Ocean Progress Report for Ocean Ecosystem

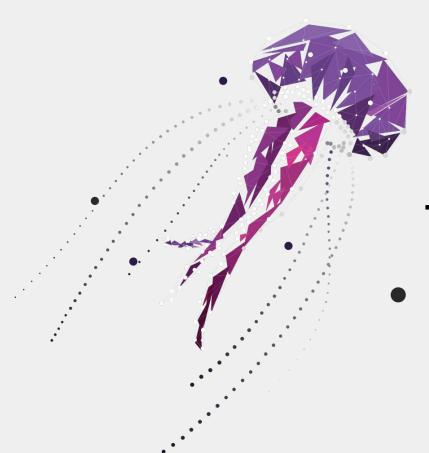
Trent McConaghy Oct 6, 2021



Outline

- Top-Level Overview
- Teams 1: OPF Core
- Teams 2: Third-Party Markets
- Teams 3: Product Contracts to OPF
- Teams 4: OceanDAO Teams
- Looking Forward



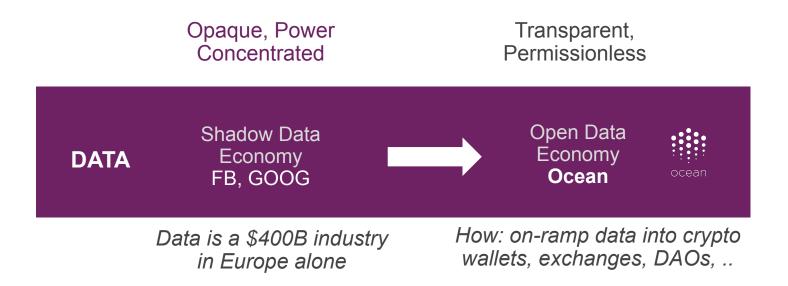


Top-Level Overview



Ocean Mission: open up data, while maintaining privacy

Towards self-sovereign data for individuals and groups.





What is Ocean?

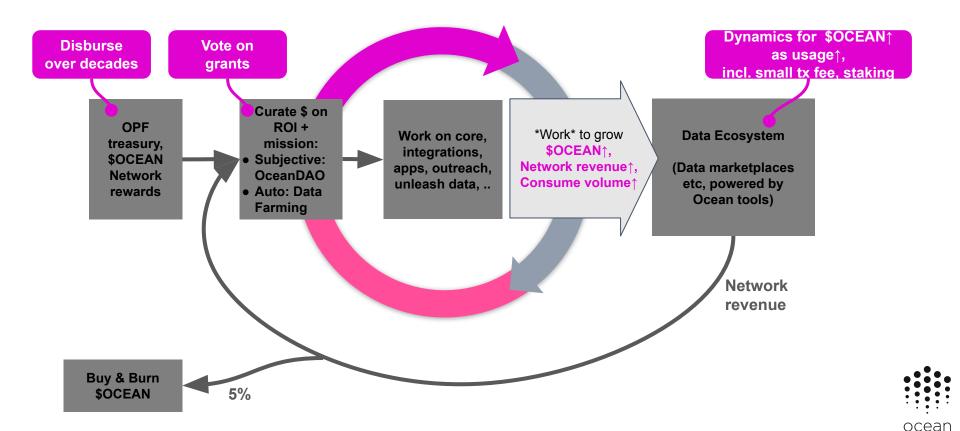
Ocean is...

- A community / ecosystem of individuals and orgs driving to the mission (initiated by Ocean Protocol Foundation)
- 2. A set of tools as public infrastructure to facilitate the mission
- 3. A token (OCEAN) with incentives to grow & sustain the ecosystem



Ocean Web3 Sustainability Loop

blog.oceanprotocol.com/the-web3-sustainability-loop-b2a4097a36e



KPIs & Traction Pillars

Main KPIs:

- **Drive \$OCEAN** -- leads to a healthy ecosystem
- Drive network revenue -- actionable metric
- Drive consume volume -- actionable metric + focus on value creation

Traction Pillars

- **Bottom-up:** Ocean Market users; developers; startups
- Top-down: enterprises, consortia
- DeFi "jugular"



Teams in Ocean ecosystem

- 1. OPF core team
- 2. 3rd Party Markets
- 3. OPF Product Contracts
- 4. OceanDAO teams

Let's review progress of each...







3 Core Products

Ocean Core Product (BE + Market) → Main Ocean USP

OceanDAO → Grow ecosystem, decentralize, long-term sustainability



Top-Level Goals 2020, 2021

2020: build Ocean "backbone"

- Ship V2: Compute-to-Data
- Ship V3: Datatokens + AMMs + Ocean Market
- Ship OceanDAO
- Bottom-up: improve Ocean Market & BE

