

# Open Power AI Consortium – Deployment and Implementation Working Group

December Virtual Workshop



**OPEN POWER  
AI CONSORTIUM**

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# SAFETY MOMENT

## Avoid Snowmelt Flooding

### AVOID SNOWMELT FLOODING

Warmer temperatures and rainfall can be a welcome change from the cold and snow of winter, however, this transition in weather can also lead to flooded streets and basements. Follow these snow removal tips and make sure you check your sump pump and that your pump's discharge line is clear and not frozen.

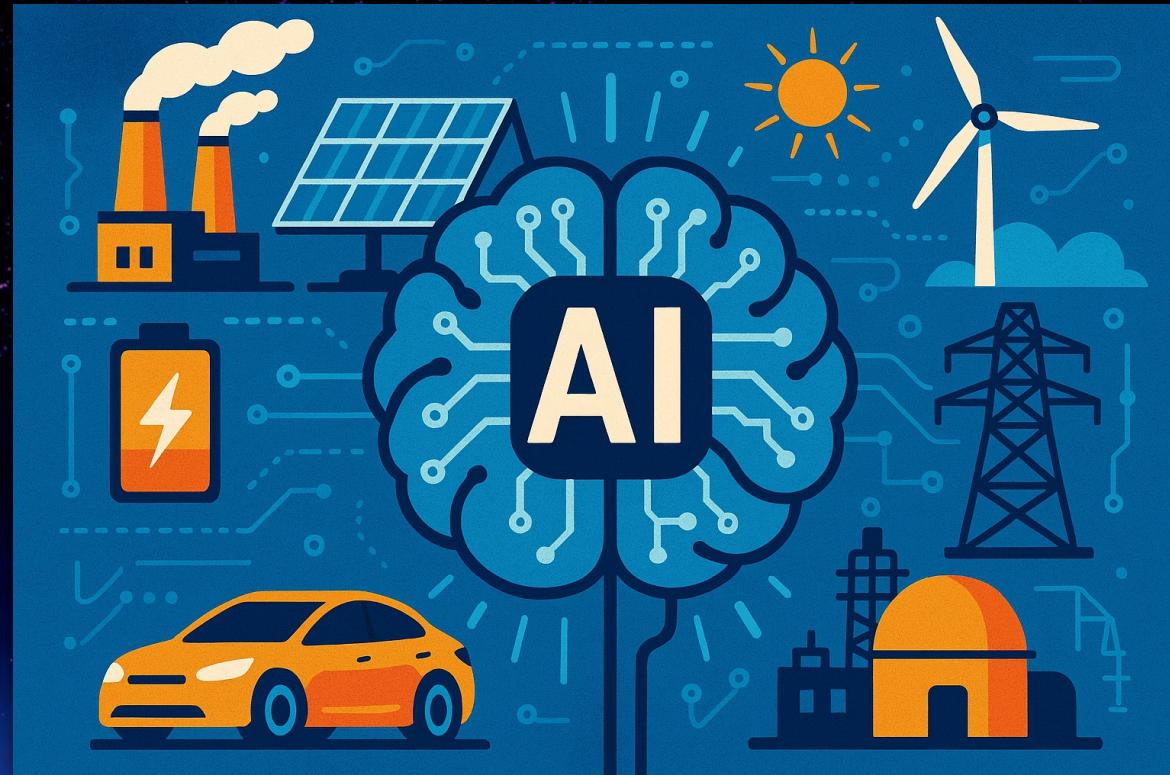


SOURCE: <https://twitter.com/WRNAmbassadors/status/1362778725218193408/photo/1>



# AGENDA

- Welcome and Safety Message
- Work Group Recap
- Upcoming Events
  - January and February Meetings
  - Utility and End-User Implementation and Deployment
- Technology Demonstration
  - Palantir



# Open Power AI Consortium – Key Objectives

Collect Data, Develop Libraries & AI Models



Create an AI Sandbox



Implementation and Lessons Learned



## Implementation and Lessons Learned

- Collaborate with leading AI developers to deploy AI models.
- Develop a feedback loop from deployments for refinement and optimization.
- Maximize impact via knowledge sharing among consortium members.

# Implementation Workstream Goals & Desired Outcomes

1. Connect commercially available AI solutions to end-users
2. Transfer, pilot, and implement new use-case solutions to industry
3. Foster a collaborative environment to improve the AI value proposition
4. Collect lessons learned through applications, demonstrations, and scaled implementation
5. Develop AI implementation guidance to help companies with successful implementation and value realization

# Three Main Thrusts to Accomplish Goals

## Research Products

- Value: Learning from implementation opportunities



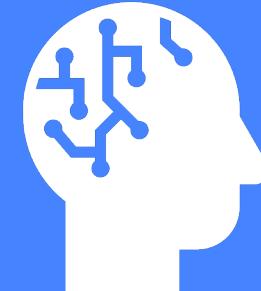
## Outreach and Interactive Knowledge Transfer

- Value: Interactive collaboration and awareness
- Value: Presentation opportunities



## AI Tool Implementation

- Value: Experience with AI tools and streamlined implementation
- Value: One-on-one and community use-case build out



# Upcoming Events

## 2026 Open Power AI Events

January						
S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
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25	26	27	28	29	30	31

February						
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26	27	28	29	30		



Deployment WG Meeting

Use-Case WG Meeting

Domain-specific Model WG Mtg.

Member Representative Committee Mtg.

May						
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24	25	26	27	28	29	30
31						

June						
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July						
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August						
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30	31					

