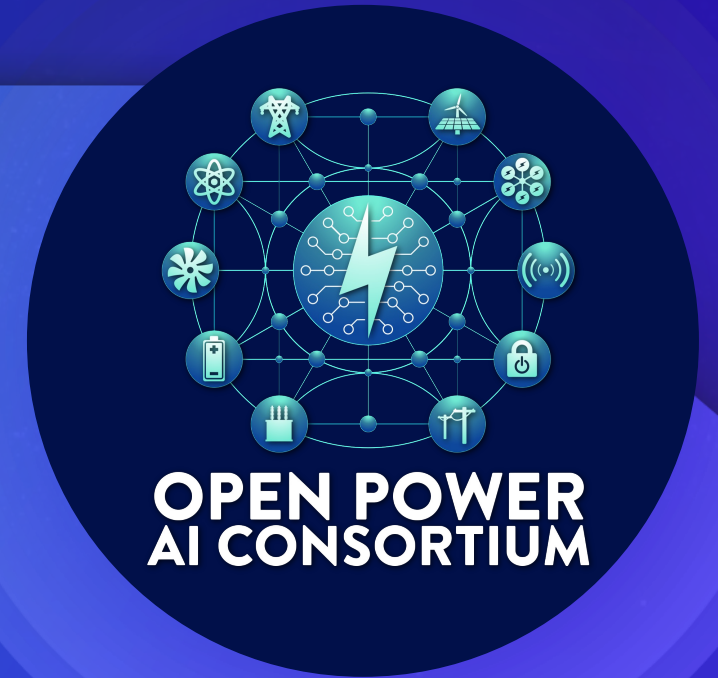


Open Power AI Consortium – Deployment and Implementation Working Group

December Virtual Workshop



Jason Hollern
Technical Executive
jhollern@epri.com
(p) +1-704-595-2579

SAFETY MOMENT

Avoid Snowmelt Flooding

AVOID SNOWMELT FLOODING

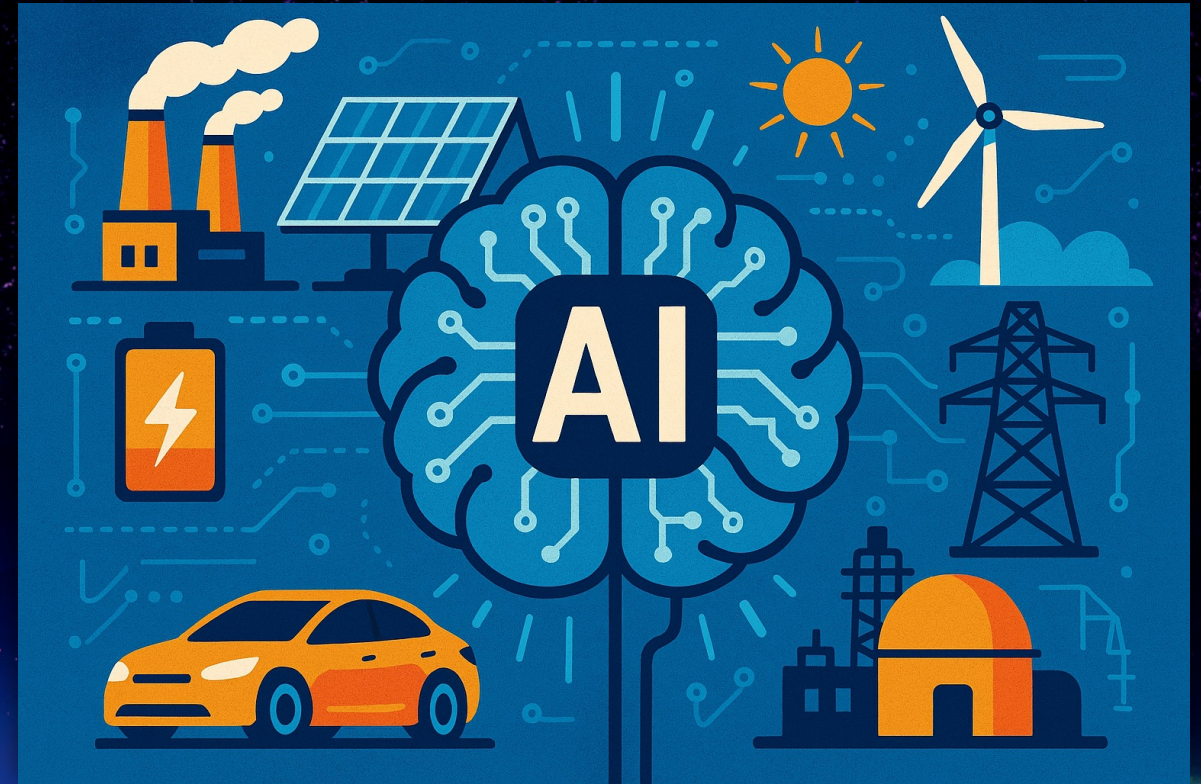
Warmer temperatures and rainfall can be a welcome change from the cold and snow of winter, however, this transition in weather can also lead to flooded streets and basements. Follow these snow removal tips and make sure you check your sump pump and that your pump's discharge line is clear and not frozen.



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
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

May						
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10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

September						
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20	21	22	23	24	25	26
27	28	29	30			

February						
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22	23	24	25	26	27	28

June						
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14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

October						
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18	19	20	21	22	23	24
25	26	27	28	29	30	31

March						
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29	30	31				

July						
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26	27	28	29	30	31	

November						
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15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

April						
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19	20	21	22	23	24	25
26	27	28	29	30		

