

The background is a dark purple gradient. On the left, there are two vertical neon lines, one blue and one purple, with a horizontal blue line intersecting the blue one. On the right, there is a large, glowing purple arc. The text 'AVEVA WORLD' is centered in a white, bold, sans-serif font.

AVEVA WORLD

# Unlocking AI's Potential with PI System Data

A Simplified, Scalable Approach

methanex  
the power of agility



A RESPONSIBLE CARE® COMPANY

# Who is Methanex



10.6 M tonnes of  
annual operating  
capacity



11 countries with  
offices or  
manufacturing  
sites



Integrated global  
supply chain and  
distribution  
network



\$3.7 billion  
in revenue 2024



Wholly-owned  
Waterfront  
Shipping  
subsidiary



Approximately  
1,415 team  
members globally

**World's largest producer and  
supplier of methanol to major  
international markets**



# Methanol end uses

## Traditional Uses

~55% of Demand



### Acetic Acid

Fleece, Adhesives, Paints



### Formaldehyde

MDF, Plywood



### Silicone

Sealants, Lubricants,  
Medical Applications,  
Insulation



### Methyl Methacrylate

PMMA-LCD Screens,  
Automotive

## Energy & MTO

~45% of Demand, High Growth



### Bio-Diesel

Replacement for Ethanol  
in the Bio Diesel Market



### Fuel Blending

Blending with gasoline



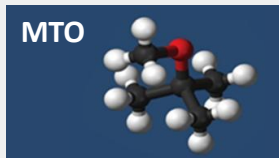
### Dimethyl-ether

LPG Replacement



### Marine Fuel

Bunker Replacement



### MTO

### MTBE

Methyl Tert Butyl Ether

### Olefins

Plastics, Ethyl propylene

- Methanol is a clear, biodegradable commodity chemical primarily produced from natural gas
- Methanol is an essential ingredient used to produce hundreds of everyday industrial and consumer items
- It is also a clean-burning, cost-competitive alternative fuel

# Global footprint

*Global distribution of operations and resources*



# Business Opportunity

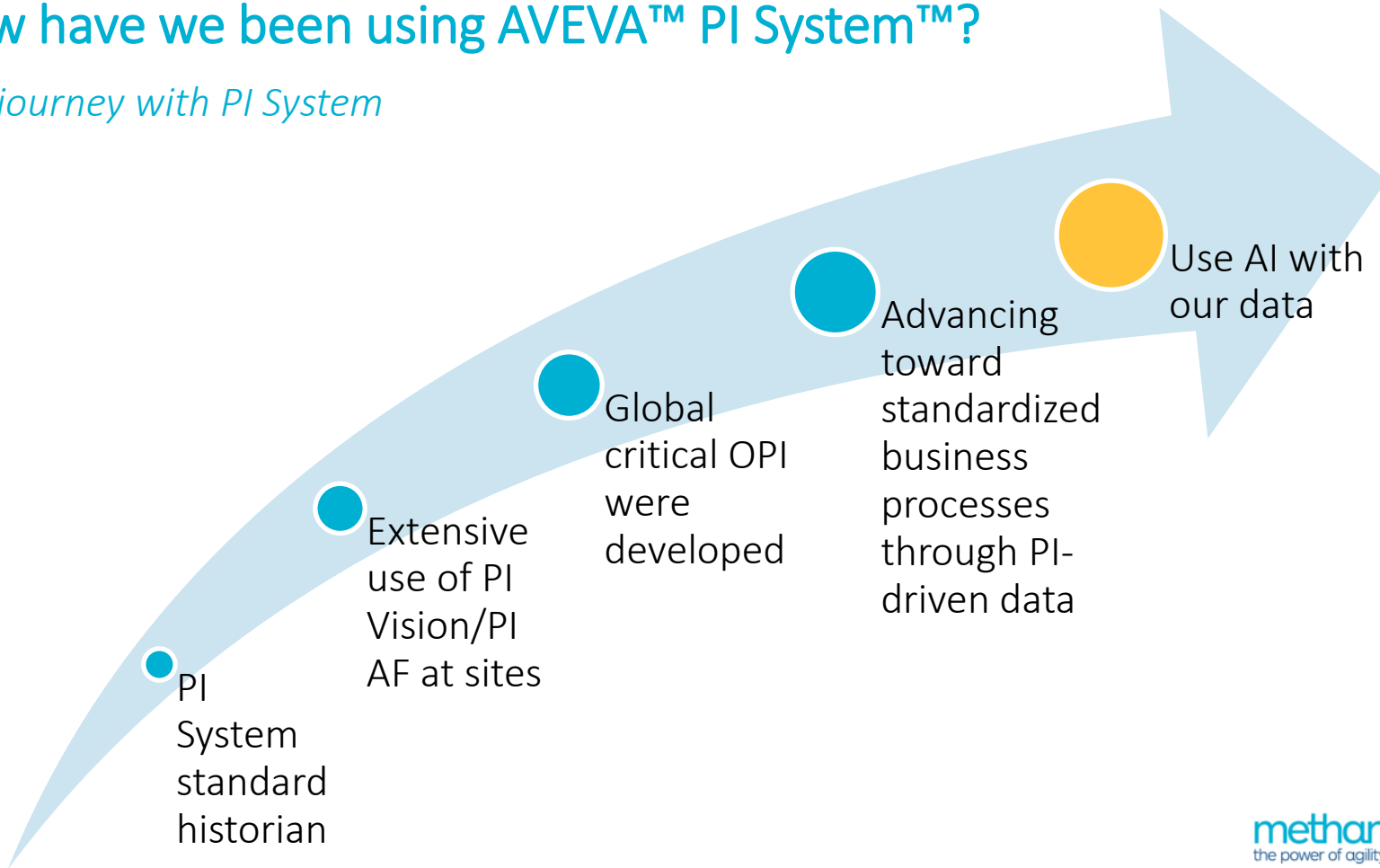
*Turning Challenges into Competitive Advantages*

