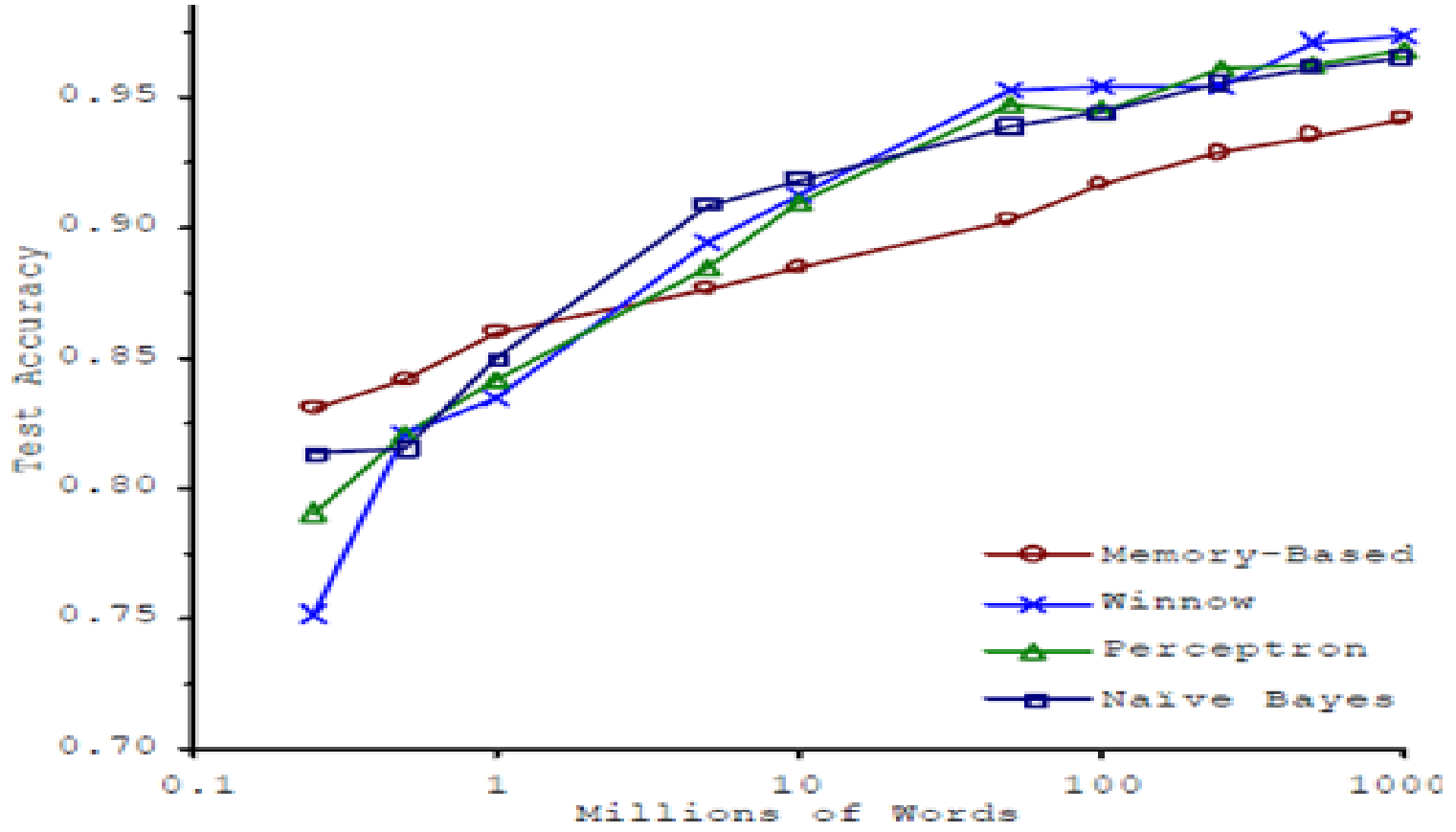
Ocean & Health Care

@oceanprotocol
Trent McConaghy

ocean

The Unreasonable