August						
S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

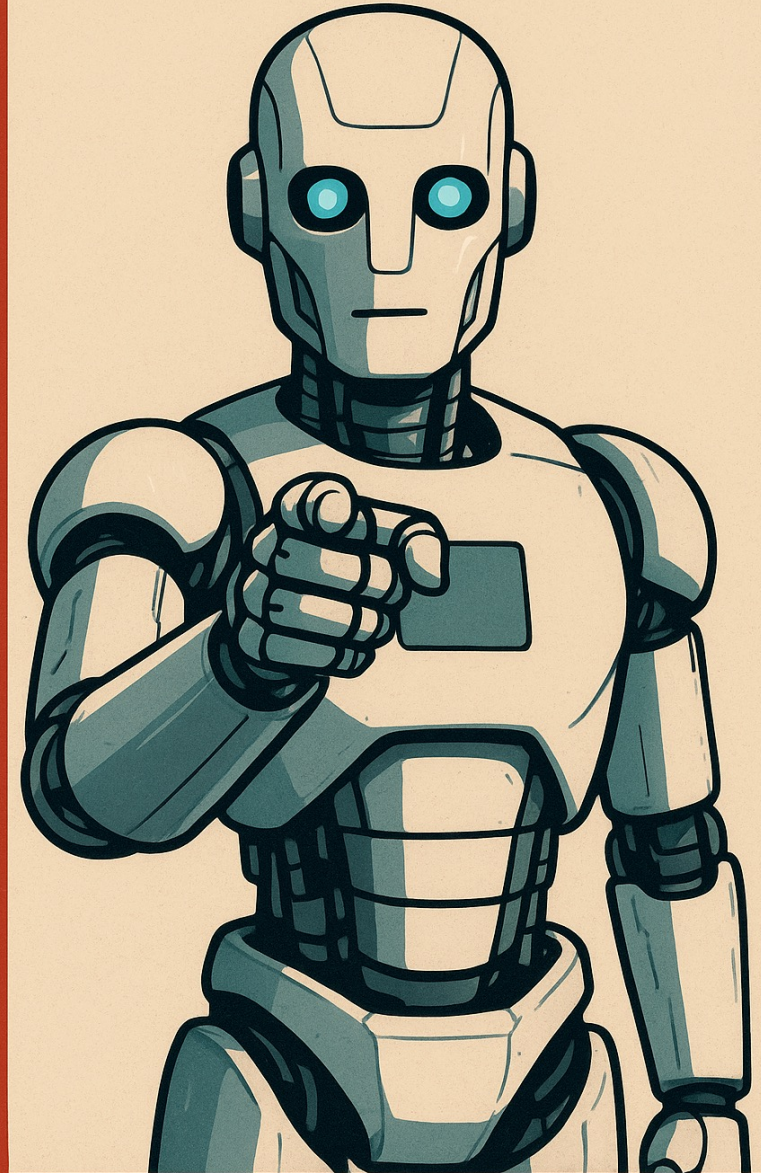
December						
S	M	T	W	T	F	S
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6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

- Deployment WG Meeting
- Use-Case WG Meeting
- Domain-specific Model WG Mtg.
- Member Representative Committee Mtg.

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) to volunteer.





Technology Demonstration

Palantir Foundry for Utilities – Omar Mohammed

Palantir —for Utilities

The Operating System for the Modern
Enterprise

Turbine
→ No 201

AI Decision Guidance

▼
MENU x

TURBINE / CODE / HEALTH

RUN SIMULATION
DATA LOAD

CHANGE → 28%

POSITION → N/A

FAULT PROBABILITY → NONE

ADJUSTMENT → SYS TOGGLE

ROTATION RPM
3

ENERGY YIELD
7%

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

▼
PALANTIR — SOFTWARE CUTTING — EDGE
FOUNDATIONAL SOFTWARE OF TOMORROW.
DELIVERED TODAY.™

EST. 2003 / PALO ALTO, CA
HQ / DENVER, CO

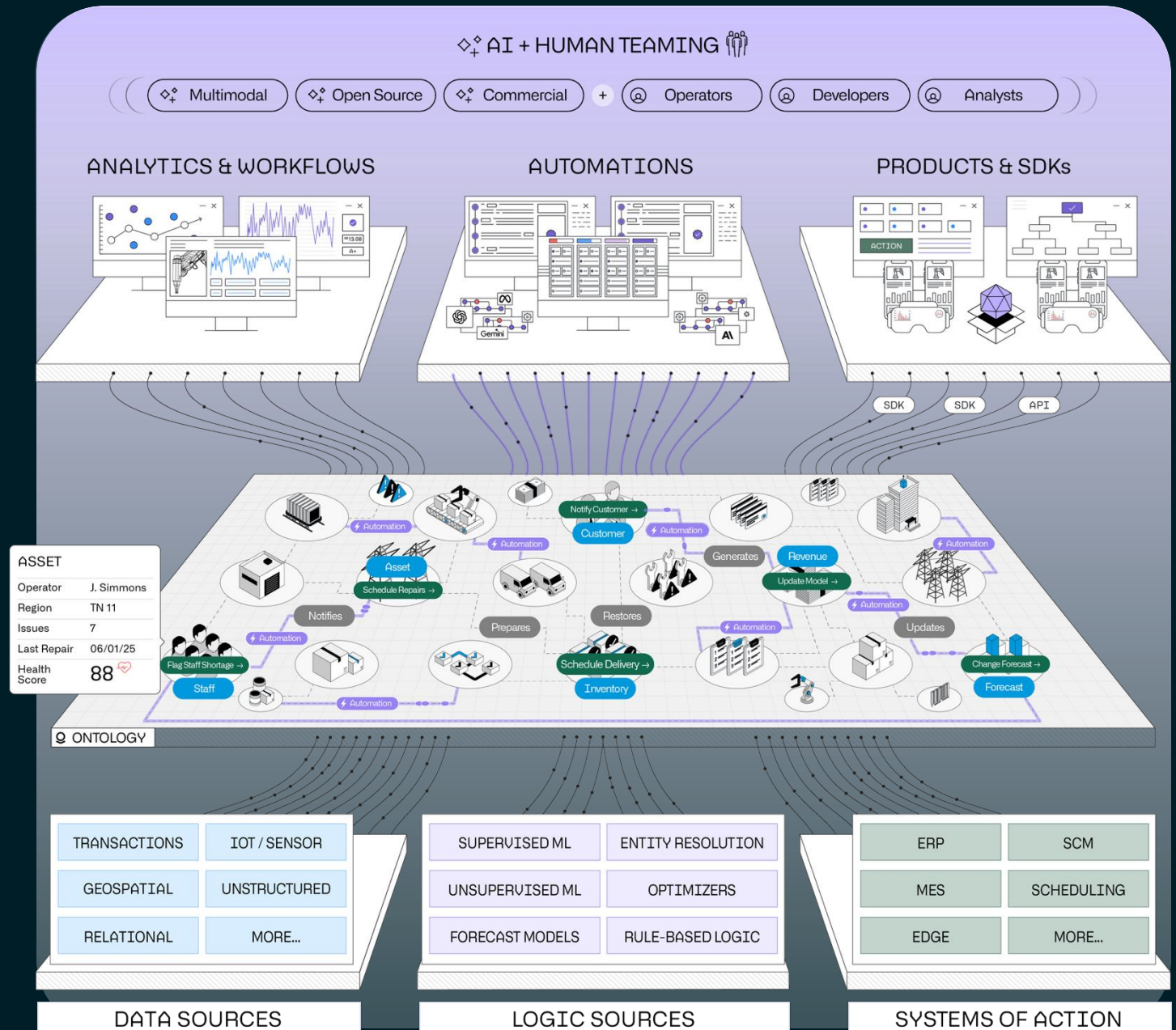
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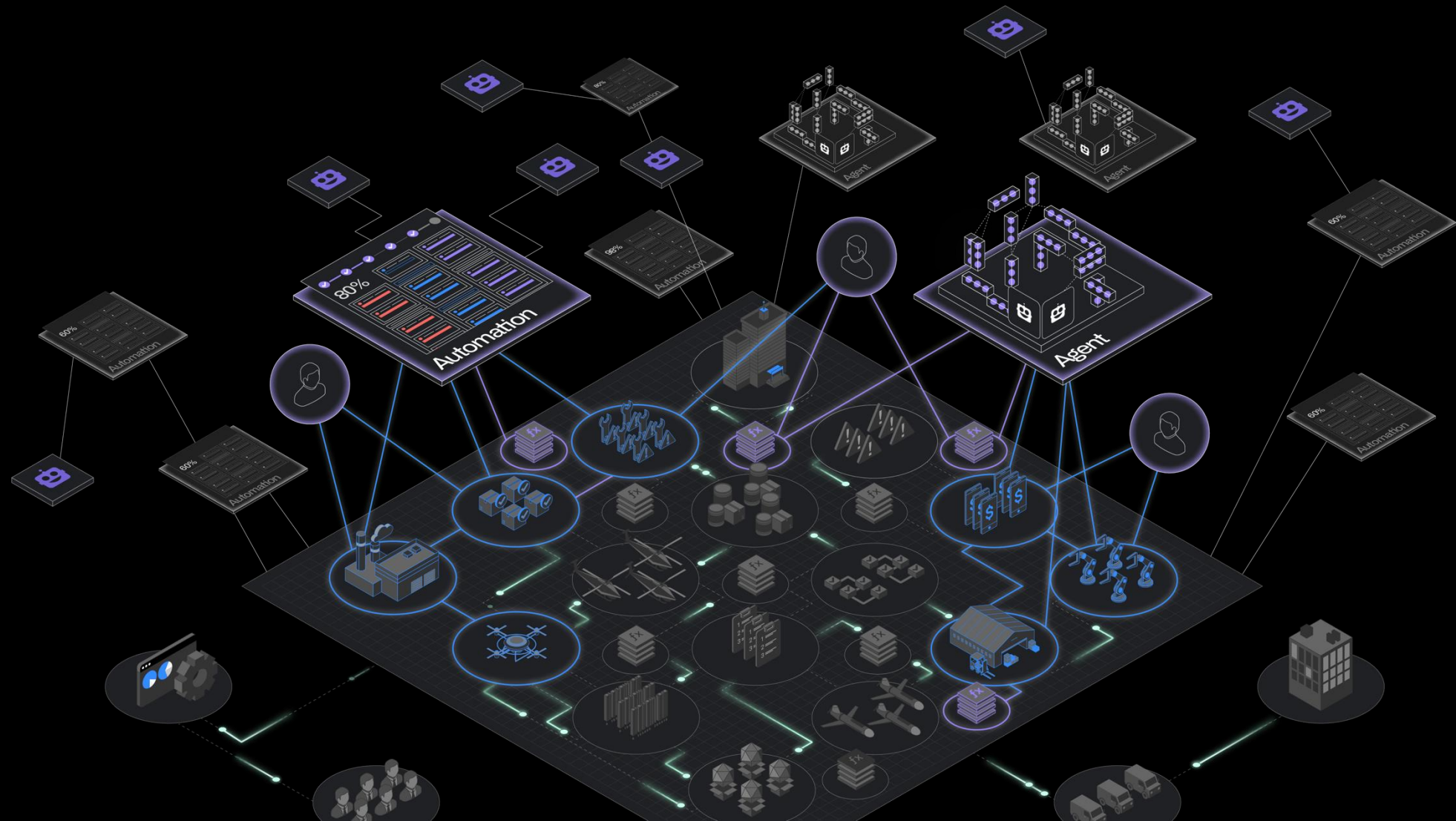
Ontology-powered OS