September						
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October						
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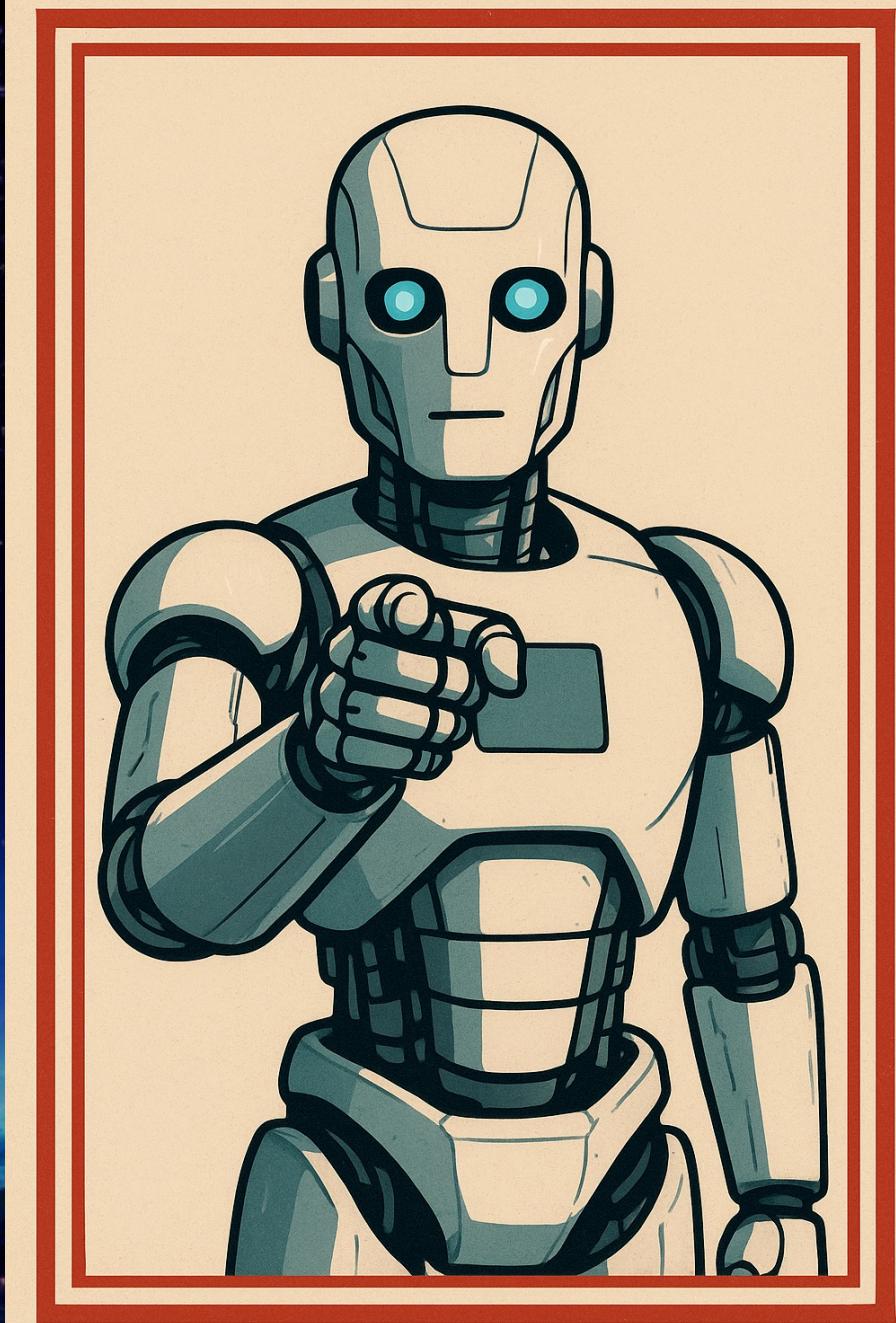
November						
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December						
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20	21	22	23	24	25	26
27	28	29	30	31		

Vendor Platform Presentations:  
 Jan.: Distill Energy  
 Feb.: Salurian AI

# We Need Your Help!

- Implementation and Deployment Use—Case Stories and Feedback
  - Monthly lessons learned, 45 minutes during the working group meetings
  - Goal: schedule presentation for Q1-26 ASAP
- Looking for a ***WG Co-Lead*** from a utility or end-user.
- Looking for opportunities to ***pilot and deploy*** AI tools, algorithms, scripts, and platforms.
  - Working with vendors/developers and EPRI to collect lessons learned and facilitate tech transfer.
- Contact Jason Hollern ([jhollern@epri.com](mailto:jhollern@epri.com)) to volunteer.



# Technology Demonstration Palantir Foundry for Utilities – Omar Mohammed

# Palantir —for Utilities

The Operating System for the Modern  
Enterprise

Turbine  
→ №201

**AI Decision Guidance**

**MENU** / TURBINE / CODE / HEALTH

RUN SIMULATION → 28%  
DATA LOAD → N/A  
CHANGE → NONE  
POSITION → NONE  
FAULT PROBABILITY → NONE  
ADJUSTMENT → SYS TOGGLE  
ROTATION RPM → 3  
ENERGY YIELD → 7%

