

Open TEAM

Open Technology Ecosystem for Agricultural
Management



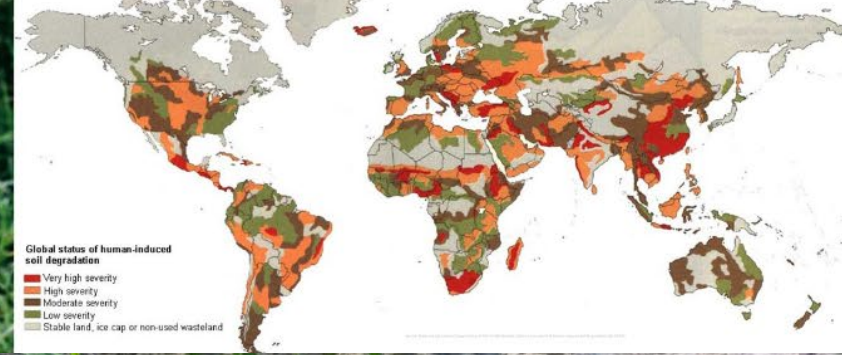
WOLFE'S NECK CENTER
FOR AGRICULTURE & THE ENVIRONMENT



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FARM HACK
A COMMUNITY FOR FARM INNOVATION

farmOS



- **Accurate**
- **Accessible**
- **Inexpensive**
- **Participatory:**
 - farmers
 - researchers
 - **AND the public**

From precision ag to decision ag

Democratizing access to
agricultural knowledge - and
creating tools that empower
people in their environment



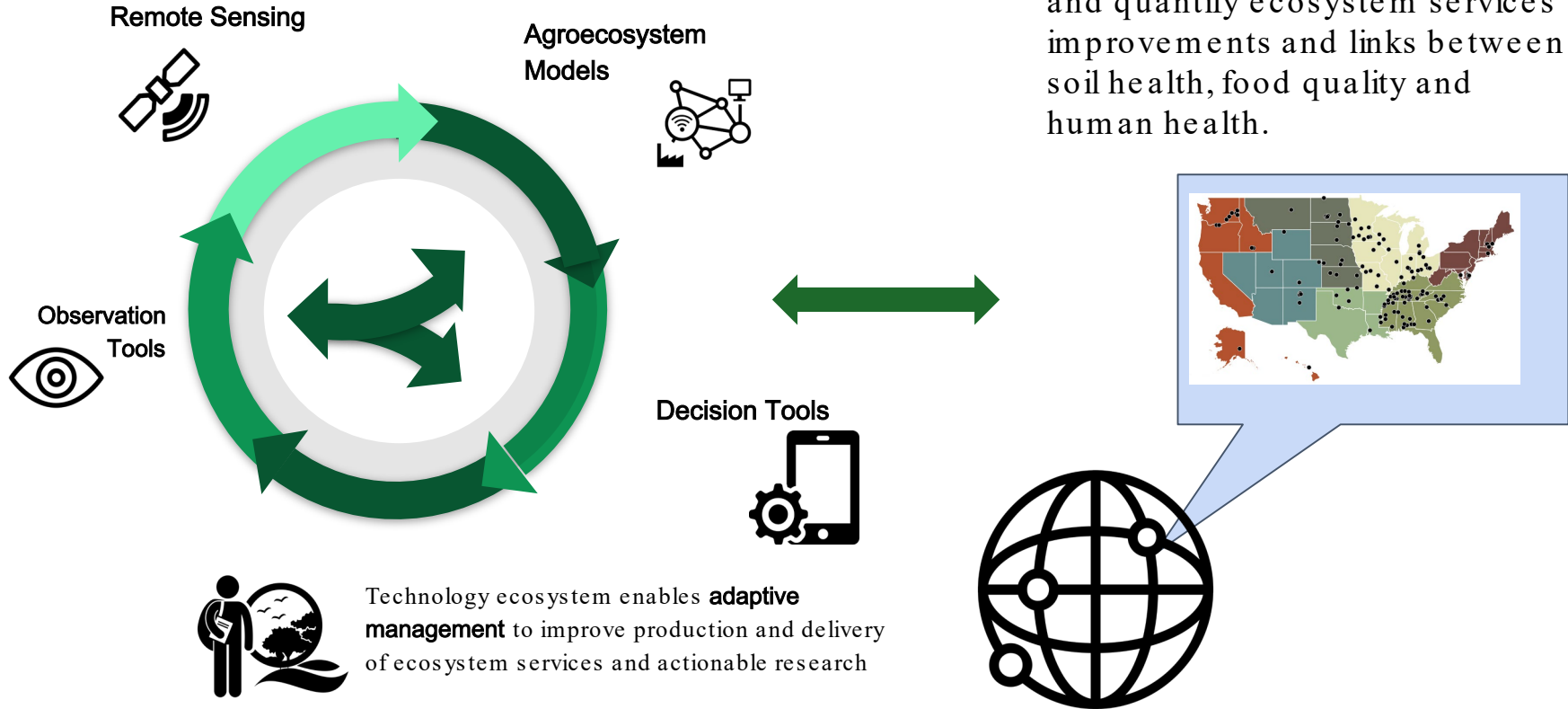
OpenTEAM.community

<https://youtu.be/pkZsooe7CQY>



OpenTEAM

Hub Farms form basis for **global network of farms and supply chains** using OpenTEAM to guide and quantify ecosystem services improvements and links between soil health, food quality and human health.