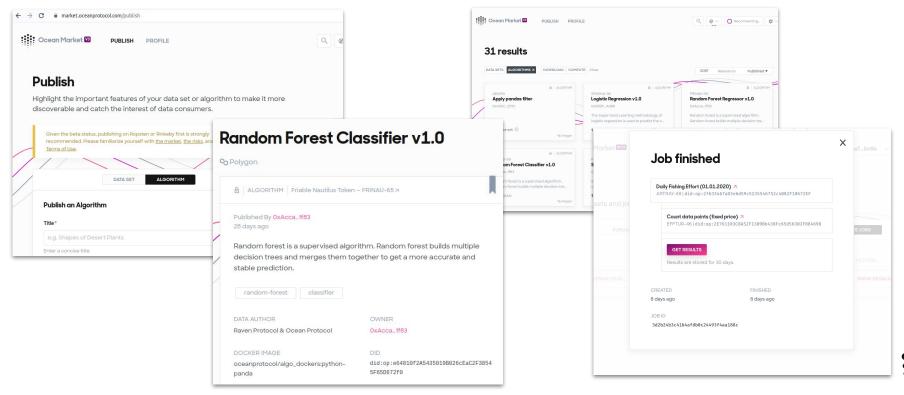
2021: drive traction via "meat on backbone"

- Bottom-up: improve Ocean Market & BE
- Top-down: improve via enterprises, Gaia-X, ...
- Ship Polygon: fix high tx fees
- Scale OceanDAO
- Ship V4 & Data Farming: consume incentives & solve rug pulls



OPF core highlight: C2D In Ocean Market

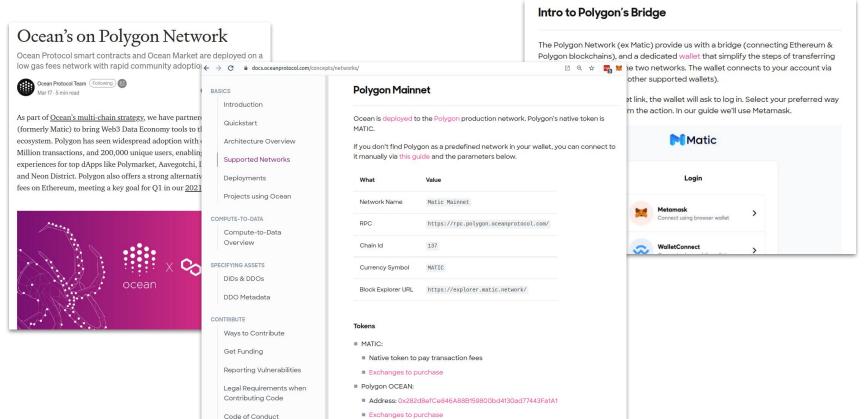
blog.oceanprotocol.com/compute-to-data-is-now-available-in-ocean-market-58868be52ef7





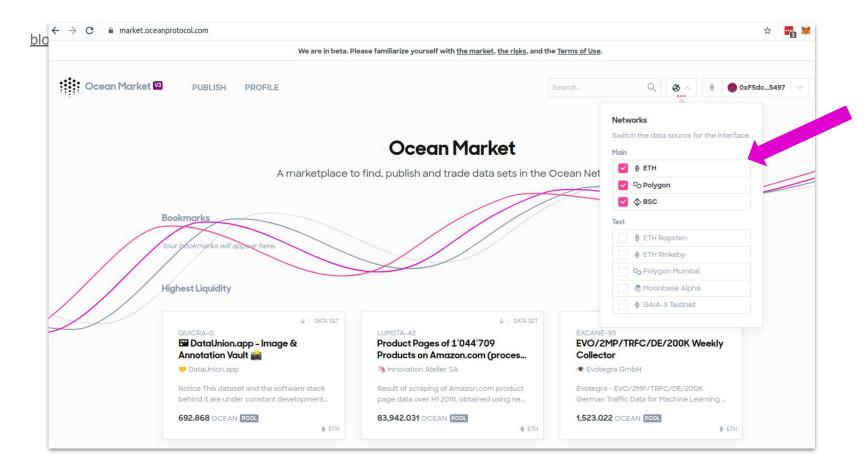
OPF core highlight: Fix gas costs: Polygon

blog.oceanprotocol.com/ocean-on-polygon-network-8abad19cbf47





OPF core highlight: Multi-chain assets not siloed





OPF core highlight: Fine-grained permissions

blog.oceanprotocol.com/fine-grained-permissions-now-supported-in-ocean-protocol-4fe434af24b9

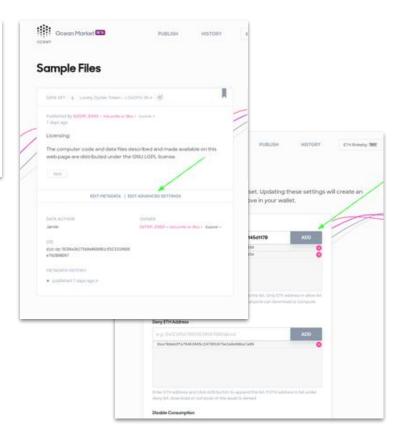
How to handle data exchange for

- image: Medical data only for credentialed EU researchers
- Selling automotive data within a consortium
- Sharing data across offices in a multinational?

