



www.aglo8.ai

Data availability →

Empowers Predictive Maintenance →

Empowers Business

**INDUSTRY-LEADING AI
SOLUTIONS**

Predictive Maintenance -> Killer Application of Smart Industry

-> Killed without Data Sharing



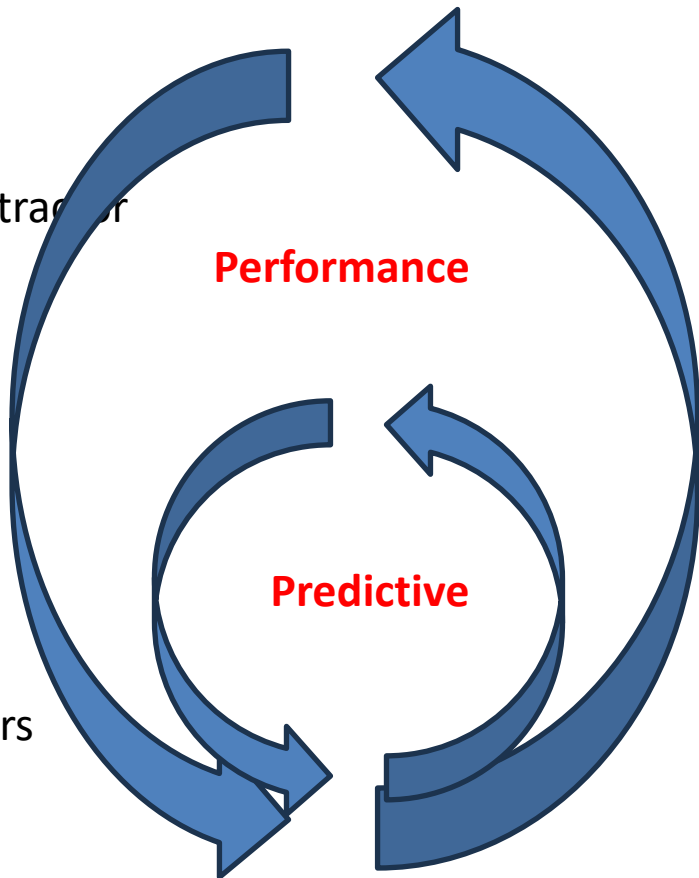
Deliver working AI
Solutions to clients
with clients protected
data



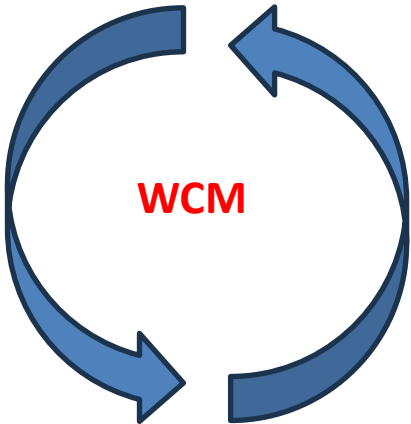
Work together to
improve general way of
working and models
based on shared data!



Engineer
Legislation
Construction Contractor
OEM
Inspection
Feed supplier
Product Sales
Laboratory
Operator
Maintenance
Service provider
Specialist providers



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About Algo8

Algo8 AI is an **Industrial AI company** helping Asset Owners to **get more out of their facility, Plant & assets** by processing their vast & myriad type of data using our **PlantBrain platform & Differentiated AI + domain-based applications**.

We help our Customers:

- **Maximize** net revenue with the best possible margins **Minimize**
- **carbon emissions** by lower Energy Consumption, Reduced Waste & Smarter use of raw Materials
- **Optimize** output with equivalent input at a lower cost
- **Reduce downtime** while reducing labor & Material Maintenance Cost
- **Enhance** safety and **Augment** workers

A photograph of an industrial facility, likely a refinery or chemical plant, featuring tall distillation columns, pipes, and structural steel. The scene is captured during sunset or sunrise, with a warm orange and yellow glow in the sky. The image has rounded corners.

Plant Brain

Engineering 1st AI Context

Churning Out Cutting Edge AI Applications for Proactive Operations

Our Portfolio



PRODUCTION INTELLIGENCE

- Plant Monitoring with Digital Twin
- Production/ Schedule Optimization
- Performance/ Quality Prediction



Upto **10%**
Increase in Throughput



RELIABILITY INTELLIGENCE

- Condition Monitoring Maintenance
- Predictive Maintenance Inventory
- optimization Integrity & Corrosion
- Detection



Upto **6%**
Improvement in Prime Quality
Production



Upto **80%**
Less Unplanned Downtime



RELIABILITY INTELLIGENCE

- Energy Management
- Decarbonization
- Safety, Security & Connected Workers



Upto **90%**
Reduction in Manual
Inspection

All applications Generated Prescriptive Actions are Augmented with Generative AI

Our Generative AI Capabilities

Digital assistant integrated into PlantBrain, enabling access to enterprise-wide data

PlantBrain Co-Pilot

Data on Demand

Instantly extract relevant information from unstructured documents using PlantBrain's powerful AI capabilities