Effectiveness of Data



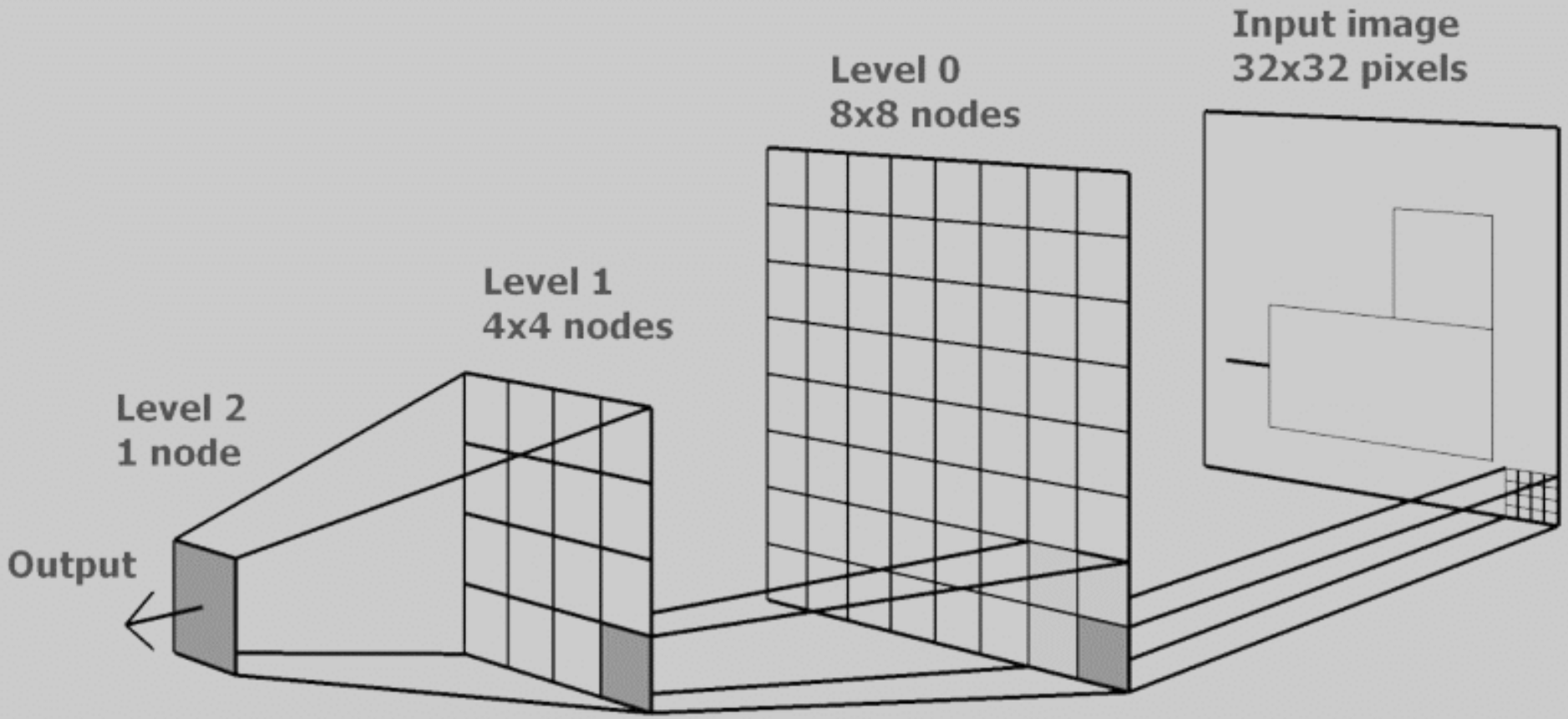
1000x *more* data

100x *less error*

[Banko and Brill, 2001]

