



Data Contextualization

Building the foundation to unlock the value of industrial data

The Challenge

In today's data-driven world, industrial organizations struggle with data silos that create inefficiencies and prevent insights from scaling. Custom data pipelines for each use-case slow down innovation and complicate maintenance. Advanced AI systems require organized and context-rich data to provide high-value insights.

Our Solution

IRIS Foundry's data contextualization capabilities bridge the gaps in your data landscape by connecting diverse data sources, and offering intuitive, flexible data modelling and AI-assisted entity mapping. Context is enhanced through a Knowledge Graph that builds relationships between siloed data and empowers advanced AI systems to perform complex analyses autonomously.

Context Matters

Transform raw data into meaningful insights with effortless organization and context addition

Eliminate Data Silos

Data from disparate systems with varying data types, formats, and structures are fed into the IRIS Foundry using pre-built data connectors. Using a flexible, intuitive, and AI-assisted process, data is transformed into industry standards or custom structures, resulting in a unified data model.

Create a Unified Asset Namespace

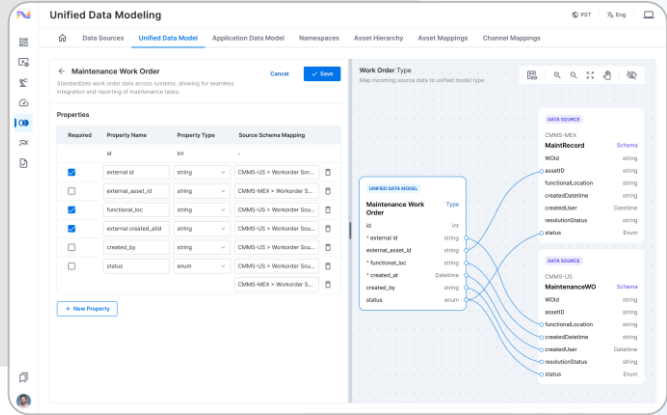
All data is contextualized into an enterprise asset hierarchy. Various entity names from multiple data systems are unified with an AI-assisted entity resolution system. This process creates a Unified Asset Namespace to interact with data and analytics intuitively.

Enable Knowledge Graphs and Co-pilots

Asset and Process knowledge graphs are constructed on top of contextualized data. These graphs add further context and semantic relationships, empowering users to simply query data with an advanced generative AI copilot.



While many manufacturers still lack standardized data due to operating a mix of older equipment and systems along with newer technologies, more than half expect that their data will be in a standardized format by 2030.
- Manufacturing Leadership Council, 2024



55%
of Industrial AI leaders say Contextualization is the most challenging area in working with AI systems.

68%
of blockers for AI adoption are related to data accessibility & transformation issues.

72%
of leaders say the most important factor for success of digital initiatives is scalability of insights.



Seamless Data Onboarding

Bring time-series, tabular, document, graph, image, or video data into IRIS Foundry using 100+ pre-built data connectors and data pipelines with advanced AI-powered data cleansing, transformation, and monitoring.



Flexible Industrial Data Modeling

Transform data into industry standards or custom data models through an intuitive, graphical user-interface. Build application specific data models to simplify data consumption across your organization.



Unified Asset Namespace

Contextualize all data against a comprehensive enterprise asset hierarchy and resolve entity name conflicts using an AI-assisted entity resolution system.



Knowledge graph and Copilots

Enable advanced asset and process knowledge graphs to build relationships between all datasets and provide a powerful query interface for generative AI copilots.

For more information visit:
symphonyai.com/industrial/iris-foundry/