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

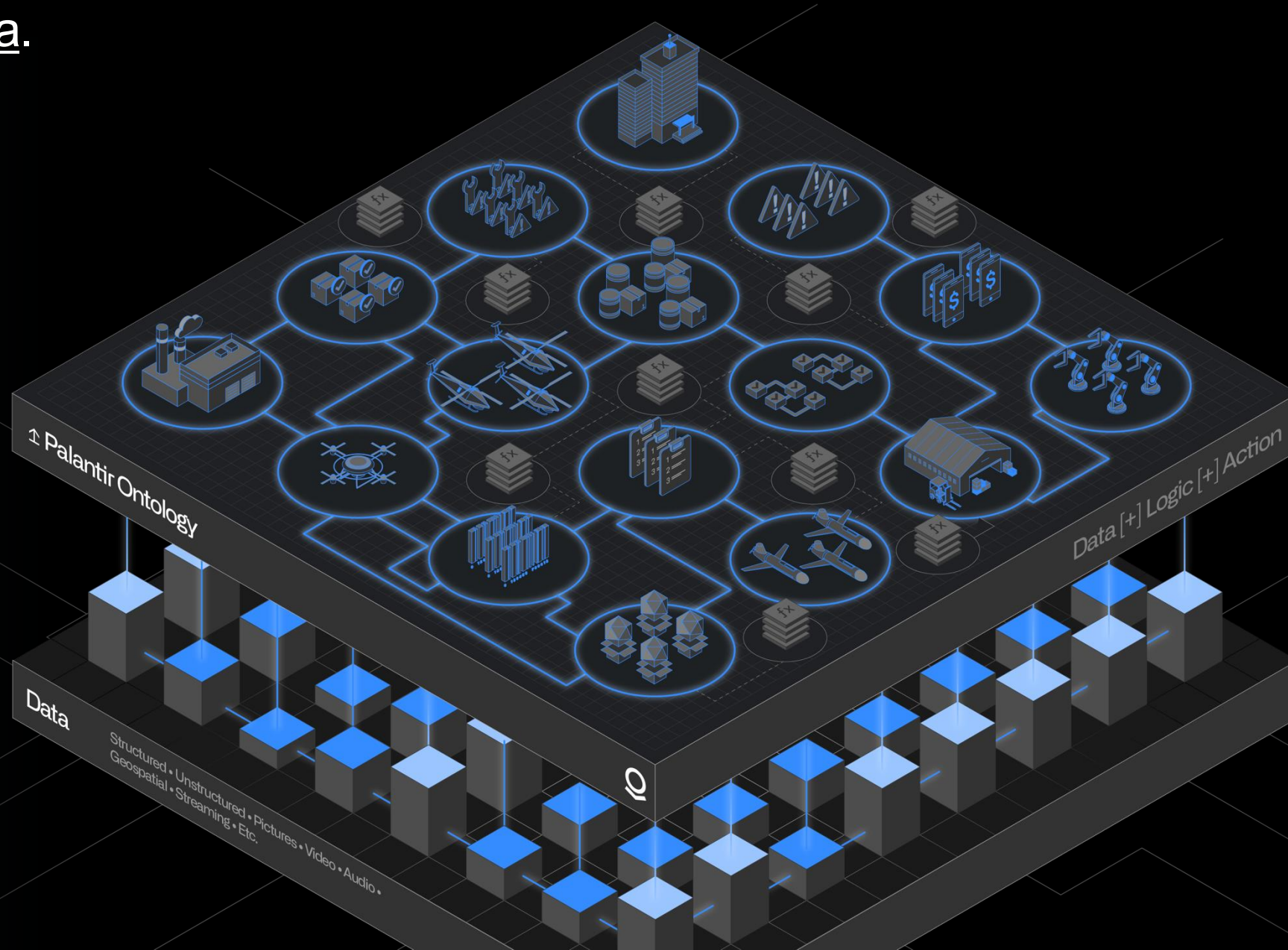
- ✓ Objects
- ✓ Links
- ✓ Actions
- ✓ Agentic Workflows
- ✓ Rules-based Flows
- ✓ Writeback Functions
- ✓ Simulations
- ✓ More...