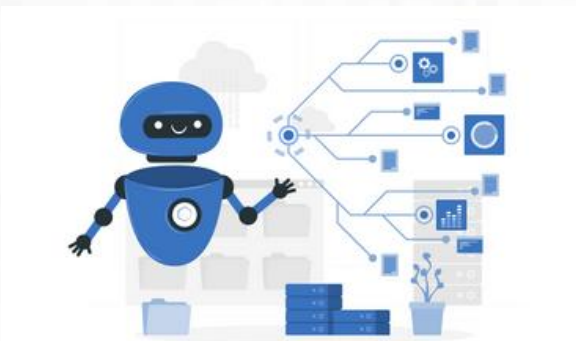
Analysis on Demand

Access insightful BI visualizations generated from both structured and unstructured data



SME on Demand

Get accurate and contextually-rich responses to technical queries, Fine-tuned with domain-specific knowledge



Data Consolidation Layer

PlantBrain



Enterprise Unstructured Data

2

AI + 1st Principle Based Models

1

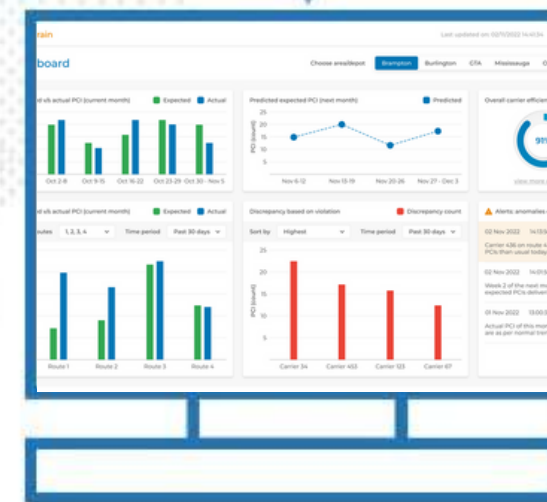
Connect to Industrial Data

- Historian, SCADA, PLC, Sensors Connectors
- CMMS, LIMS, ERP, Engineering information
- Camera DVR, Optics Connectors

