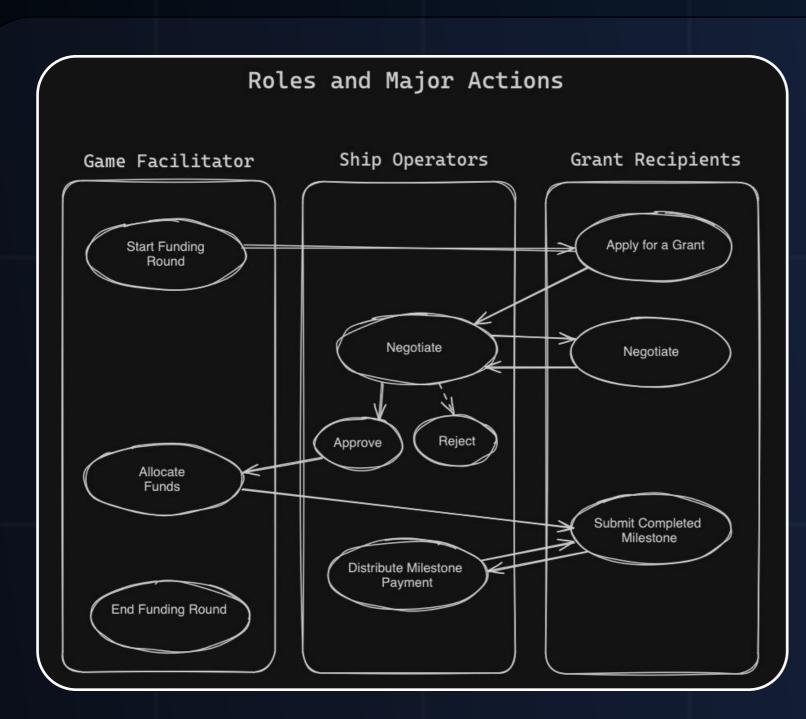
Blue Moon had all of their grants funded and wrapped up by the original deadline. The extension may have worked to their disadvantage.

Role Based Governance and Game Facilitators

Part of the reason Grant Ships ran so smoothly even in a pilot round is because every responsibility required for a grants program is split across 3 distinct roles, with clear actions available to them that are enforced by a smart contract.

Game Facilitator is the role that handles the set up of the game and enforces the rules. Each grant requires Game Facilitator approval pending compliance checks. For this Pilot Round that meant that each grant recipient signed off on the compliance policy, passed KYC/KYB screening and the grant was within domain scope.

When facilitators approve Operator grant requests, that earmarks funds for a particular project. From there, Ship Operators make the actual distributions at their discretion.





Grant Ships draws on the fundamentals of board game design to keep user flows intuitive and fun.

The Themed Operator Factor

One pattern we noticed when accepting Operator applications is that many wanted to operate within a an area of focus (e.g. geographic region, game genre, etc) rather than allocate more generally within the funding domain.

Our concern with accepting a "themed operator" is that voters might vote for their favorite theme without looking at the quality of the allocation decisions made.

We noted that some voters stated they choose Green Pill Dev Ship because of their regen focus. Combined with low voter turnout we believe this factor contributed significantly to their victory in the Arbitrum delegated vote.

3 Operators3 Strategies

Each of the 3 Operators used a different strategy to make their funding decisions. We saw a hackathon, an investment-style portfolio and a new "convex funding" style in this pilot round, each with their own advantages and disadvantages.