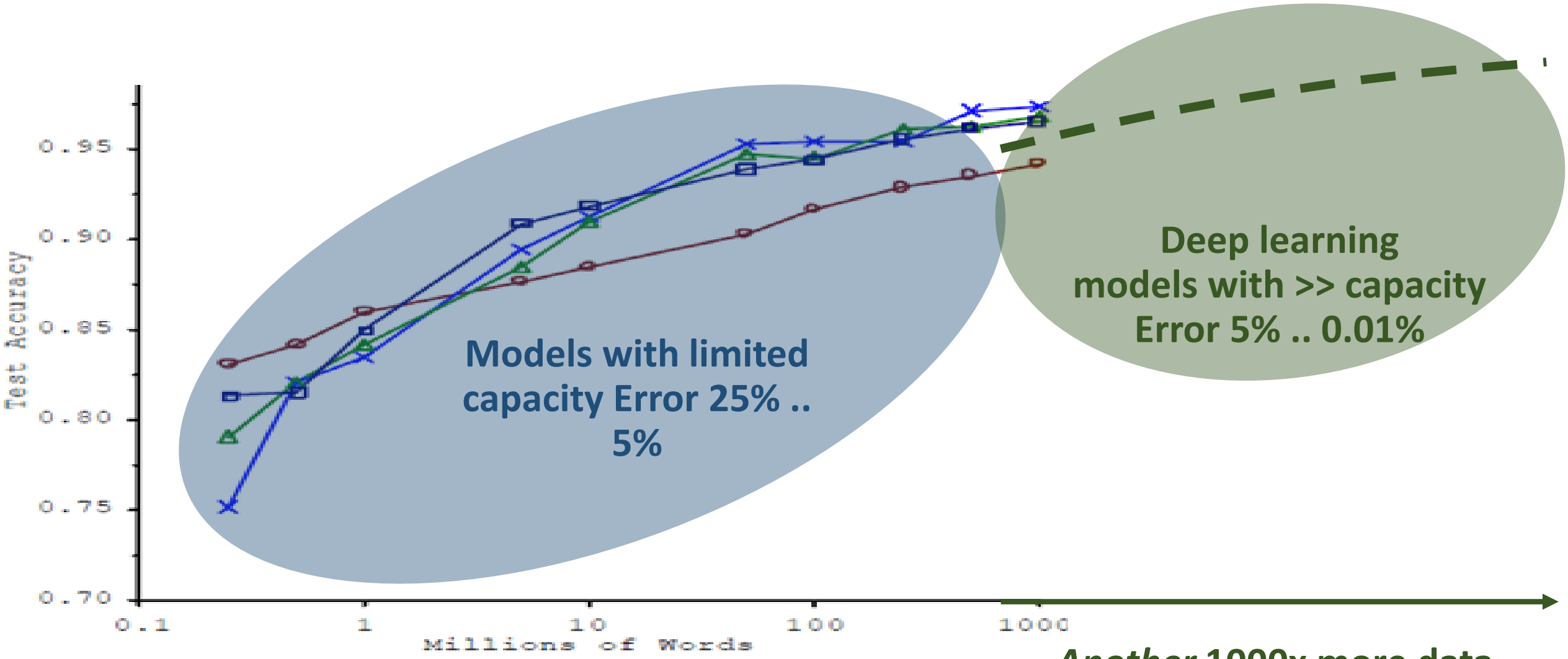
Deep Learning: Neural Networks * Moore's Law

≈1950s algorithms on 1000x+ more storage & compute



https://en.wikipedia.org/wiki/File:HTM_Hierarchy_example.png

Deep Learning *Loves* Data



Data you have

1 hospital

Data you want

10,000 hospitals

Data you have

1 hospital

Data you want

10,000 hospitals

Showstopper:
Privacy Concerns

A Fundamental Tradeoff?