**SEMANTIC DATA — AI/ML-BASED TWINS — TWIN-BASED SIMULATIONS**

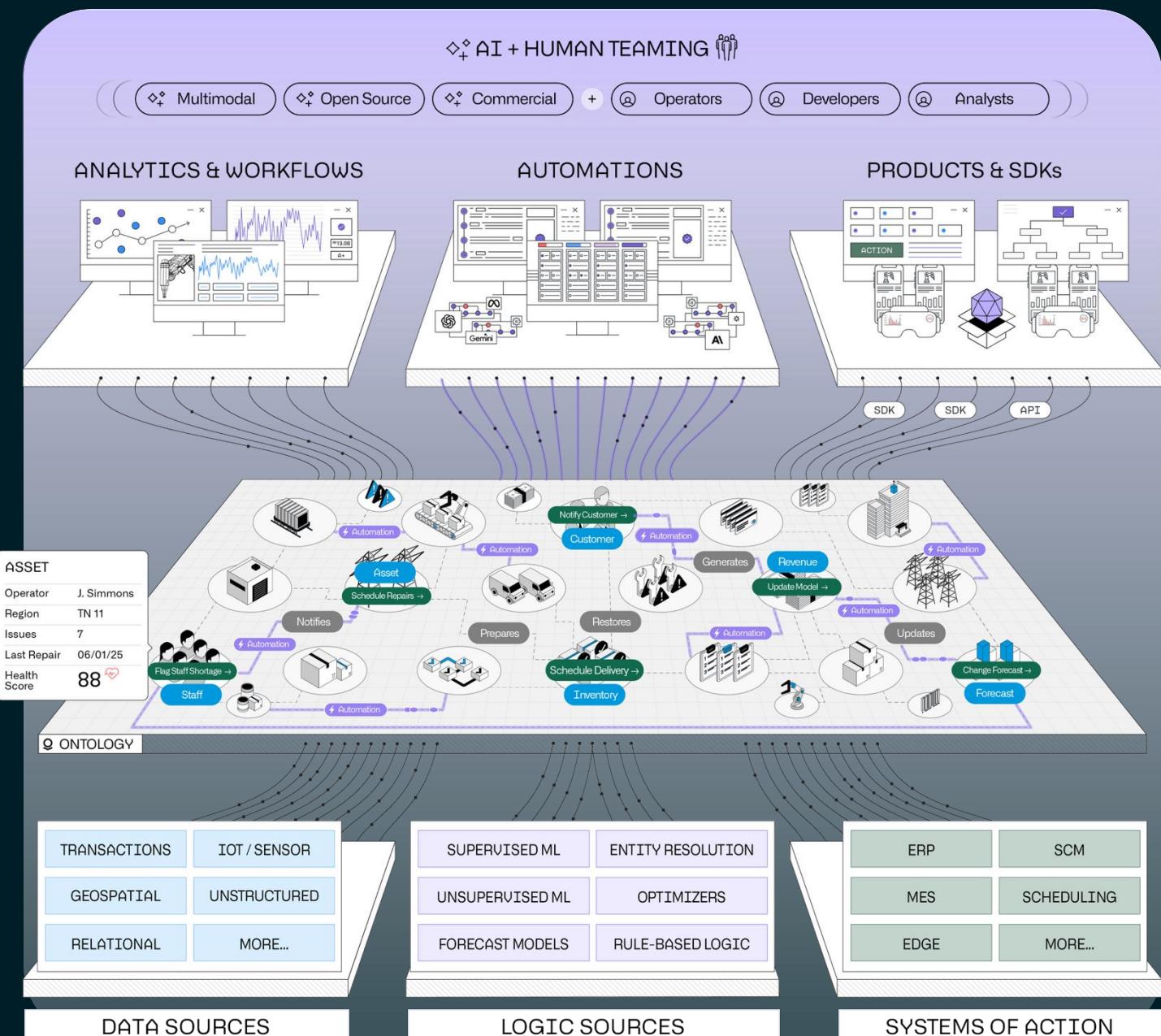
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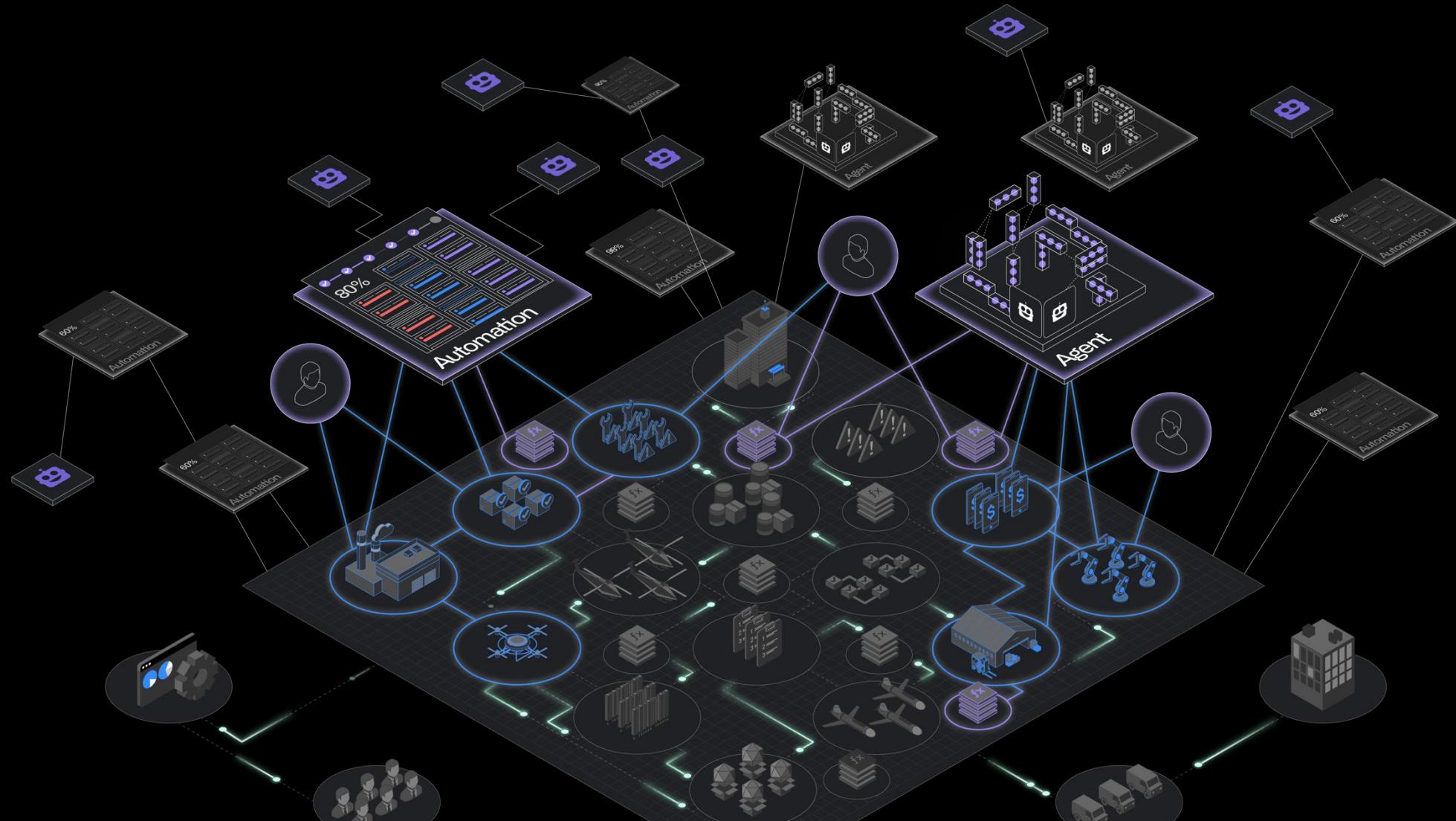
# Ontology-powered OS

RE-USE ONTOLOGY ELEMENTS  
ACROSS WORKFLOWS, APPS, &  
AUTOMATIONS

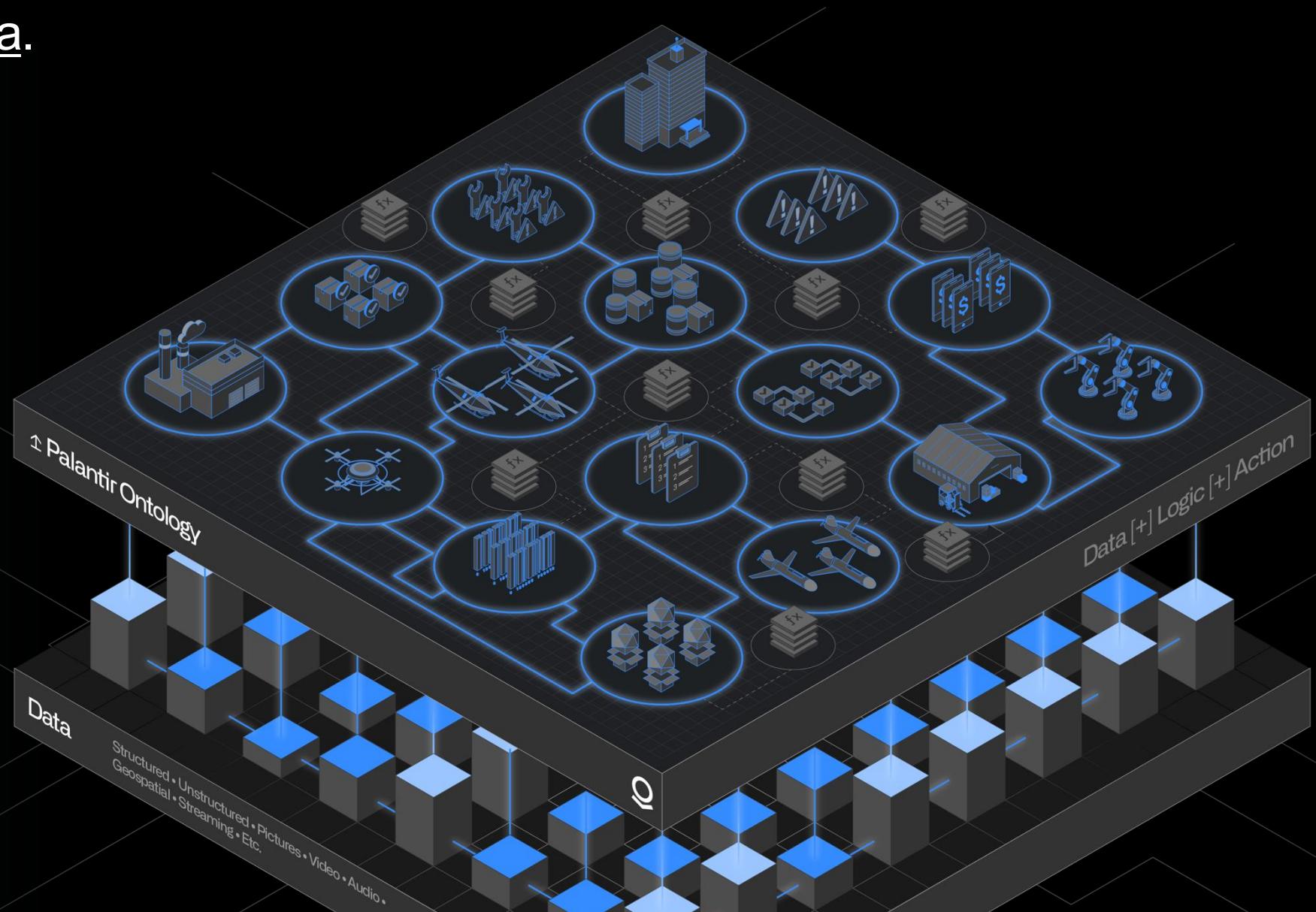
- ✓ Objects
- ✓ Links
- ✓ Actions
- ✓ Agentic Workflows
- ✓ Rules-based Flows
- ✓ Writeback Functions
- ✓ Simulations
- ✓ More...