- Allow for Global Collaboration
  - Leverage expertise from SMEs and IT professionals worldwide.
- Prevent Equipment Failures
  - Utilize foundational AI models for precise in-house predictions.
- Improve Operating efficiency
  - Deploy customized AI solutions tailored to operational needs.

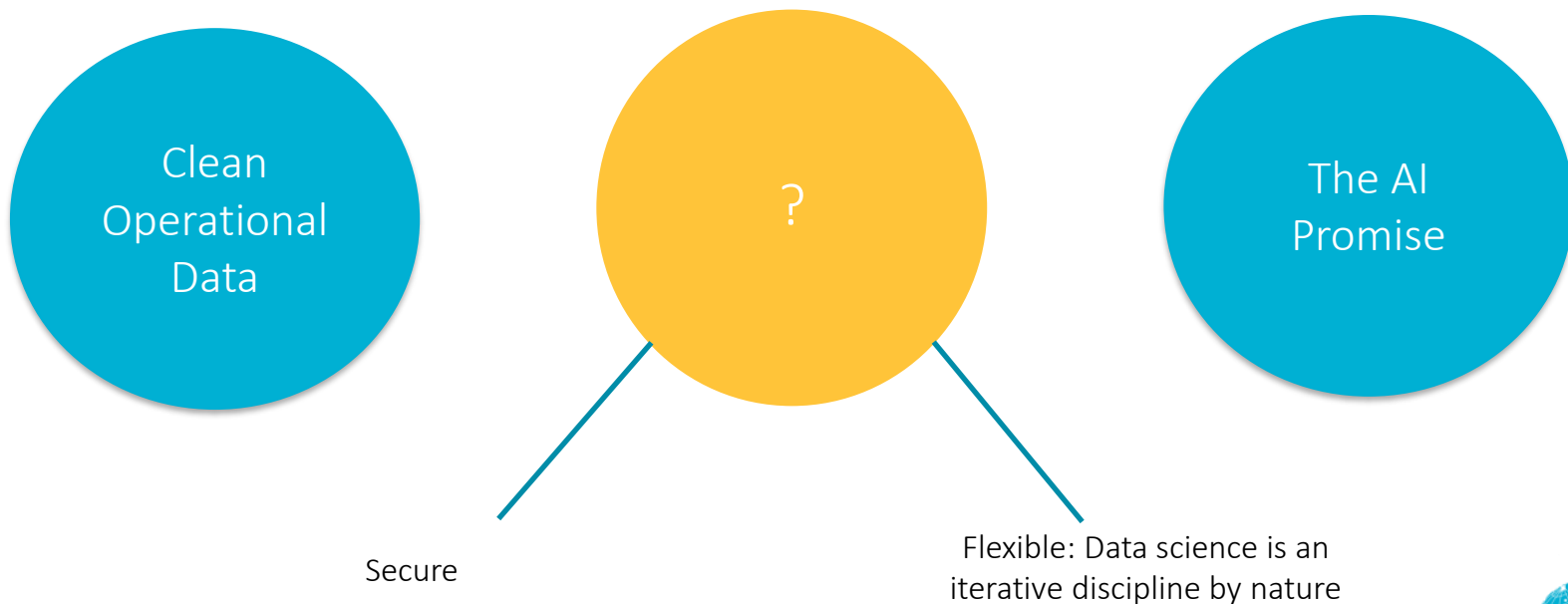


# How have we been using AVEVA™ PI System™?

*Our journey with PI System*

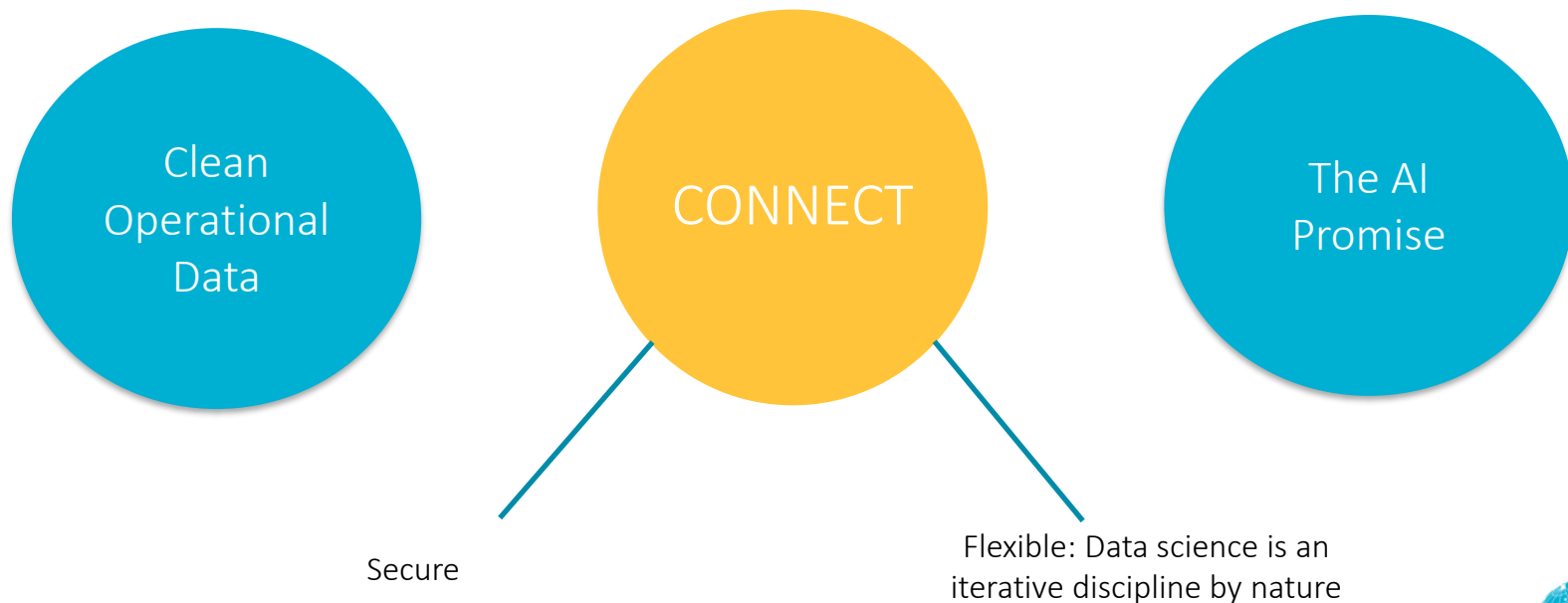


# How to use AI with PI System data?



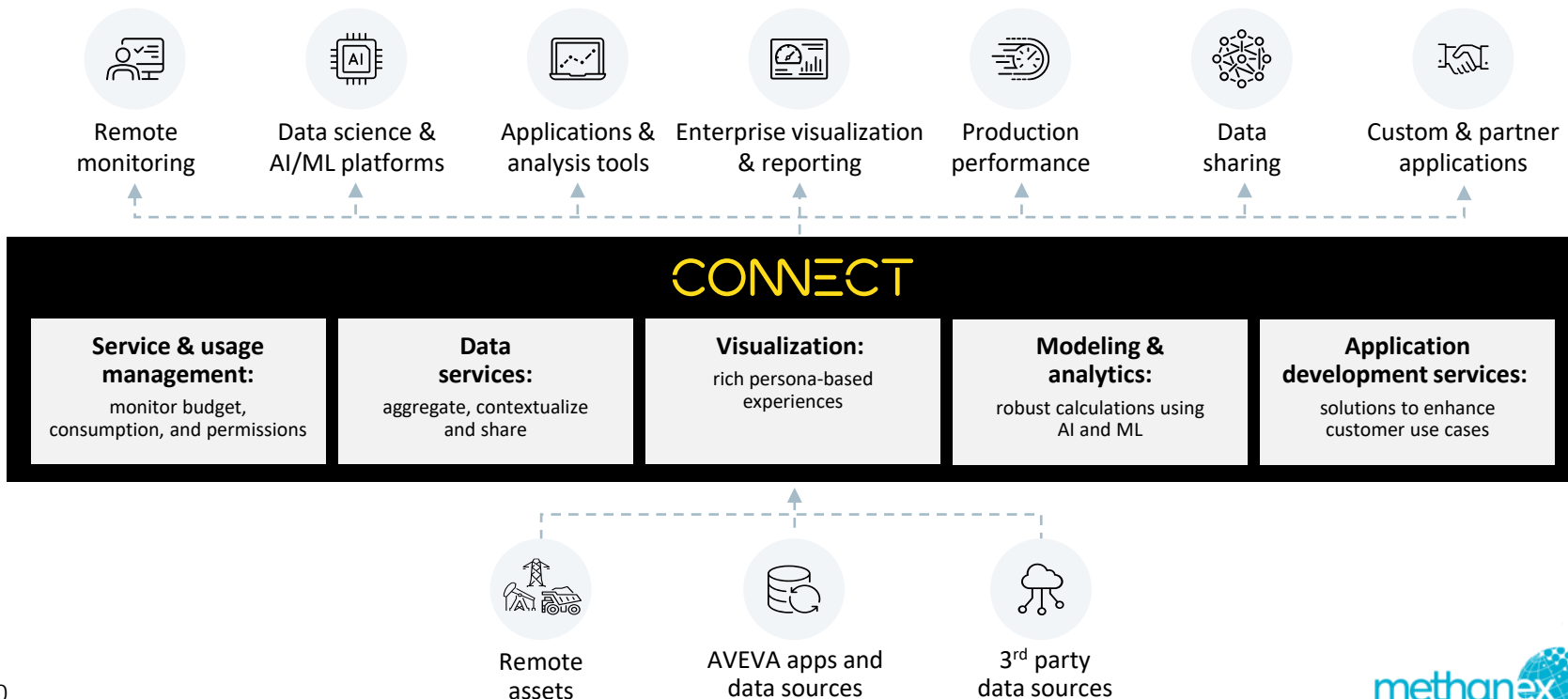