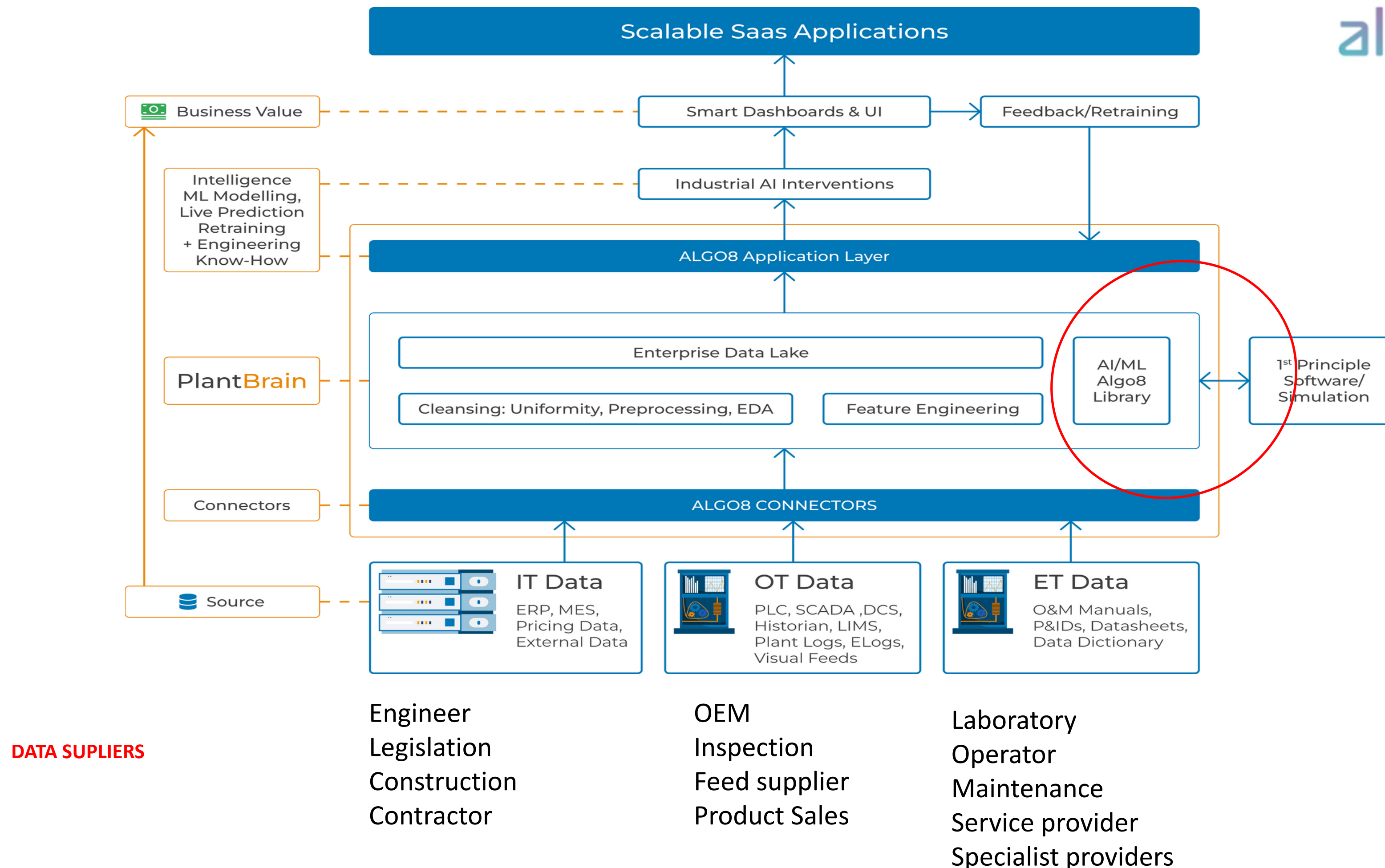
3

Applications for Proactive Operations

- Diagnostic, Predictive and Prescriptive Insights
- Interactive, Intelligent & Optimized KPIs
- Alerts and Tracking on Insights



◦ Recommended Actions with Generative AI



OUR EXPERTISE YOUR BUSINESS

AI BASED COMPUTER VISION

Automate tasks that the human visual system performs & power them with Artificial Intelligence (AI)