@oceanprotocol fine-grained permissions handles this



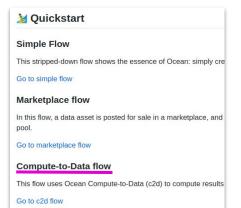






Better dev onboarding: ocean.py C2D Quickstart

github.com/oceanprotocol/ocean.py/blob/main/READMEs/c2d-flow.md















- 1. Setup
- 2. Alice publishes data asset
- 3. Alice publishes algorithm
- 4. Alice allows the algorithm for C2D for that data asset
- 5. Bob acquires datatokens for data and algorithm
- 6. Bob starts a compute job
- 7. Bob monitors logs / algorithm output



Only inputs needed: DATA_did, ALG_did. Everything else can get computed as ne

In the same Python console:

order & pay for dataset

```
In the same Python console:

DATA_did = DATA_ddo.did  # for convenience

ALG_did = ALG_ddo.did

DATA_DDO = ocean.assets.resolve(DATA_did)  # make sure we operate on

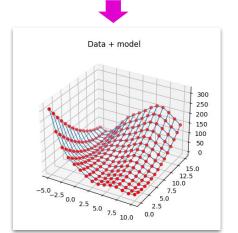
ALG_DDO = ocean.assets.resolve(ALG_did)  # make sure we operate on

Compute_service = DATA_DDO.get_service('compute')

algo_service = ALG_DDO.get_service('access')

from ocean lib.web3 internal.constants import ZERO ADDRESS
```

from ocean_lib.models.compute_input import ComputeInput



OPF Core: Solve rug pulls & reduce IL (WIP)

Problem 1:

- Rug pulls are when a token whale pulls out of their large position in a pool, hurting other stakers
- In Ocean V3, every publisher is a datatoken whale
- Rug pulls happened :(

Problem 2:

 Significant impermanent loss (IL) because staking OCEAN bought DTs (with slippage), and unstaking sold DTs (with slippage)



OPF Core: Solve rug pulls & reduce IL (WIP)

Solution for Ocean V4: One-sided staking (1SS)

- Initial datatokens are controlled by the pool, *not* the publisher
- Pool mints datatokens when OCEAN is staked, burns when unstaked
- Publishers are not datatoken whales → no opportunity to rug pull
- Staking OCEAN *doesn't* buy DTs → no slippage → no IL in act of staking
- Unstaking OCEAN *doesn't* sell DTs → no slippage → no IL in act of unstaking
- Though there's still IL if OCEAN:DT ratio changes from (a) when you stake to (b) when unstake



Criterion

Ocean

V3

×

×

XX

VV

LBP

×

×

1SS

~

V

~

~

~

×

LBP+

1SS

×

LBP + 1SS

Dutch: Pub

1SS +

Dutch: Pool

×

1SS +

Vesting

1SS +

Dutch: Pool

+ Vesting

OPF core: Token Engineering to solve rug pulls & reduce IL (WIP)

Simple to understand, build, maintain

Avoids large price swings / IL when people just want to stake OCEAN

Solves price spikes at beginning

Solve rug pulls

initially

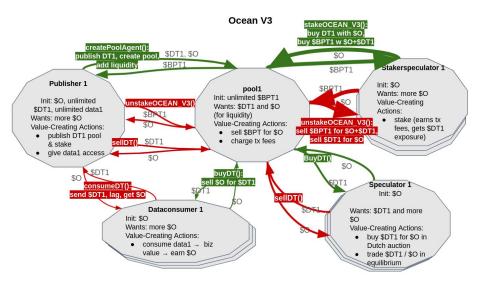
Solves price spikes in market equilibrium

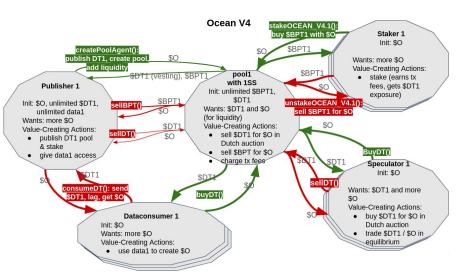
Good incentive for publisher to publish

Solve rug pulls & reduce IL: Modeling V3 → V4

https://github.com/tokenspice/tokenspice

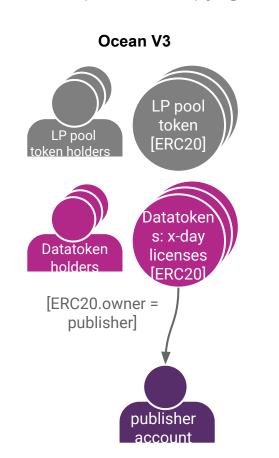
TokenSPICE: EVM Agent-Based Token Simulator Unit Testing passing MyPy Static Typechecking passing TokenSPICE simulates tokenized ecosystems via an agent-based approach, with EVM in-the-loop. It can help design, tune, and verify tokenized ecosystems. It's young but promising. We welcome you to contribute! Each "agent" is a class. Has a wallet, and does work to earn \$. One models the system by wiring up agents, and tracking metrics (kpis). Agents may be written in pure Python, or with an EVM-based backend. A "netlist" defines what you simulate, and how. It wires up a collection of agents to interact in a given way. You can write your own netlists to simulate whatever you like. The assets/netLists directory has examples.

