



# Towards an AI Commons

@oceanprotocol  
Trent McConaghy



# SUSTAINABLE DEVELOPMENT GOALS





Q: can AI help?

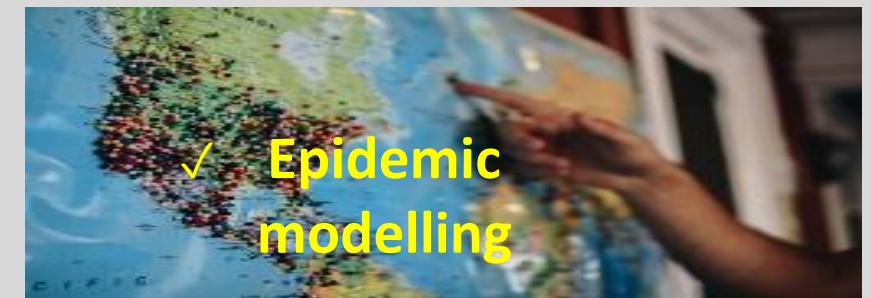


## AI + Satellite projects





## AI + Smart Communities



# 2017: AI FOR GOOD SUMMIT

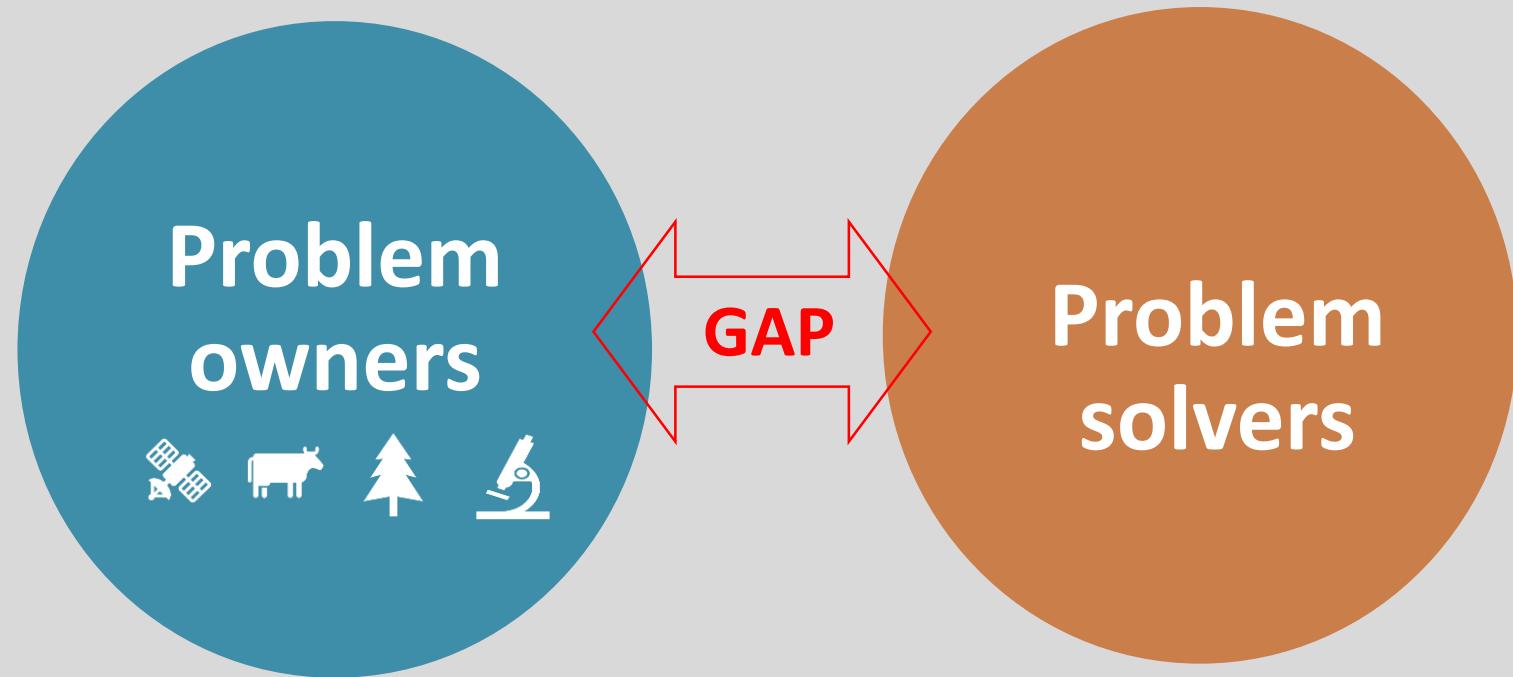


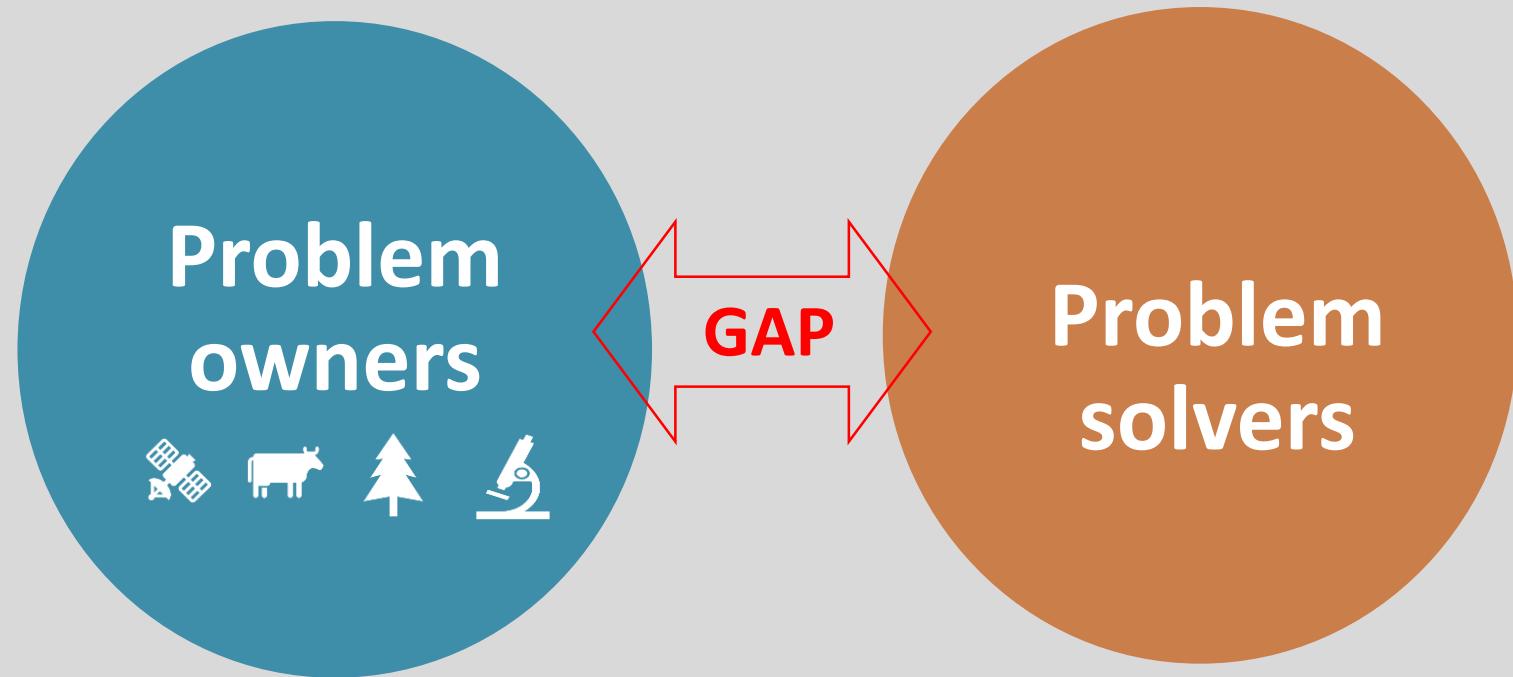


**Q: can AI help?  
A: Yes! #AlforGood**



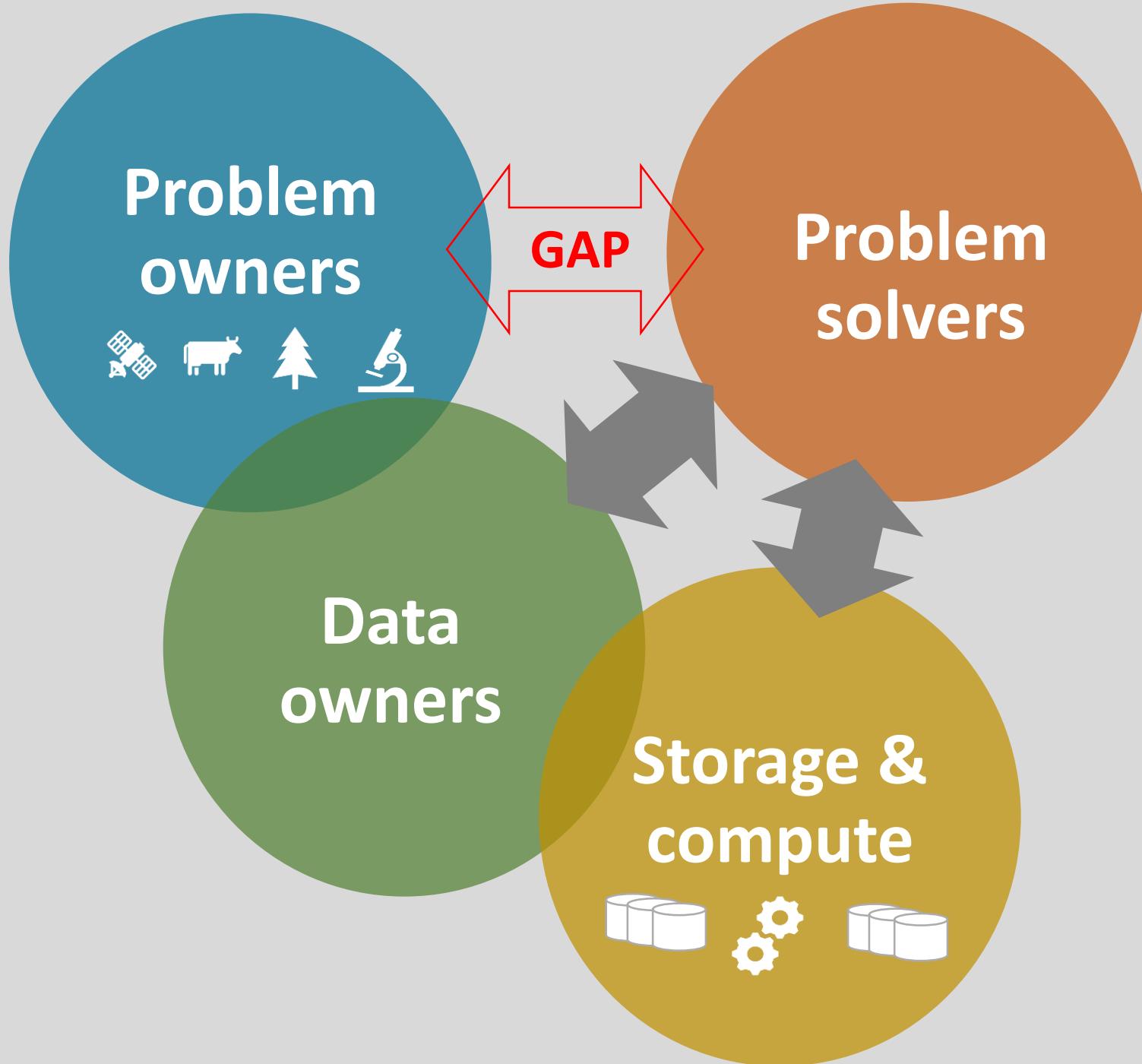
**Q: can AI help?  
A: Yes! #AIforGood  
But...**