MACHINE AND DEEP LEARNING

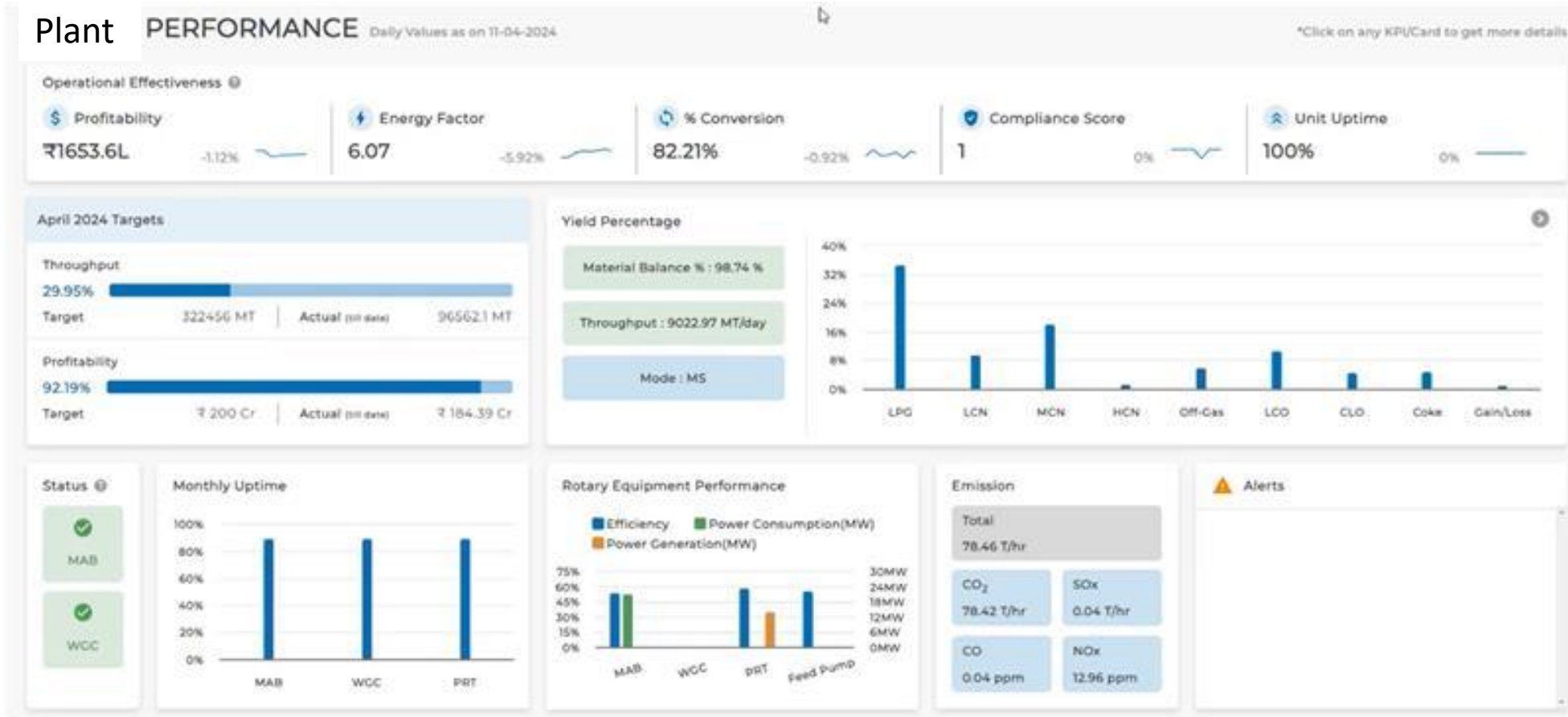
Empower your operations and workflows by using Advanced AI/ML Algorithms

GENERATIVE AI

Enable access & get insights from enterprise-wide data, both Structured & Unstructured, Through a single interface

ENTERPRISE DATA LAKE SOLUTION

Store your data as-is, without having to first structure the data.