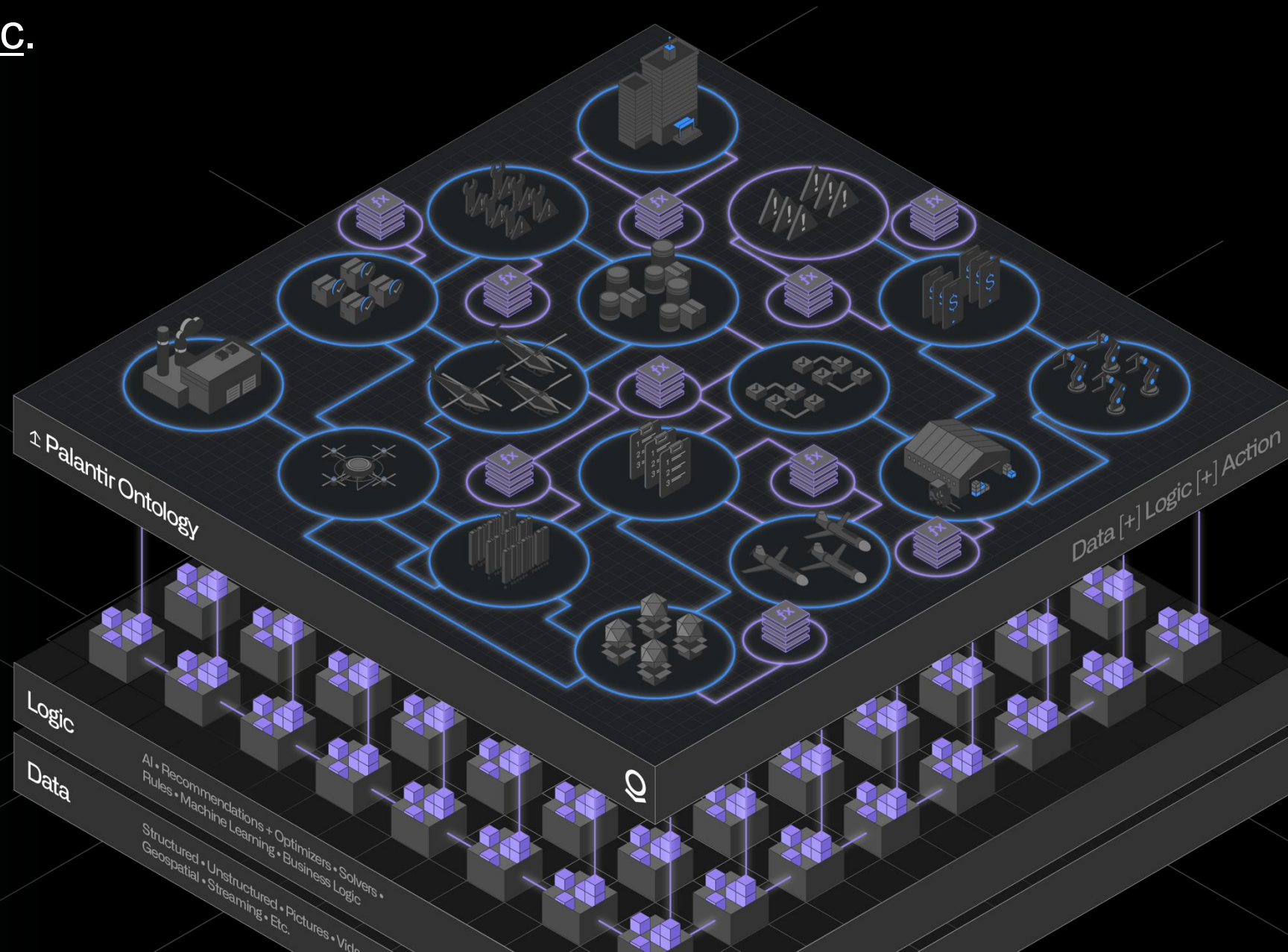
The Ontology provides a shared operational view for mixed Human+AI teams.