Chapter 5: The Voting Round

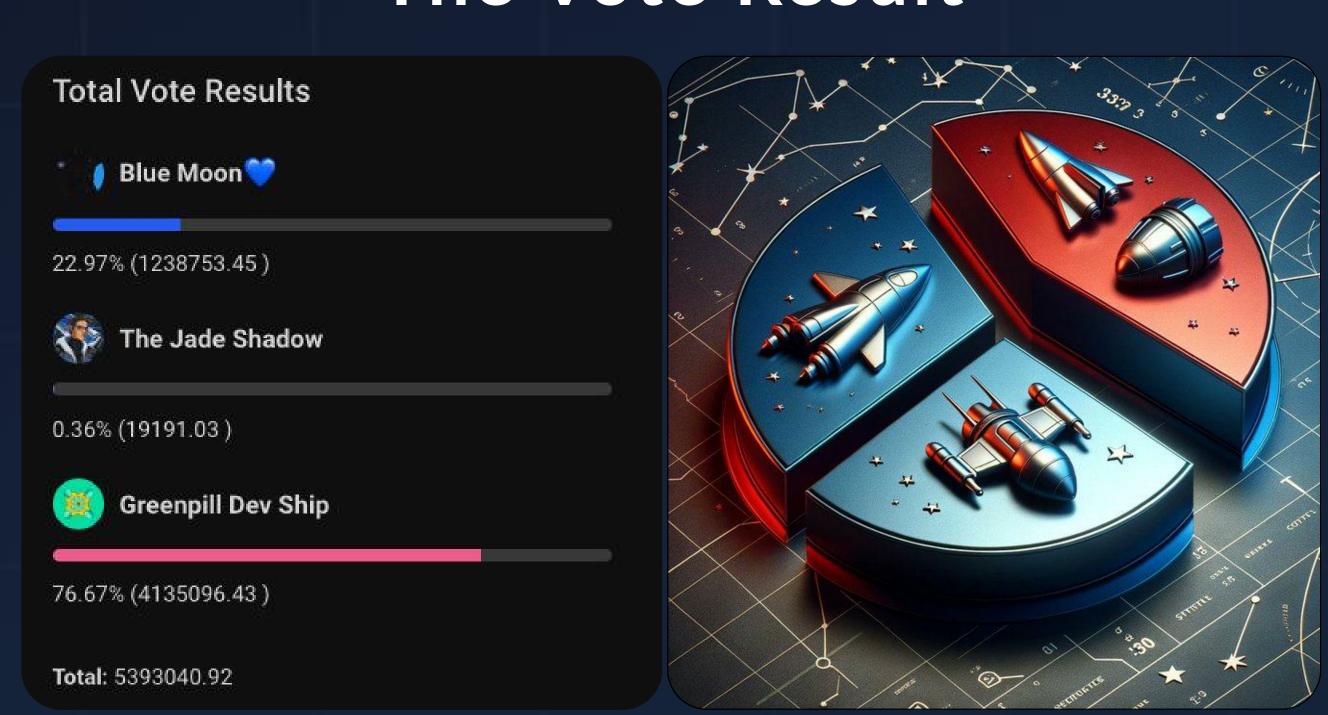
The whole idea of Grant Ships "evolving" ideal grants programs depends on having a good Fitness Function. Funds available to each ship in round 2 are proportional to the vote received in round 1. In this way, the best programs should expand while the weaker programs contract or are potentially eliminated if they do not reach certain thresholds.

Recall from the first section that we gave ourselves an F+ in this area. We did our best to advertise the vote, and we know that many major delegates were aware of it. Most simply chose not to vote.

As for the results, a flat TCR vote is a very blunt instrument and it did not serve well as a fitness function. Besides the low voter turnout in our case, token balances vary widely and so does quality of attention to the nuances of the game.

We had one voter with over 5.12 million of the total 5.39 million votes. Basically, one person decided the outcome. In the future we will be bringing more nuance to the decision making process. See Roadmap for details.

The Vote Result



The original plan was to have vote percentages map directly to funding percentages in the second round. Due to low voter turnout and high vote disparity, this became infeasible.

Jade Shadow - Crash & Burn



Since the original draft whitepaper of Grant Ships, we had entertained the idea that if a ship didn't reach a certain threshold of votes, they would be jettisoned from the ship and a new crew would take over their position.

For the purpose of this Pilot Round, having Jade Shadow crash and burn and dividing the funds between the remaining 2 ships seemed the best move to recover the game. Ali heroically volunteered to "go down with the ship."

Thanks for taking one for team, Ali. Jade Shadow RIP.



The Community Vote

After the poor signal received from the Arbitrum Delegated vote, we decided to implement some of our planned "voting token" features (see chapter 6: Lessons Learned) in the form of a second round of voting.

This time we airdropped soul-bound tokens to grant recipients,

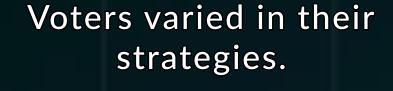
Ship Operators and a selection of 12 community judges.