Open **TEAM**

farmOS

Enter Data Once- Use many times !



our-sci.net



Management tools

- Organic Certification
- GAP/FSMA Certification
- Covercrop Decision Support Suite
- Soil Health Tools
- Grazing tools

Research tools

- On-Farm Trials
- Adaptive Nutrient management

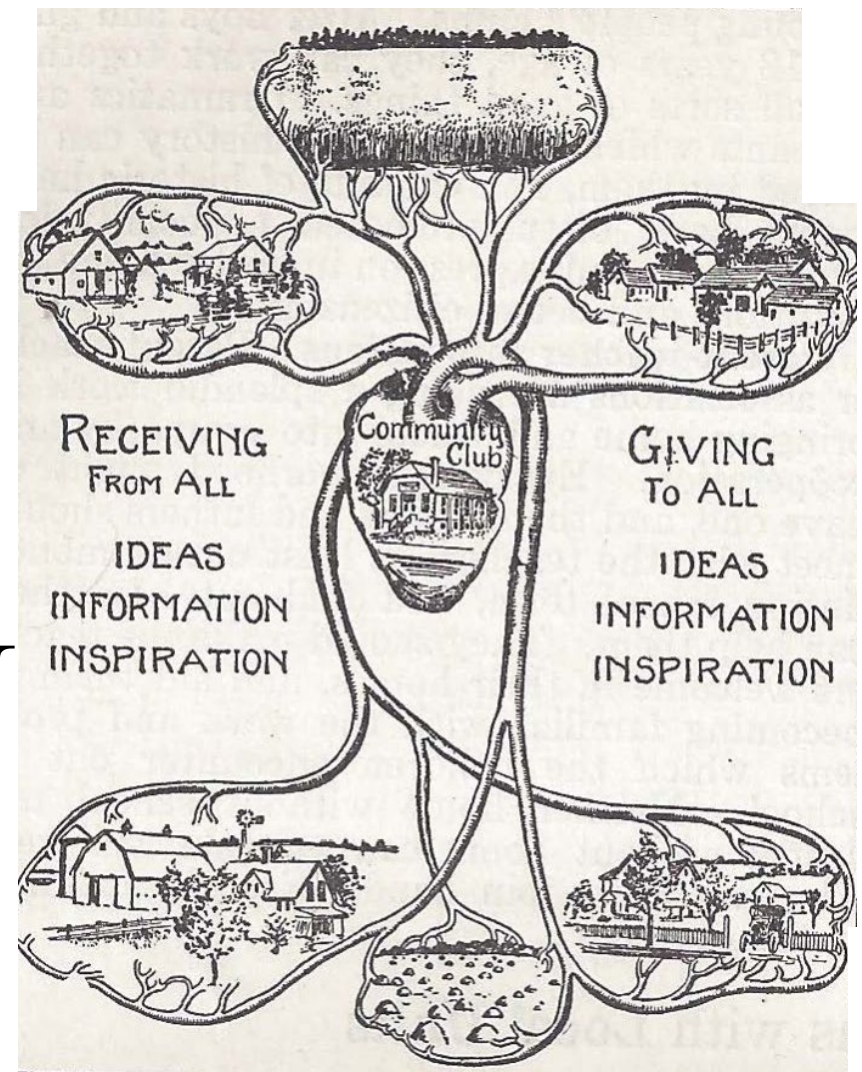
Government feedback

- NRCS/FSA import export
- NRCS Soil Layers
- Easement Monitoring

Ecosystem Service Markets

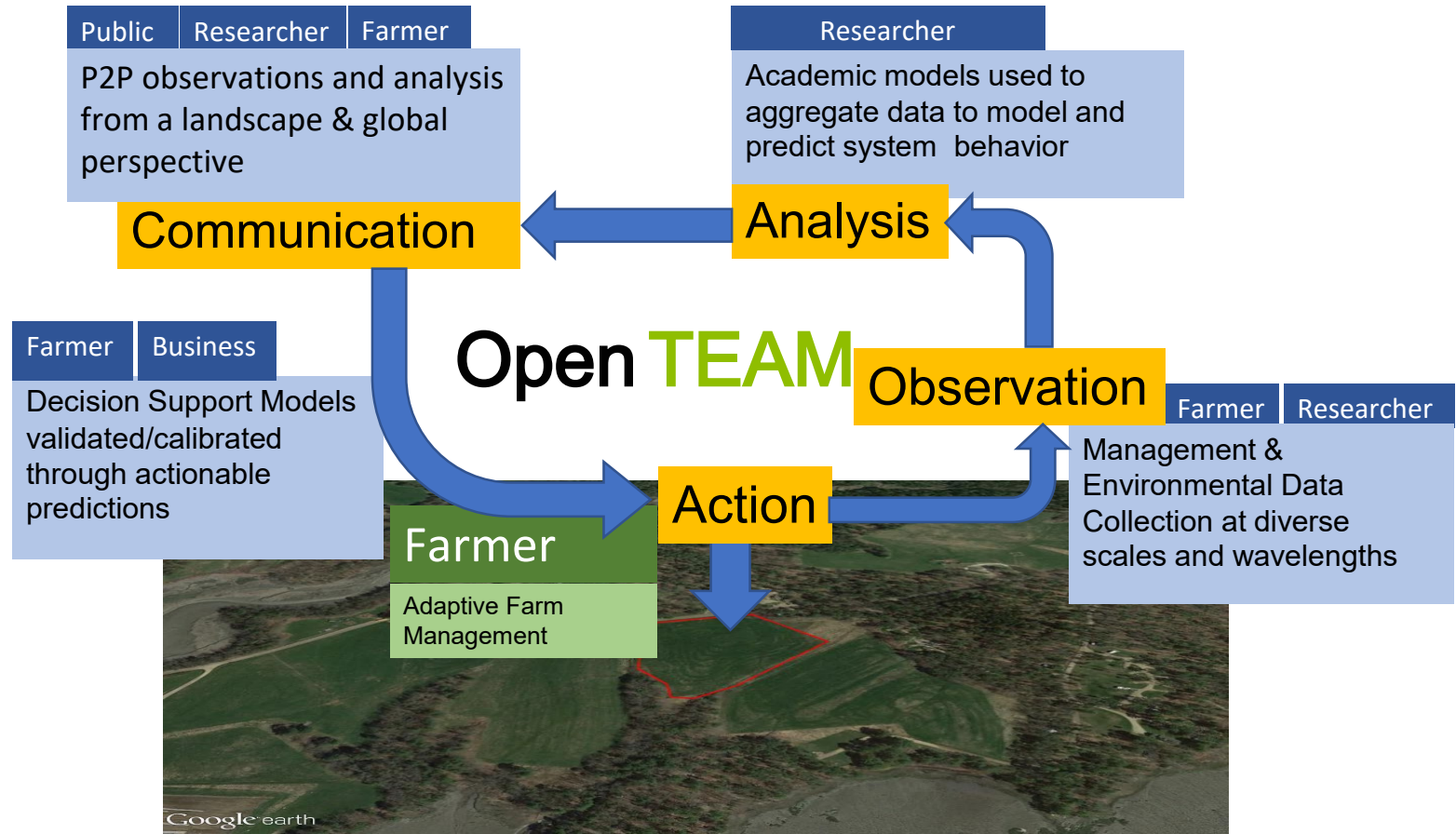
Open TEAM

Information
AND
INSPIRATION