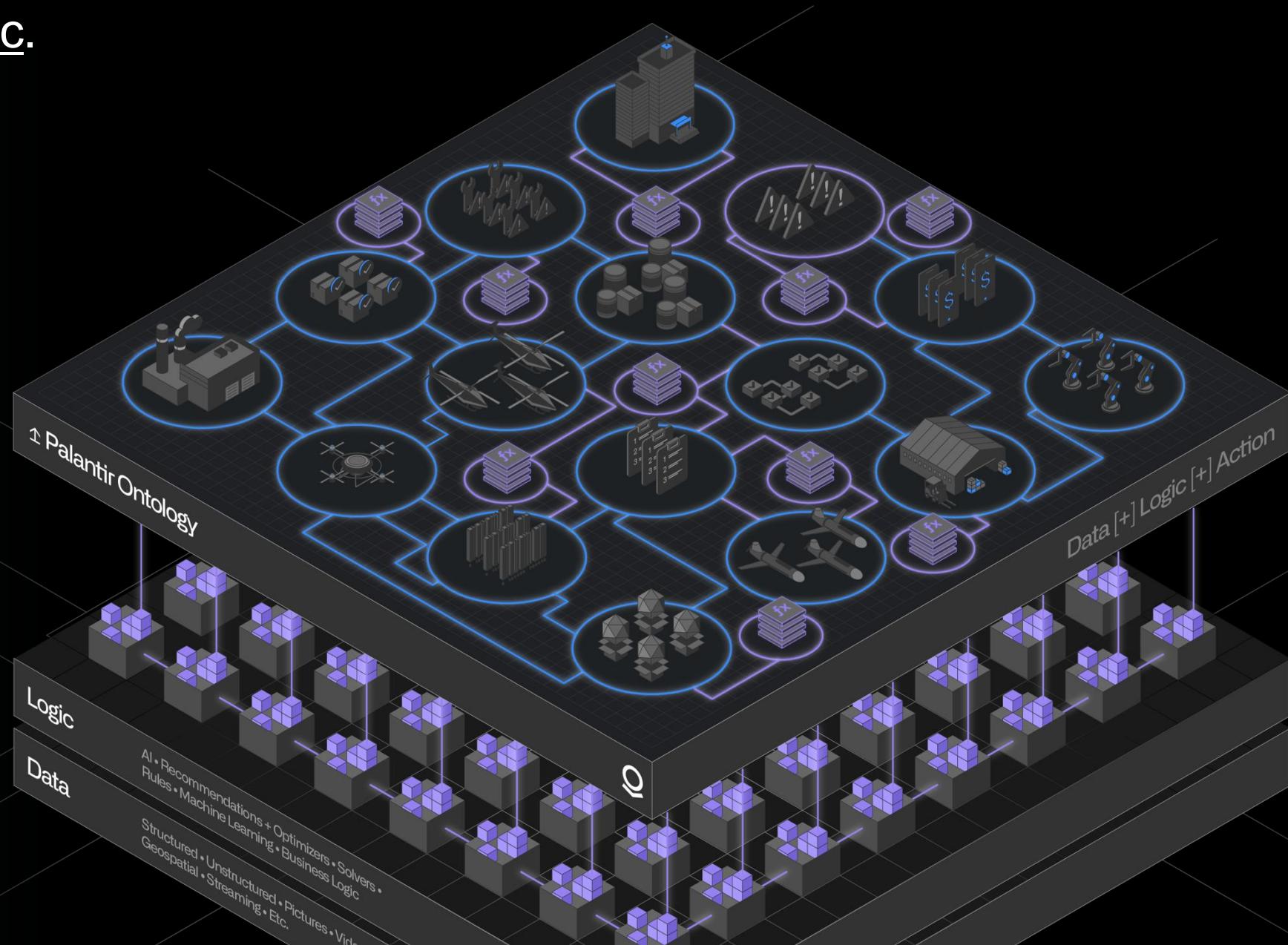
The Ontology provides a shared operational view for mixed Human+AI teams.



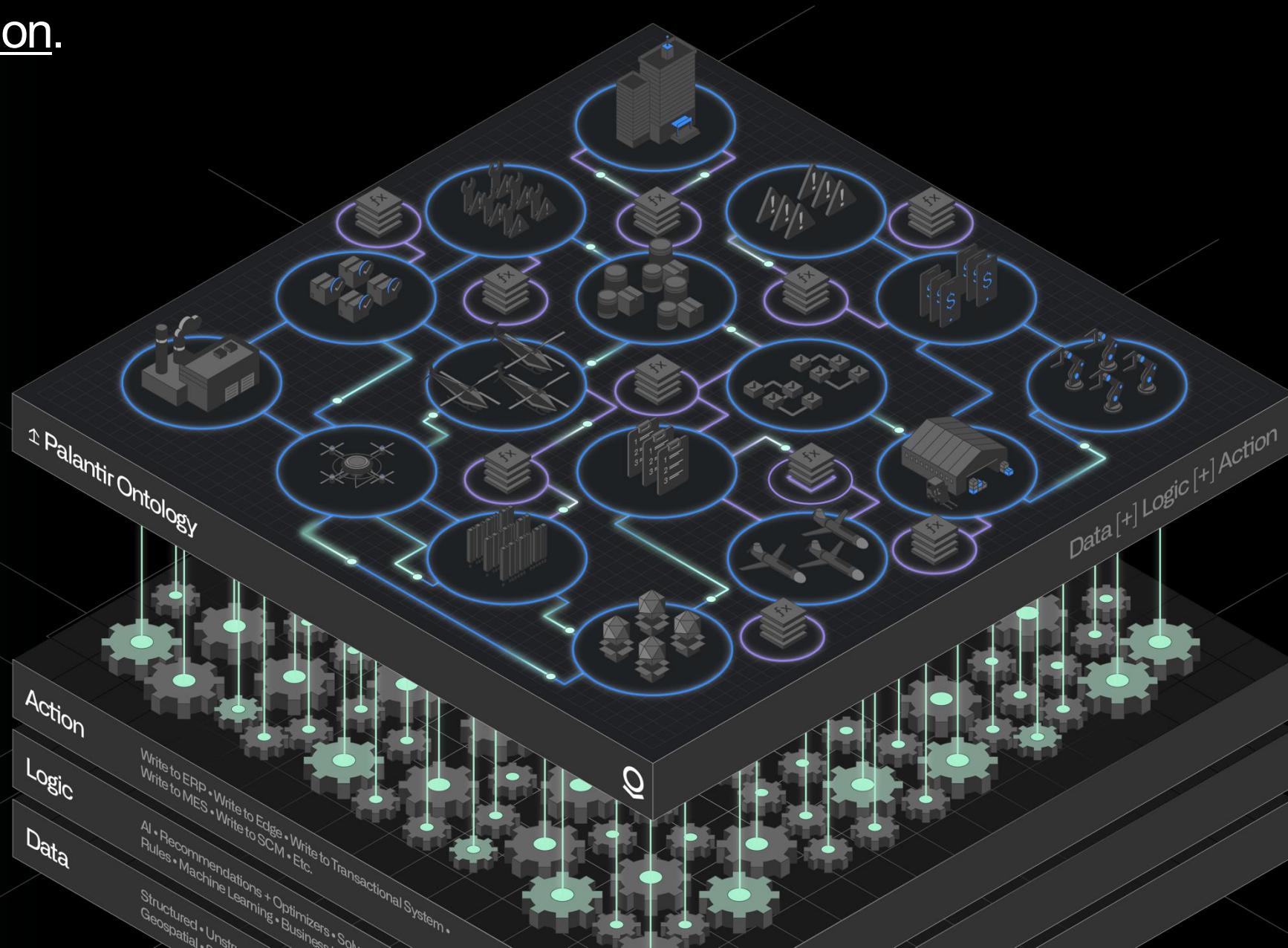
...shared data.