Scaling  
#AIforGood





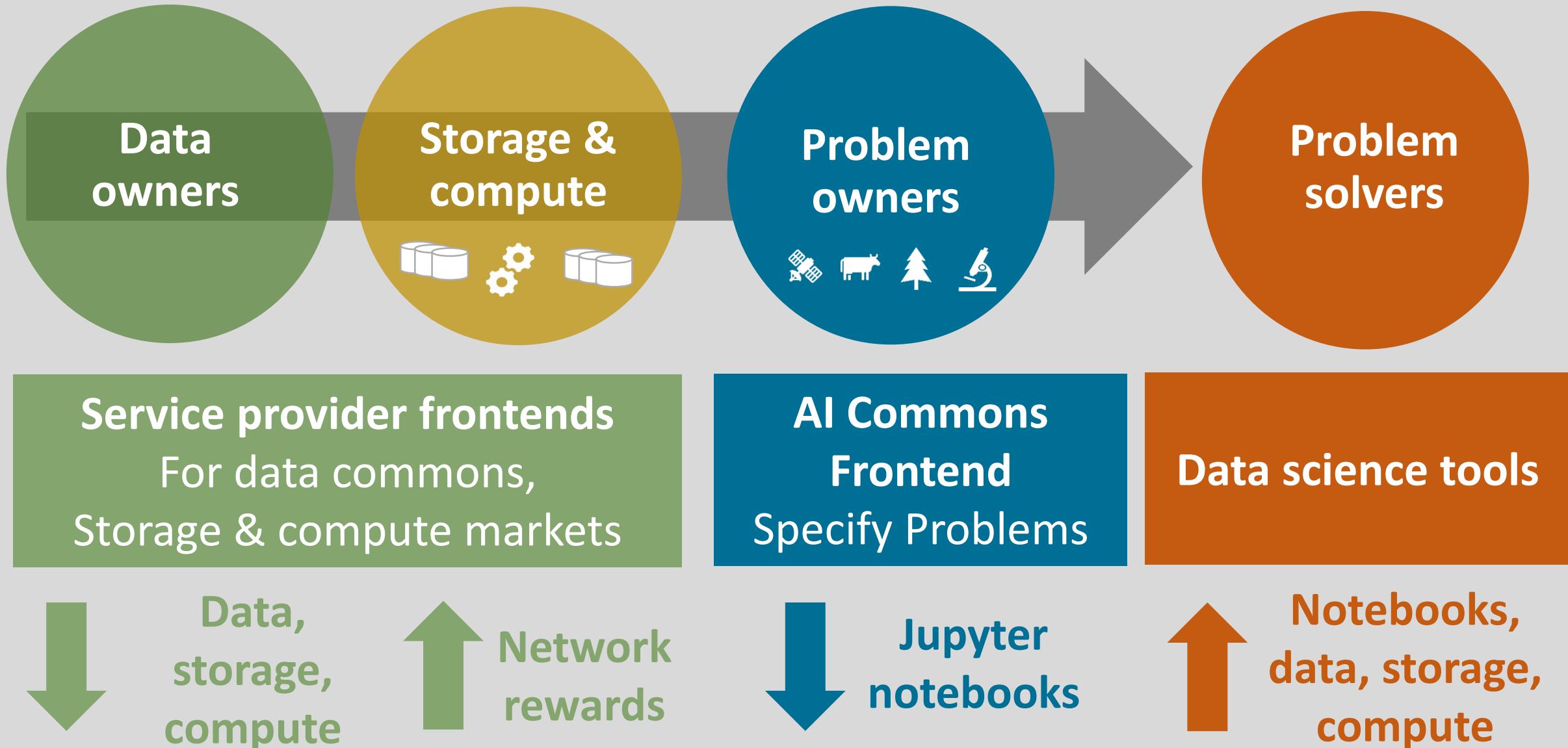
Connective tissue: public utility network