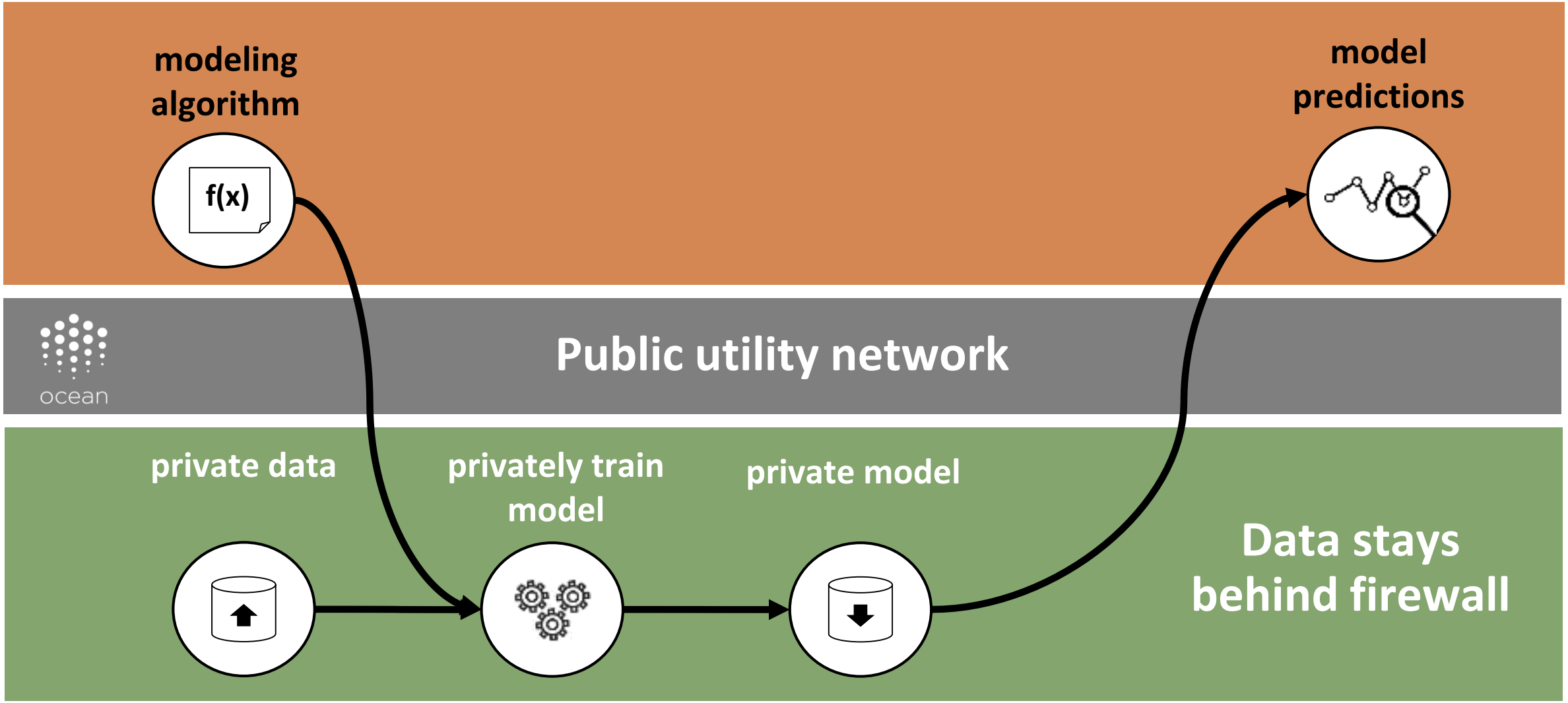
AI Accuracy ↑ ↑ ↑
Lives Saved ↑ ↑ ↑

Data -