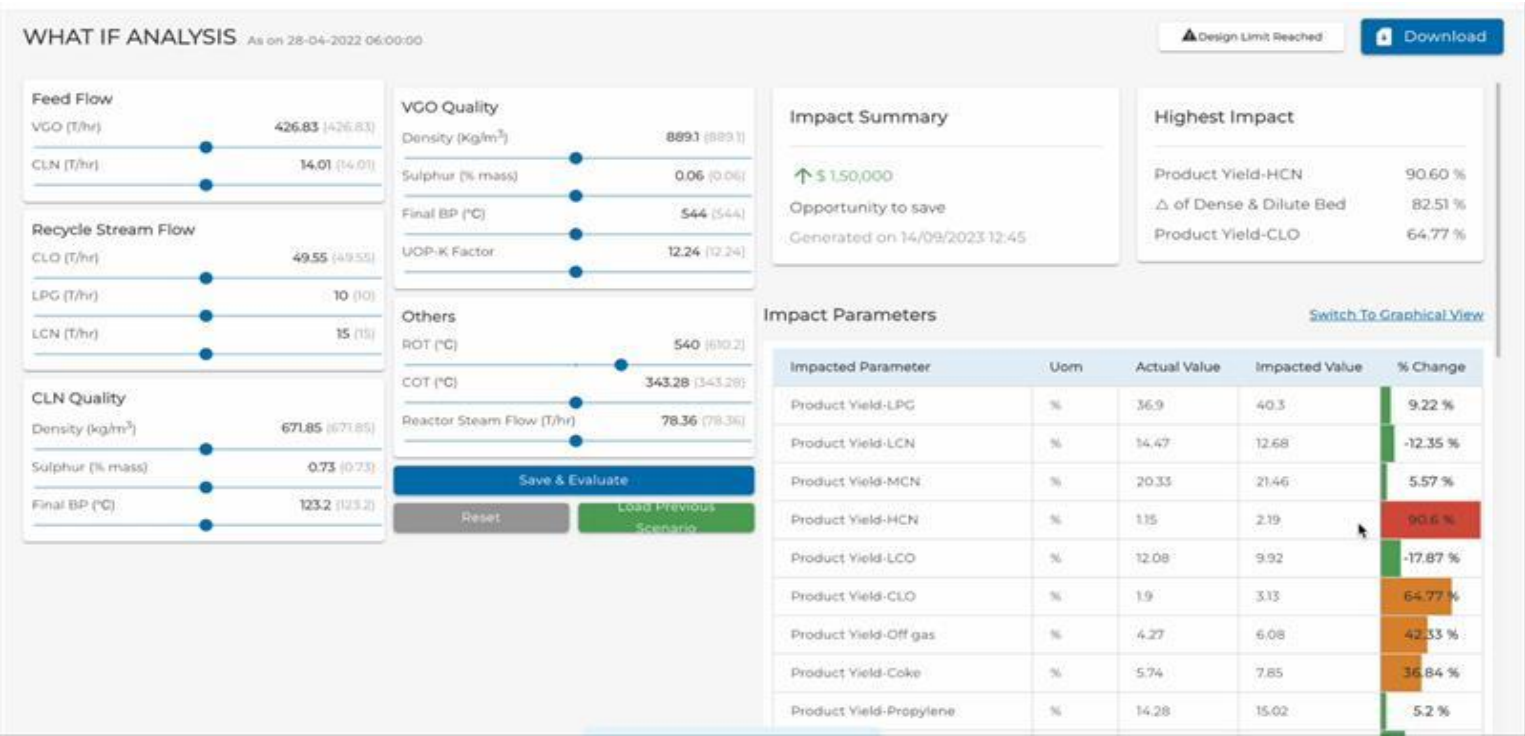
Direct Insight in
Profitability

Direct Insight
Energy
Performance

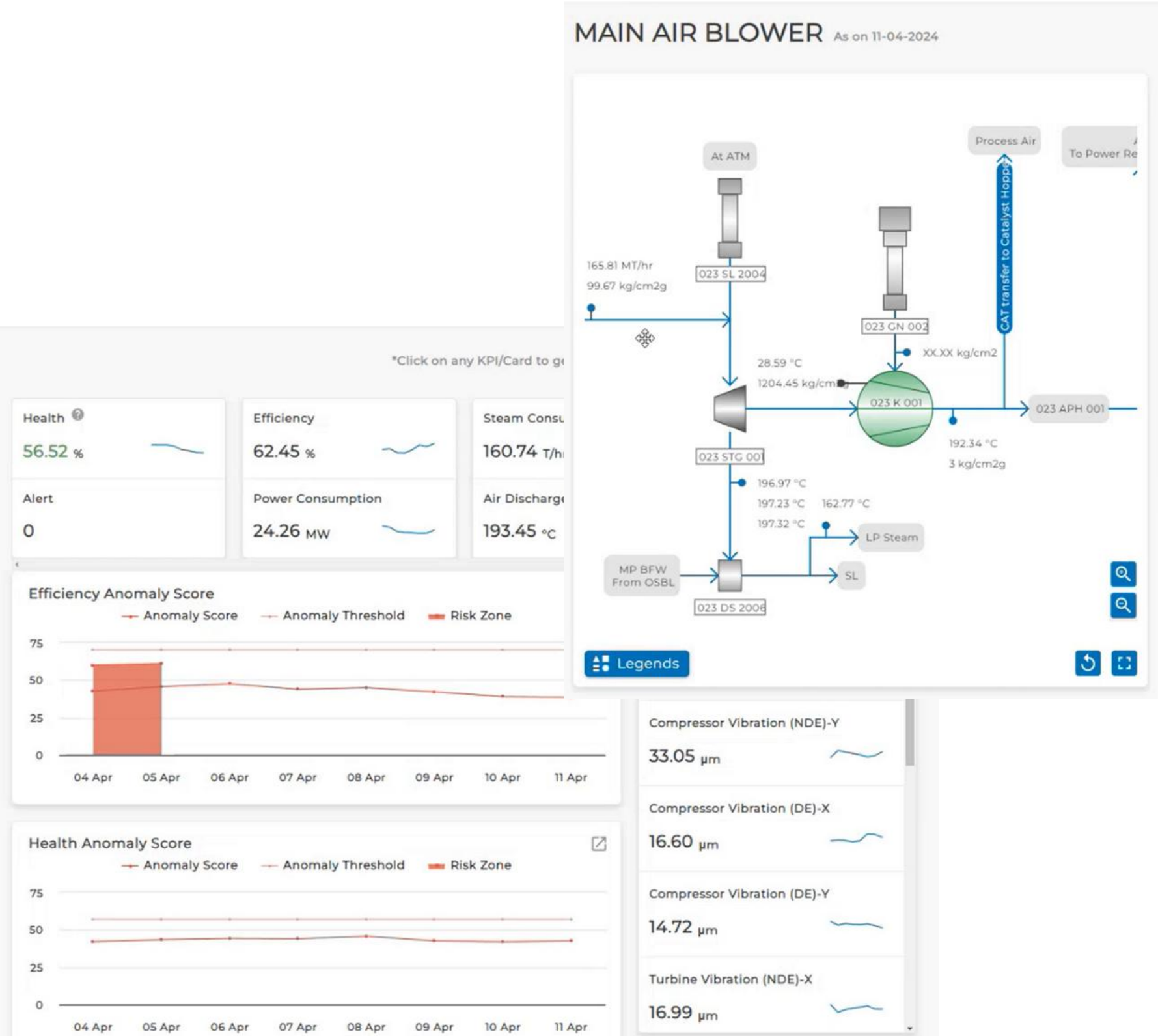
Direct insight in
Reliability

Direct Insight in
OEE

Unlimited
Scenario Power



Predictive Maintenance of MAB



Challenge

Unplanned downtime due to critical equipment failure (Main Air blower has lead time of upto 70 days)