# How to use AI with PI data?



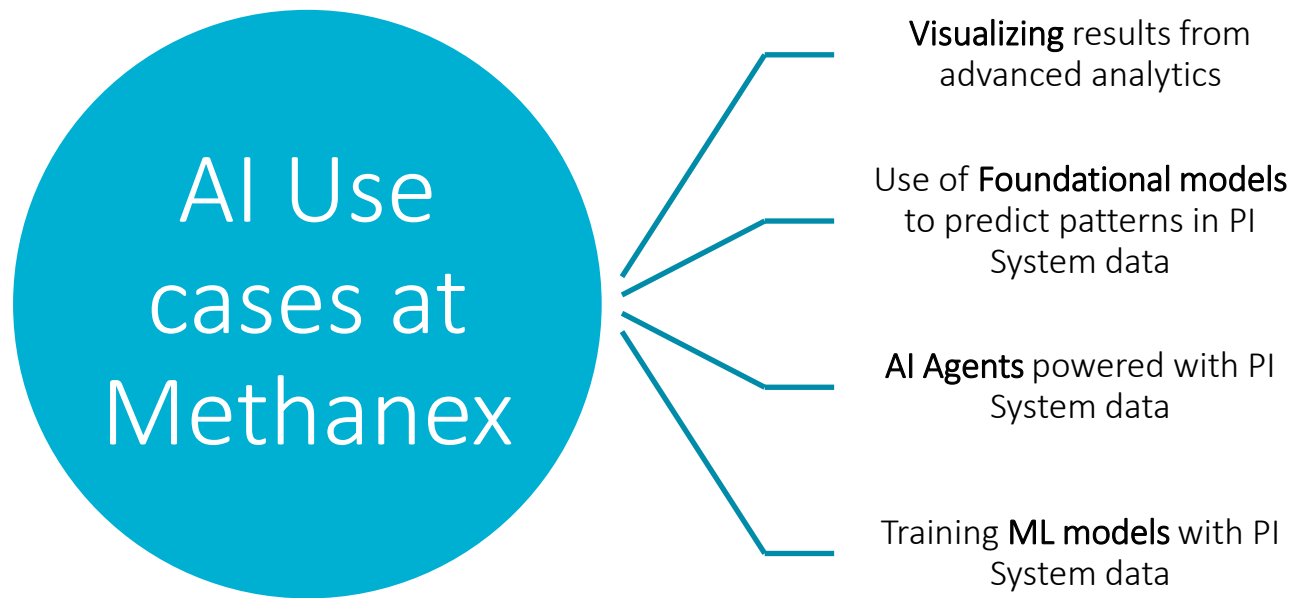
# What is CONNECT?

*Improve data-driven decisions to increase operational efficiency, productivity, safety, sustainability, and asset reliability*



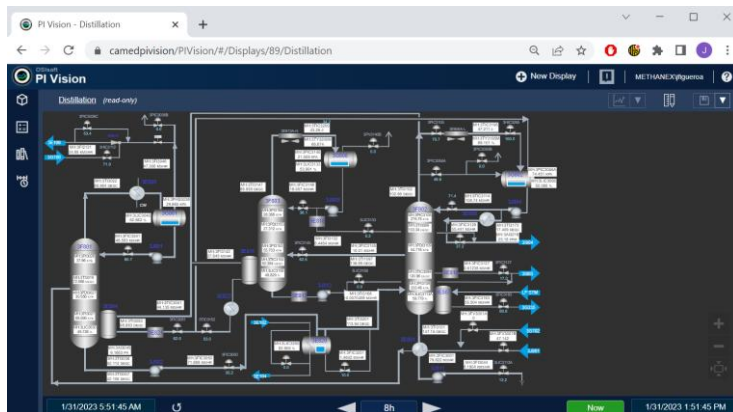
# How are we using CONNECT to unlock AI Potential?