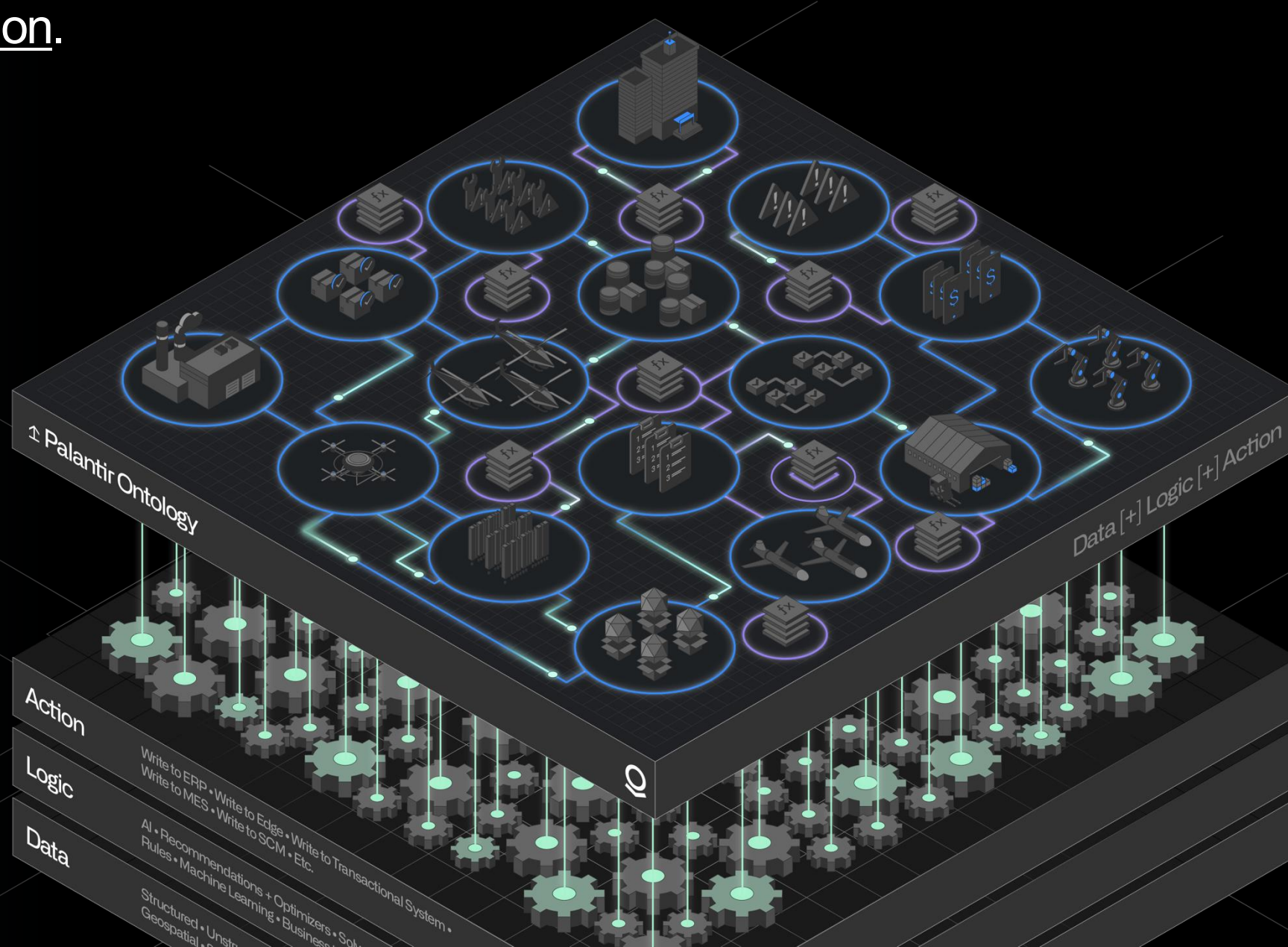


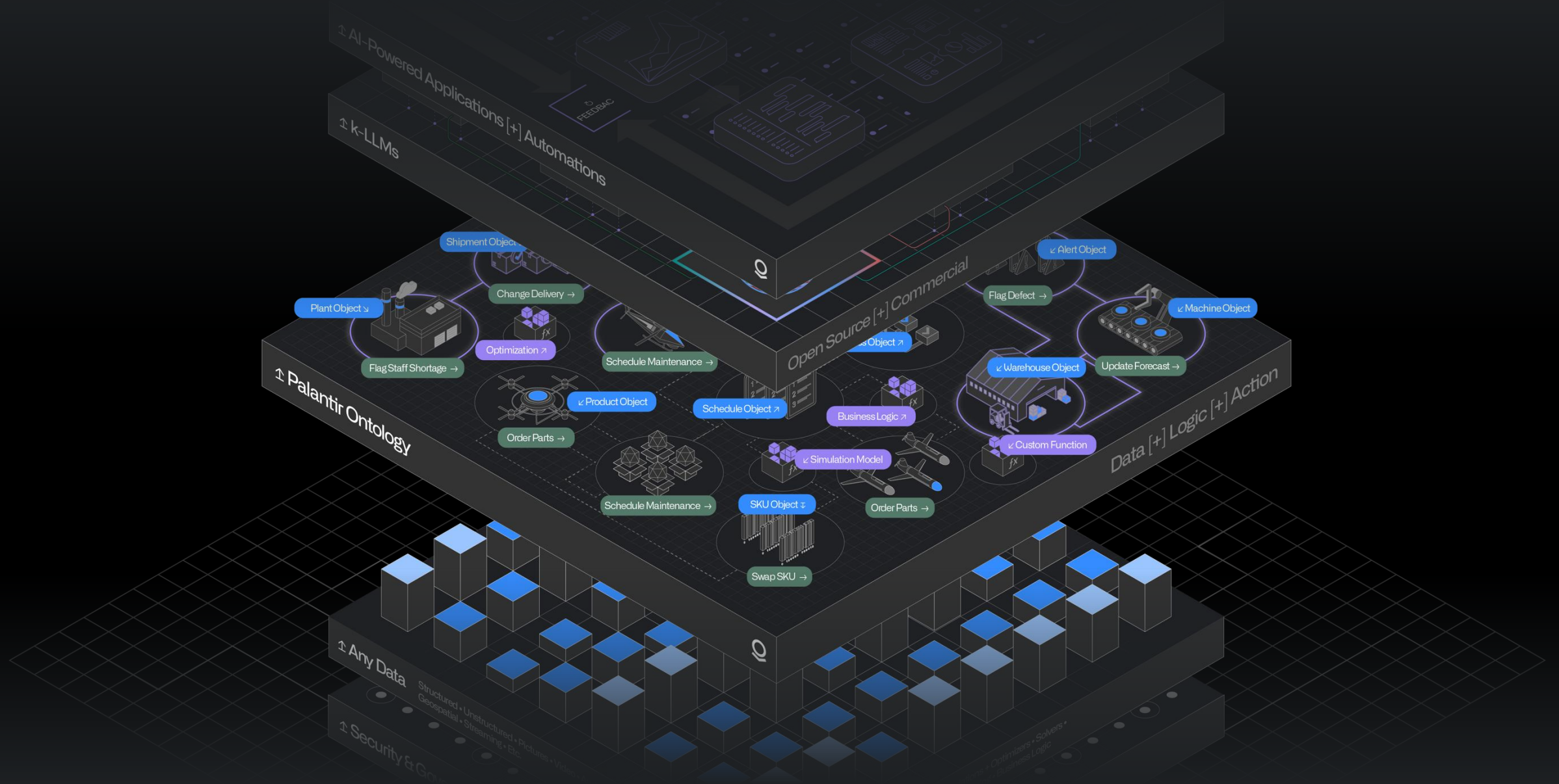
...shared data.