# Blockchains are public utility networks





**Blockchain public utility network for the AI Commons**



**Public utility network incentivizing data:**

- Block rewards for data
- Privacy-preserving AI modeling



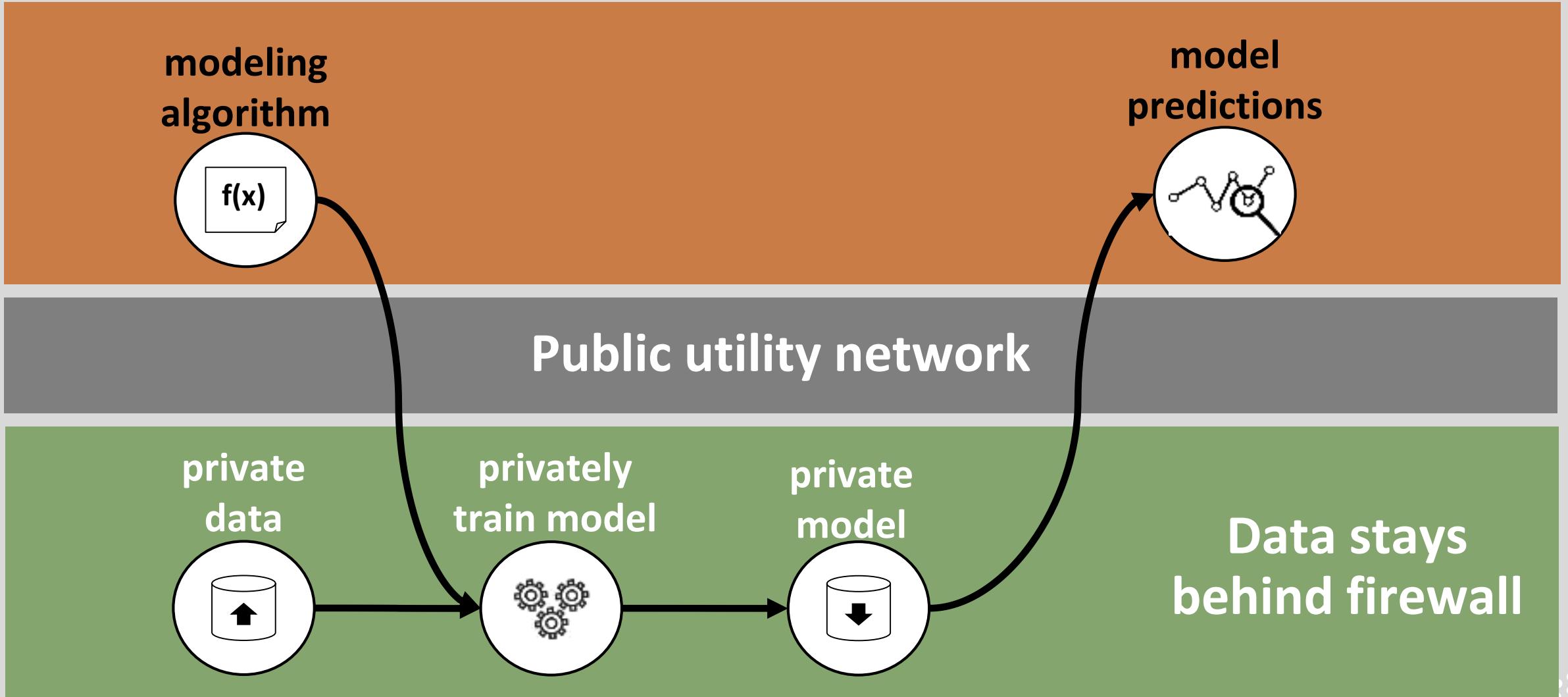
Have data	Have AI (Want data)	Have data	Have data	Have AI (Want data)
Have AI (Want data)	Have data	Have AI (Want data)	Have AI (Want data)	Have data
Data marketplace	DM	DM	DM	DM
DM	DM	DM	DM	DM
DM	DM	DM	DM	DM
DM	DM	DM	DM	DM

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

A close-up photograph of two hands, likely belonging to a woman, cupped together to hold a small bunch of white daisies with yellow centers. The hands are positioned in the center of the frame against a dark, textured background.

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

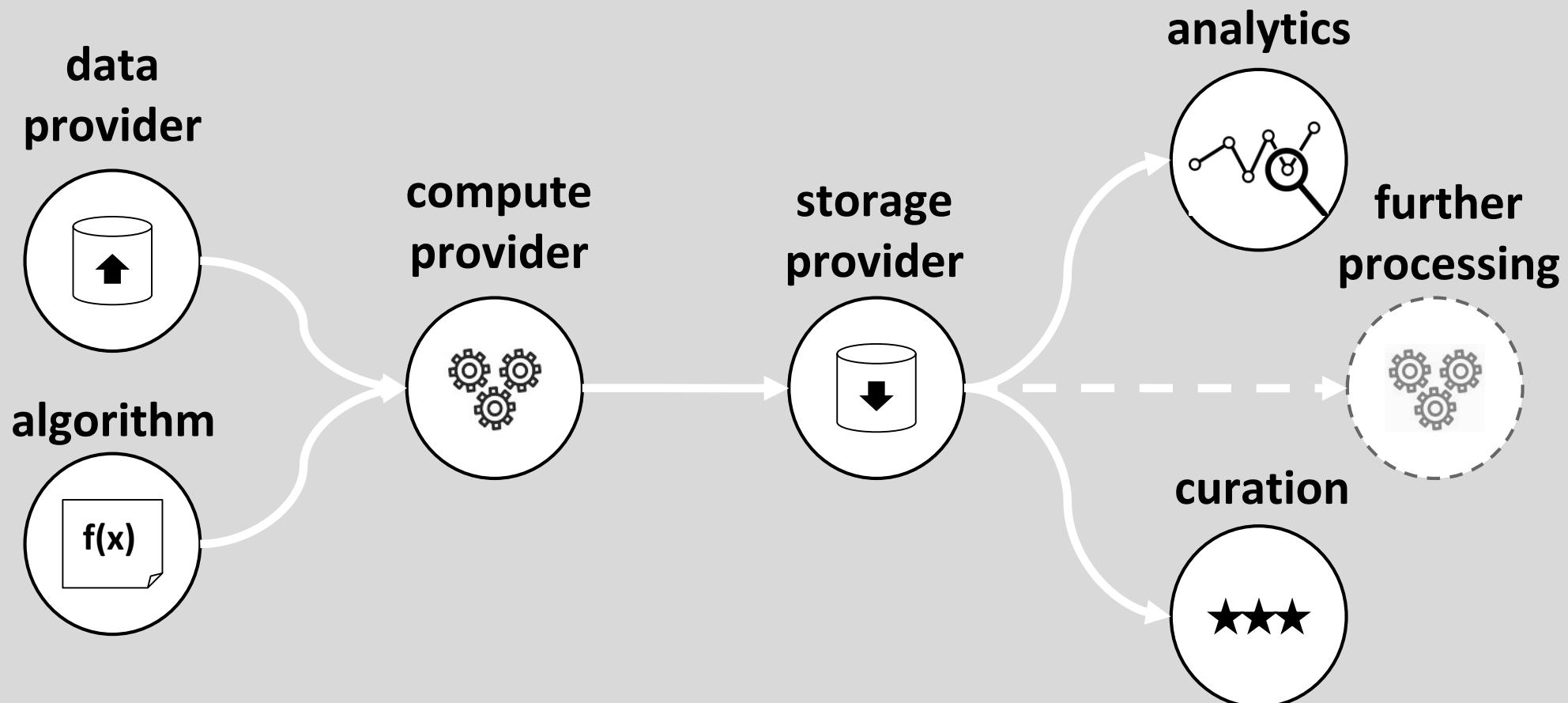
# Preserve privacy: bring AI compute to the data



