



Towards an AI Commons

@oceanprotocol
Trent McConaghy

SUSTAINABLE DEVELOPMENT GOALS





Q: can AI help?



AI + Satellite projects





AI + Smart Communities



2017: AI FOR GOOD SUMMIT



XPRIZE®



United Nations Educational, Scientific and Cultural Organization



United Nations Environment Programme



for every child



The UN Refugee Agency



United Nations Office for Disarmament Affairs



United Nations Development Programme



World Intellectual Property Organization



United Nations Office for Disaster Risk Reduction



Office of the High Commissioner



United Nations Office on Drugs and Crime



United Nations Institute for Training and Research



Investing in rural people



Comprehensive Nuclear Test Ban Treaty Organization



United Nations Population Fund



United Nations International Research and Training Institute



United Nations Industrial Development Organization



United Nations Development Programme



United Nations University



United Nations Institute for Disarmament Research



United Nations



United Nations Economic and Social Commission for Europe



United Nations Office for Outer Space Affairs



United Nations Office for Project Services



United Nations

UN DESA



Q: can AI help?

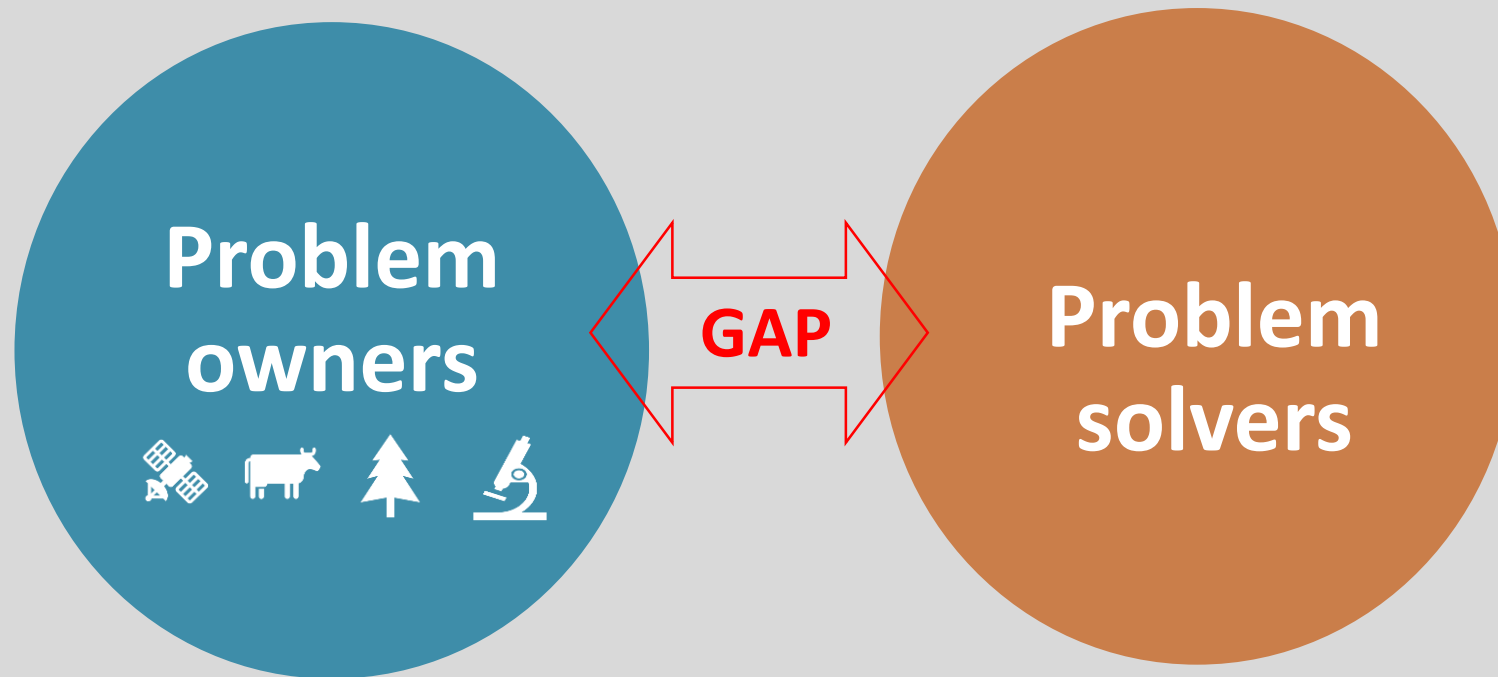
A: Yes! #AIforGood

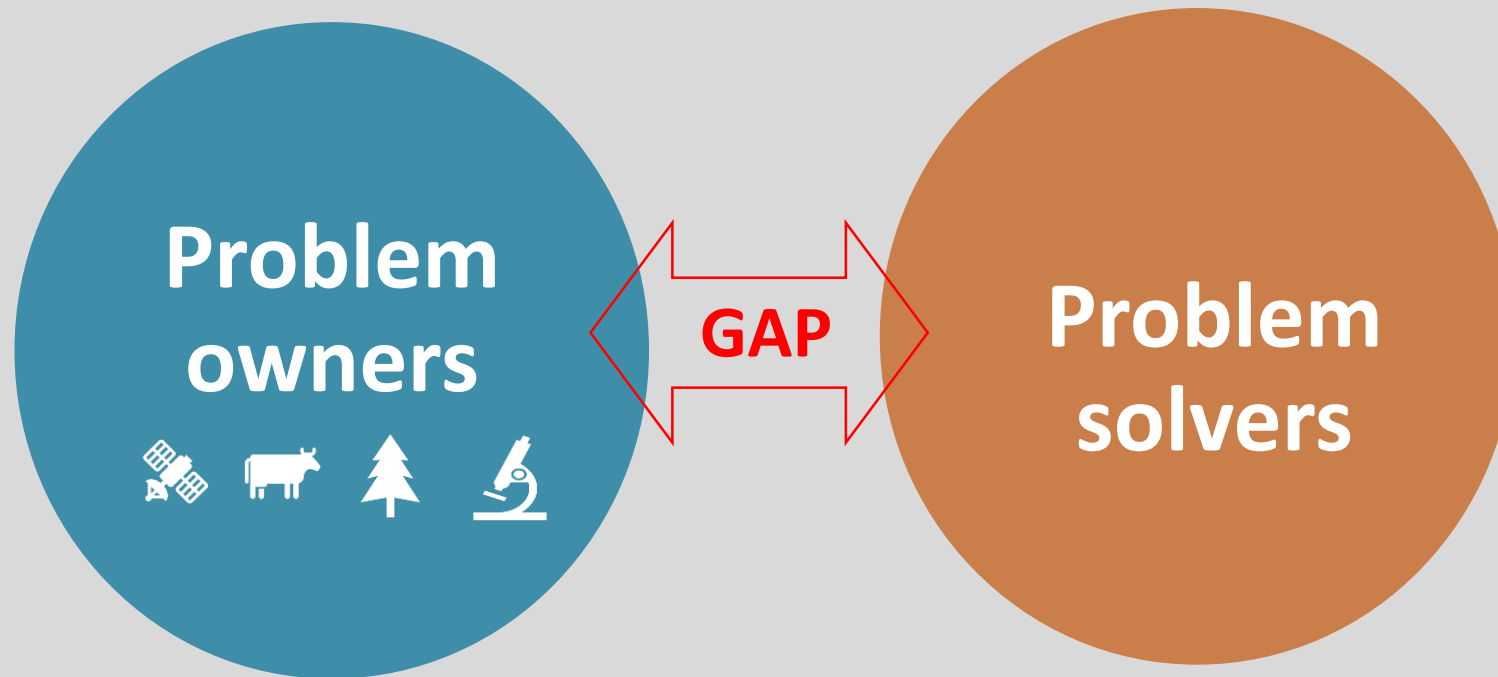


Q: can AI help?