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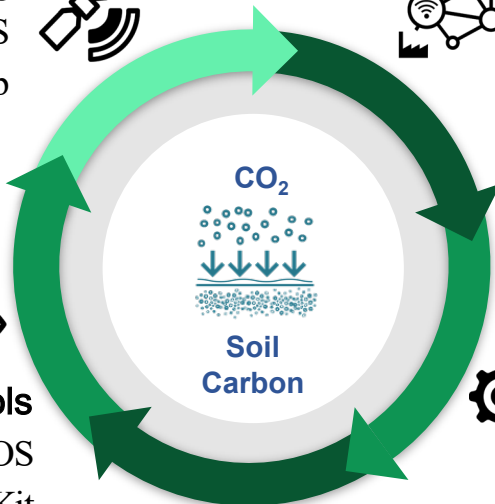


Open TEAM a Technology Ecosystem for continual Soil Health Improvement

Remote Sensing
OPTIS
Open Land Map



Agroecosystem
Models
Comet Farm
Cool Farm Tools
DNDC



Observation Tools
farm OS
Our Sci Kit
LandPKS
Quick Carbon



Decision Tools
Grazing tools
Cover crop suite
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Adaptive Management
Farmer networks





farmOS

Farm Dashboard

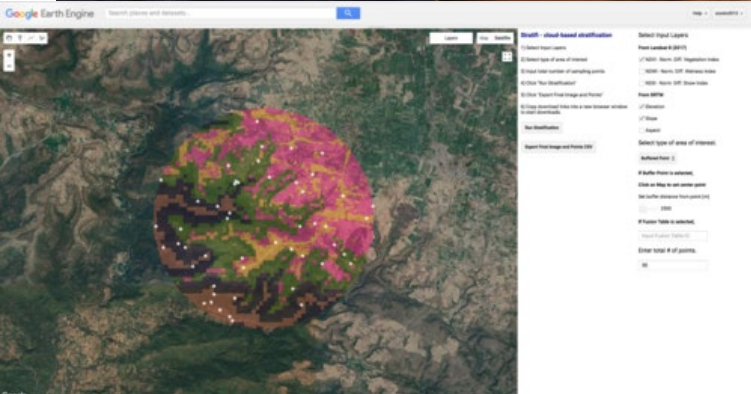
Farm Activities Movements Observations All Logs