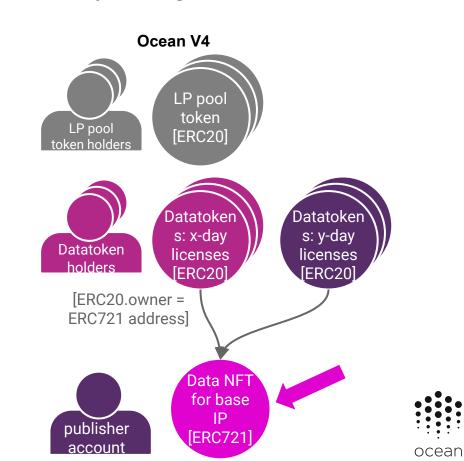




OPF Core: Data NFTs (WIP)

ERC721 represents copyright holder. Enhances flexibility, leverages ERC721 tools





OPF Core: Data Farming

Liquidity mining style program to incentivize data consume volume



Data Farming can only run at scale when rug pulls are solved.

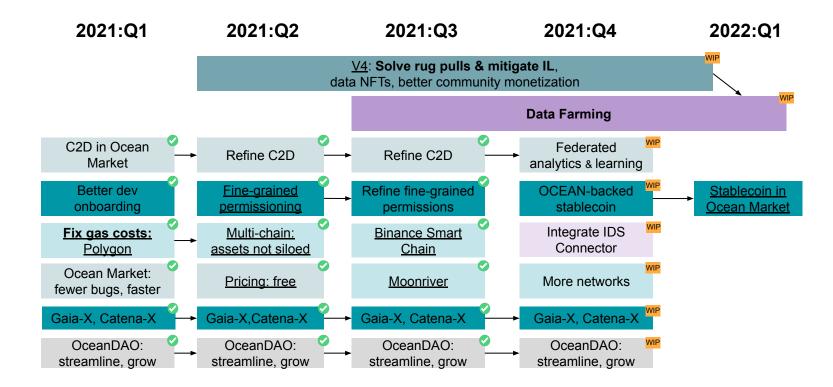
V4 solves rug pulls.

Therefore, Data Farming at scale will follow on the heels of V4.



OPF Core: Roadmap

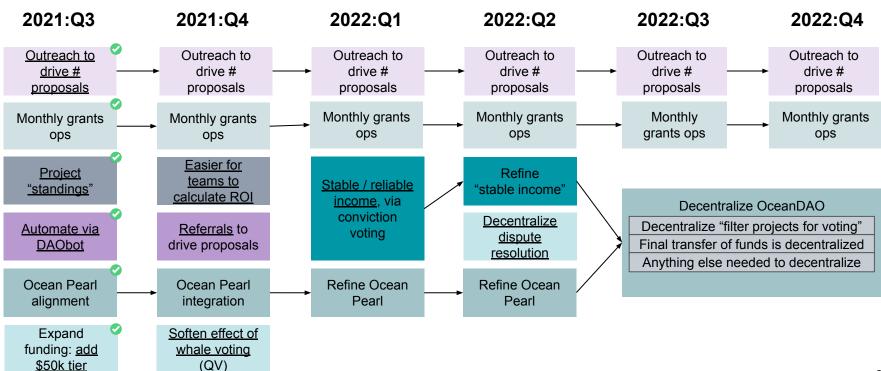
blog.oceanprotocol.com/ocean-product-update-2021-6875bc1f804f





OPF Core: OceanDAO & decentralization roadmap

blog.oceanprotocol.com/oceandao-roadmap-update-q3-2021-to-eoy-2022-c73038699a6f







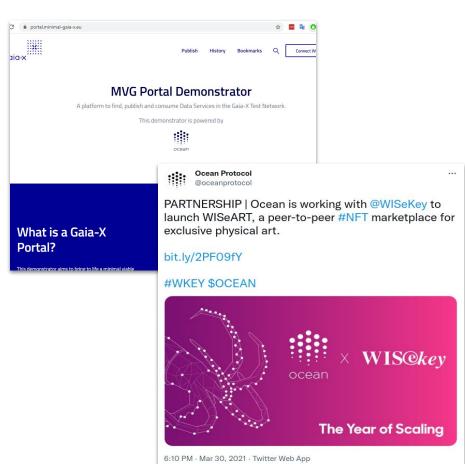
Teams 2: Third-Party Markets



Teams 2: Third-Party Markets

- 1. Ocean Market live
- 2. BDP live
- 3. GAIA-X Ref Mkt live demo
- 4. Catena-X Ref Mkt live demo
- 5. WISekey WIP, live before EOY
- 6. (largeco) WIP, live before EOY
- 7. (largeco) WIP, live before EOY
- 8. (medco) WIP, live before EOY

(plus several more via OceanDAO)