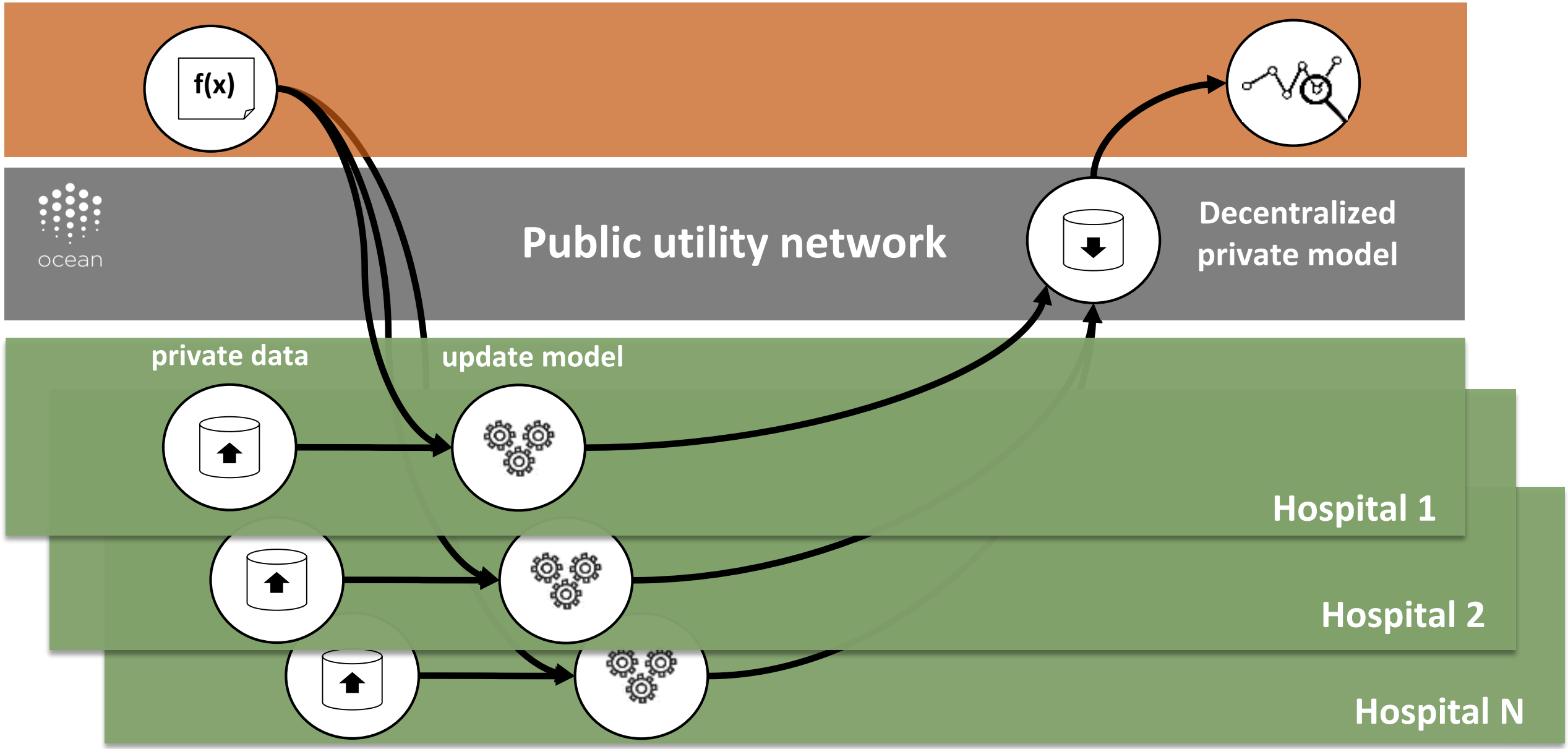
Data ↑ ↑ ↑

Privacy ↓ ↓ ↓
Exploits ↑ ↑ ↑