*Four use cases*

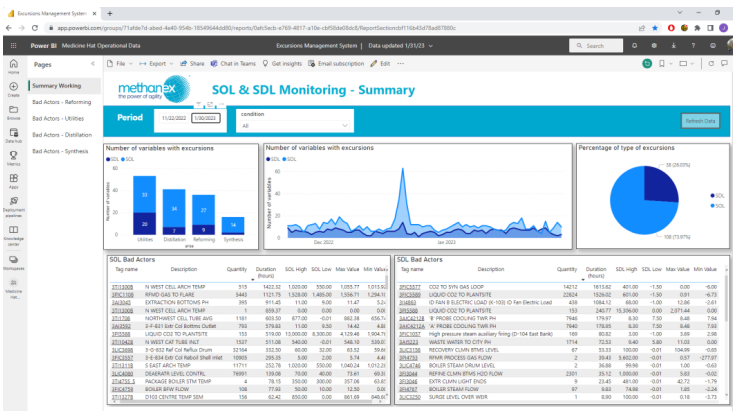


# Data Visualization

## Power BI Report



Operational



Strategic

methanex  
the power of agility

# Data Visualization

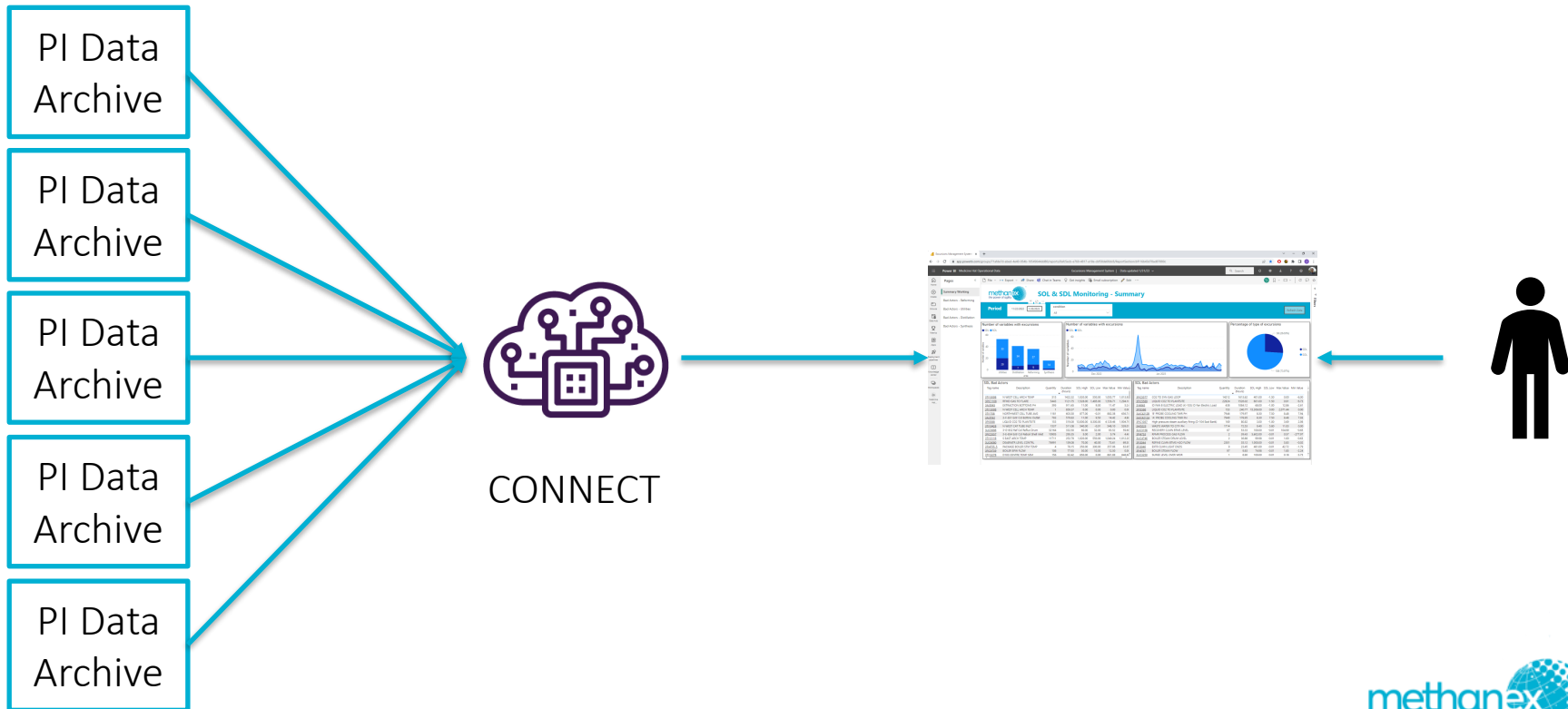
## Power BI Report



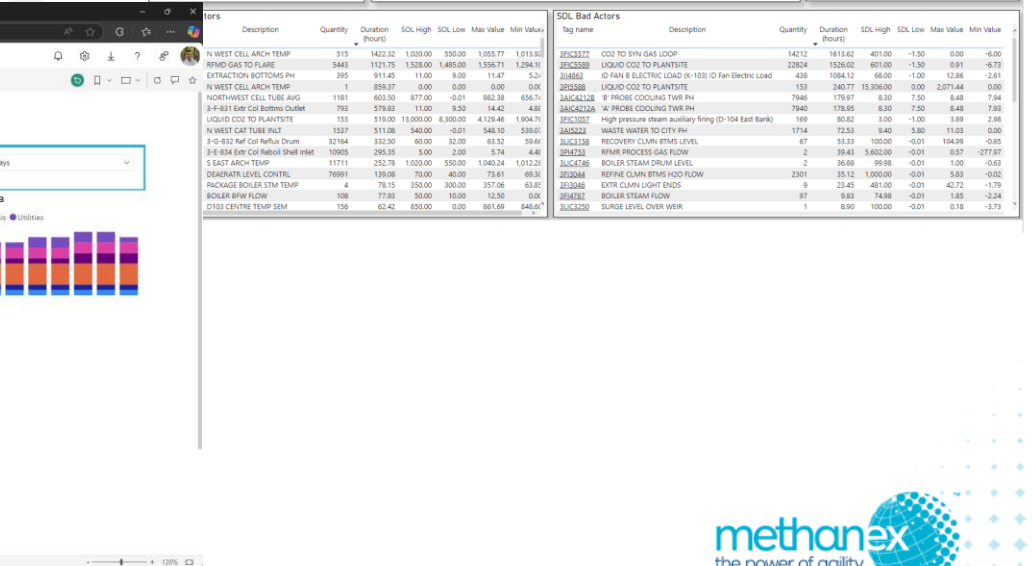


# Data Visualization

## Power BI