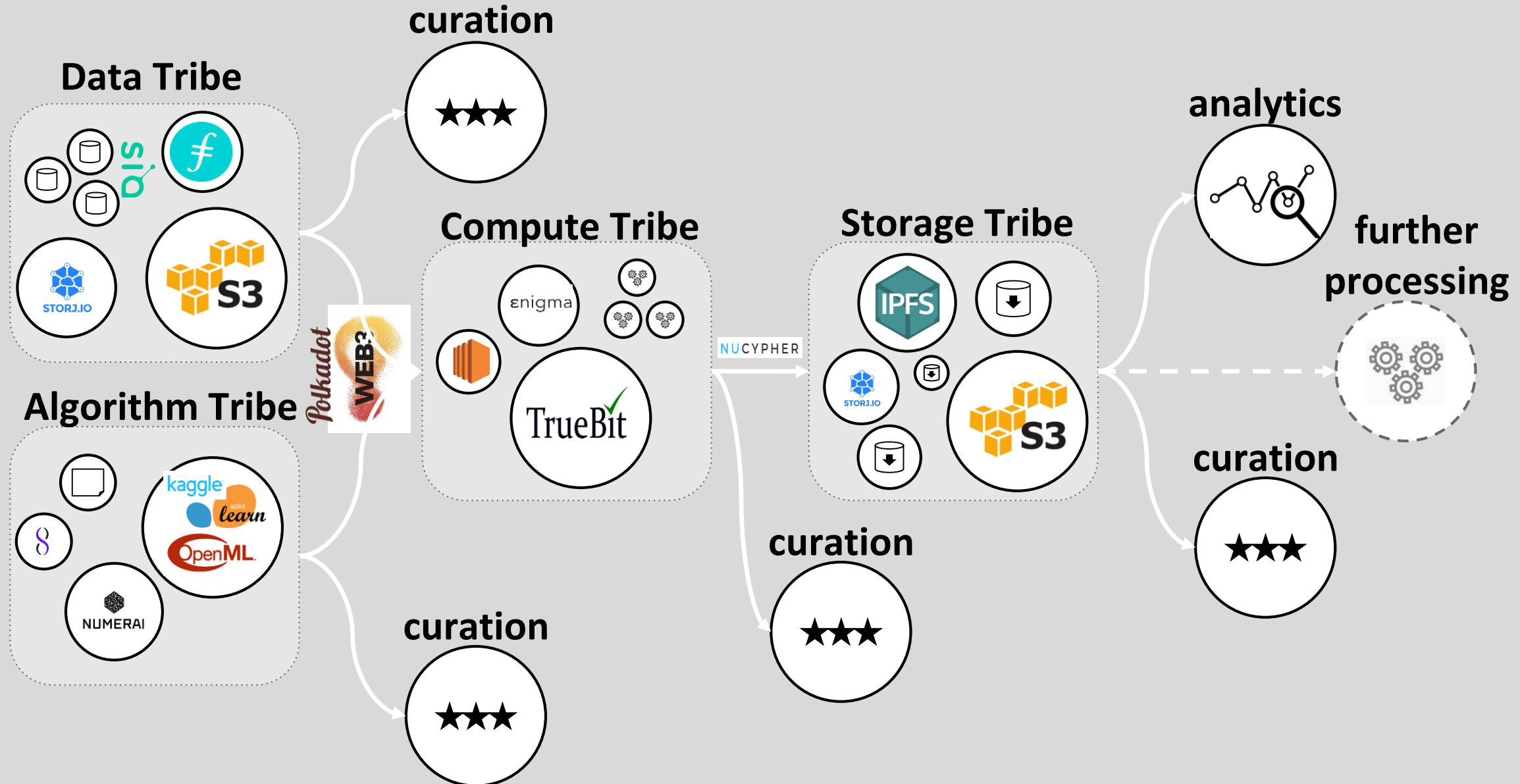
# Framings



# “AI Compute Pipeline”

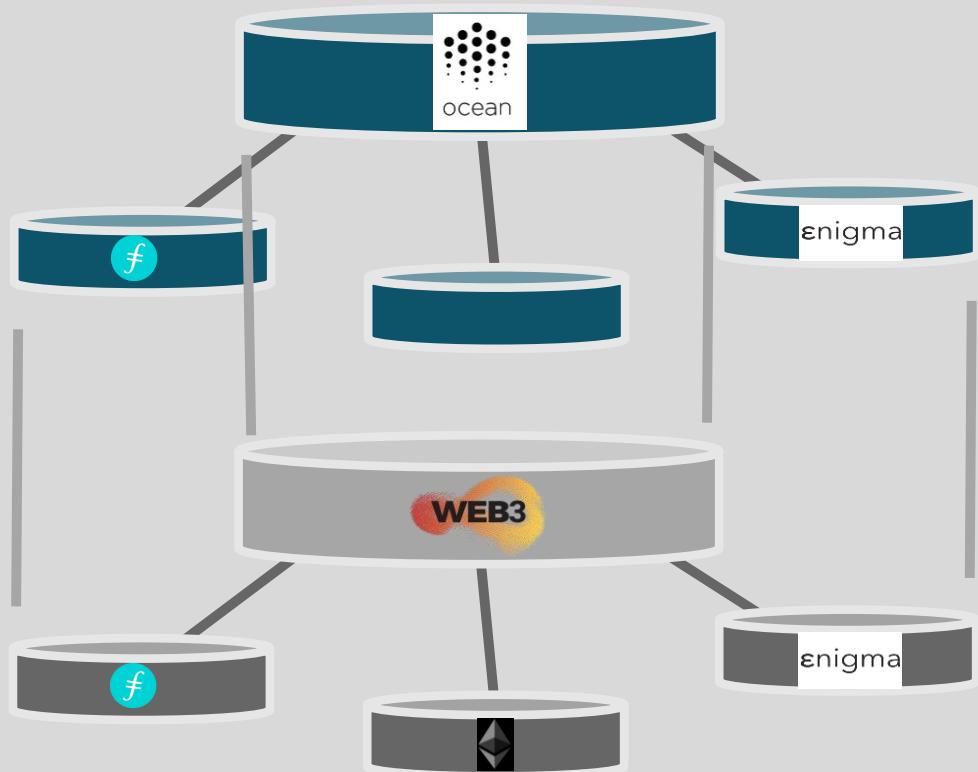


# “Inter-Service Network”

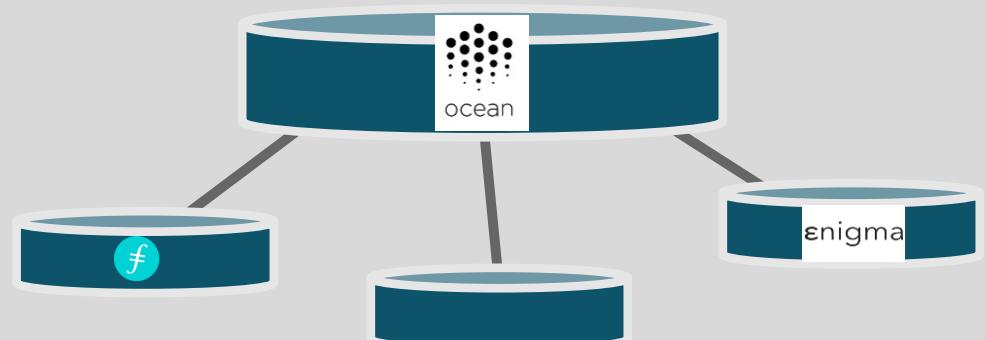


# “Network of Networks, for AI Stack”

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	3 <sup>rd</sup> party reseller	Easyjet website