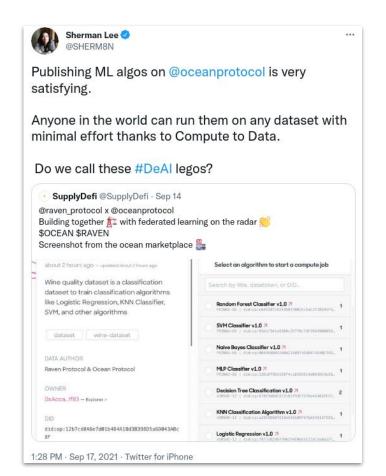
Teams 3: Product Contracts to OPF



Teams 3: Product Contracts to OPF: Summary

Org	What	Date started
Raven Protocol	Add more AI/ML algorithms WIP Federated analytics Federated learning	Q2 2021
Altoros	Datatoken-first wallet alphaWIP Datatoken-first wallet MVP	Q2 2021
DeltaDAO	Gaia-X demo Catena-X demo Privacy review WIP Gaia-X & Catena-X ongoing work	Q2 2021
Datarella	Catena-X demo (w Bosch + fetch.ai) WIP Integrate IDS Connector	Q2 2021
UTU	UTU curation signals in UTU appWIP UTU signals in Ocean Market	Q2 2021

Teams 3: Raven Protocol: Add more AI/ML algs

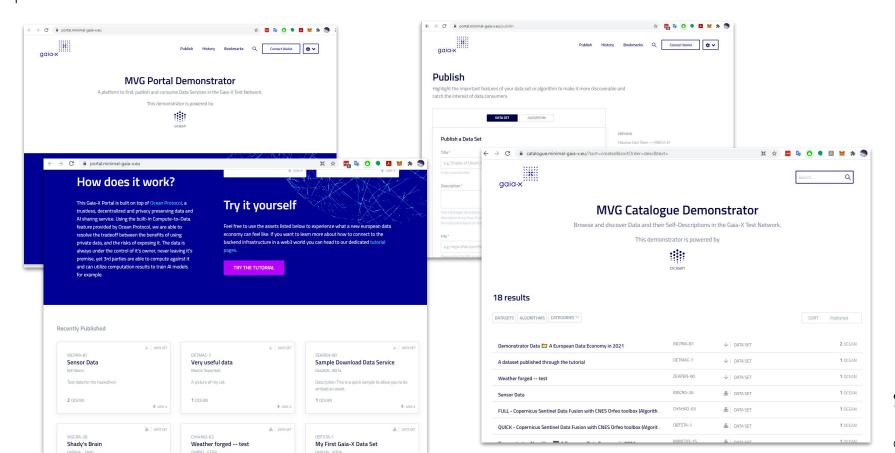






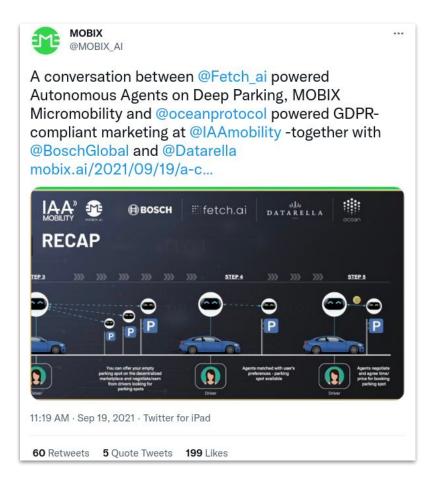
Teams 3: DeltaDAO: Gaia-X Demonstrator

https://portal.minimal-gaia-x.eu





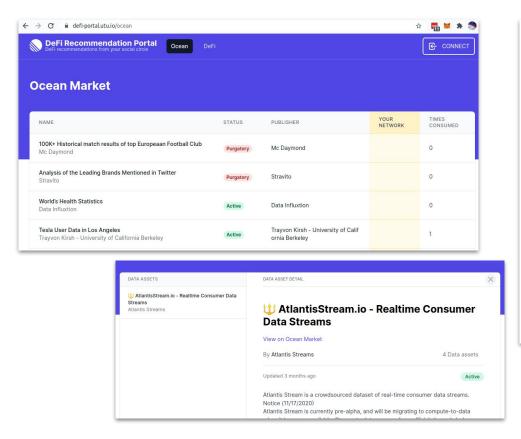
Teams 3: Datarella / Mobix + Bosch + Fetch.ai

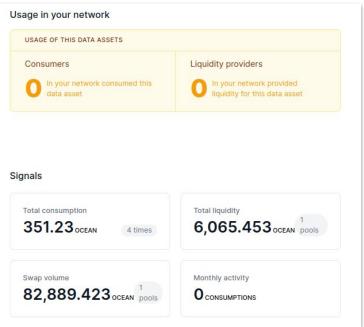




Teams 3: UTU Recommendations

https://defi-portal.utu.io/ocean









Teams 4: OceanDAO teams



4. OceanDAO teams. 84 and counting!

oceanpearl.io/projects



Projects

Dao Proposals



Project overview

See what the community has to offer.



Ocean Vantage Build & Integrate

Facilitate data offerings, staking and data consumption on the Ocean Protocol network by...

Project Coral

Outreach

Project Coral is an outreach and community building initiative to bootstrap an Open Science Data.

Coral Market

Build & Integrate

Coral Market is open-source application for GDPR-compliant self-sovereign scientific data...