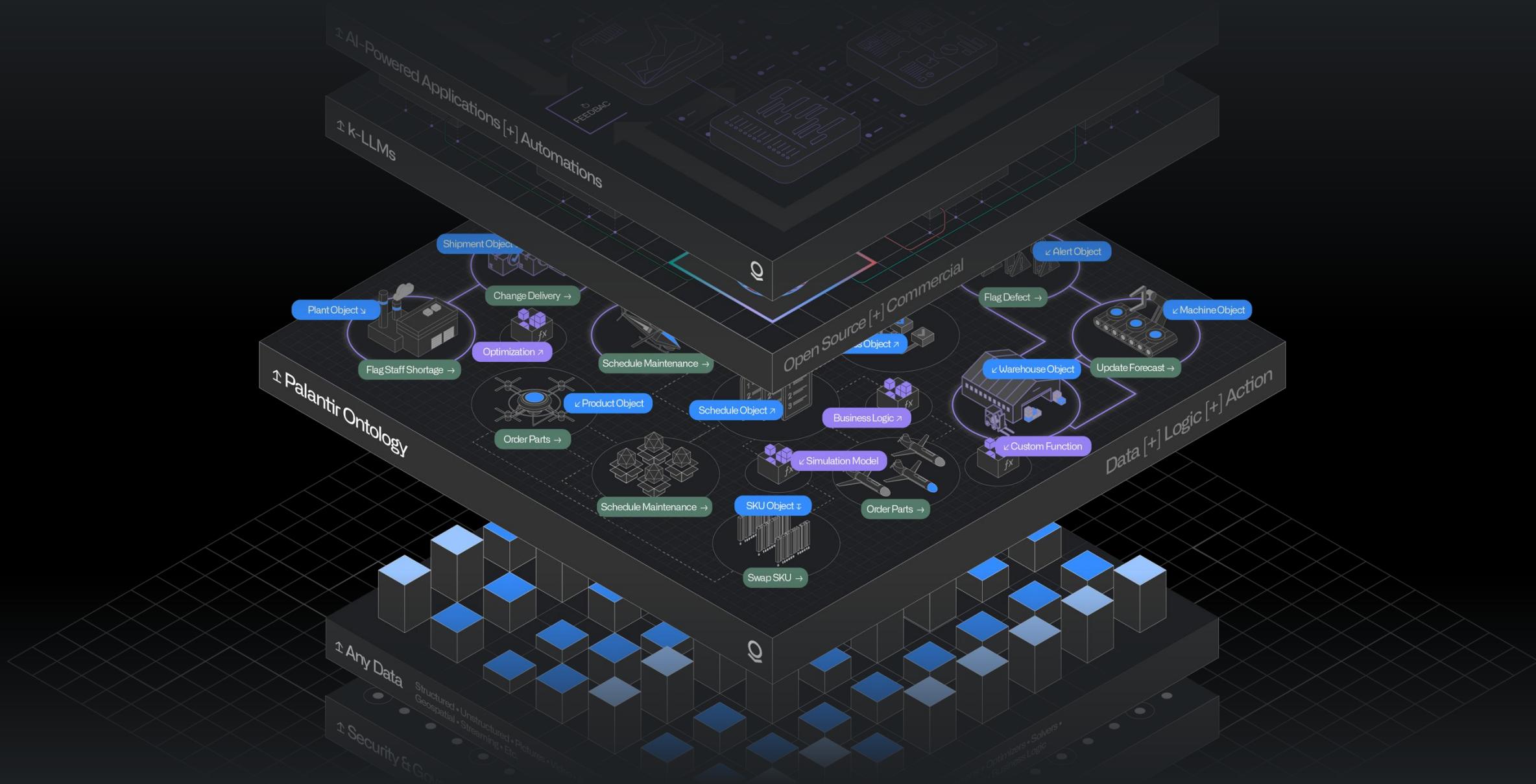


...shared logic.