At the time of writing, the vote is underway but we are already

seeing greater participation and more articulate reviews.

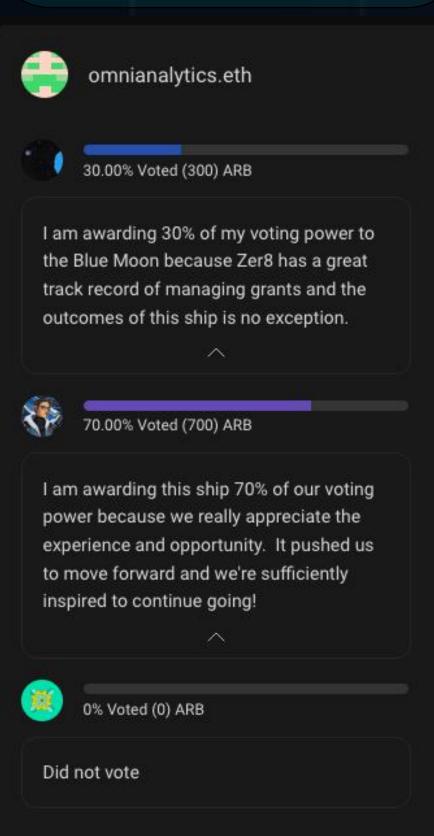
Voting Strategies

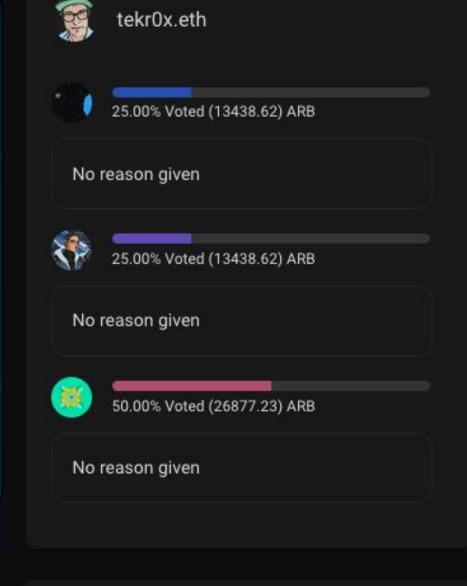
A Selection of Votes from the Round 1 Arbitrum TCR

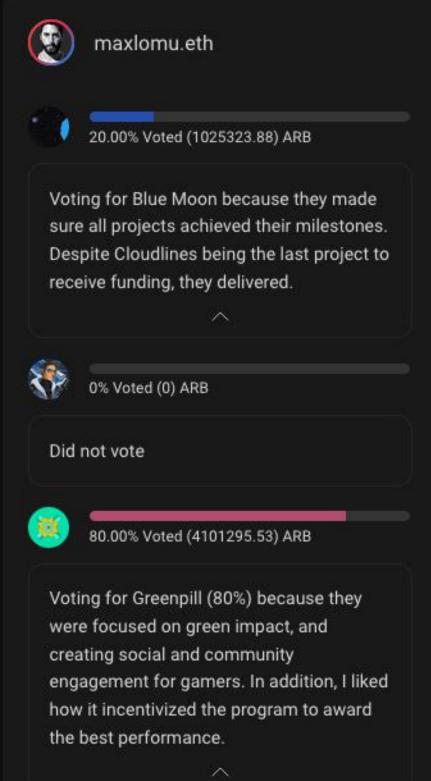


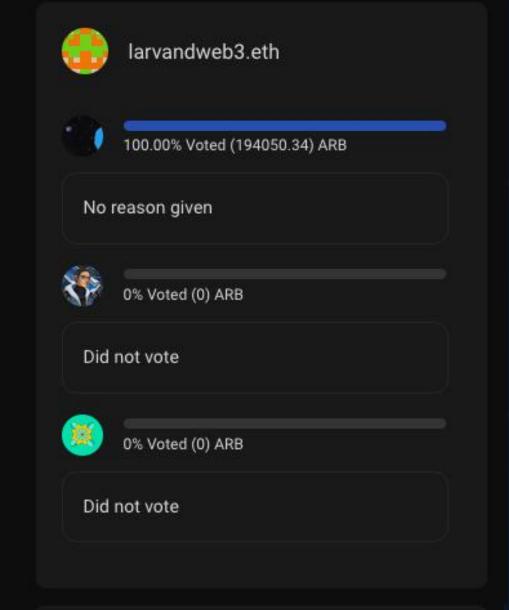
Some balanced their vote across the Operators.