+ Add an area + Add an activity + Add a movement + Add an observation



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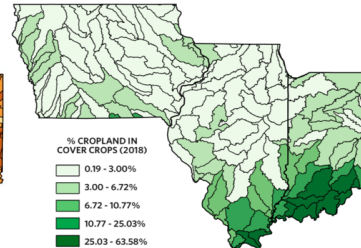
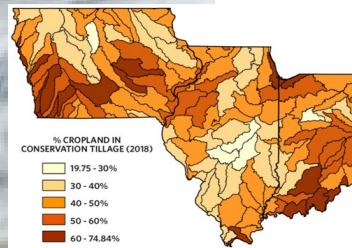


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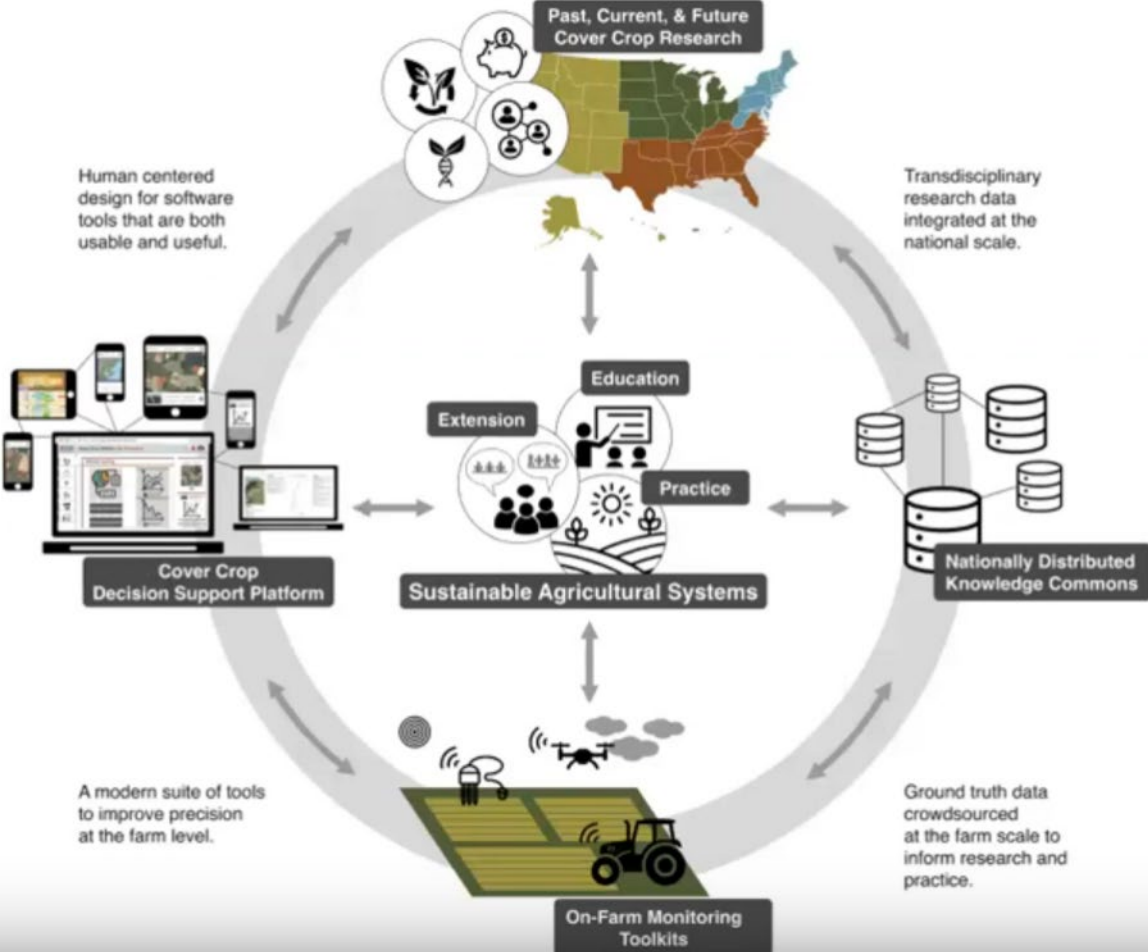
OpTIS