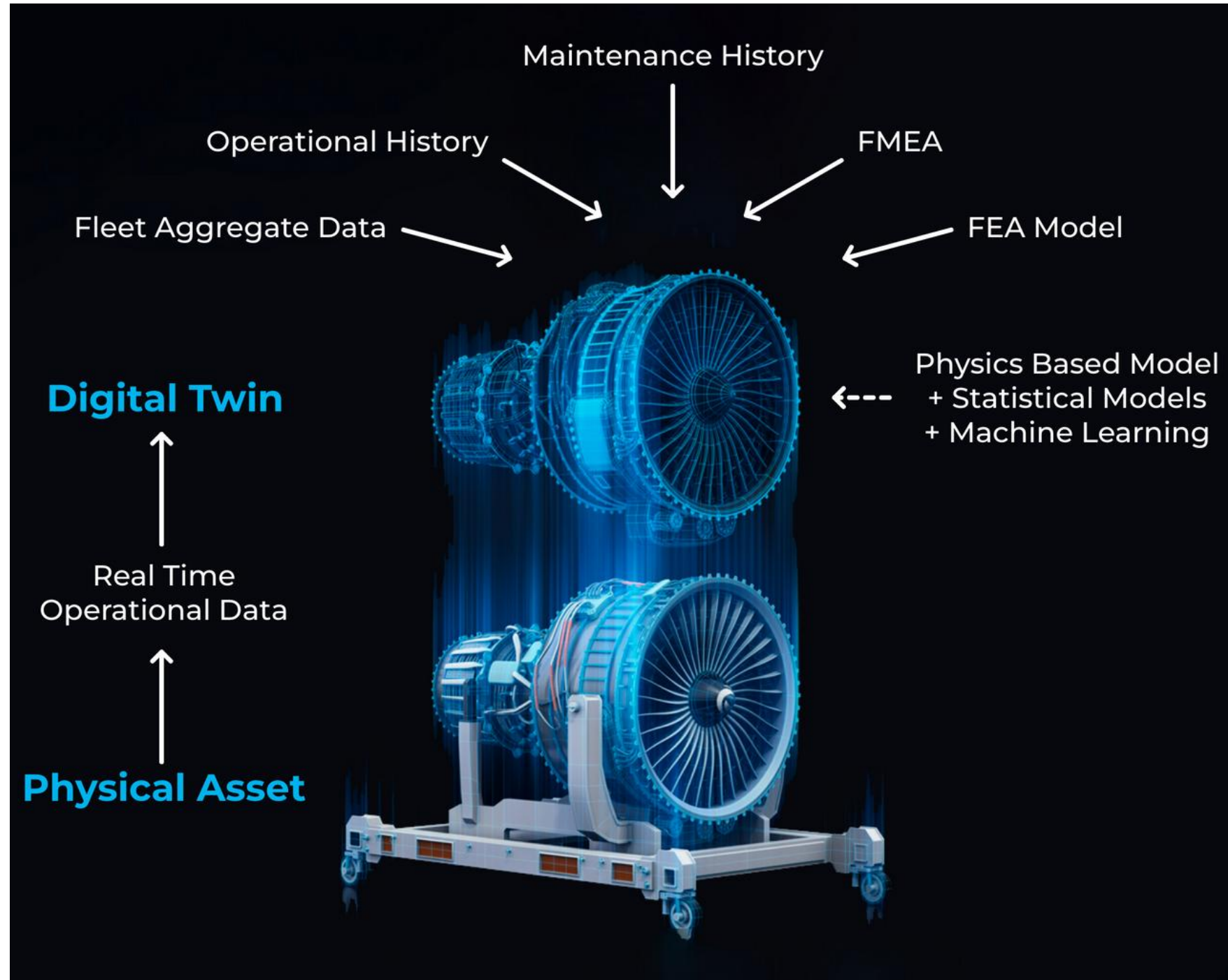
Approach

- Prognostic Health
- Management module deployed
- Using MAB performance data predicted when it is likely to fail 30 days in advance

Benefits

- Savings of approximately USD 500K per early catch of rotary equipment failure

Digital Twin for the FCCU



Challenge

Traditional FCCU operations face limitations in real-time insights and reactive maintenance.

Approach

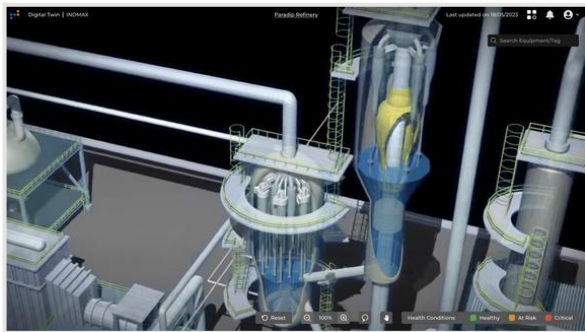
- Creating a virtual replica of the FCC unit.
- Initial involvement of simulated data for training and what-if analysis.
- Integrating real-time data for dynamic insights.
- Incorporating inputs from FCC experts.
- Utilizing advanced analytics for optimal performance.

Benefits

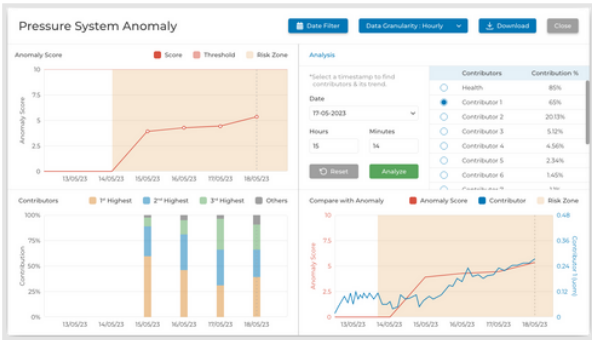
- Enhanced operational visibility
- Predictive maintenance strategies
- Optimized process control

When there is data there is information

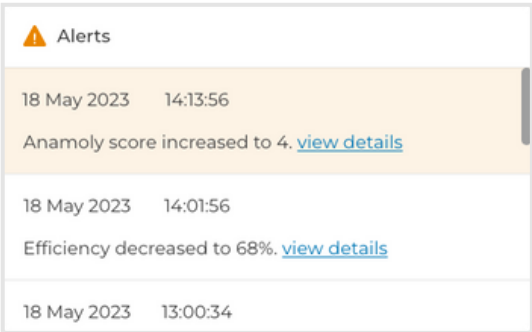
Visualisation



Asset Visualisation



Data Visualisation and Reporting



Connected Worker

Applications

Asset Twin

Process Twin

System Twin

Analytics

Performance Health Monitoring

AI Powered Early Diagnostics

Predictive Model (ML+1st Principles)