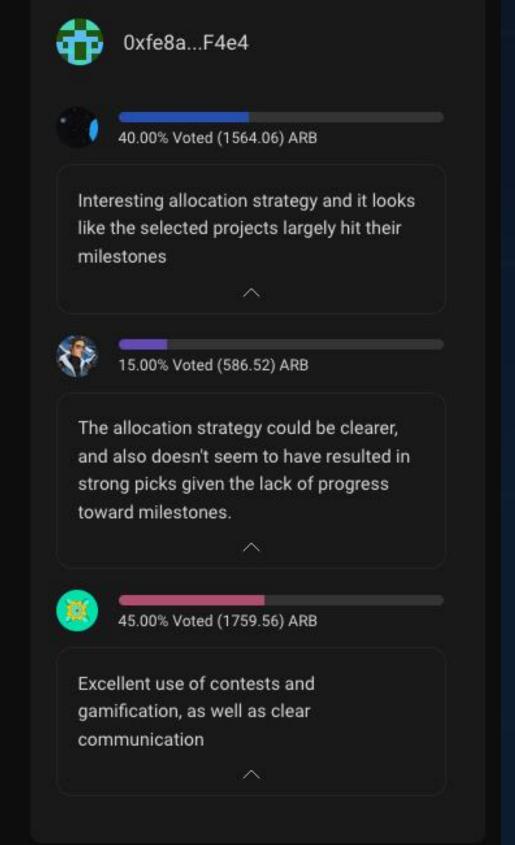
Others used an all or nothing approach.
Transparency on reasoning varied.
Operators found any feedback helpful.

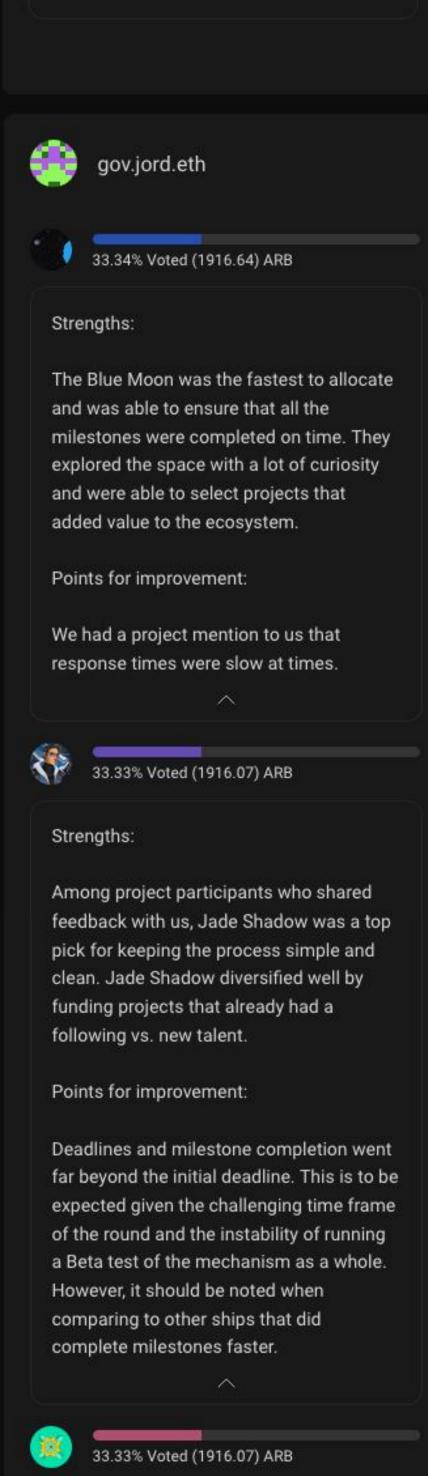












Strengths:

this more.

Points for improvement:

and refined over time.