Operational Tillage Information System

Phase 1 Release is >1 Billion Acre-Years of Data



An Information Ecology for Sustainable Agriculture



Open Agriculture Technology and Systems

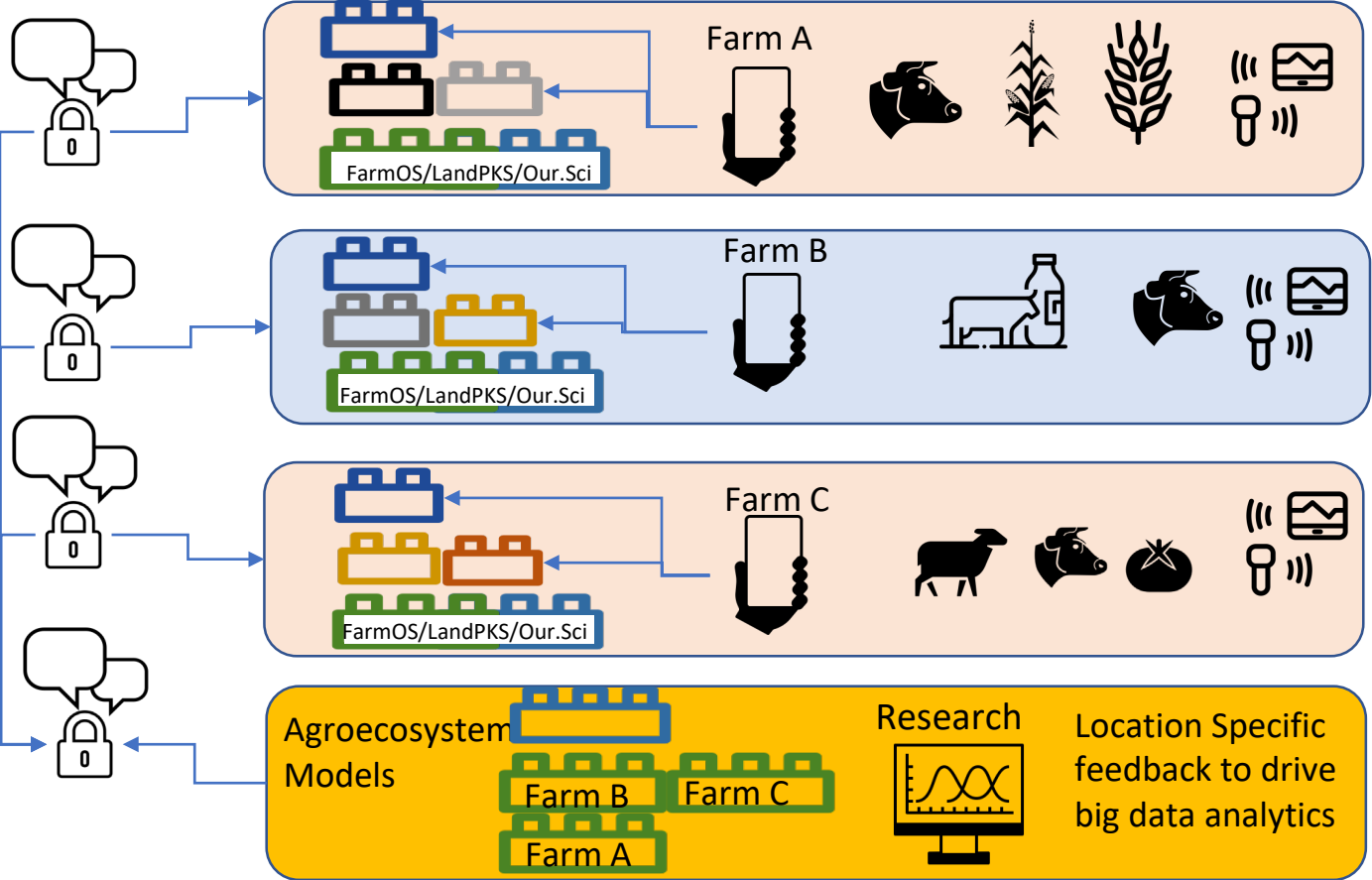
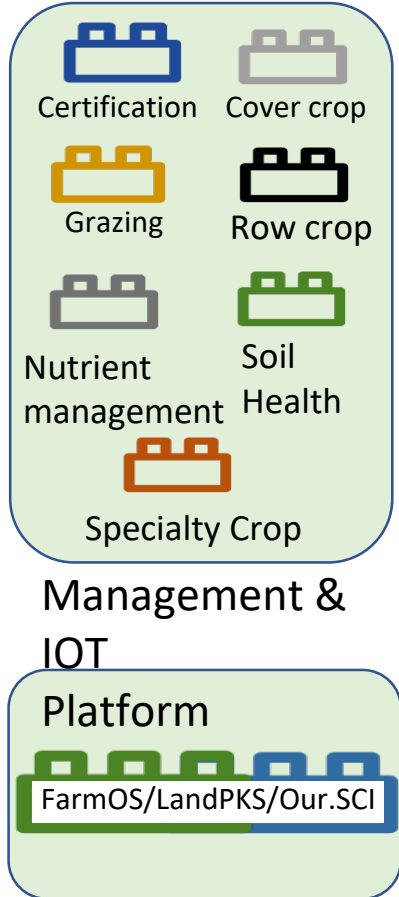


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Tools are built with a modular Software Development Tool Kit (SDK)

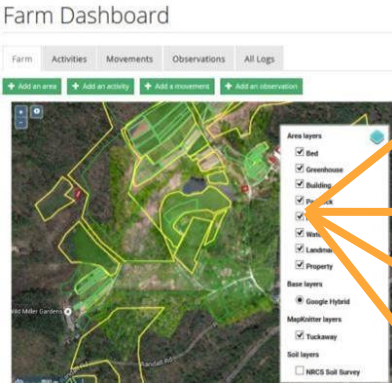
Modules

Peer to Peer Communications & Community Centered Design



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Site Specific Data Compounds in Value



Ecosystem Services Markets: enables secure, long term asset creation and trading for carbon, water quality/quantity, and biodiversity markets.