Data Layer

Integration and Contextualisation

Source Systems

3D models

Engineering

Central Tag Database

Document Management

Reality Capture

Asset Management

Maintenance Management

Risk Management

Process Historian

Alarms and events

Edge and IIOT

OEM Diagnostics

Control of Work

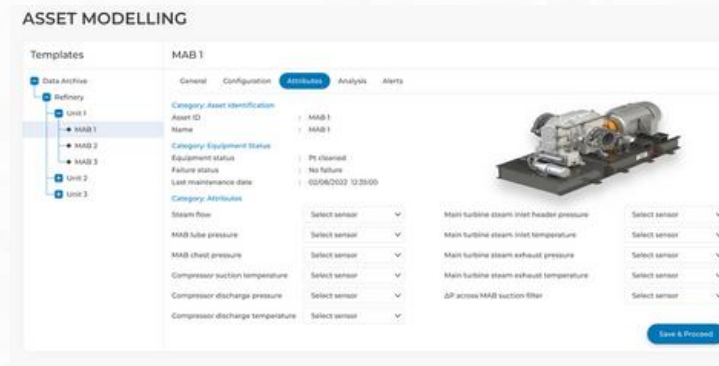
Change Management

ERP and planning

Carbon and emissions

Key Deployments

➤ Improved Reliability



Predictive/ Condition Monitoring Maintenance for rotating equipment
Benefit: \$1.5M/ Yr ↑ for critical equipment

➤ Optimized Processes



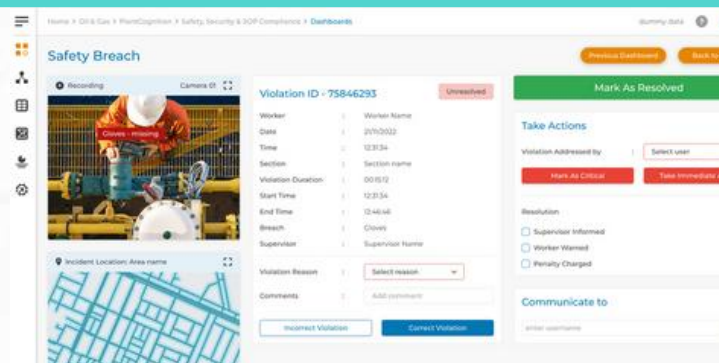
EOR Optimization and Polymer Injection Reduction for oil & gas
Benefit: 2% Polymer ↓ for optimum EOR

➤ Intelligent Schedules



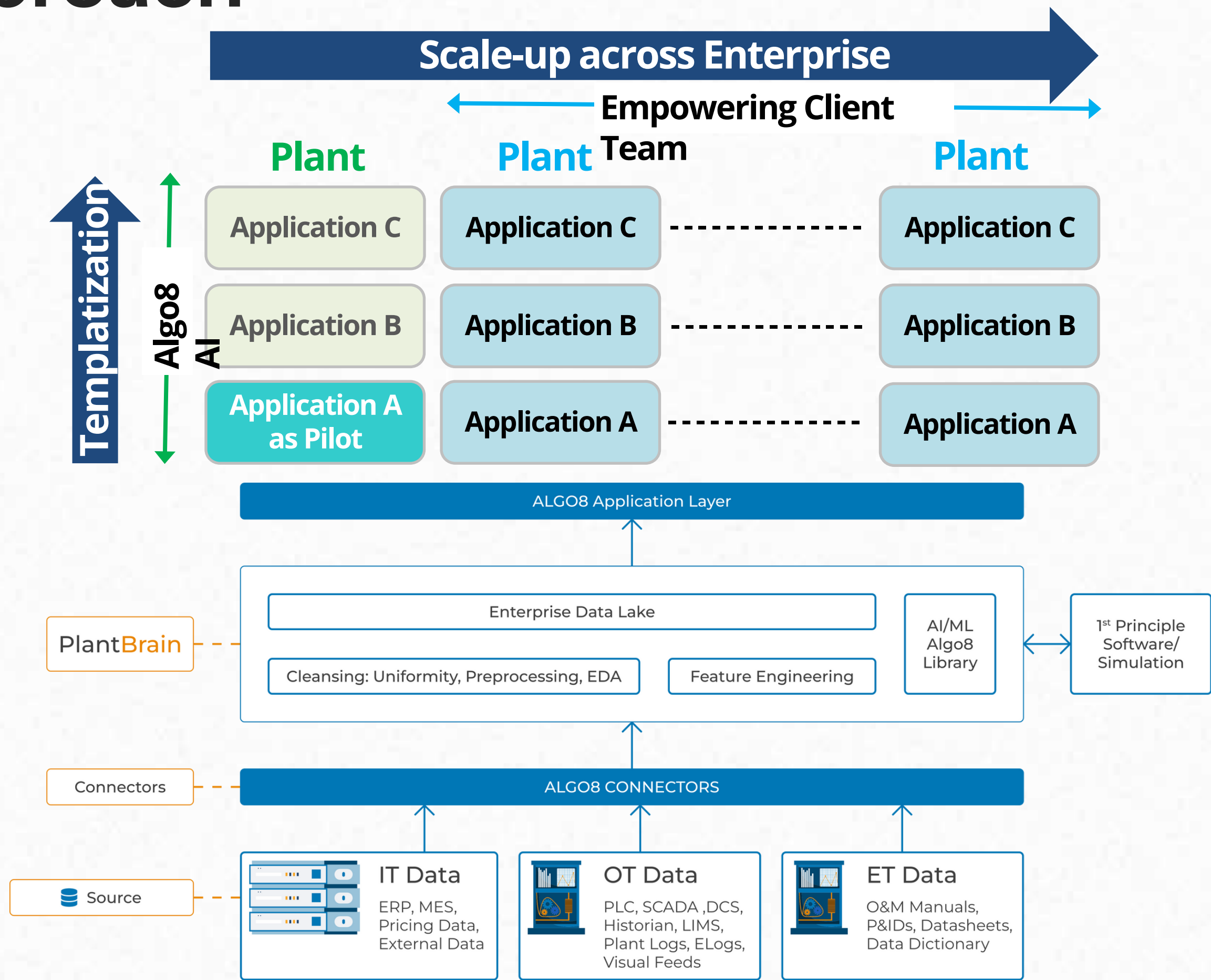
AI Based Cleaning Scheduler for CDU/VDU PHT Heat Exchangers Fouling
Benefit: \$12M/ Yr ↑ per refinery