A: Yes! #AIforGood

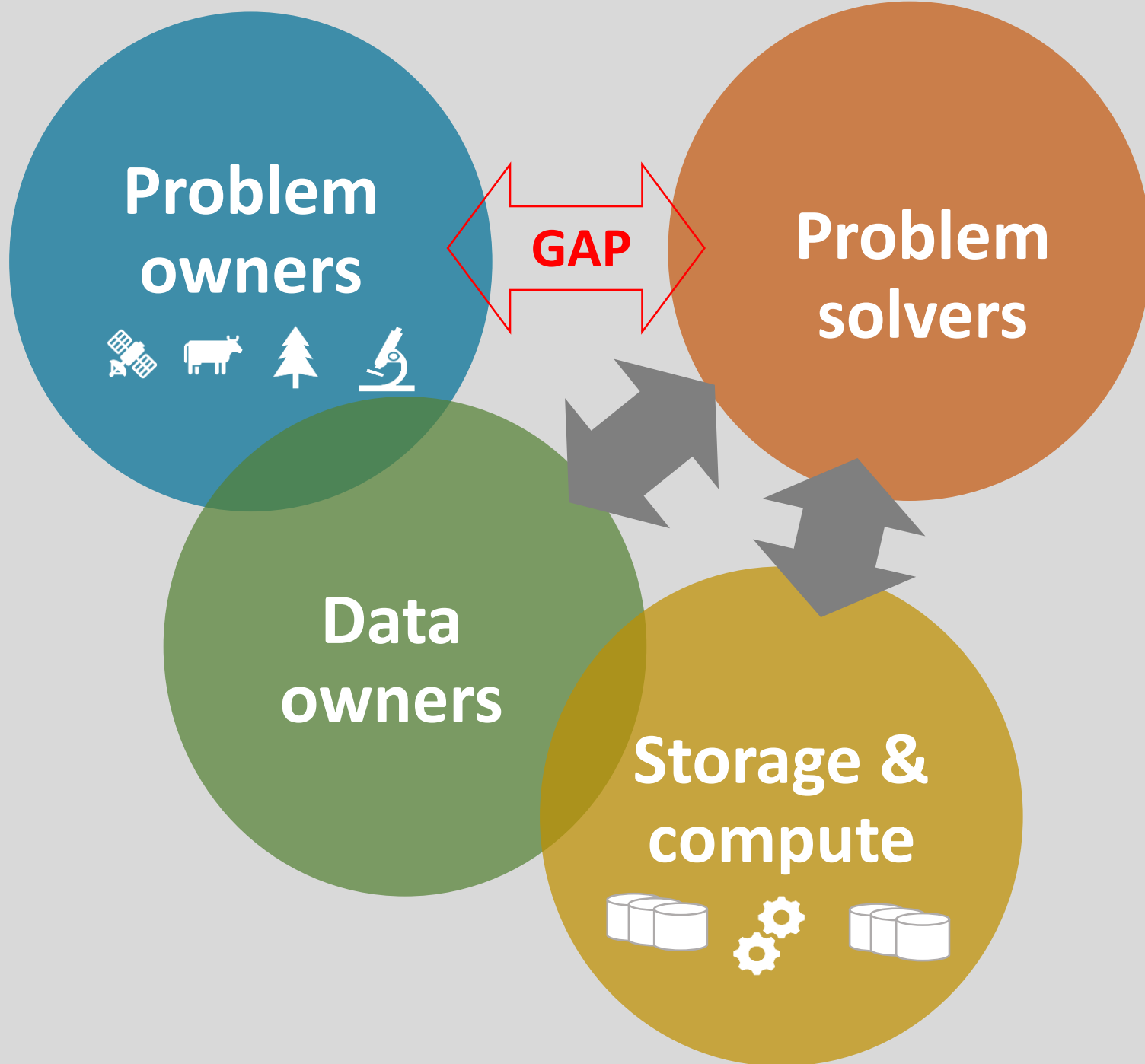
But...