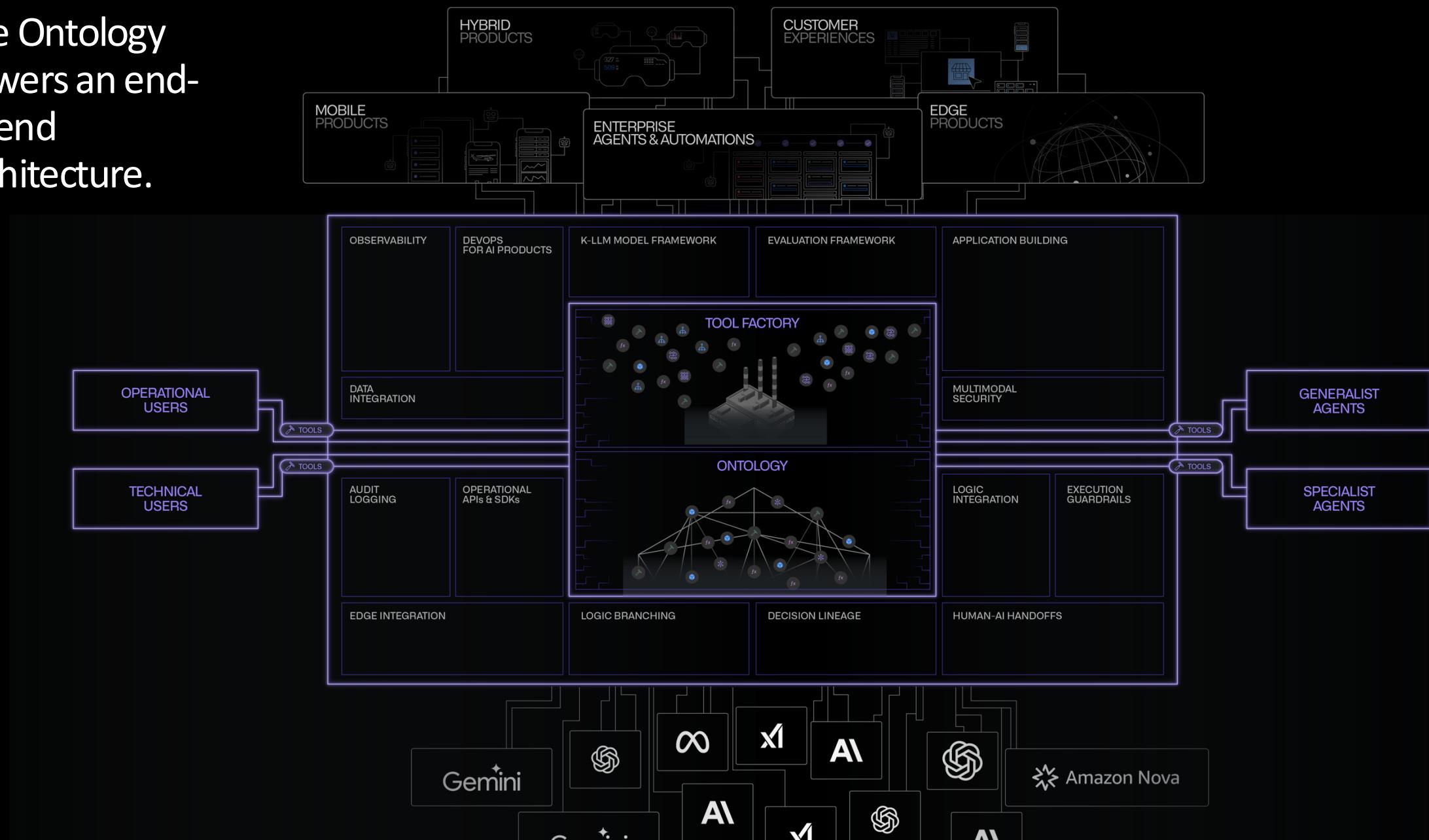


...shared action.