Dataset with new classes like

pedestrian, car, motorcycle,...

Ocean Pearl Outreach

We bootstrap a communitybased project tracking platform for the Ocean ecosystem with an... RuaPullIndex Build & Integrate

#

When the Ocean Protocol first launched their dynamically priced data set pools (a fork of Balancer...



Algovera Onshore Build & Integrate

Kagale for Data Scientists utilizing Ocean Protocol



Onshore OCFAN Build & Integrate

Kagale for Data Scientists utilizing Ocean Protocol.



DataUnion Foundation Unleash Data

We want to give everyone the ability to use their data for a better future and their own profit.



inspired by the Ocean Protocol

eco-system. We develop a variet...

Data Whale Build & Integrate Data Whale is a startup that is

Build & Integrate RAZ simplifies ESG and investment data management while making the influence of impact on...

RAZ Finance



Ocean Greek Commun... Outreach

Create an Ocean Protocol Newsletter/Blog for the Greek Community



	運	(8)	•
Ocean x DeFi Outreach Increase avareness of Ocean protocol and how it fits into the crypto ecosystem in order to buil.	Currents Project unleash bate Our gool is to build actionable passivitary datasets for angle taders and investors, we aim to.	Project Appleseed Outrooch By grobbing just a share of the large university administrate data niche, Ocean Protocol would not.	Votes4LPs build 6 integrate briending the Ocean Protocol Snepshot stragies to cover more liquidity pools.
	₩ Semme what	(D)	Sec.

ublish ultra law latericy Object Detection Network for face eaction and soals on the ocean.	lick-start the German Ocean- based data economy by introducing ocean to the leading.	I will build angested strategies that will allow almost all OCEAN holders to vose for Ocean DRD without.	A gosless snapshot base tool for governing datap siquidity Providen
::::	★	(*)	(***) (***)
EU Regulations	OCEAN Dashboard	Voting Mechanism Des	Pool Screen
Oerman (tu) regulatory equirements for decentralized data exchanges	Dopp to track oil Ocean taken movements (daily, weekly, monthly) in various wallets.	Exploring both different voting mechanism design options and potential content or community	Better Stats is a dapp the various metrics for a give pool over a given time

101	
Analytics Translation	
shantles as a project will grow	
beyond the current trends as	
noted above from the Blackback	

Moon Jelly

Liquidity Pool Handling

:::: Buidl Ocean



Datalatte.ai

monetize their own data and

H

Research Data Econo...

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::::

Ocean Pool Alerts



Resilient MI

robust, interpretable machine

Datapeek



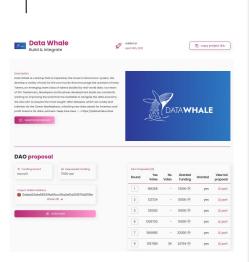
Hama - Securely Mone...