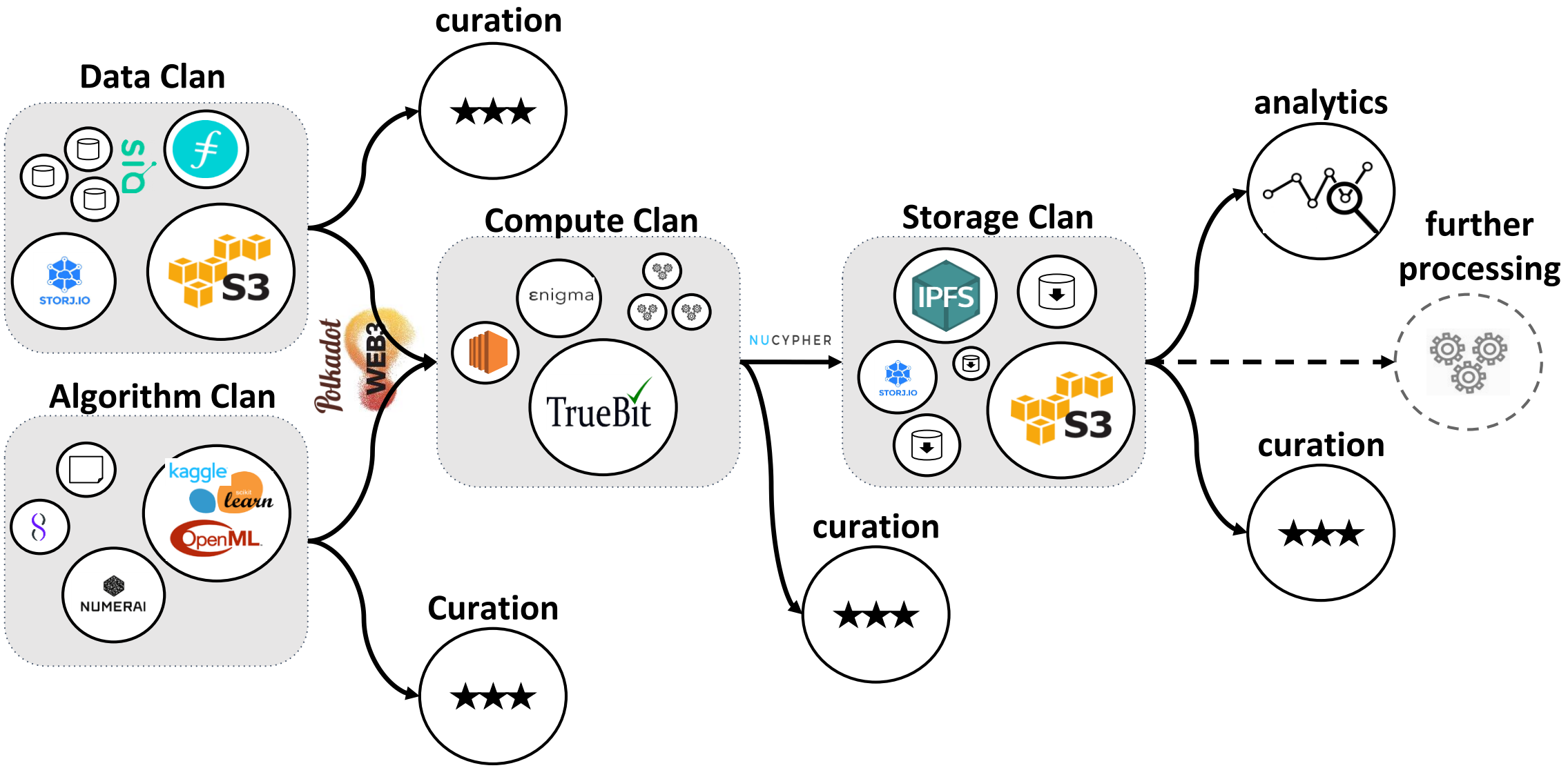
What if we bring AI compute to the data?