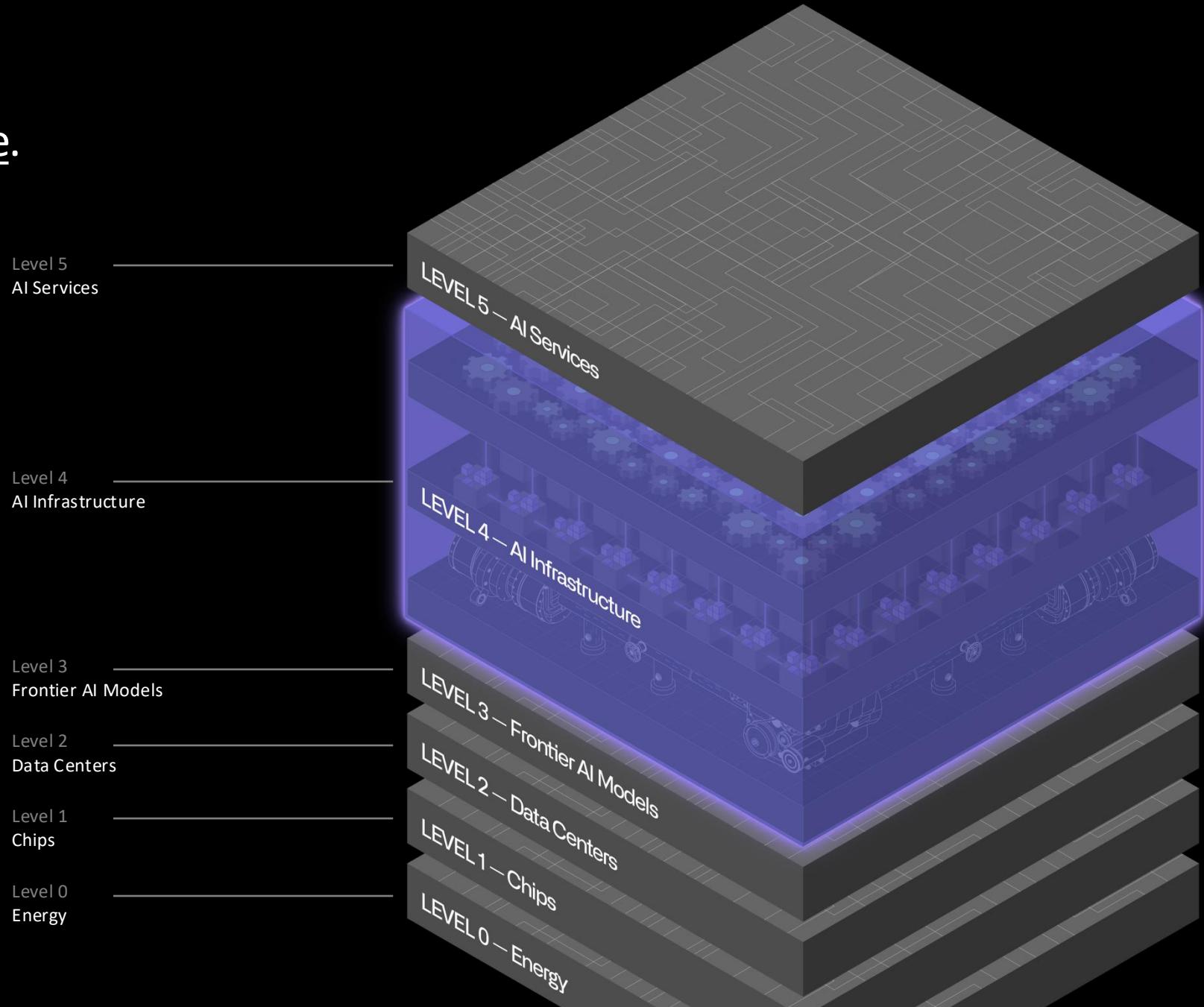




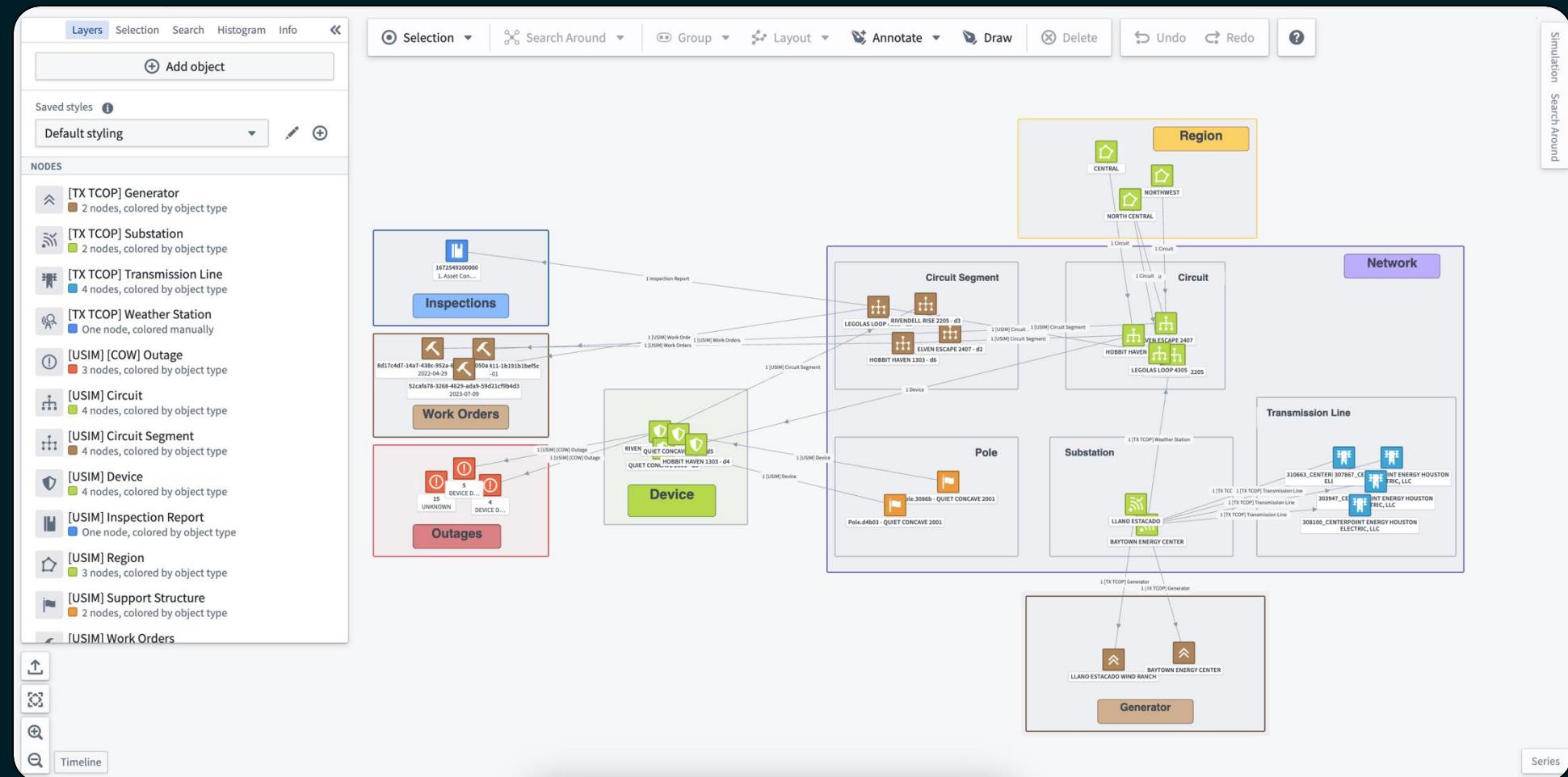
The Ontology powers an end-to-end architecture.



# We call this AI Infrastructure.



# Ex: Interconnected View of Assets, Programs and Risks



# Wide-Ranging Use Cases & Applications

## GRID ANALYTICS

- Asset 360 – Digital Twin
- Outage Localization
- Emergency Preparedness – Storm and Wildfire Response
- Work Planning and Bundling
- Preventative Asset Maintenance
- Vegetation Management
- Elevated Fire Risk

## CUSTOMER ANALYTICS

- Customer Segmentation
- Customer Engagement and Communications
- Demand Side Management
- Customer Notifications
- Next Best Action

## RENEWABLES

- Fleet Management
- Site Planning
- Maintenance Allocation & Planning
- Turbine Downtime Minimization
- Renewable Asset 360

## DECARBONIZATION

- EV Network Monitoring & Operations
- EV Charger Site Selection
- Heating Electrification
- Real-Time Load / Demand Forecasting
- Fleet Operations

## GRID MODERNIZATION

- Integrated Grid Planning
- Scenario Planning
- Work Planning and Bundling

## CAPITAL PROJECTS

- Material and Supplier Management
- Procurement and Process Mapping
- Project Scheduling Optimization
- Warehouse Inventory Tracking

## REGULATORY

- Interconnection Queues
- Regulatory Reporting
- Corporate Risk and Compliance
- Evidence Request Tools



# Approach

Accenture + Palantir propose a joint proof-of-concept through a consolidated methodology:



## Data Integration

Integration of data from *existing data\** sources and data quality review



## Workflow Configuration

Configuration of workflow components (functions, applications, models) against the target use case



## User Testing & Feedback

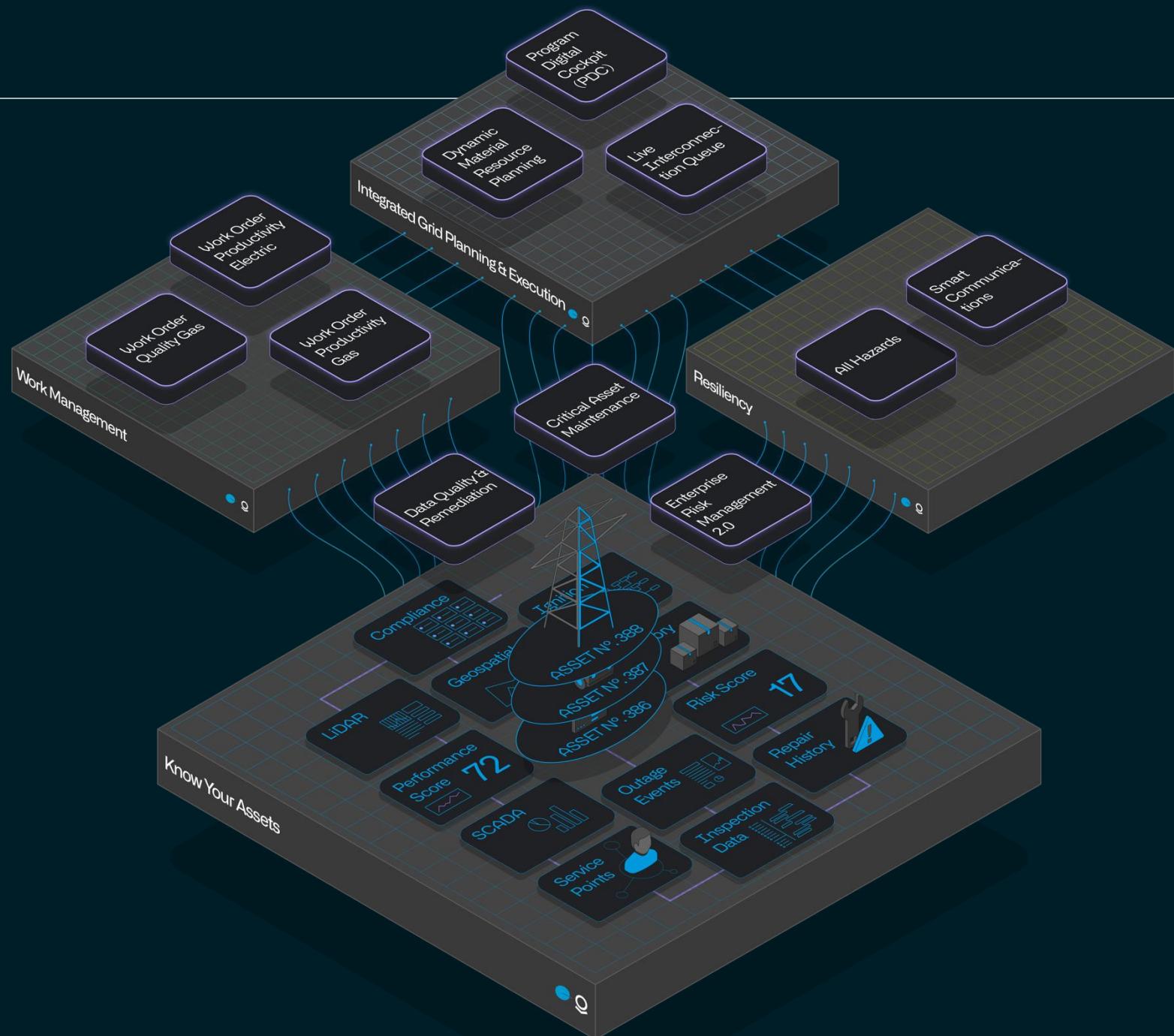
Short cycle user demonstration, feedback and iterations