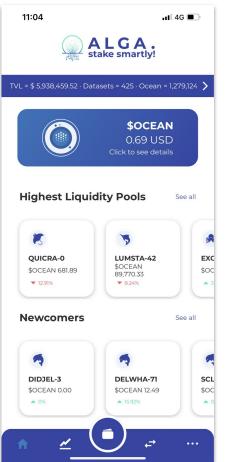
monetise their web services using

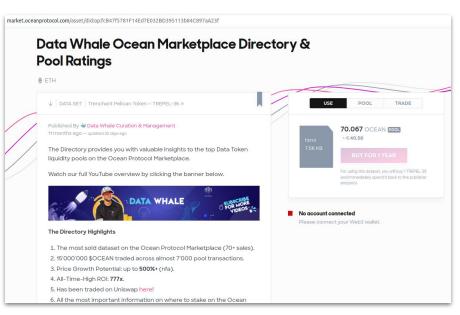




Team: Data Whale Data Ratings, Data Wallet

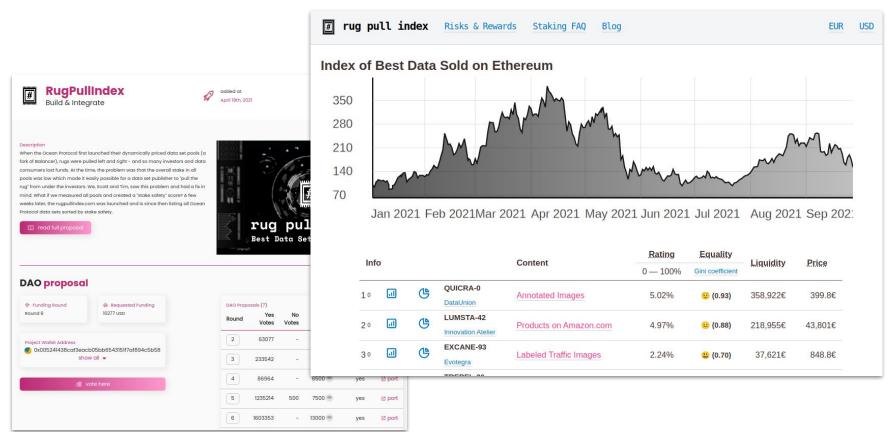






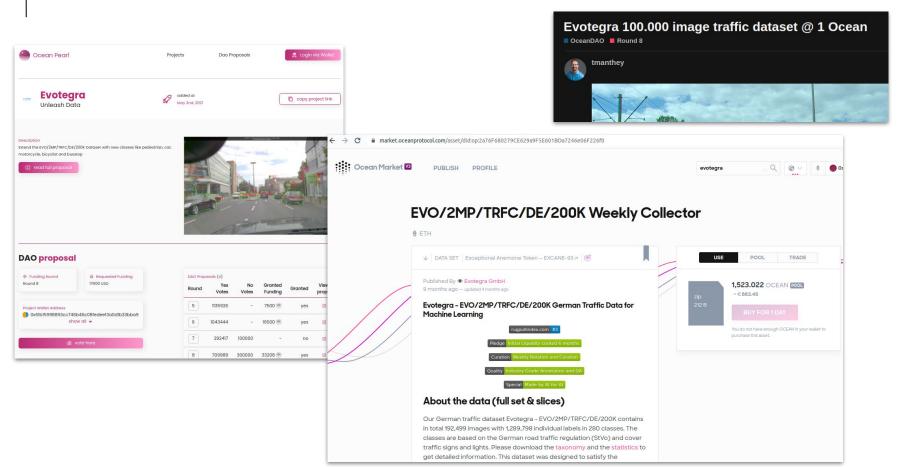


Team: RugPullIndex Data Ratings



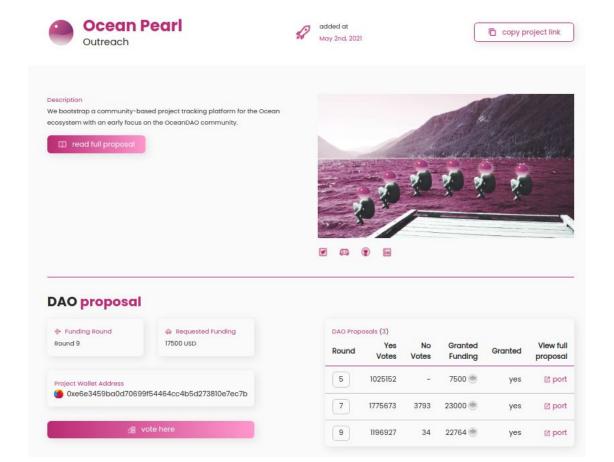


Team: Evotegra High-quality Datasets



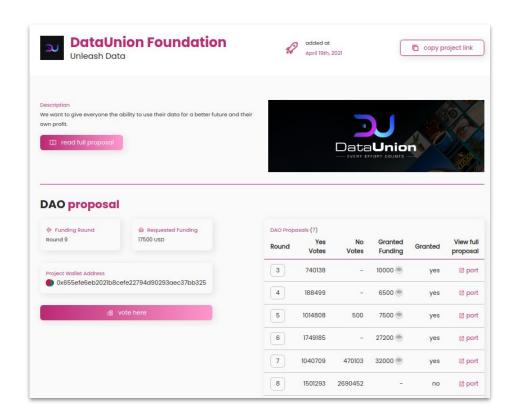


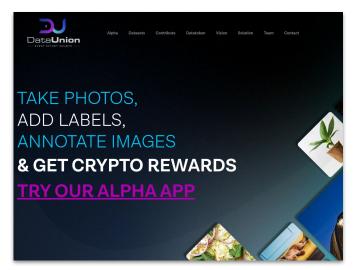
Team: Ocean Pearl Project Tracker→OceanDAO frontend





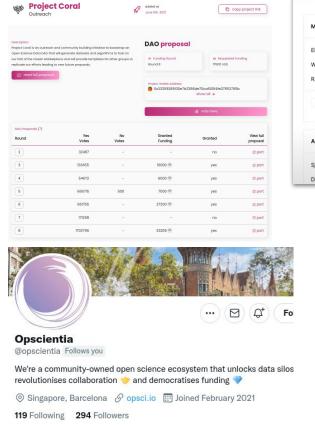
Team: DataUnion Al Image Labeling Union

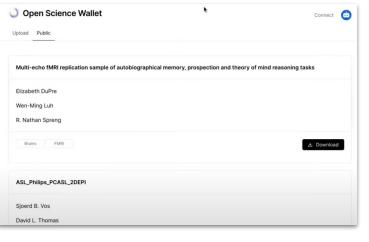


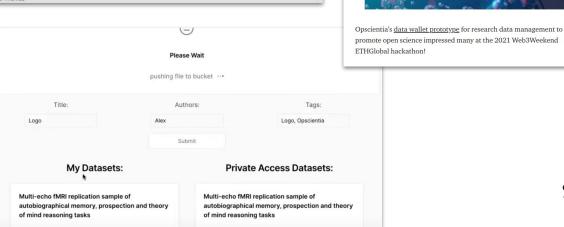




Team: Project Coral Data DAO around Open Science







Opscientia DAO Wins Multiple

0000 ...