Bring AI compute to the data, *across 10,000 hospitals* (*Decentralized* federated learning)

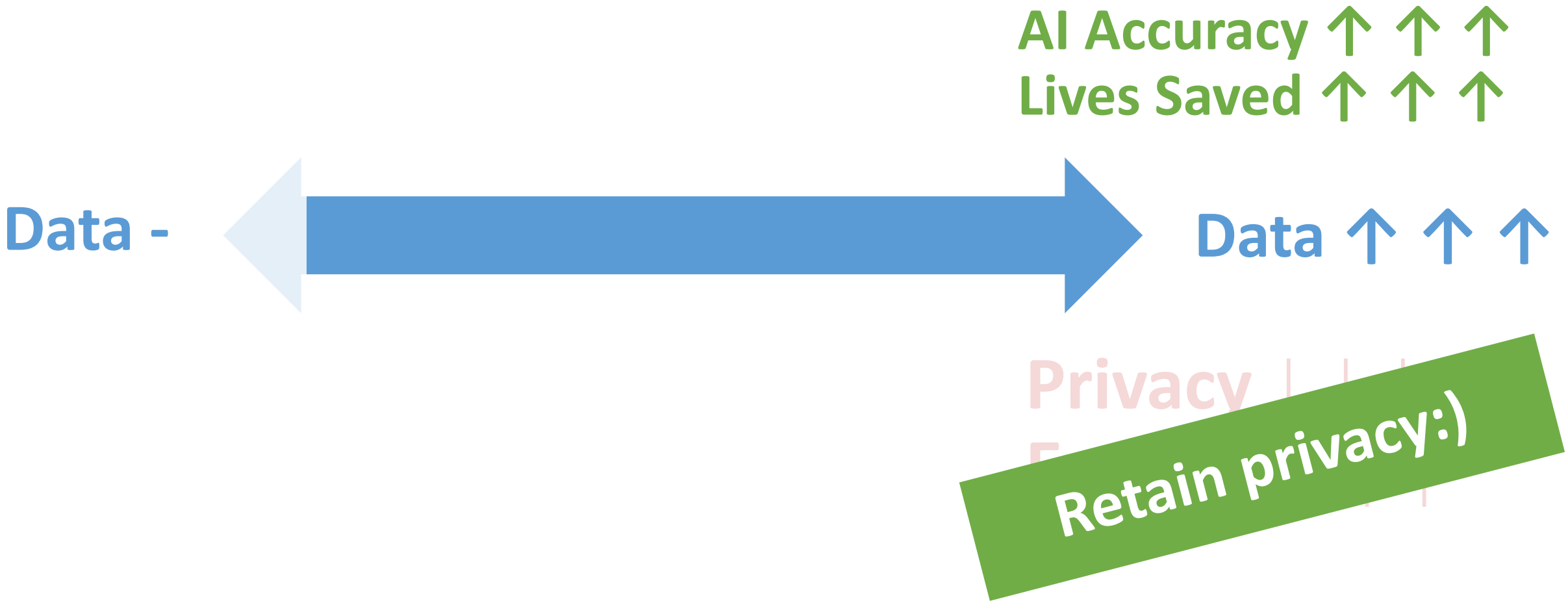


Ocean is a Public Utility Network
For Decentralized Orchestration (incl. Dec. Federated Learning)

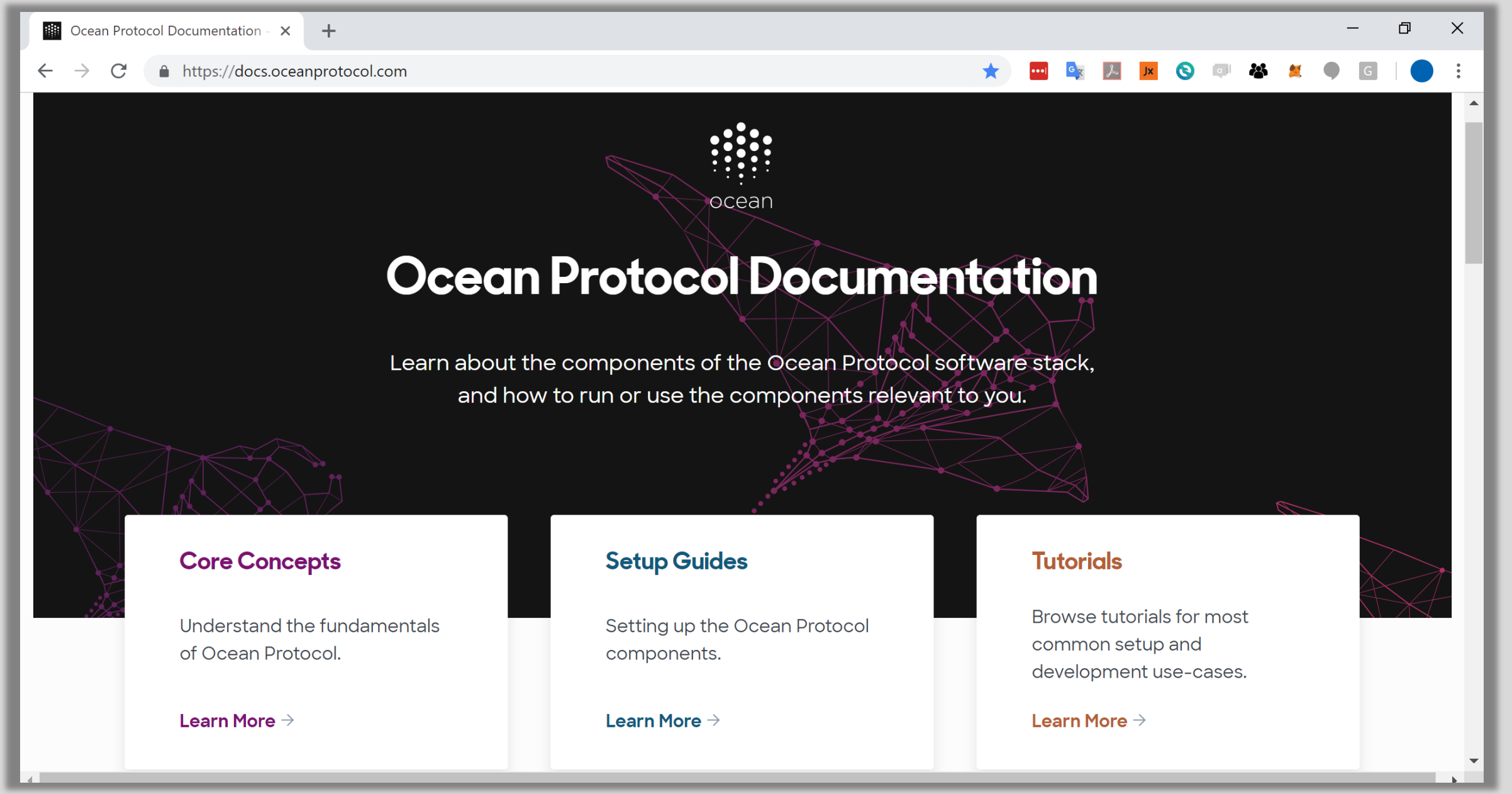


Ocean Resolves the Tradeoff

by Bringing Compute to the Data (via Dec. Orchestration)