Travel agent	Hip munk	BA website	Travel agent

Travel agent	Hip munk	BA website	Travel agent
--------------	----------	------------	--------------

SABRE

## Supply data:

Biz's, NGOs,  
Governments



Data market	DM	AC	DM
AI common	DM	DM	AC

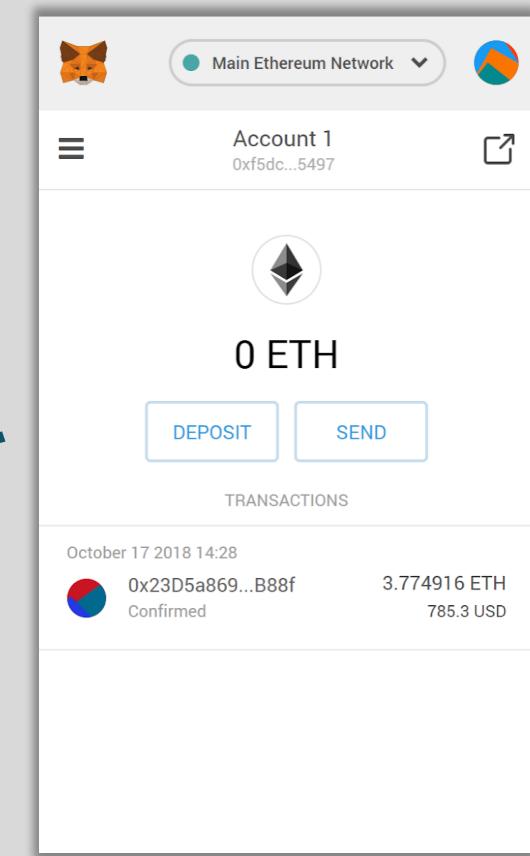
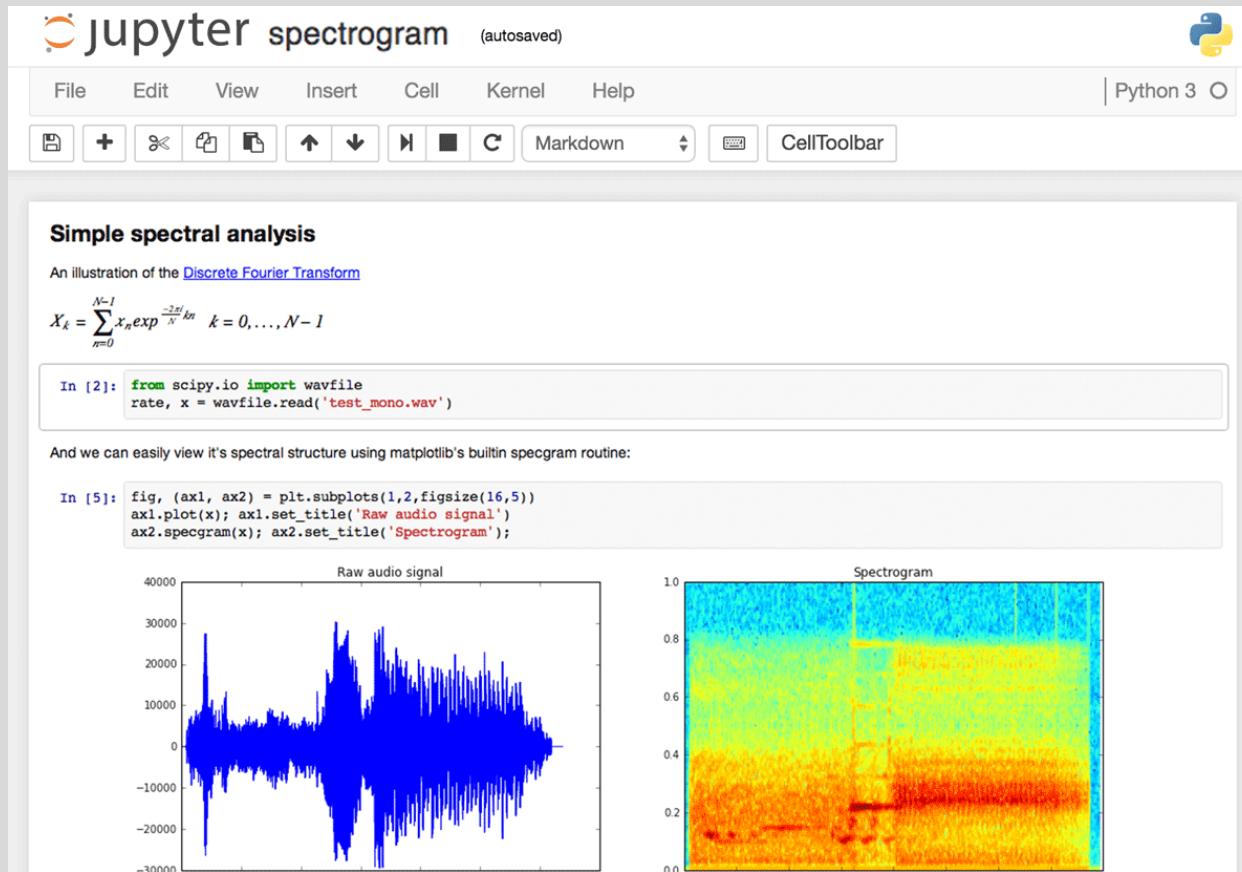