Greenpill deserves recognition for

sourcing feedback from their community

regen within gaming is promising and I'm

looking forward to seeing them explore

While Greenpill's model was innovative

and interesting, some users expressed

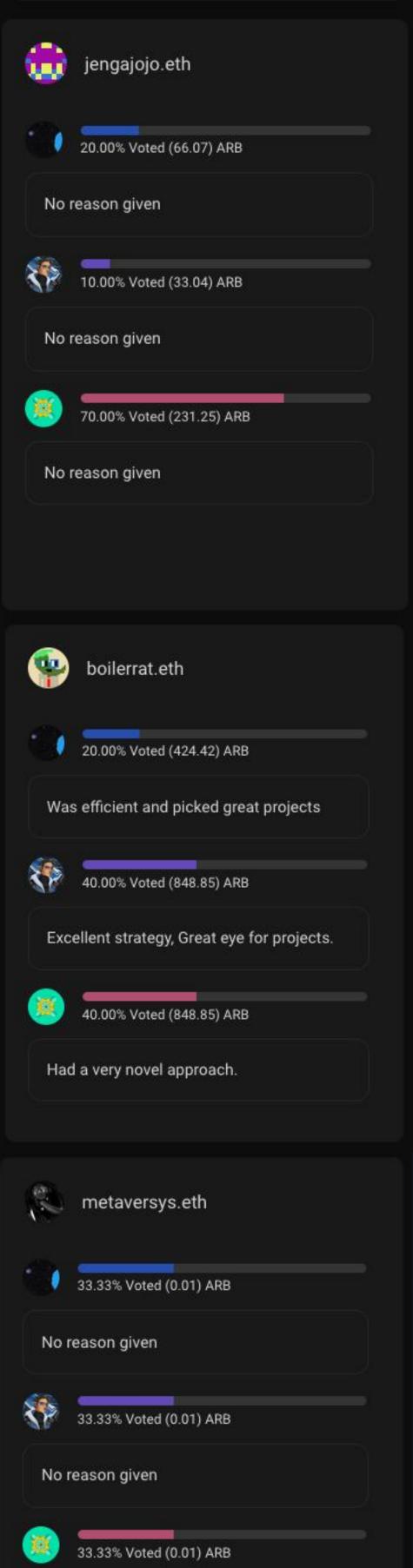
frustration with the complexity and cost of

participation. As with all new models, I see

this as something that can be iterated on

with Grant Ships. Also, their focus on

and getting a wider range of users involved



There were 13 unique voters who participated representing 5,393,040.92 ARB.

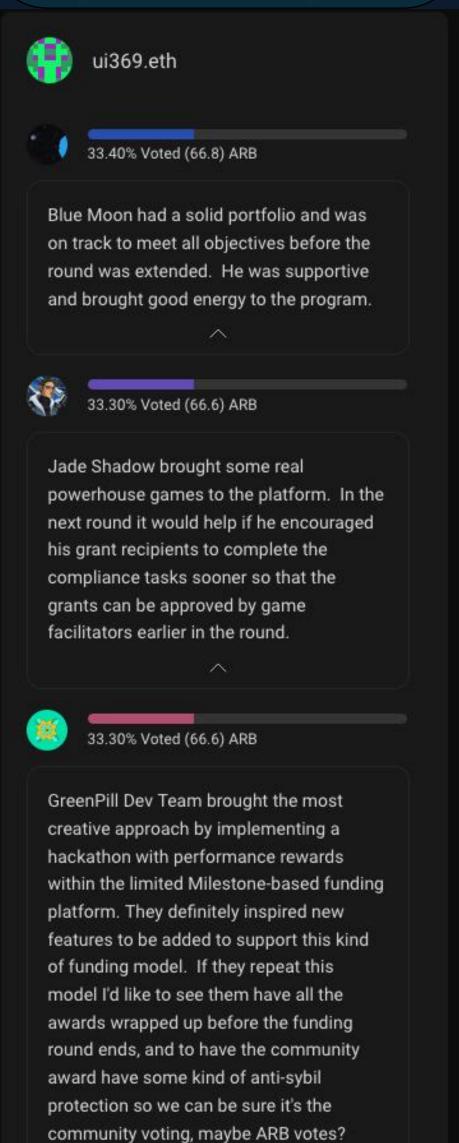
Three of those were from the DAO Masons team.