Scaling #AIforGood



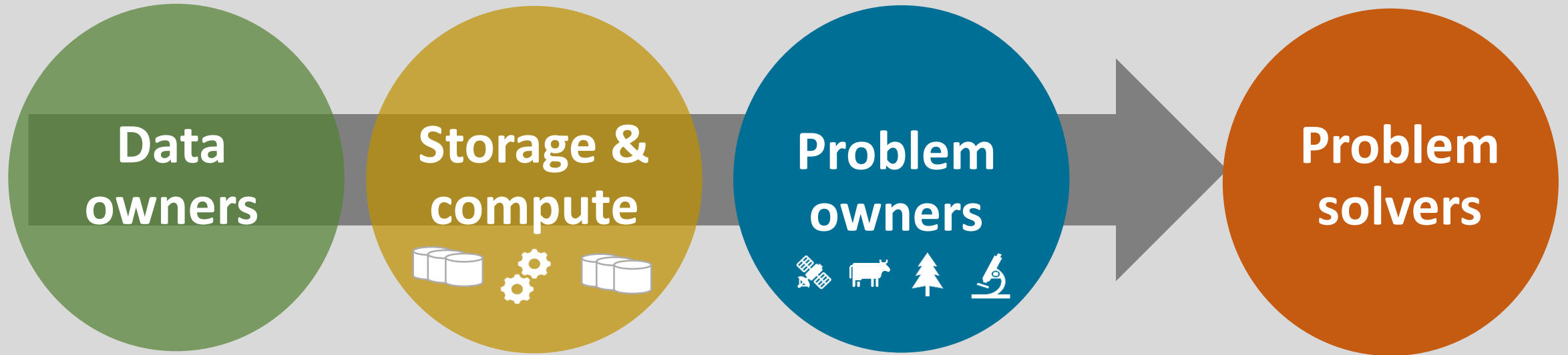




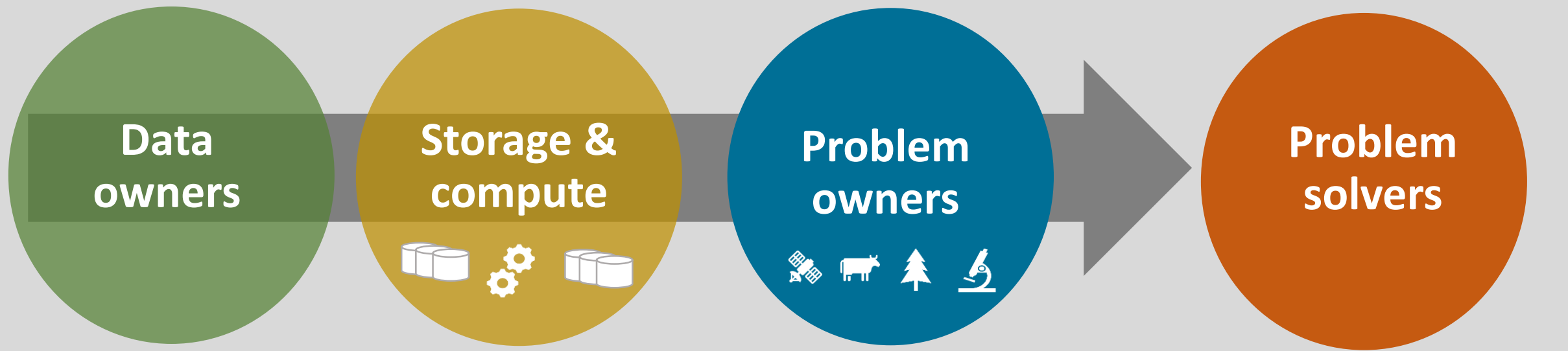
Connective tissue: public utility network

Blockchains are public utility networks





Blockchain public utility network for the AI Commons



Service provider frontends
For data commons,
Storage & compute markets

**AI Commons
Frontend**
Specify Problems

Data science tools

↓
**Data,
storage,
compute**

↑
**Network
rewards**

↓
**Jupyter
notebooks**

↑
**Notebooks,
data, storage,
compute**

- Block rewards for data
- Privacy-preserving AI modeling

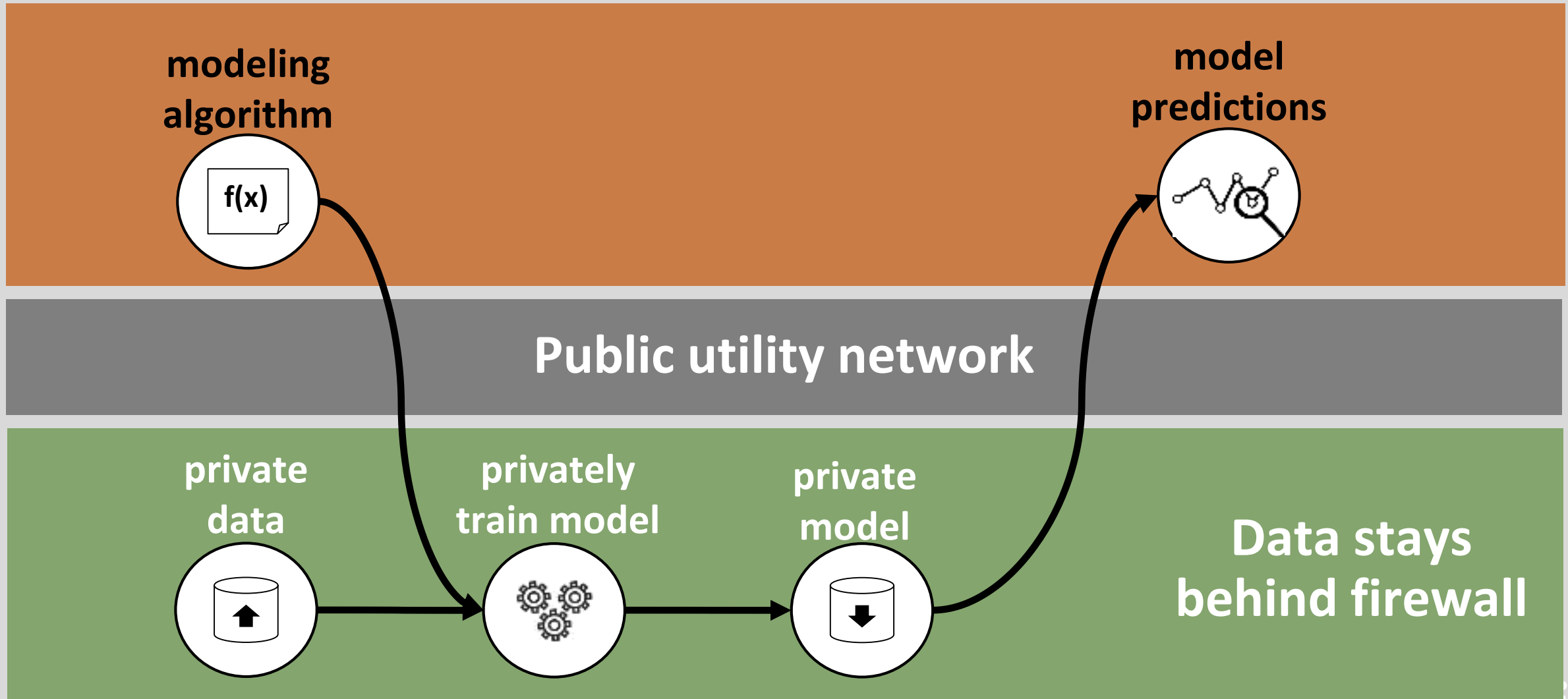
Have data	Have AI (Want data)	Have data	Have data	Have AI (Want data)
Have AI (Want data)	Have data	Have AI (Want data)	Have AI (Want data)	Have data
Data marketplace	DM	DM	DM	DM
DM	DM	DM	DM	DM
DM	DM	DM	DM	DM
DM	DM	DM	DM	DM

Catalyze the commons *and* profit-making, via a substrate for a thousand marketplaces to bloom.