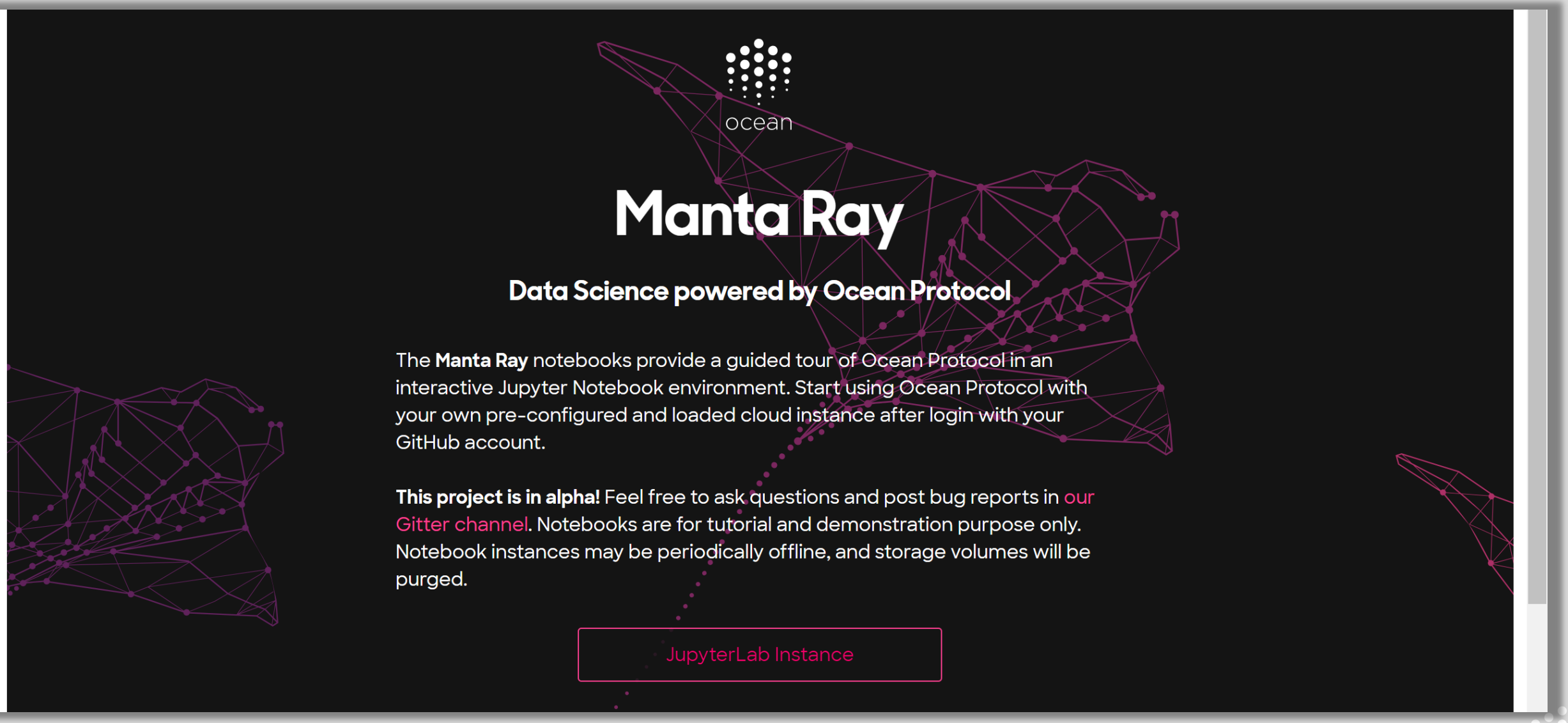


https://docs.oceanprotocol.com



ocean

https://datascience.oceanprotocol.com



ocean

ConnectedLife: Better predict Parkinson's by connecting data across hospitals

Data you have

1 hospital

Data you'll get!

10,000 hospitals