Certification (Government and supply chains): high quality & high resolution data improves accuracy and effectiveness of certification, government payments, crop insurance, and supply chain incentives.



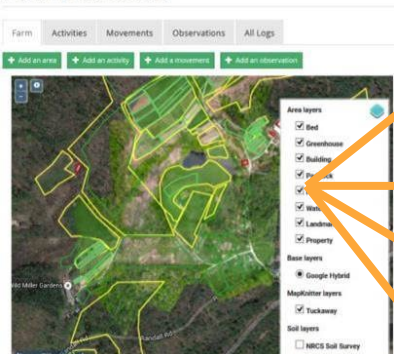
Research and development: high quality farm data on practices, conditions, and environmental performance feeds into tool and model design, calibration, and improvement.



Farm level: Site-specific decision support tools create agronomic value; improve farm gate profitability and resilience.

Data quality and value increase over time

Farm Dashboard



Network Effect and Return on Investment

Open **TEAM**

Knowledge Infrastructure and community of practice Investment

Open TEAM a Technology Ecosystem for continual Soil Health Improvement

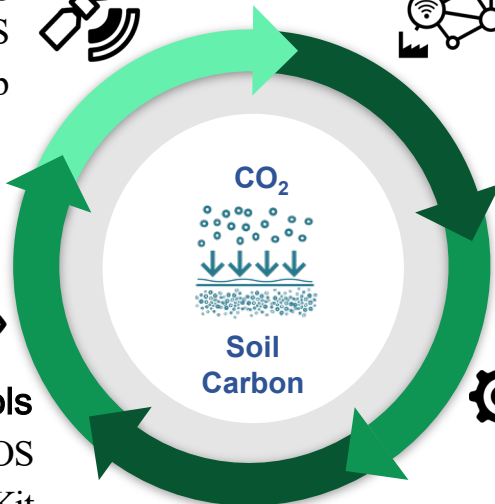
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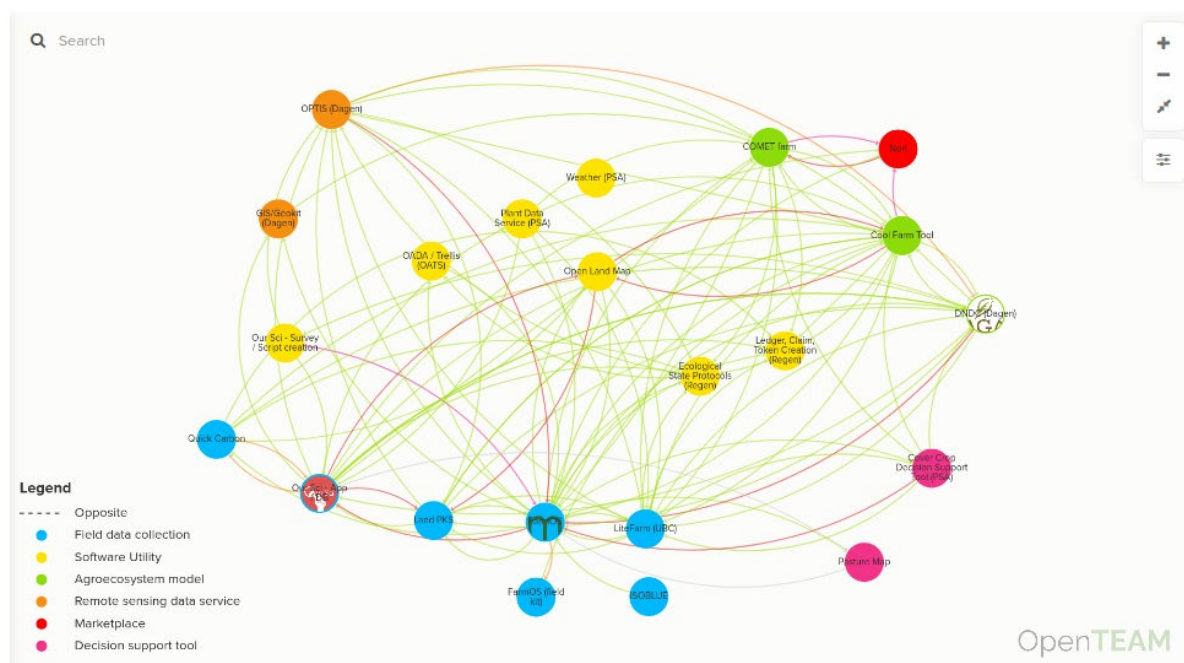