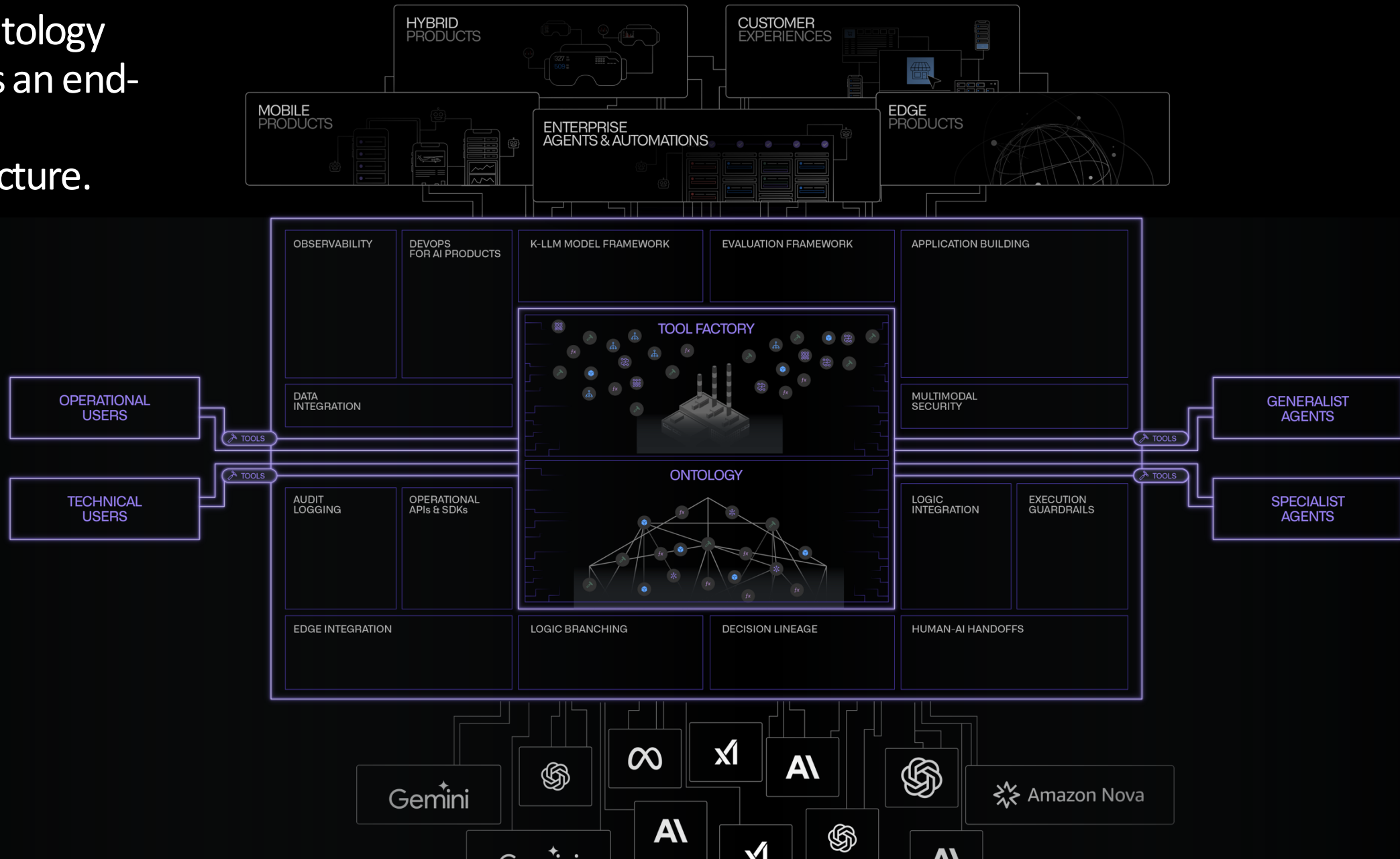


...shared logic.