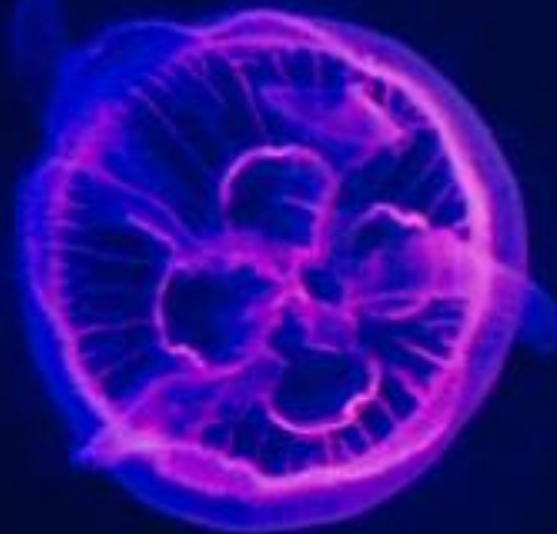
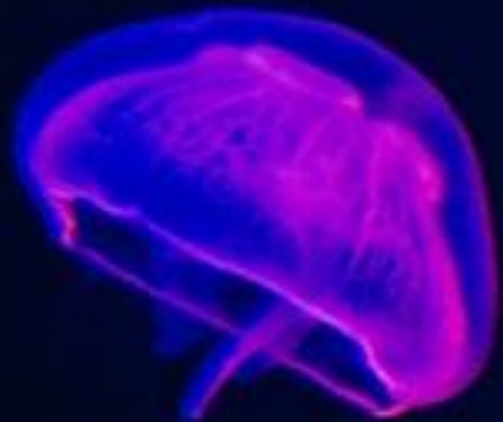
Block rewards to incentivize data supply
Add to data commons, make \$



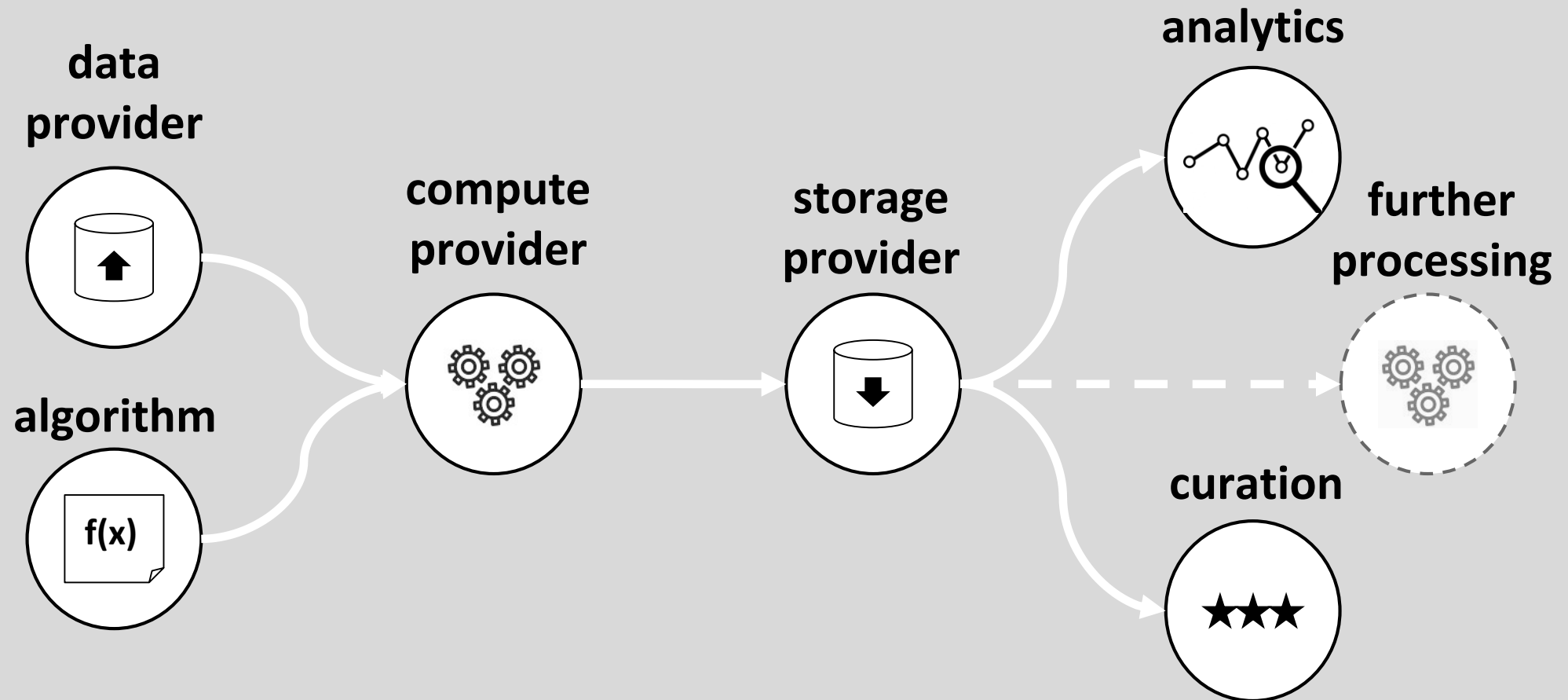
Preserve privacy: bring AI compute to the data