Report

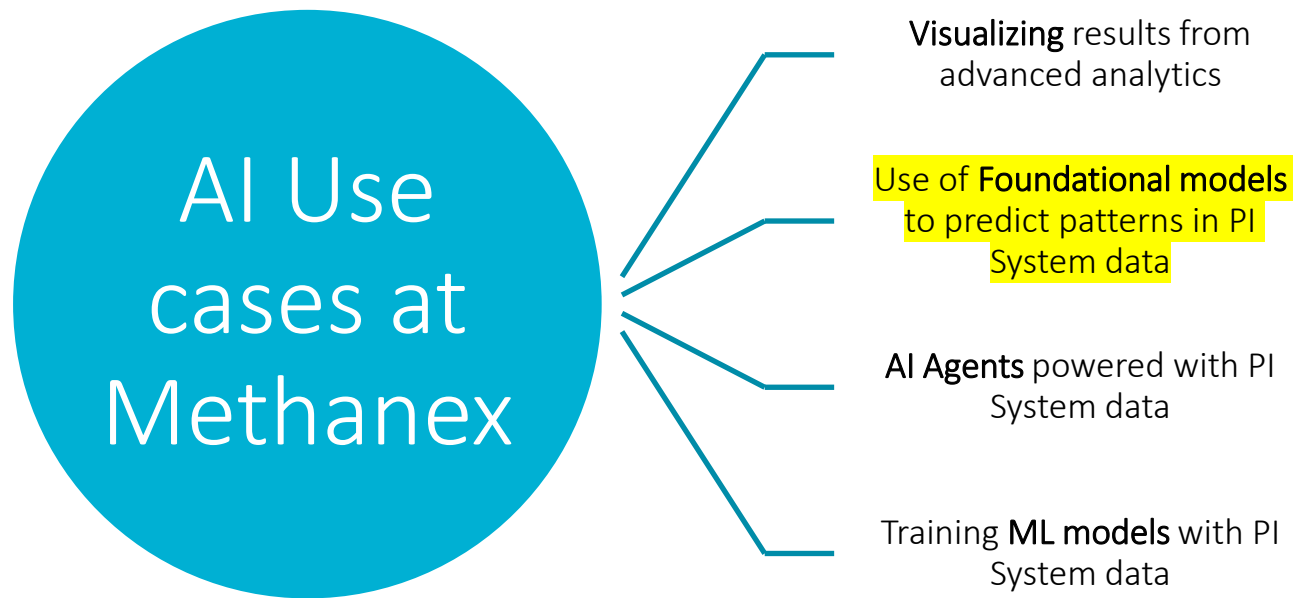


## PowerBI Reports



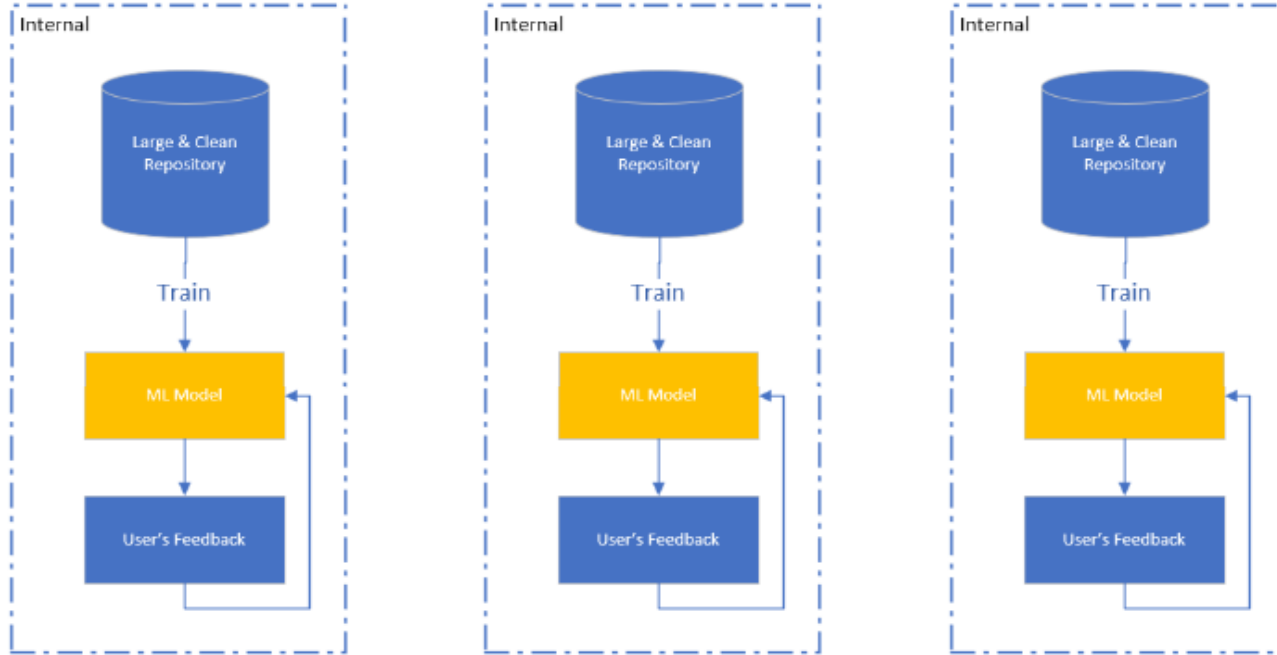
# How are we using CONNECT to unlock AI Potential?