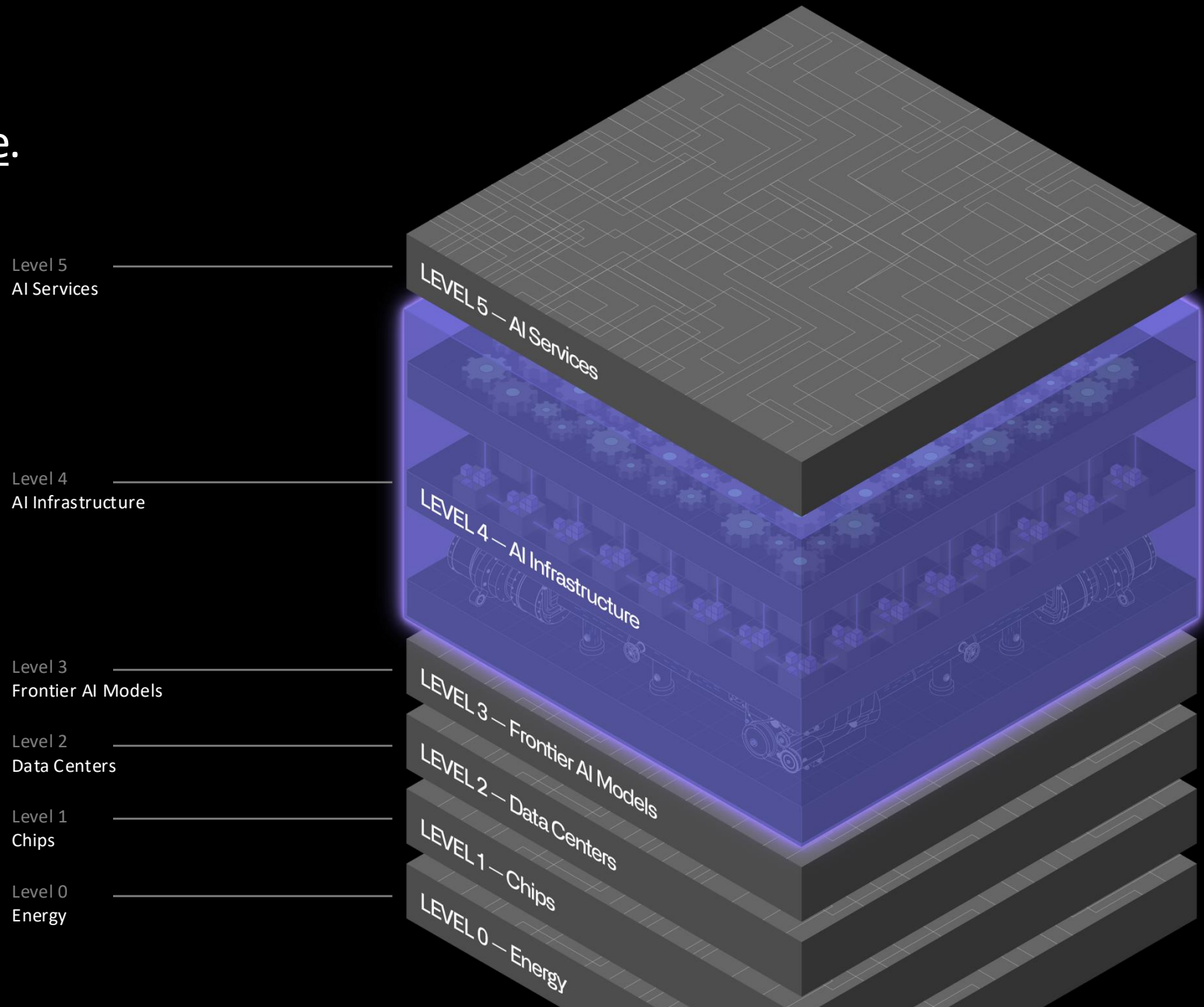




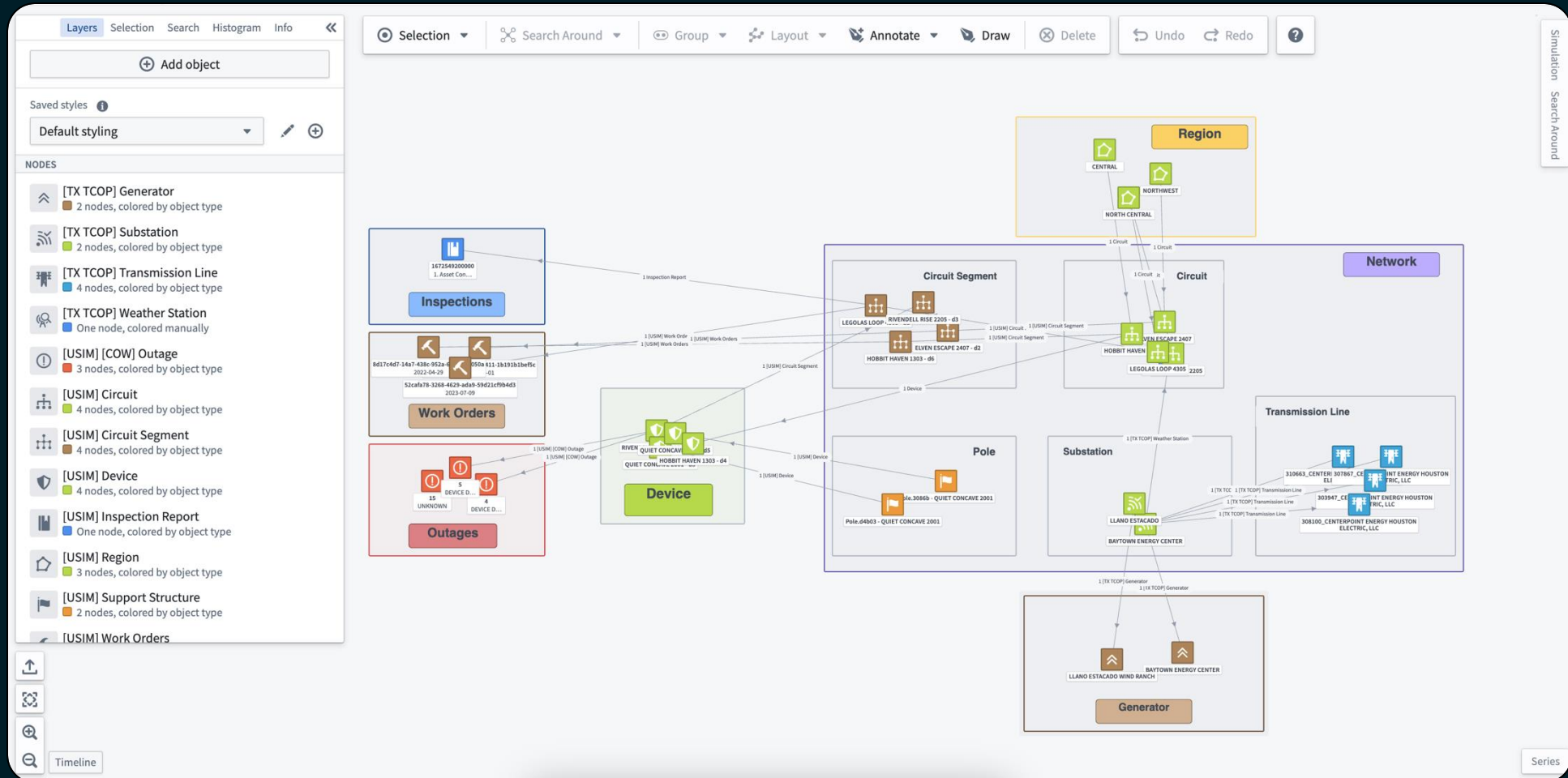




We call this
AI Infrastructure.



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

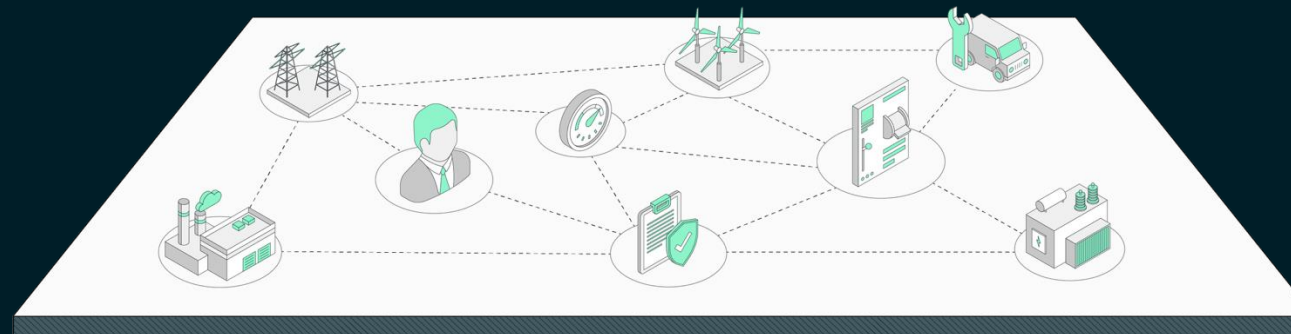
- Integrated Grid Planning
- Scenario Planning
- Work Planning and Bundling

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



ONTOLOGY

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



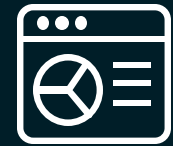
Workflow Configuration

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



User Testing & Feedback

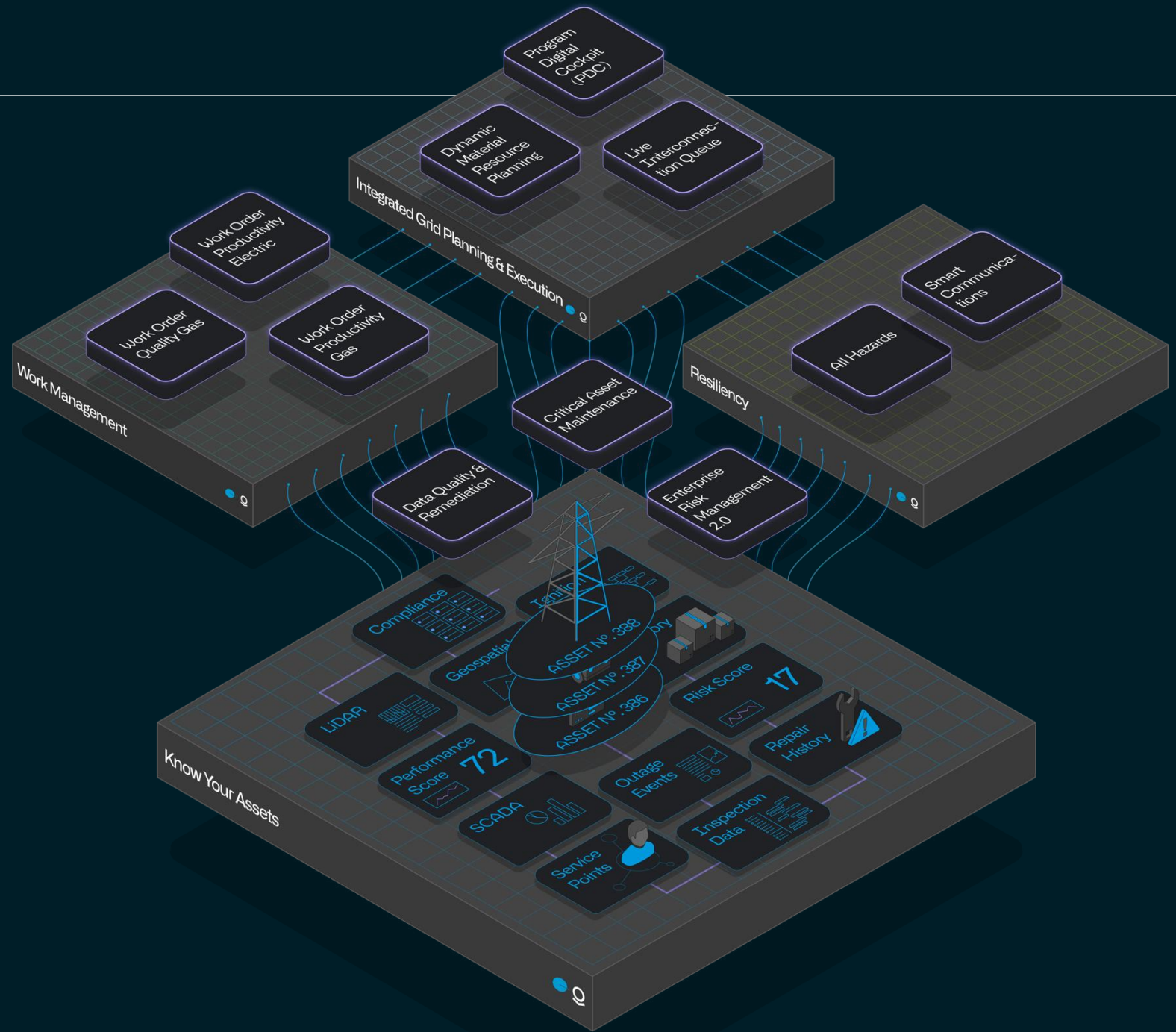
Short cycle user
demonstration, feedback
and iterations