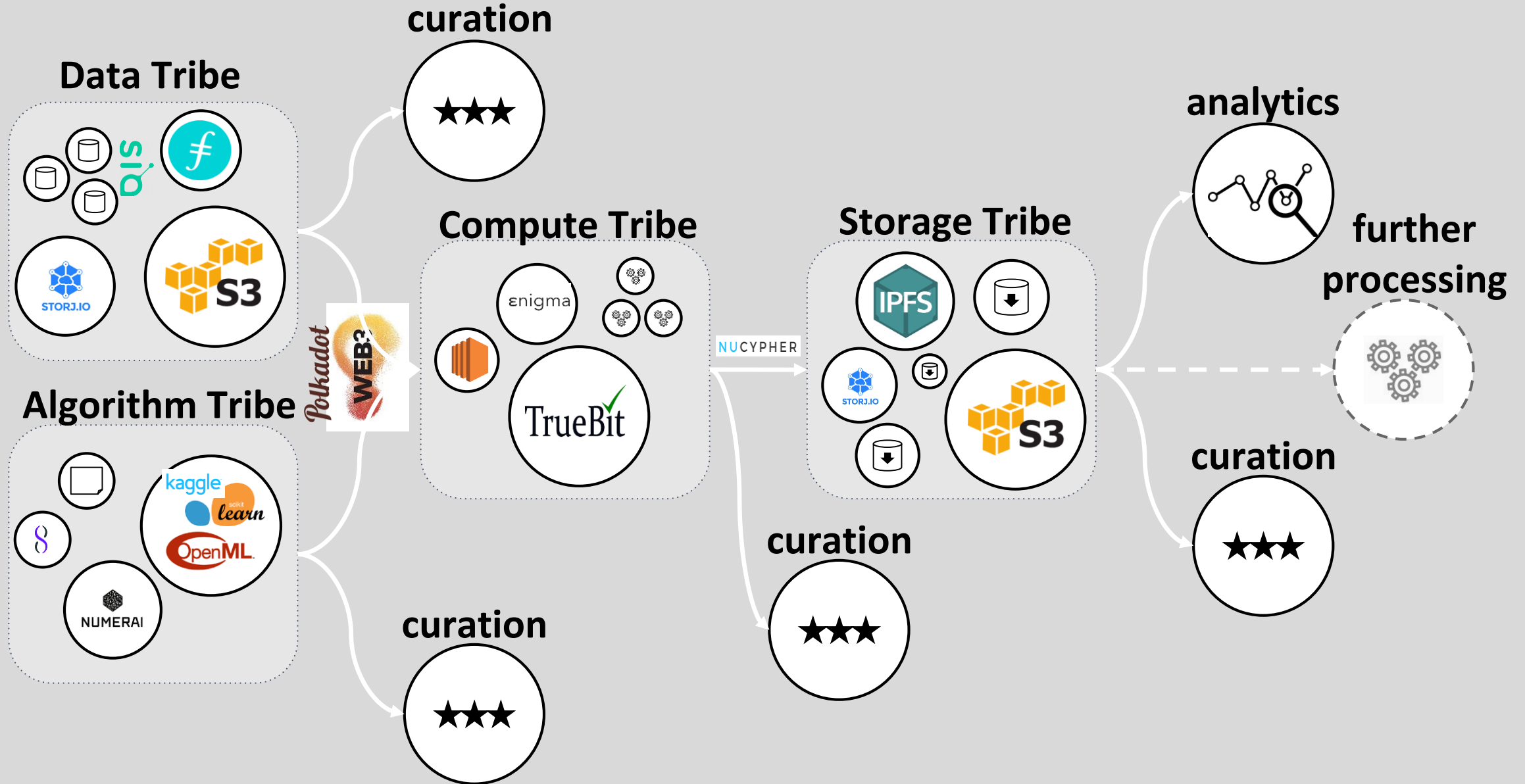
Framings



“AI Compute Pipeline”

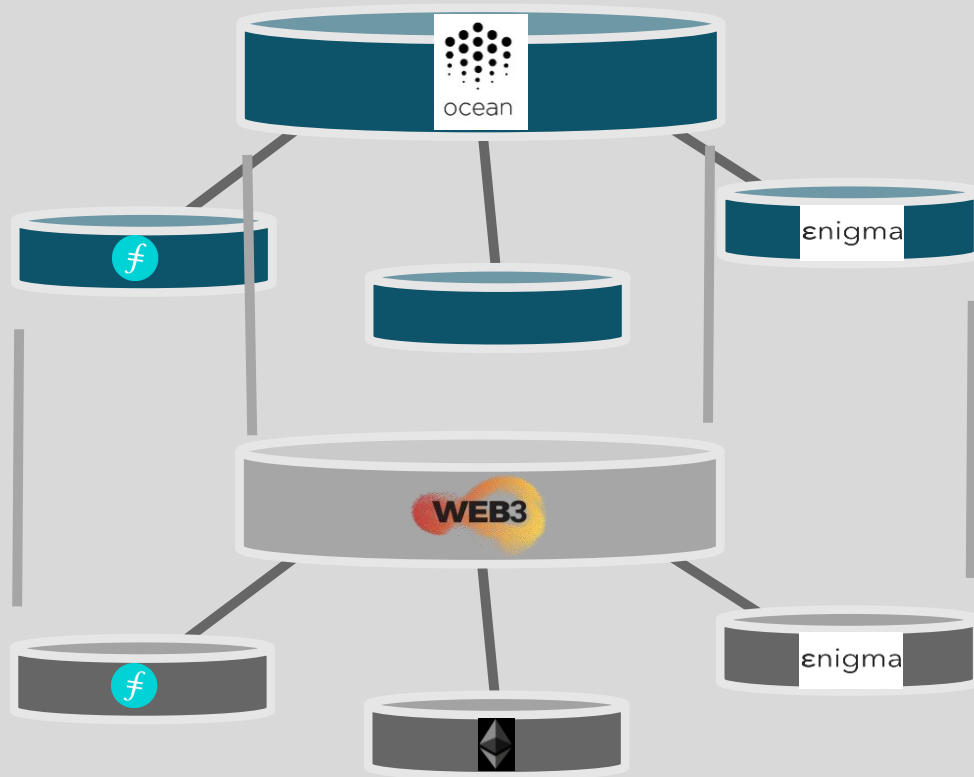


“Inter-Service Network”

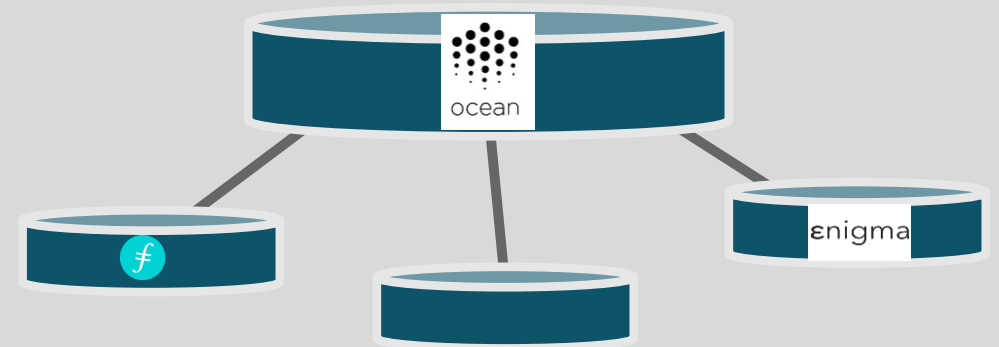


“Network of Networks, for AI Stack”

Crypto perspective:
Ocean is L2 on L1



AI perspective:
Ocean is L1



“SABRE for data”

SABRE is metadata/substrate for airline tickets. Ocean, for data itself.