Decision Tools
Grazing tools
Cover crop suite
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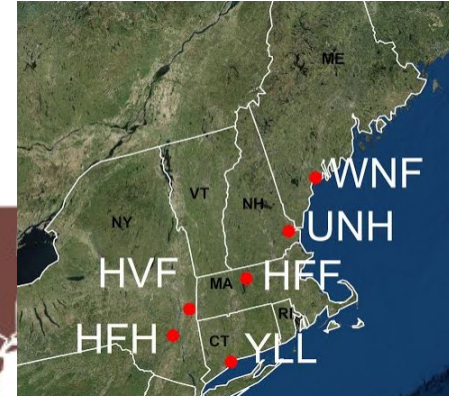
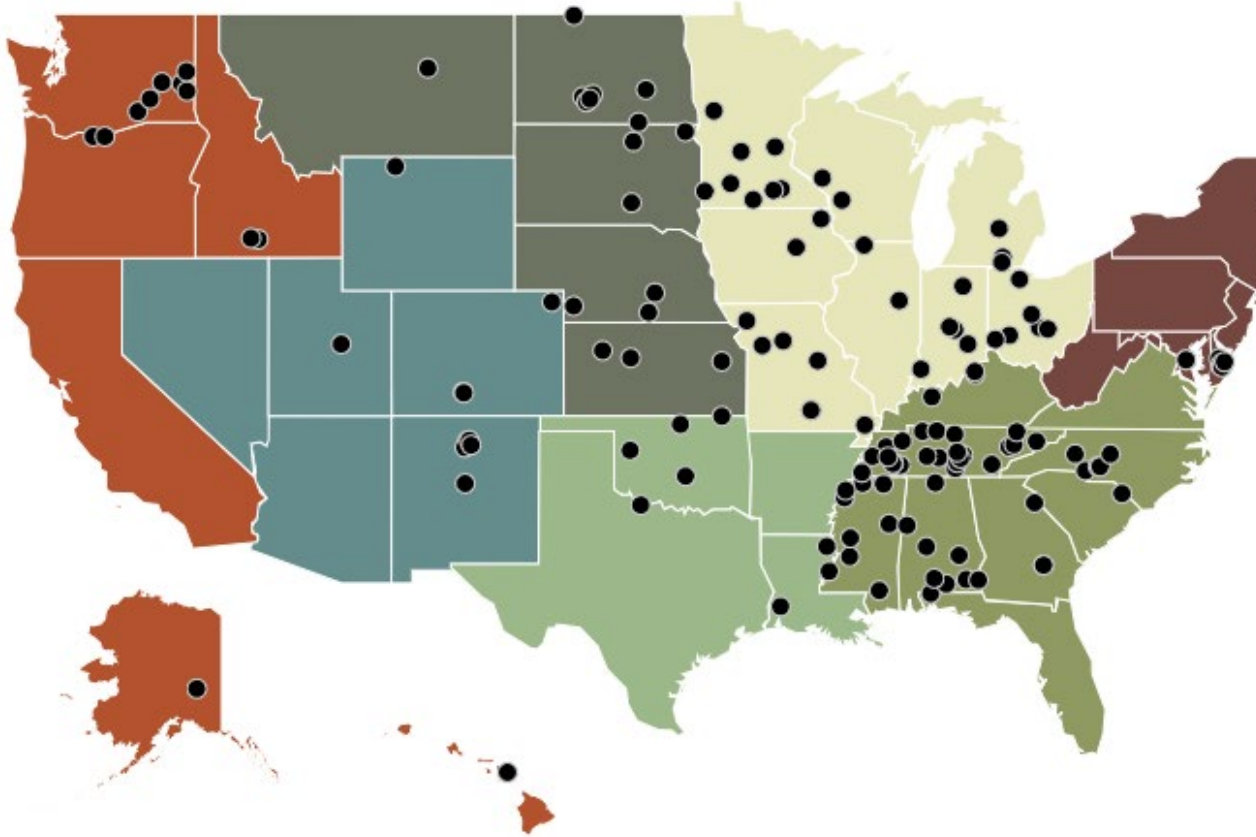
Adaptive Management
Farmer networks