Voters were asked to assign a percentage of their voting power to each ship.

Voters could hold back some of their voting power if they chose.

Can you spot the whale?







No reason given



Chapter 6: Needs and Solutions

During the first pilot round we gave several surveys to our users. From their feedback we identified 3 core needs. We've listed them here along with our planned solutions for each of them.

The Need

Better Fitness Functions

Evolving the ideal grants programs depends on having a good fitness function. This means having a good way to assess performance and use that assessment to reward high performing ships and replace lowperforming ships.



Over time, the best allocation patterns should thrive and grow.

Recall from the first section that we originally gave ourselves an F+ in this area. Our fitness function was "What do Arbitrum Voters think?". Details aside, we did not receive a meaningful or useful signal from Arbitrum voters. With TCR votes, voter turnout, token balances and context/attention levels can vary widely. We've learned that this tool is too blunt an instrument and ill-suited to assessing the efficacy of a grants program.

Our learnings from the in-progress Community Vote (see Chapter 5) will inform the further design of our Grant Ships Voting Points system.

The Solution

Grant Ships Voting Points

We plan to add a multi-token voting system so that a DAO can signal alongside more invested contributors and reviewers. This system will allow soul-bound token airdrops to engaged spectators and participants when they complete in-game activities such as:

- Completing milestones (with bonuses for timeliness)
- Posting updates
- Publicly reviewing projects and ships
- Engaging with content (e.g. comments, upvotes, etc)
- Participating in past votes

This will create a scoring mechanism that we can correlate with voting power in the game. This will open up a rich design space we can use to encourage participation. It will also require fine-tuning to ensure that a meaningful signal is being gathered.



Voting parameters will be configurable so a traditional TCR vote could still be used entirely if so desired.

We believe these features will improve the fitness function and allow us to discern who the top performers are so they can rise to the top of the marketplace.

The Need

Projects Want to be Seen

For Grant Ships to thrive we need to build a 3 sided marketplace: Projects, Allocators, Community. Onboarding projects and giving them a way to show off is the highest leverage way to grow this marketplace.

We had multiple requests from game developers in our pilot round to add more ways to show off their projects on the Grant Ships platform. They wanted to include playable links, multimedia and engage with fans through the platform.

We believe that improving the project profile pages will increase the power of our "project magnet" - growing the community side of the marketplace and drawing in more allocators as well.

The Solution

Improved Project Profile Pages

We will improve the project profile page to become a stylish landing page for web3 gaming projects before expanding scope to include web3 projects in general. We will support more user customization options including including custom banner and background images, multimedia carousels, playable links and timeline updates.

These features will give community members and allocators a better way to sample and engage with the project and determine which projects are trending and worthy of their attention. This will also draw in projects who need a platform to show off, driving community engagement and turning the flywheel.

The Need

Smooth Grant Application Workflow

Even though the applicant experience on Grant Ships is reportedly a lot better than traditional grants programs (according to our surveys), Ships still need to more easily connect with projects they wish to fund. They need a way to communicate in-app with the grant recipient.

Reviewers need a way to audit the quality of the grant planning and milestone execution so they need to be able to see the interactions between funders and projects.

All users needs a better way to interact with and view the flow of each grant. The grant process needs to be more 'free-flow' to allow for better communication. Milestones need to be less rigid and should not require that they are submitted in order.

The Solution

Grant Pages

We will create a full Grant page for each project grant application. This page will allow users to view project grants, milestones, the negotiation process, approvals, and rejections in a timeline.

Many actions that occur in the main feed will link to content on the Grants page and put the grant negotiation process in the public eye.

This will include features to facilitate matchmaking by allowing a Ship Operator to send a 'beacon' to request that the project submits an application, reducing the need for 'offline' communication out of the public eye.