Supply tickets:
Airlines

Consume tickets:
Consumer
travelers, biz ppl



Expedia

Kayak

3rd party
reseller

Easyjet
website

Travel
agent

Hip
munk

BA
website

Travel
agent

SABRE

Supply data:
Biz's, NGOs,
Governments

Consume data:
Data scientists,
Biz analysts



Data
market

DM

AC

DM

AI
common

DM

DM

AC



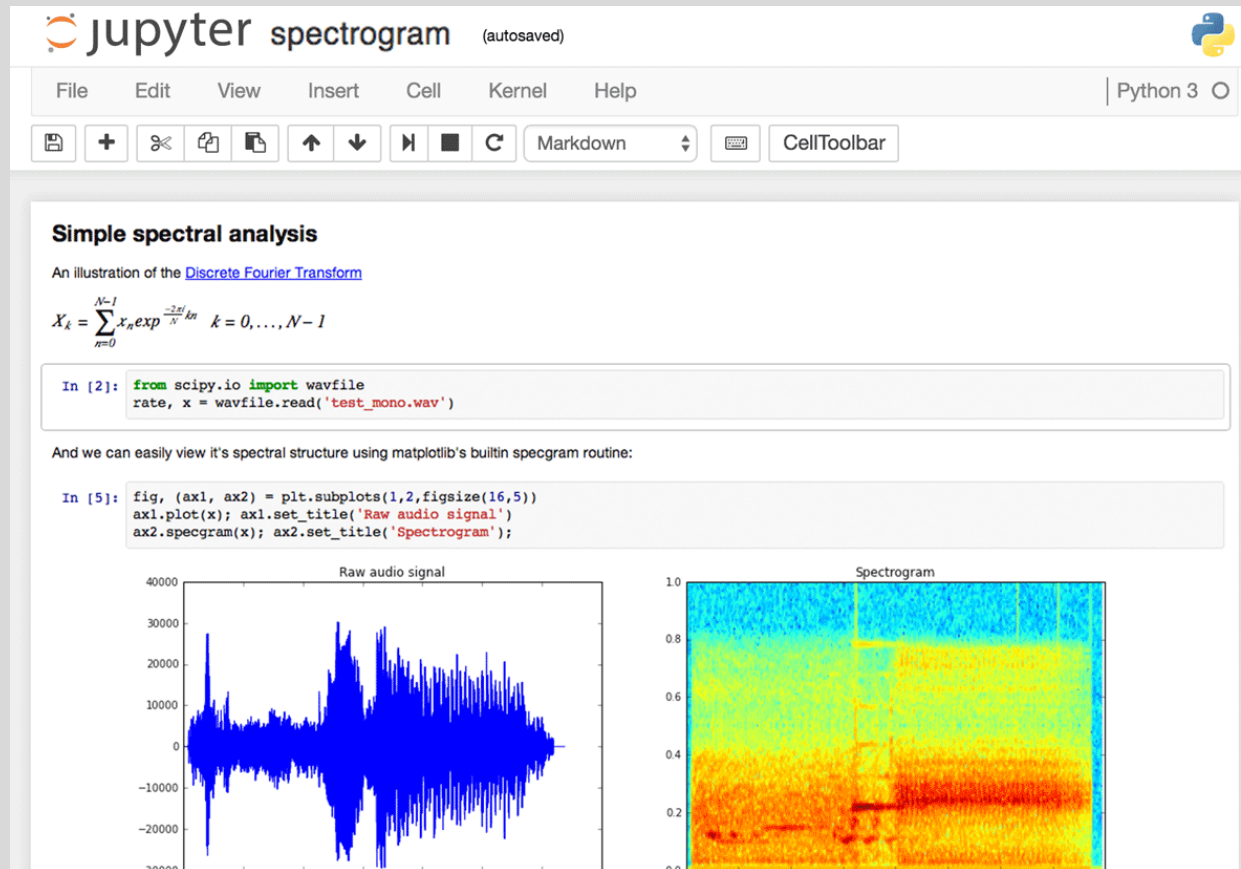
ocean

Public utility
network

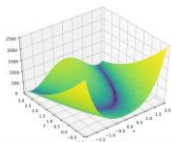
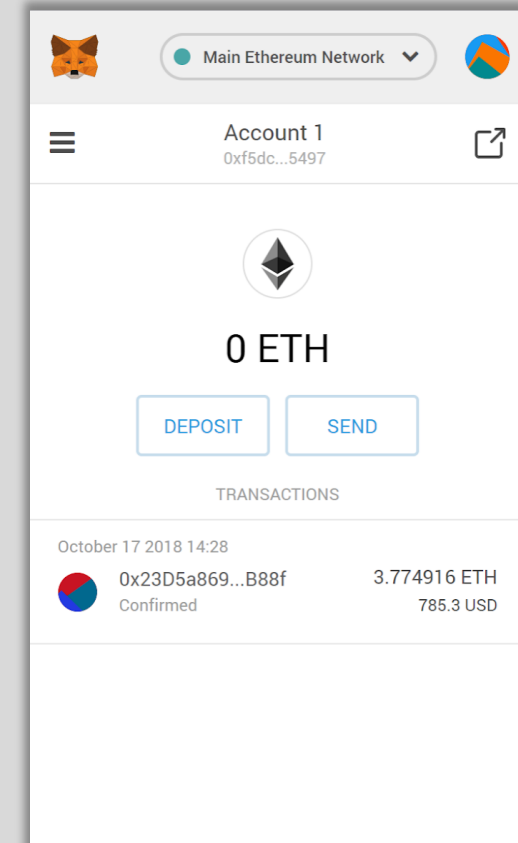


User Experience


Keep Data Science Tooling, Add Crypto



*






Every dataset is an asset. Every Jupyter notebook is an asset (!)

Ocean

KillTheHumans

5 Datasets

View  

Login 

Marketplace

KillTheHumans

KillTheHumans is a marketplace for datasets and Jupyter notebooks. In order to eradicate poverty, data must be input into the system version 2.8.

1

Dataset 78XcYT9
Laser Target Practice Exercises

Publisher Name: LazerDrone Ltd.
Date Published: 03-08-2019

LAZ

2

Dataset 87ertHG
Facial Recognition Data

Publisher Name: VoyeurDrone Inc.
Date Published: 20-06-2018

VOY

3

Dataset 000x567
Thermal Sensor Data

Publisher Name: Predator Movement
Date Published: 31-09-2022

KTH

4

Dataset 96zERC
Human Locations based on IP

Publisher Name: SkyNet
Date Published: 09-11-2020

KLO

5

Dataset 254phyY
Human Biological Weaknesses

Publisher Name: The Overmind
Date Published: 28-06-2016

REX

6

Add your dataset here ...

... and become a publisher

7845.12 OCN

11 Datasets

1 OCN = 0.12 ETH

Diminator 

My Token Assets

NTT	102.10	KIO	55.00
RED	0.45	OSC	0.80
INT	45.38	IOX	1.00
ZAP	10.00	BAR	4523.12
NTT	100.00	URD	200.00
AAC	22.45		

My Dataset Portfolio

02	Dataset 0XhjijkA	▲ +1.8%	4.23k NTT	42.10 OCN
10	Dataset 0XhjijkA	▼ -0.5%	2.47k RED	01.10 OCN
04	Dataset qfij875	▲ +2.1%	5.89k INT	30.10 OCN
08	Dataset x00C475	▲ +5.2%	0.20k ZAP	42.10 OCN
02	Dataset 0XhjijkA	▼ -1.8%	4.23k NTT	40.10 OCN
07	Dataset 78XcYT9	▲ +4.5%	2.99k AAC	9.20 OCN
02	Dataset euyijC88	▲ +1.8%	4.23k KIO	38.26 OCN
10	Dataset 78eyujP	▼ -4.6%	0.45k OSC	42.10 OCN
19	Dataset 0XhjijkA	▼ -2.3%	4.23k IOX	22.47 OCN
22	Dataset AA854cv	▲ +0.4%	6.01k BAR	42.10 OCN
03	Dataset 0XhjijkA	▲ +1.8%	8.23k URD	10.24 OCN

Dataset Selection and Token Supply vs Cost

Dataset 78XcYT9

Marketplace #Name

Ranking 7



▲ +4.5%

Current
9.20 OCN
2.99k AAC

Future
9.25 OCN
3.04k AAC

+5.80|

Invest (+) or Withdraw (-)