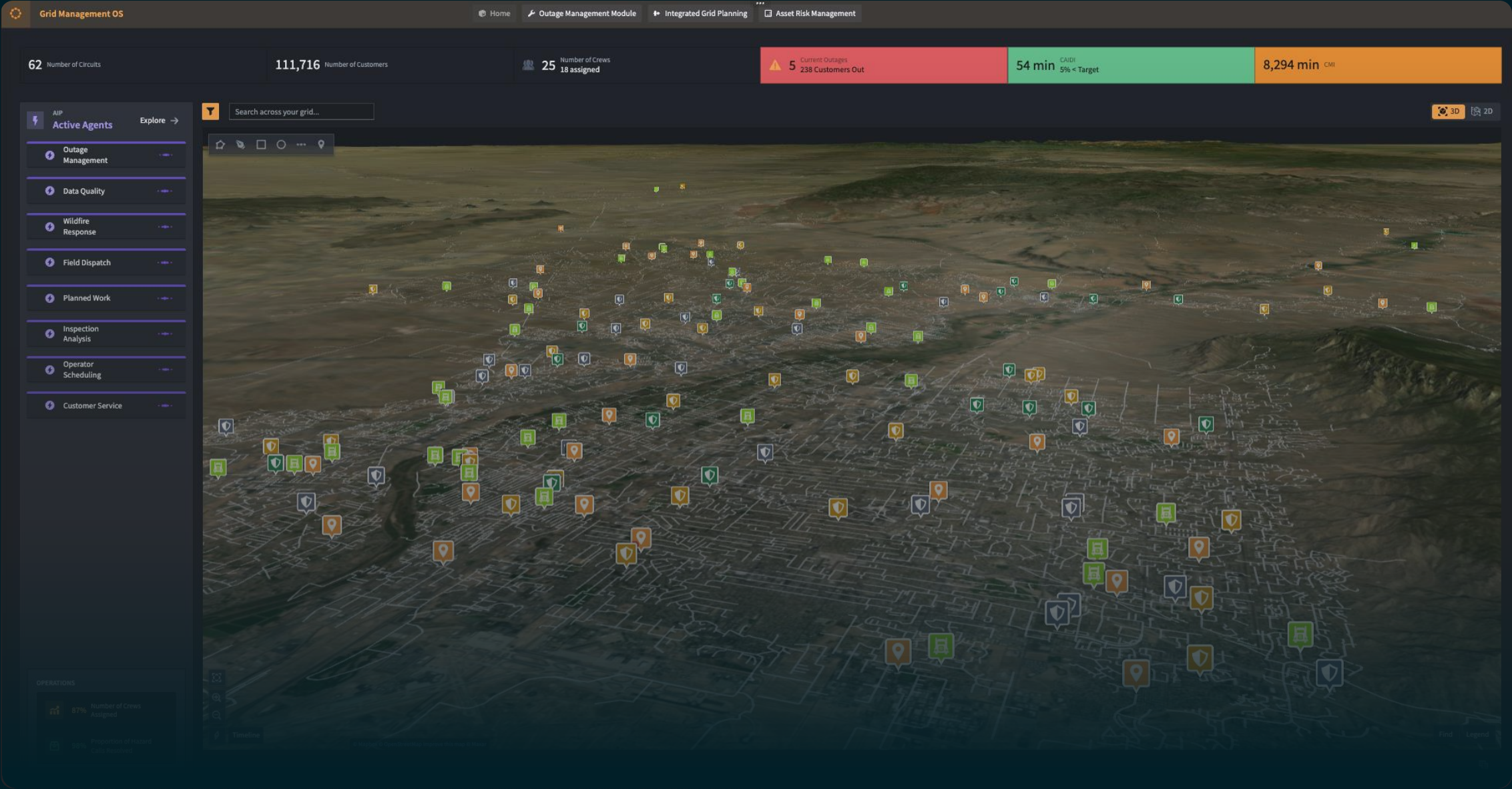


Validation & Refinement

Data validation, feature
hardening and product
roll-out

Developing Critical Energy Assets At Scale





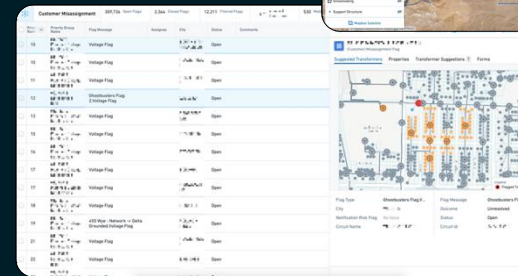
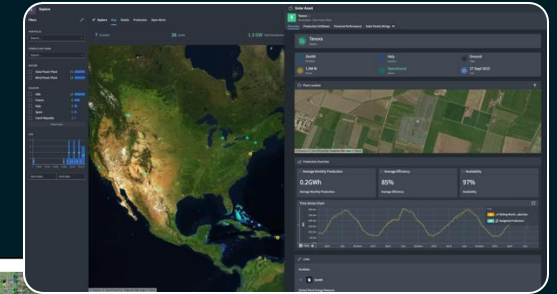
System-Wide Visibility & Operations

- 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

99% reduction in
acreage burned in 2022



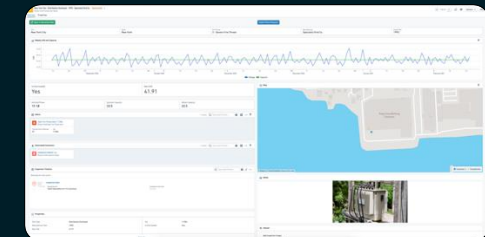
PACIFIC GAS &
ELECTRIC (PG&E)



20M+ assets integrated
150M+ weather forecast points



SOUTHERN CALIFORNIA
EDISON (SCE)



Distributed Workflows Optimize “Hubs & Spokes”