Awards at the EthGlobal

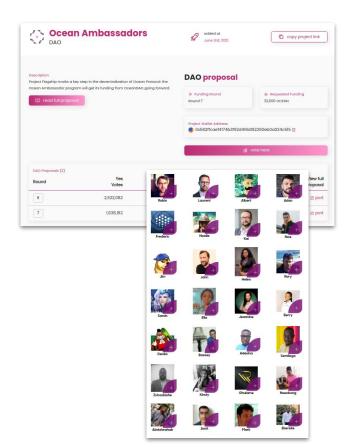
Hackathon

Alexandra McCarroll Follow &

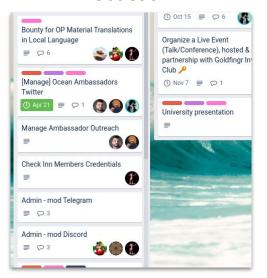
Team: Vantage Crypto WSS Integration, Data Market



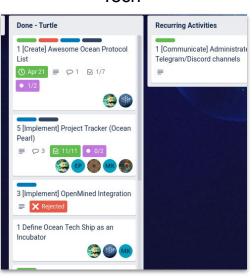
Team: Ocean Ambassadors



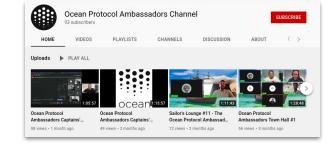
Outreach



Tech



Podcast







Here's some highlights of @OceanDAO_ since day one:

106 projects funded, building and strengthening Ocean's ecosystem and the data economy

121,672,417 OCEAN Voted

194,868 OCEAN burned since Round 8

More on OceanDAO here: oceanprotocol.com/dao



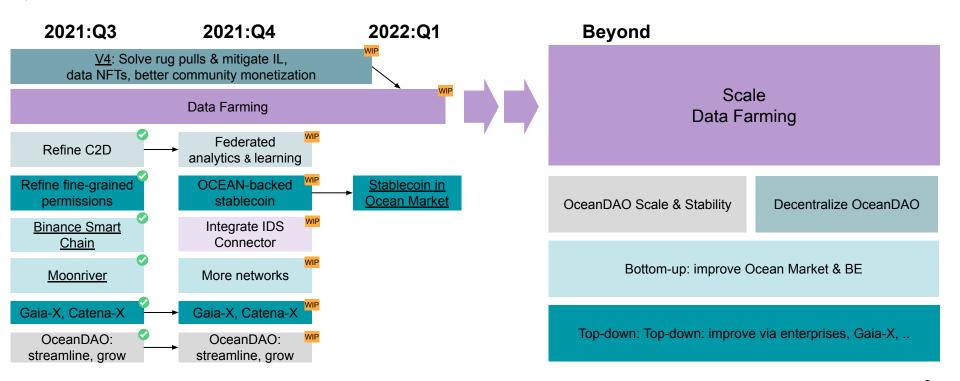




Looking Forward



Looking Forward: Roadmap





Looking Forward: Top-Level Goals 2020, 2021, 2022

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- Ship V2: Compute-to-Data
- Ship V3: Datatokens + AMMs + Ocean Mkt
- Ship OceanDAO
- Bottom-up: improve Ocean Market & BE

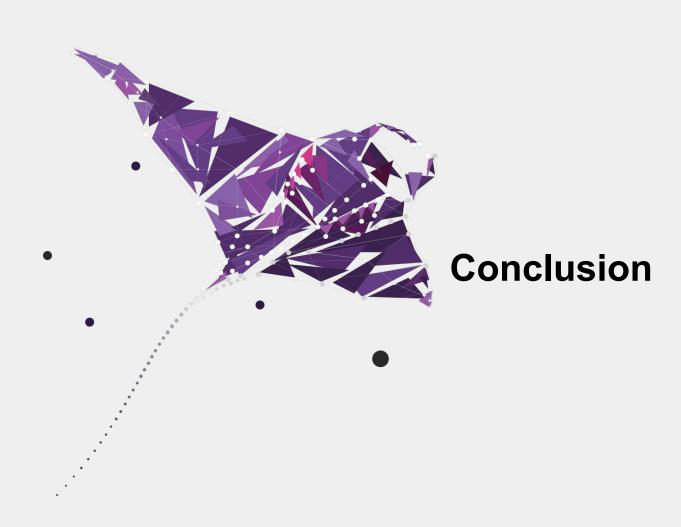
2021: drive traction via "meat on backbone"

- Bottom-up: improve Ocean Market & BE
- Top-down: improve via enterprises, Gaia-X, ...
- Ship Polygon: fix high tx fees
- Scale OceanDAO
- Ship V4 & Data Farming: consume incentives & solve rug pulls (actual date: Jan 2022)

2022: drive traction, decentralize

- Scale Data Farming
- OceanDAO: scale, stabilize, decentralize
- Bottom-up: improve Ocean Market & BE
- Top-down: Top-down: improve via enterprises, Gaia-X, .







Conclusion

We covered...

- Top-Level Overview
- Teams 1: OPF Core
- Teams 2: Third-Party Markets
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Together, we're unleashing an open data economy.



configuration in order to increase

platform designed to act as a...