



Manufacturers need to optimize production, improve product quality, and reduce unplanned downtime by generating more value from their data. Cognite Data Fusion is addressing the most difficult industrial data challenges to provide open, contextualized data for organizations.

Industrial Data Challenges

Cognite Data Fusion (CDF) provides DataOps at scale for industry, making industrial data accessible, understandable, and useful for data scientists and developers. CDF unlocks use cases for industrial data by providing:



Data in Context

CDF's machine learning contextualization services create relationships between siloed data from source systems such as time series, ERP & work orders, tabular data, IoT logs, events, P&IDs, 3D, and photogrammetry.



Scalable Data Model

Use Templates to scale successful Proof-of-Concepts across an entire class of equipment or assets.

Reuse the contextualized data model to solve many use cases from the same model.



Open Application Architecture

Open standards enable easy integration with widely adopted applications and developer tools.

Developer friendly SDKs and APIs further enhance connectivity.



Live Data Access

Combine live operational (OT) data with simulation or historical data to create Hybrid AI models that can address use cases in production optimization or quality.



Known Data Quality

Manage data quality on a per use case basis to ensure recommended actions are valid and trustworthy.

Use pre-built rules and create new rules with an available logic engine as needed.



Complete Data Spectrum

Integrate and contextualize unstructured data to enhance asset and process visibility:

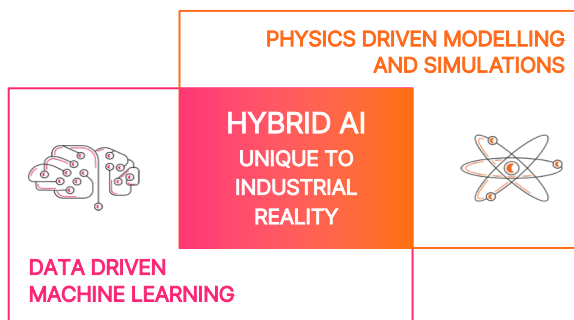
- Robotics to support monitoring and inspection
- Computer vision managing environmental conditions
- Digitize analog signals to support data models

Cognite Data Fusion Benefits

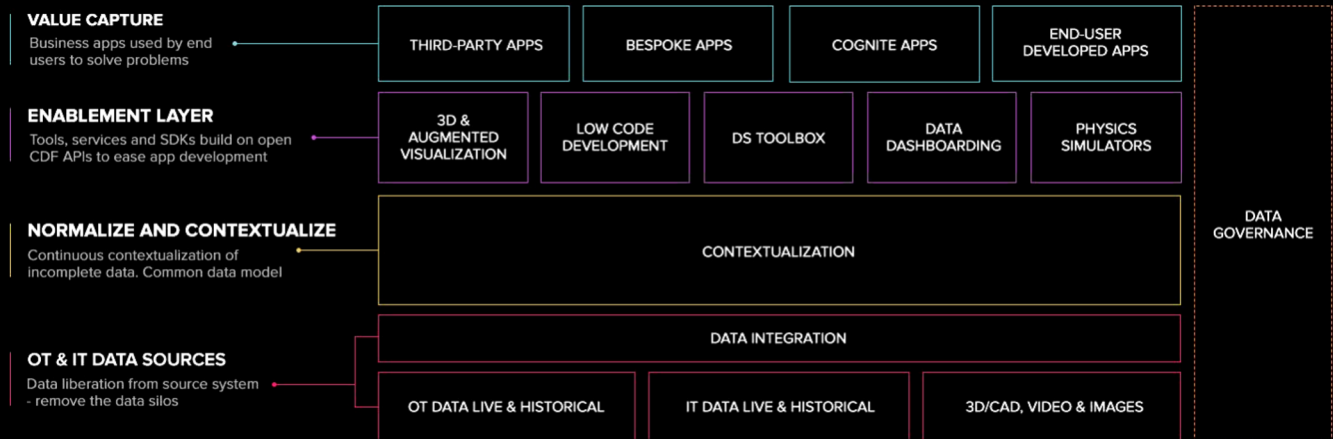
- Expand the breadth of applications and accelerate development time with a robust data model
- Operational data foundation enabling digital twin
- Empower internal development teams with self-service open APIs & SDKs
- Democratizes embedded subject-matter expertise with data access and contextualization
- Combine your organization knowledge with Cognite's domain talent and proven partner network

Cognite Data Fusion Enables Hybrid AI

Hybrid AI combines physics-based models and simulations with Artificial Intelligence (AI) to create robust solutions with a high degree of confidence.



COGNITE DATA FUSION ARCHITECTURE



Complete Application Portfolio

In addition to integration with common 3rd party applications, Cognite has also built application frameworks design for industrial use cases such as production optimization, smart maintenance, workforce enablement, and sustainability.



Domain Talent to Ensure Business Success

No two industrial sites are the same. Our team of domain experts, solution architects, and value engineers provide the support needed to offer scalable, sustainable software that fits into your existing ecosystem.

What we do:

- Reduce project risk by quantifying project value upfront and create a roadmap to successful ROI.
- Provide out-of-the-box functionality for teams to quickly develop solutions and reduce time to value.
- Empower our customers to develop and scale use cases by using automating services to maintain solutions.
- Ensure product adoption by building use cases into existing workflows and applications.

Industrial DataOps & Contextualization

With so much value potential in applying advanced analytics, AI, and ML, and integrated and contextualized industrial data architecture has become increasingly necessary. Industrial data operations is required to serve data consumers in a dynamic, scalable, and repeatable way.

Cognite Data Fusion was built to serve the industrial data environment by providing the OT and IT data contextualization services to build and scale use cases for production optimization, product quality, and asset performance. Alongside our proven technology, Cognite and our team of partners will also provide technical and domain expertise. Our organization is built to ensure our customers meet their business objectives and have a partner to rely on throughout this journey.