Chapter 7: Grant Ships Development Star Chart

(aka Roadmap)

Milestone 1: Builder Showcase

- Custom banners & background images
- Video support
- Multimedia carousel
- Multimedia-enabled feed updates
- Robust project updates
- Playable links
- Tagging & Filtering
- Improved navigation
- User comments
- Community interaction

Milestone 3: Grant Ship Voting Points

- Reward voting tokens for user participation
- Scoring & Badging incentive mechanism for most engaged users
- Dual-token voting with improved TCR weight options
- Configurable voting rounds

Milestone 5: Playtesting & Reviews

- Allow projects to share the most recent build of their game
- Allow community to play-test and leave feedback with custom onchain surveys
- Verification system for reviews (spam prevention)
- Mechanism to reward reviewers with Grant Ships Voting Token.
- Encourage a reviewer media ecosystem to provide additional accountability and visibility

Milestone 2: Grant Pages

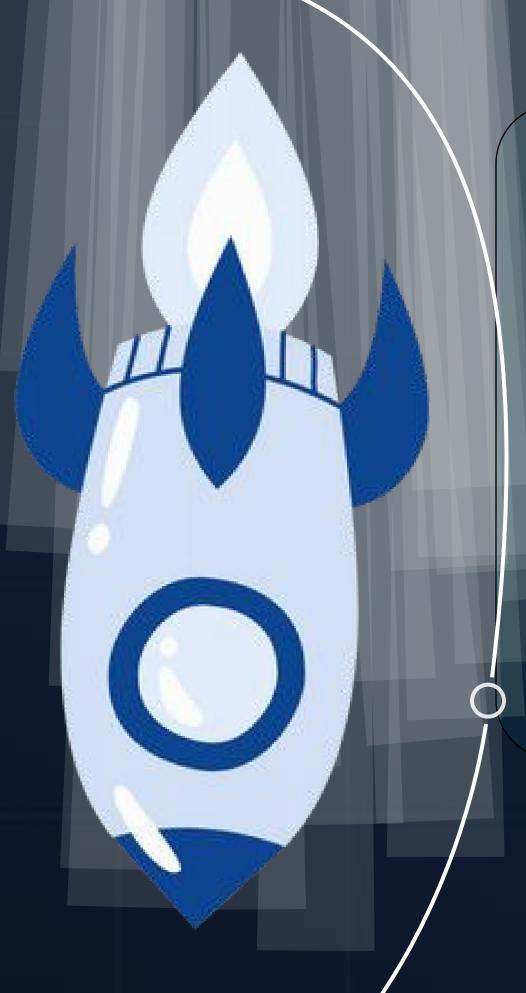
- Dedicated grant application page
- In-app communication during grant negotiation
- Discussion, Approval, Rejection timelines
- Fund claw-back features
- Matchmaking features including Operator invite "beacon" feature
- Links from project update feed

Milestone 4: Notifications & Comms

- Users get real-time notifications on in-game events
- Targeted subscriptions Improve in-app notifications
- Post events to mobile clients (ex. Push Protocol)
- Automatic posting to social accounts
- Social sharing features

Milestone 6: Self-Monetization

- Allow projects to monetize and receive donations in-app.
- Venture capital features to allow investment alongside grant options aka Venture Ships
- Piece-by-piece
 agreement generator
 for smooth and legal
 contract negotiations



Special Thanks

Sponsoring Partners

Grant Ships was originally designed as an entry in a "pluralistic grants program" design contest hosted by Disruption Joe. Grant Ships was the winning entry and we received a 500 ARB prize.

This was enough motivation for us to flesh out the idea and make a formal grant application to Plurality Labs. We received the grant to build Grant Ships in November 2023. They suggested we increase our build budget by 90K ARB to fund this Pilot Round.

Since then Plurality Labs has joined forces with Thrive's ThankARB program who have been a pleasure to work with also.

Thank you for helping Grant Ships become a reality!



Technical Partners

Grant Ships wouldn't be possible without key web3 protocols and developer expertise that have been cultivated and refined over the years.

In particular we'd like to thank the Haberdasher Labs, Gitcoin Allo, Envio and PublicHaus teams for their brilliant technological support during the development of Grant Ships.









Gaming Partners

Special thanks to the Ship Operators and all of the project teams building these amazing games who helped us test a new grants platform. Their energy and support have been essential to our success so far. We look forward to seeing how far they go!

The Ship Operators







Blue Moon

Jade Shadow

Green Pill Dev

The Games



Monkey Empire



Smithonia



GMetaRaves: Beats



EcoLand



Omniacs.Run!



Cloudlines



AR World



The Beacon

Grant Ships was created by DAO Masons, a values-driven builder guild committed to helping organizations succeed through superior governance systems.