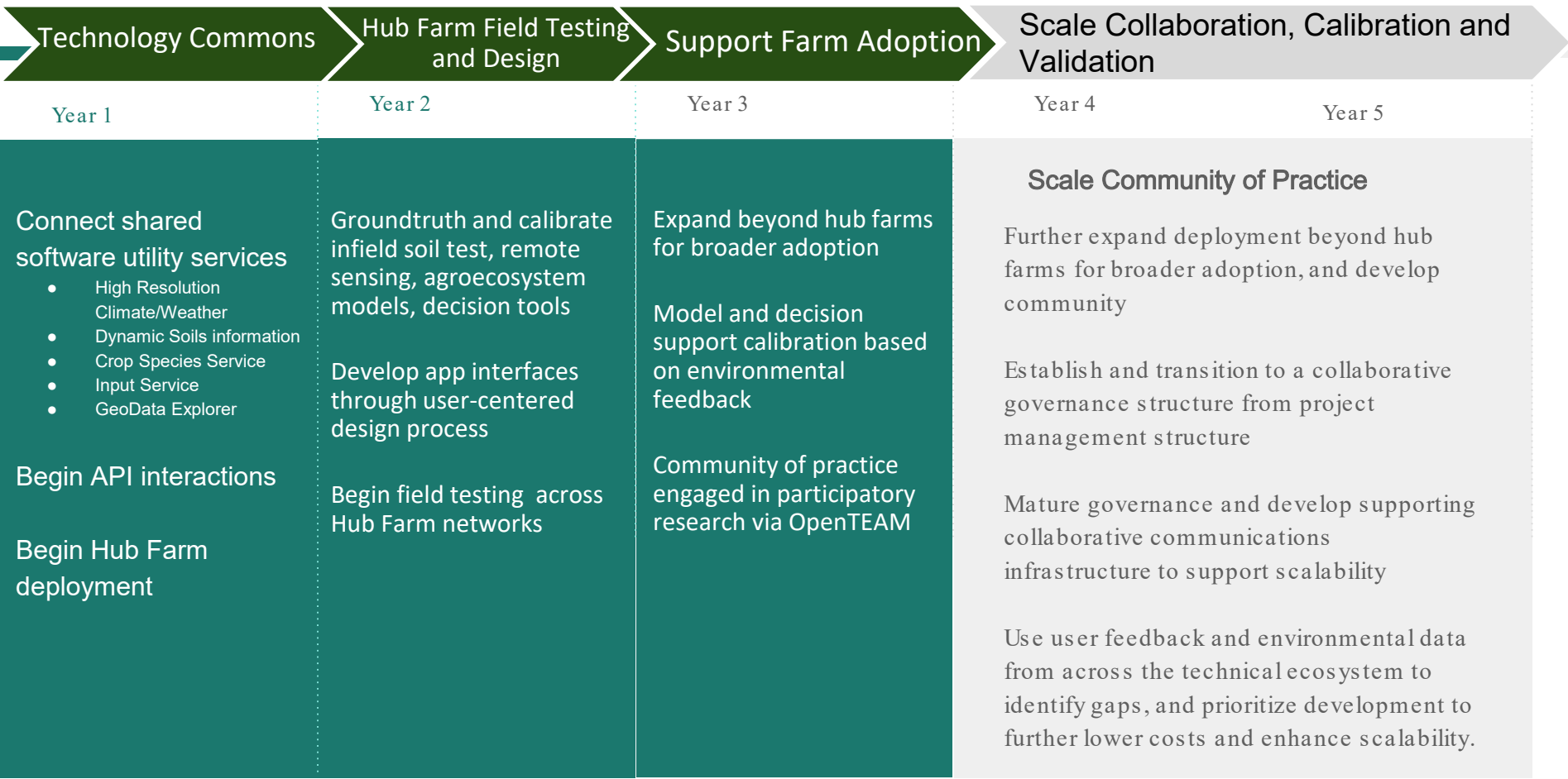


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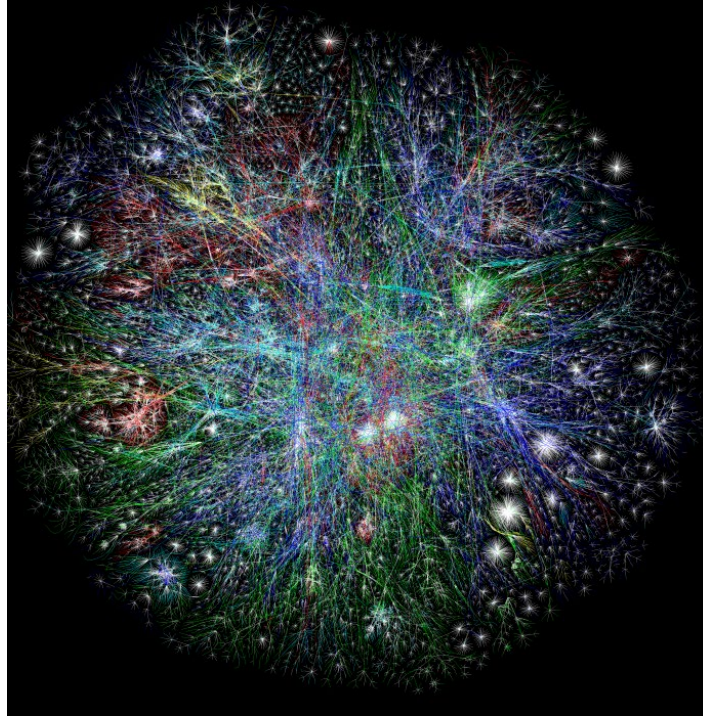
A Farm Network to Learn by Doing



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Thank you !

