Team OATS: Open Ag Technologies and Systems

The Future is Today
Let Us Make it Happen

ODAP

OATS Data Automation Platform

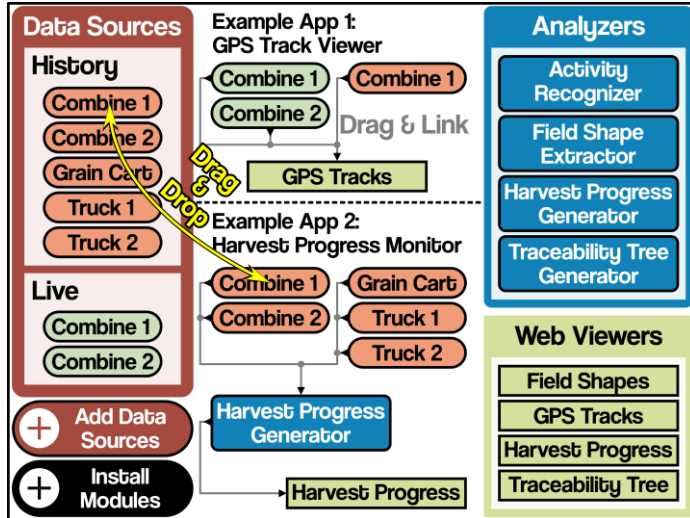# The One-Stop Open-Source Platform for Agriculture Data Automation

Mission
To build a free and open ag data automation ecosystem

Ag Data Today: A Burden to Producers
- No full control over data from proprietary sources
- Steep learning curve of open-source tools
- Working pieces do not work together
- Little value from analysis without a large investment

ODAP: "LEGO" for Ag Data Automation Applications
- **Full control** and **trust** guaranteed by **full transparency**
- **Codeless** and **drag-and-drop** workflow
- **State-of-the-art** research to extract insights for producers
- **Fully automated** and **plug-and-play** operation modules

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Data Sources

History
- Combine 1
- Combine 2
- Grain Cart
- Truck 1
- Truck 2

Live
- Combine 1
- Combine 2

- Add Data Sources
- Install Modules

Example App 1: GPS Track Viewer
- Combine 1 — Combine 1
- Combine 2
- Drag & Link
- GPS Tracks

Drag & Drop

Example App 2: Harvest Progress Monitor
- Combine 1 — Grain Cart
- Combine 2 — Truck 1
- Truck 2
- Harvest Progress Generator
- Harvest Progress

Analyzers
- Activity Recognizer
- Field Shape Extractor
- Harvest Progress Generator
- Traceability Tree Generator

Web Viewers
- Field Shapes
- GPS Tracks
- Harvest Progress
- Traceability Tree

Vision
Ag data automation boosted by open cooperation

Potential Partners
Universities, research labs, John Deere (Operations Center), Case IH (AFS), New Holland (PLM), AGCO (Fuse), Ag Leader, Topcon, AgroSense, Raven Slingshot, Traccar, AgGateway (ADAPT), GeoFIS, Trimble AutoSync

Competitive Advantage: First of Its Kind
- Innovative user experience: a web app to build ag apps
- Targeting producers in U.S. (3.4 million with an average age of 57.5 years) but expandable with new modules
- Application of latest research outcomes
- Full control over the deployment: users get to choose where to store and process the data
- A comprehensive solution covering data collection, management, and analysis

Benefiting the Whole Digital Agriculture Industry
- User-focused: full control over what is done; vendor lock-in eased by modular design
- Open to all cooperation: anyone can use; anyone can contribute
- Application-oriented: data are visualized only when necessary
- Community-driven: collective power + talent development

Seeking
- Partnership, sponsorship, seed funding, and advice

Contribution · Community · Industry · Advice · Research · Academia
Needs — Producer

2021												2022	2023	2024	2025
◄ Select Essential Modules															
◄ Design ODAP Framework				◄ Implement Modules											
		◄ Implement UI				◄ Integration Testing				Release Public Beta					
								◄ Closed Beta		Roadmap for Stable Version					
Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	2022	2023	2024	2025

Goals: To **Survive**, **Attract Contributors**, and **Release Public Beta**
(Via Competition Prize, Partnership, Sponsorship, and Membership)

Goal: Business Development

INDIANA SOYBEAN ALLIANCE · INDIANA CORN Marketing Council · AgriNovus INDIANA · PURDUE UNIVERSITY · OATS

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