➤ Safer Operations

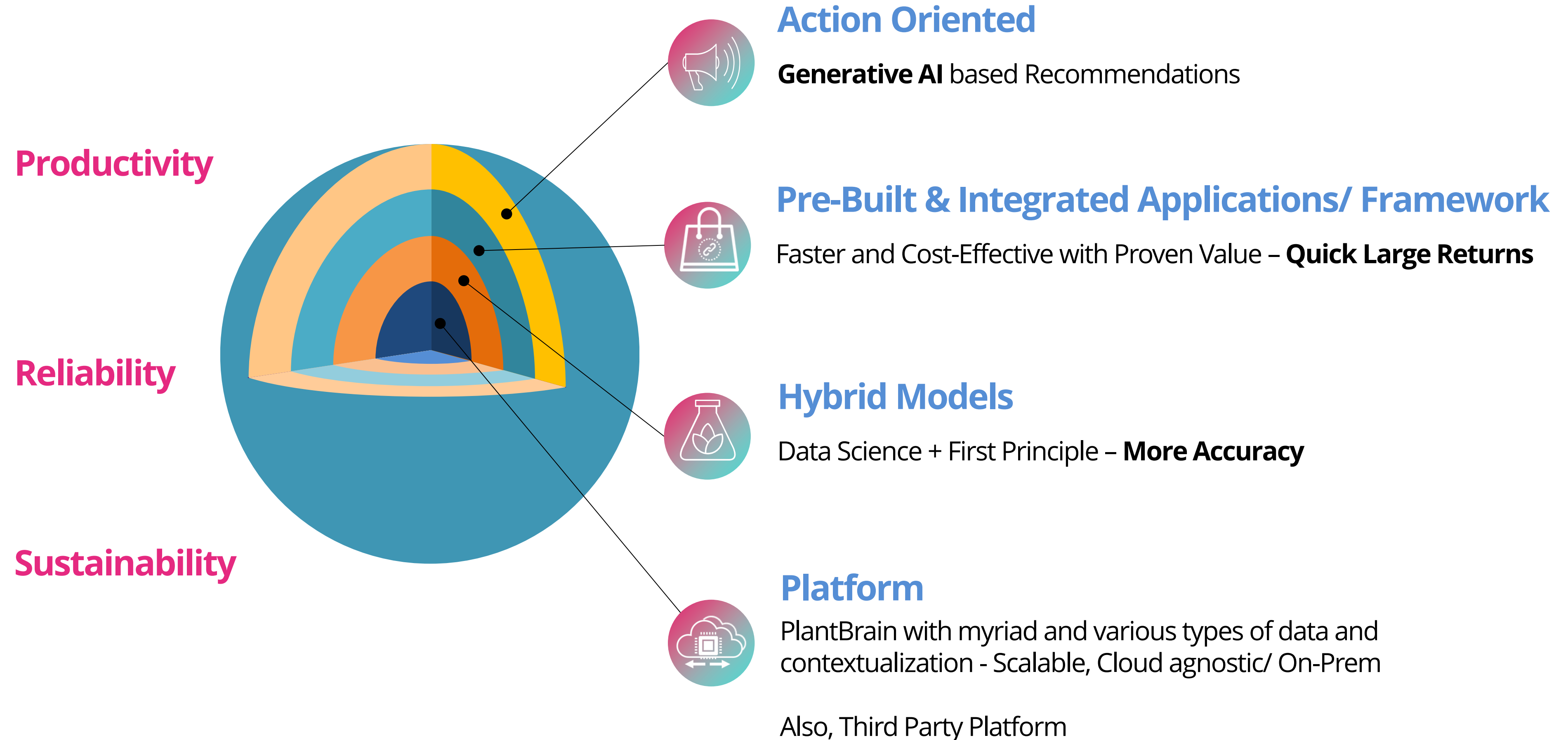


Intelligent Safety and Security Monitoring
Benefit: 100% SOP compliance

Our Approach



Our Differentiators





Join us on a Journey to transform
the Industrial Sector with AI

CONTACT

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