Public utility network



# 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 to buy and sell datasets. In order to eradicate piracy, the publisher's name and data must be input correctly. 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 part of the ecosystem

ocean

7845.12 OCN

11 Datasets

1 OCN = 0.12 ETH

Dominator

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		

Dataset Selection and Token Supply vs Cost

Dataset	Marketplace	#Name	Ranking
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



ocean

# 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.

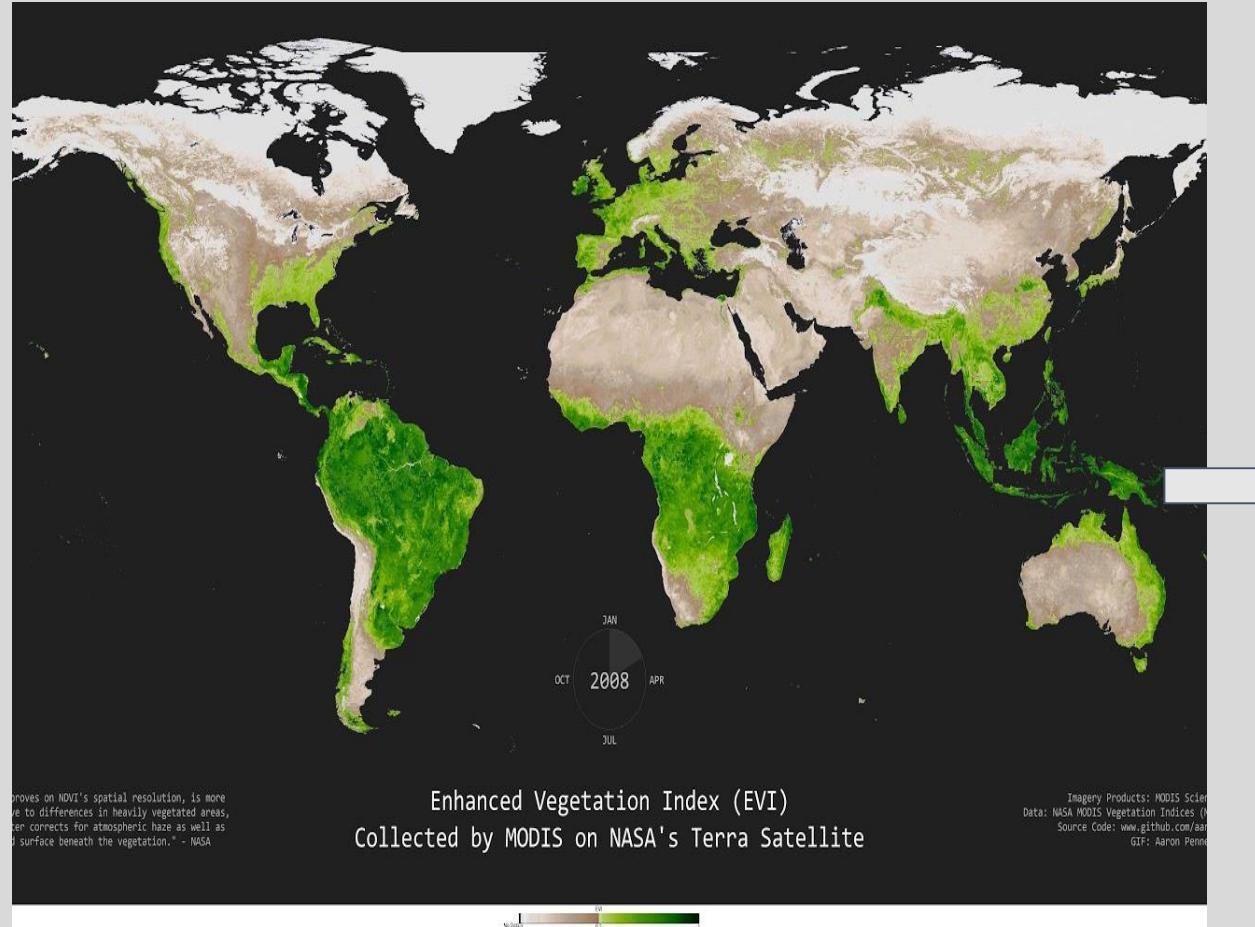


A close-up, low-angle shot of a coral reef at night. The scene is dominated by a dense cluster of glowing blue tentacles, which appear to be coral polyps. These tentacles are illuminated from within, creating a bright, ethereal glow against the deep black of the surrounding water. The tentacles are thick and somewhat translucent, with small, darker spots along their length. In the center, there's a brighter, more concentrated area of light, possibly from a nearby source or a different type of coral. The overall effect is one of mystery and beauty, capturing a moment in the underwater world that is typically hidden from view.