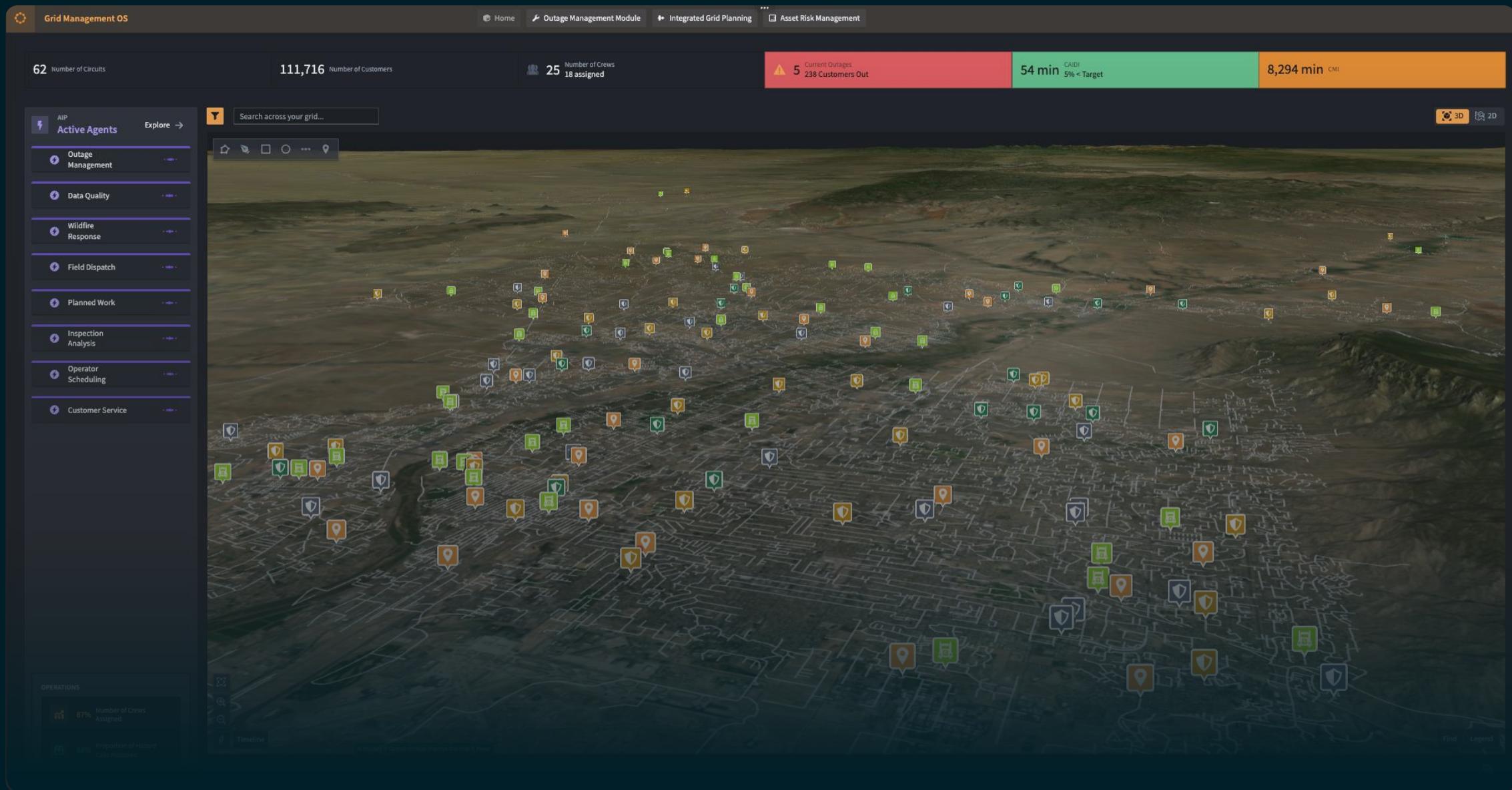


## Validation & Refinement

Data validation, feature hardening and product roll-out

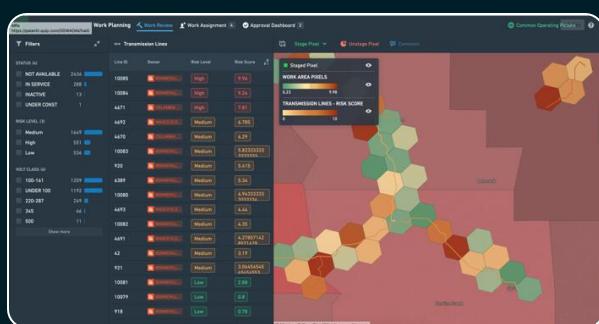
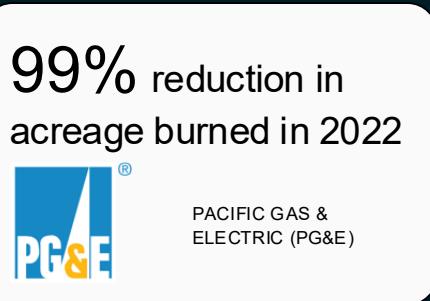
# Developing Critical Energy Assets At Scale





# System-Wide Visibility & Operations

- Assets: transmission and distribution, including tracing capabilities and visibility into network segmentation
- Field activities: inspections and maintenance
- Risk: localized visibility into risk drivers such as vegetation or weather patterns leading to wildfires and storms
- Weather readings: readings including moisture levels, wind speeds, temperatures, FPIs, etc.
- Open maintenance tags
- Vegetation: strike trees within distance of the lines
- Models: ex: firespread models



# Distributed Workflows Optimize “Hubs & Spokes”