Confirm Transaction

New powers for data scientists

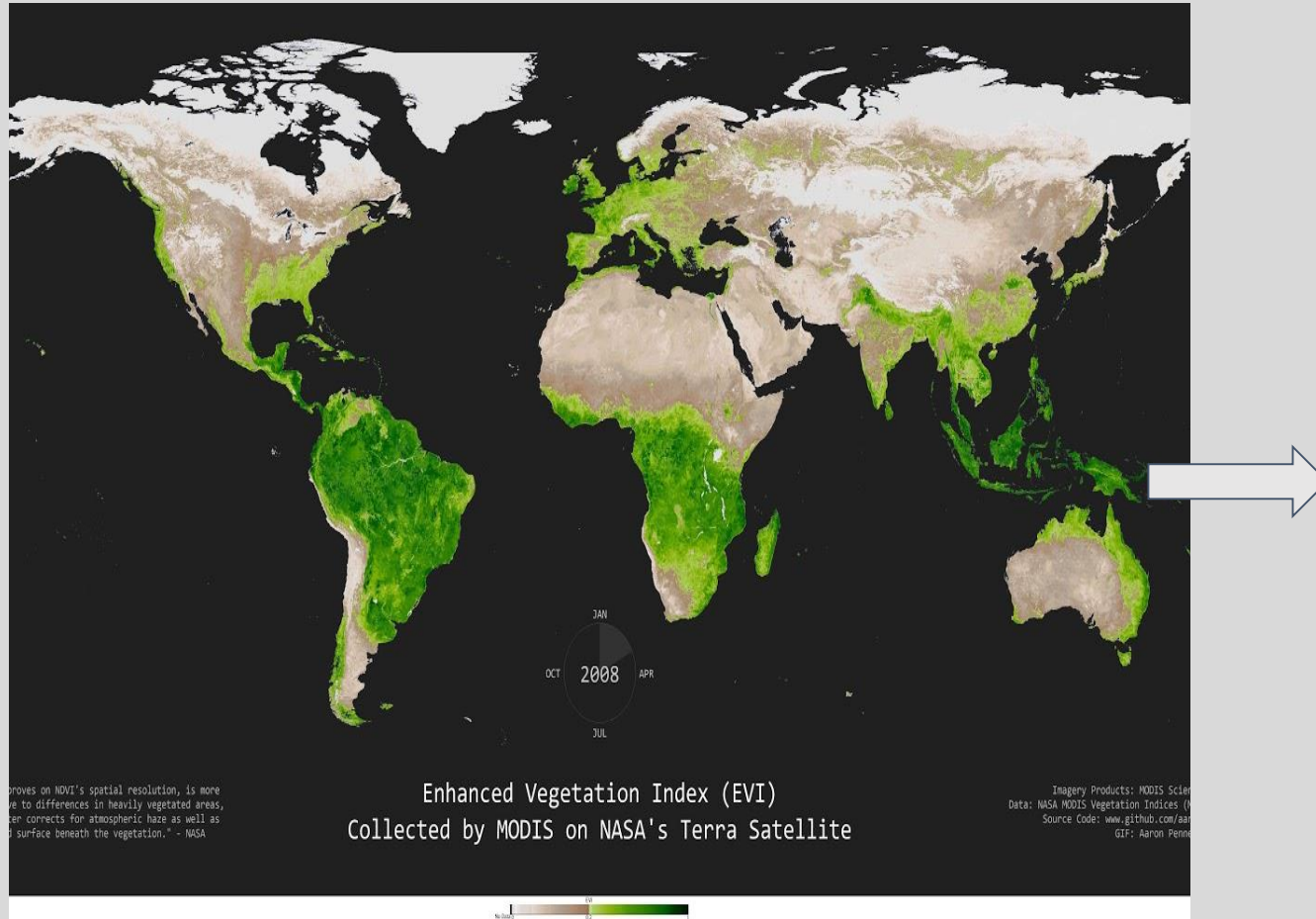
- **Way more data.** Data commons. Enterprise data without data escapes via on-premise compute.
- **Provenance** in data & AI training. Goodbye data honeypots.
- **More \$.** For generating data. For cleaning, labeling, feature engineering data. For algs. For curation.



Applications

Use case: water quality

Satellite data in the commons to verify impact of forest restoration on water





**Better predict Parkinson's by connecting data across hospitals
& borders; promoting & promoting research collaboration
(ConnectedLife)**



**Grow Asia (WEF Spinoff):
Help small farmers allocate their fertilizer better, to increase yields**



**Govt of Singapore Data Authorities (IMDA):
Give policymakers optionality to get benefits of AI,
while addressing privacy**



Fred Werner

@fredwerner73

Following



On stage at World AI Summit with @xprize @FondationBotnar @SColesPorter @trentmc0 @frossi_t announcing #Alcommons and @ITU #Aiforgood Global Summit. Big congrats to @SColesPorter and team for another amazing #wsai18!!



**AI Commons:
40+ UN Agencies,
AI XPRIZE Using Ocean
in #AIforGood**



User Experience II

https://docs.oceanprotocol.com

Ocean Protocol Documentation - x

https://docs.oceanprotocol.com



ocean

Ocean Protocol Documentation

Learn about the components of the Ocean Protocol software stack, and how to run or use the components relevant to you.

Core Concepts

Understand the fundamentals of Ocean Protocol.

[Learn More →](#)

Setup Guides

Setting up the Ocean Protocol components.

[Learn More →](#)

Tutorials

Browse tutorials for most common setup and development use-cases.

[Learn More →](#)