# 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  
#AIcommons 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 - [+](#)

[←](#) [→](#) [C](#) [🔒 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 →](#)

 ocean



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

Ocean Protocol Docu | Tools & Examples - C | Quickstart - Ocean P | Jupyter Notebooks - Manta Ray — Ocean | JupyterLab

Not secure | a1e6efedde7f611e8887b1225ec03c49-1029831930.us-east-1.elb.amazonaws.com/user/trentmc... ☆

File Edit View Run Kernel Hub Tabs Settings Help

Launcher

Name Last Modified

mantaray.jupyter 2 minutes ago

Notebook

Python 3

Console

Python 3

Other

\$\_-

=

ocean

## QUICKSTART

Run & Try Everything

```
git clone https://github.com/oceanprotocol/barge.git  
cd barge/  
  
.start_ocean.sh --latest
```

## MARKETPLACES

Set Up a Marketplace

Seeing the dolphin means it's working:

## PUBLISHERS

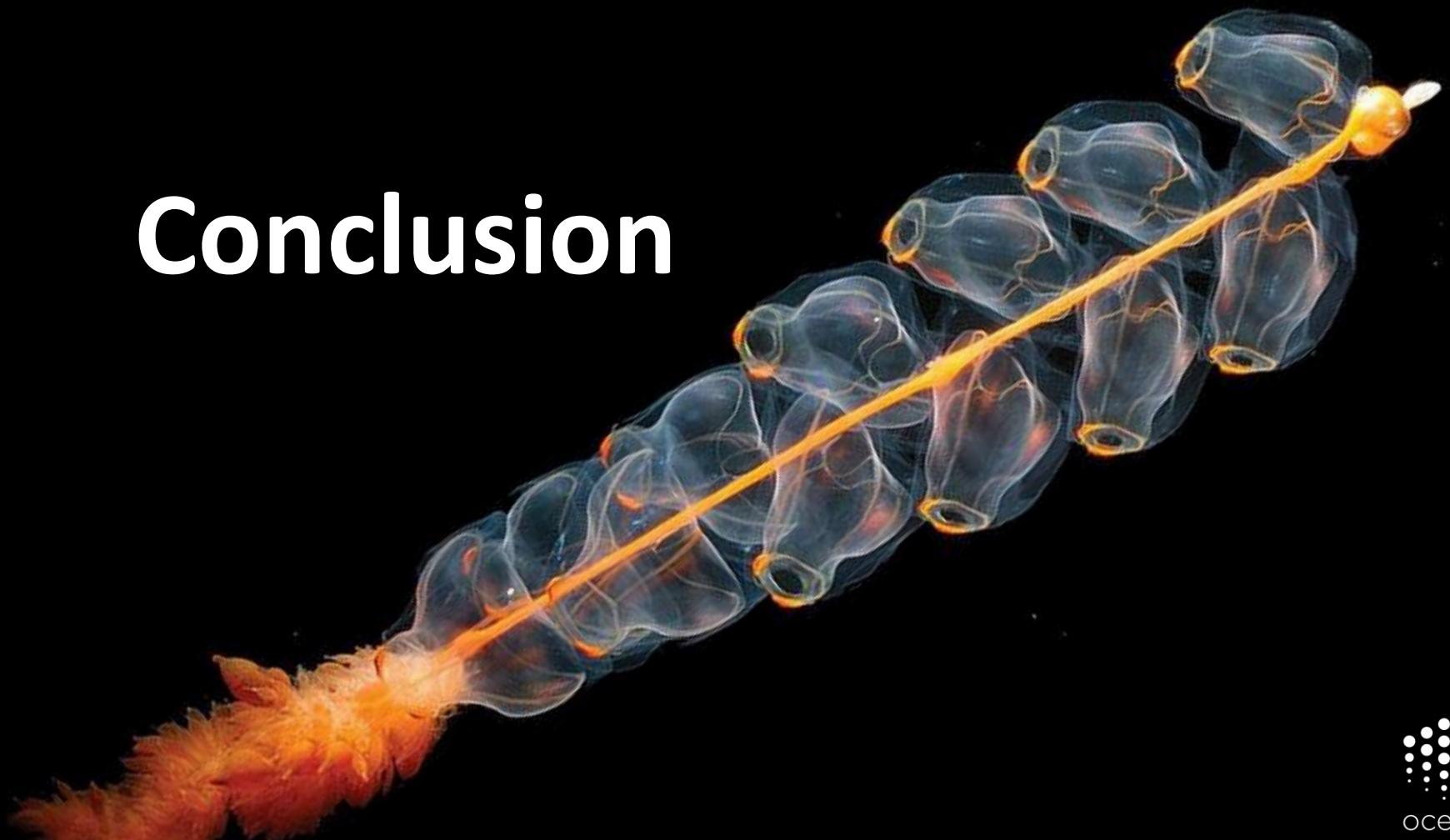
Publish Data or Services

## KEEPERS

Run a Keeper

```
→ ./start_ocean.sh --latest  
  
Welcome to  
  
      ,-'--.  
     / .---. \ .---.  
    ;/  
   /_;  
  
 _.-. )` \ .-. )` \ .-. )` \ .-. )` \ .-. )`  
| / \ \ / \ \ / \ \ / \ \ / \ \ / \ \ / \ \ / \ \ / \ \ / |  
 \ / \ \ / \ \ / \ \ / \ \ / \ \ / \ \ / \ \ / \ \ / \ \ / |  
  
 ---  
  
Get info: oceanprotocol.com  
Get code: github.com/oceanprotocol  
Get help: gitter.im/oceanprotocol/Lobby
```

# Conclusion





**Q: how to scale #AIforGood?**

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

Trent McConaghy  
@trentmc0