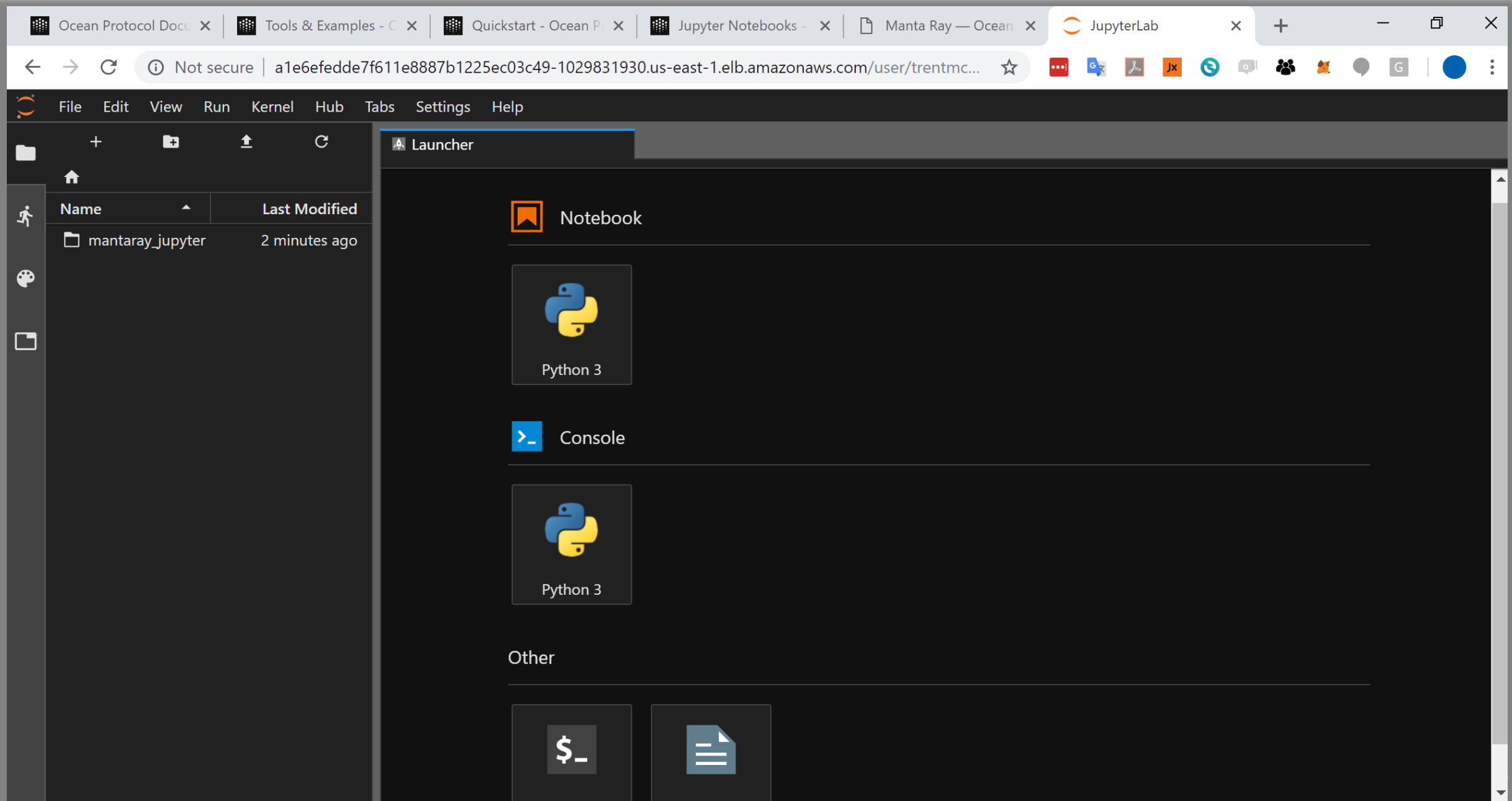
Manta Ray

Data Science powered by Ocean Protocol

The **Manta Ray** notebooks provide a guided tour of Ocean Protocol in an interactive Jupyter Notebook environment. Start using Ocean Protocol with your own pre-configured and loaded cloud instance after login with your GitHub account.

This project is in alpha! Feel free to ask questions and post bug reports in [our Gitter channel](#). Notebooks are for tutorial and demonstration purpose only. Notebook instances may be periodically offline, and storage volumes will be purged.

JupyterLab Instance



QUICKSTART

Run & Try Everything

MARKETPLACES

Set Up a Marketplace

PUBLISHERS

Publish Data or Services

KEEPERS

Run a Keeper

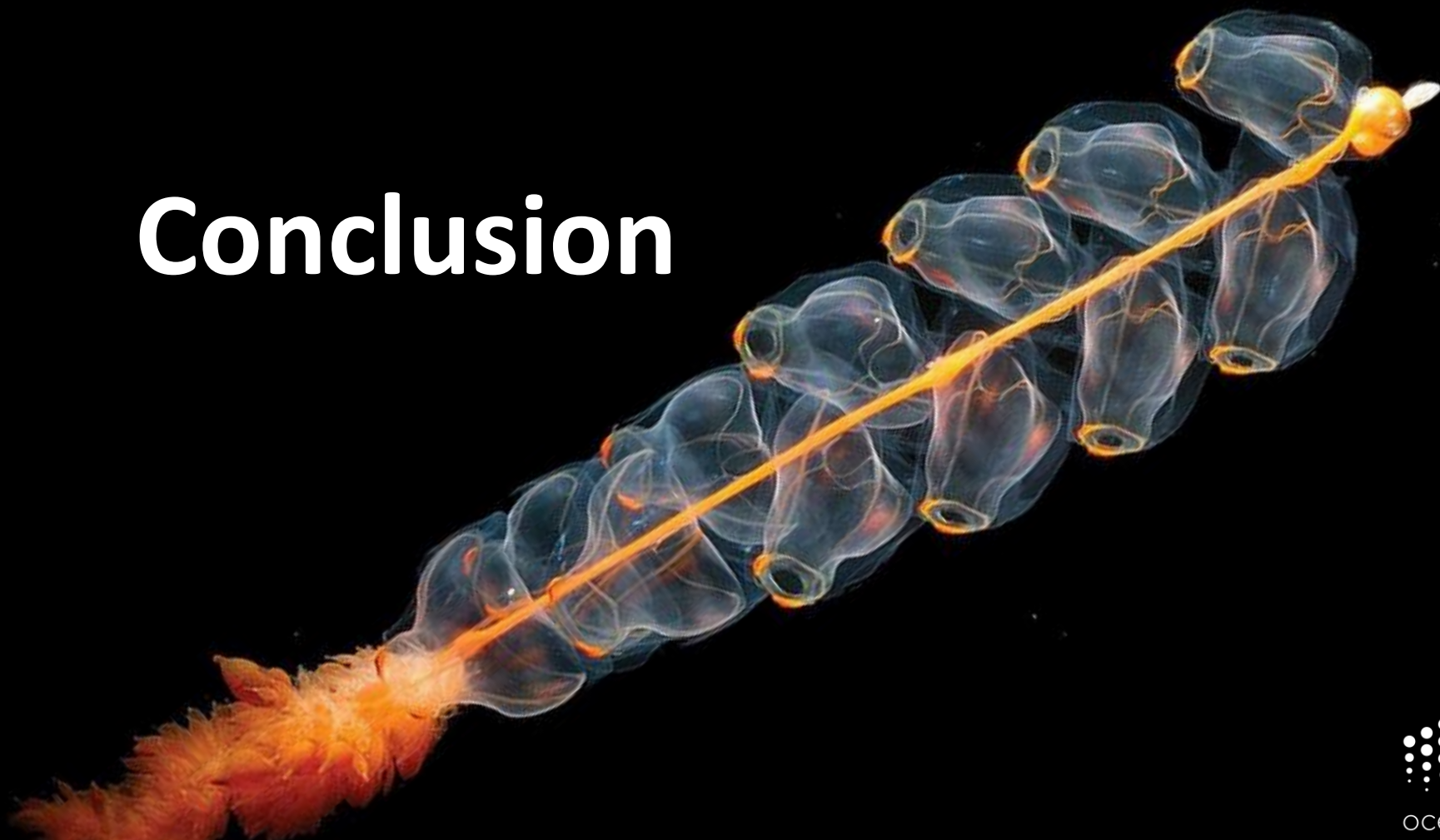
```
git clone https://github.com/oceanprotocol/barge.git
cd barge/

./start_ocean.sh --latest
```

Seeing the dolphin means it's working:

[illegible]

Conclusion





Q: how to scale #AIforGood?

**A: Blockchain public utility
network for the AI commons**

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