*Four use cases*



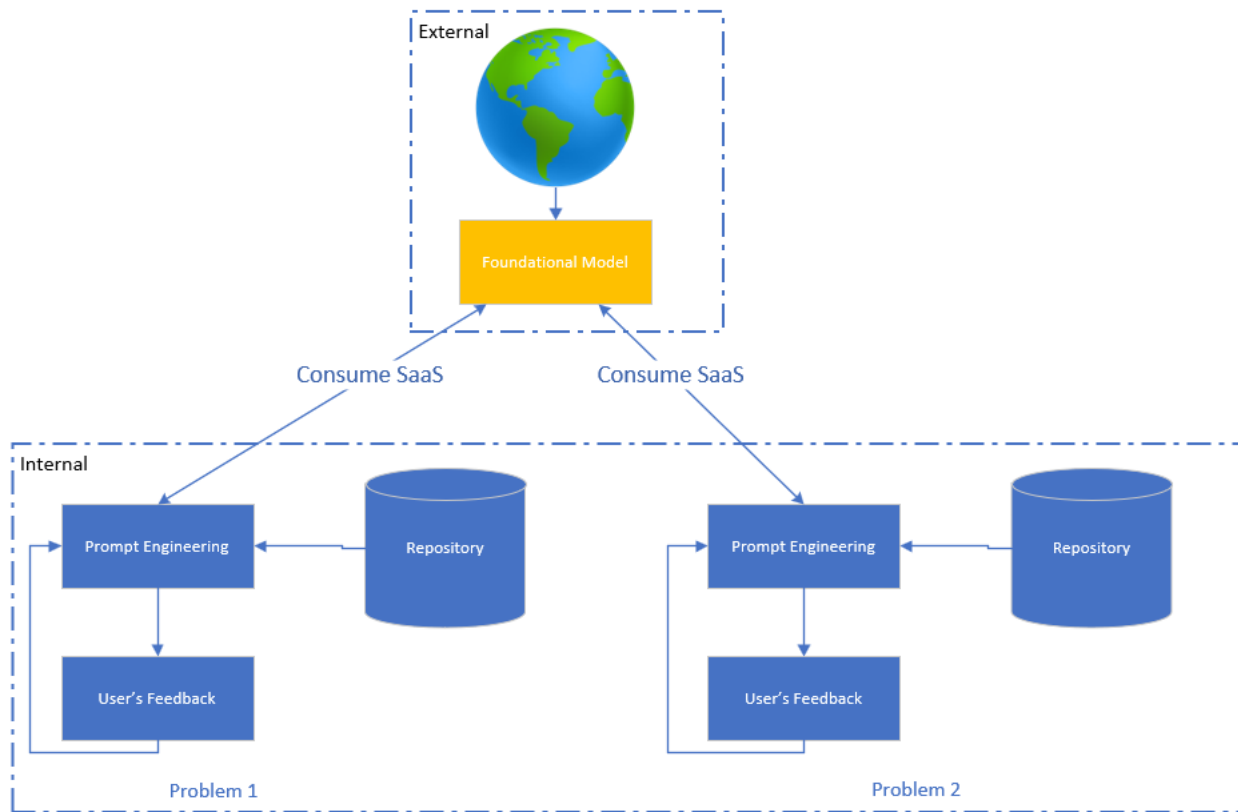
# Traditional Machine Learning

## *Model Training*



# Foundational Model

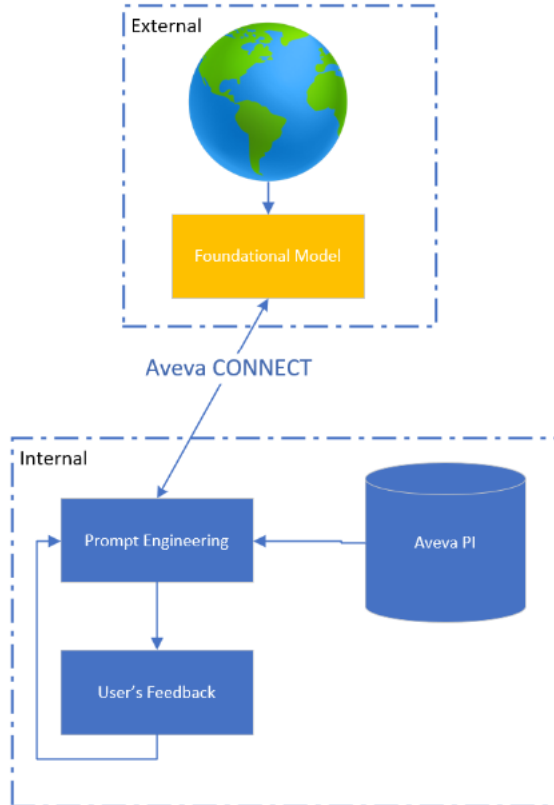
## *Foundational Models*





# Foundational Model

## *Foundational Models*



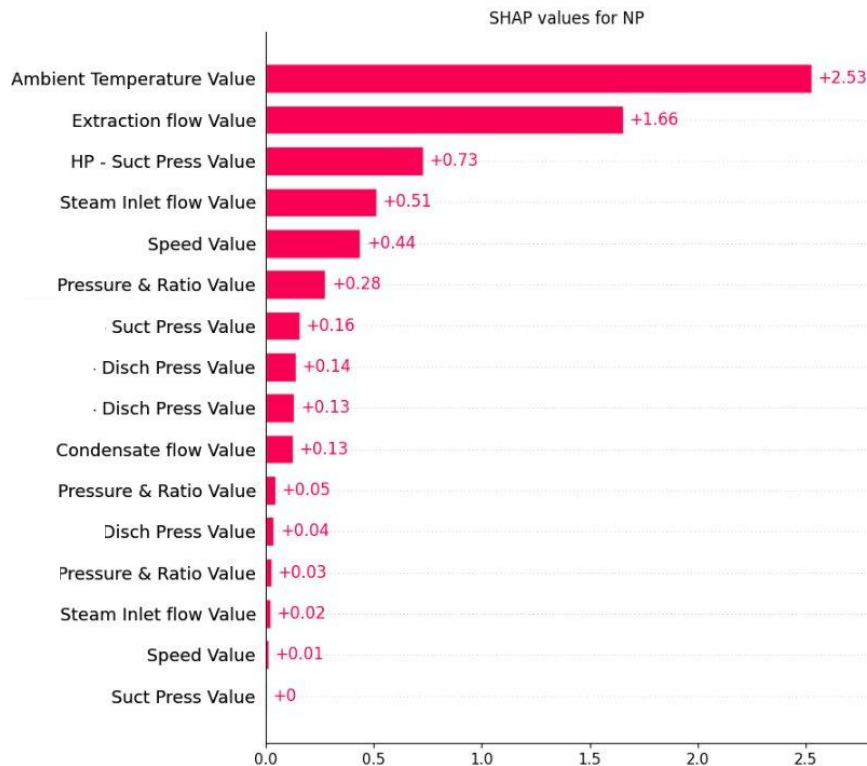
# Foundational Model

*Forecasting using TimeGEN through Microsoft AzureAI*



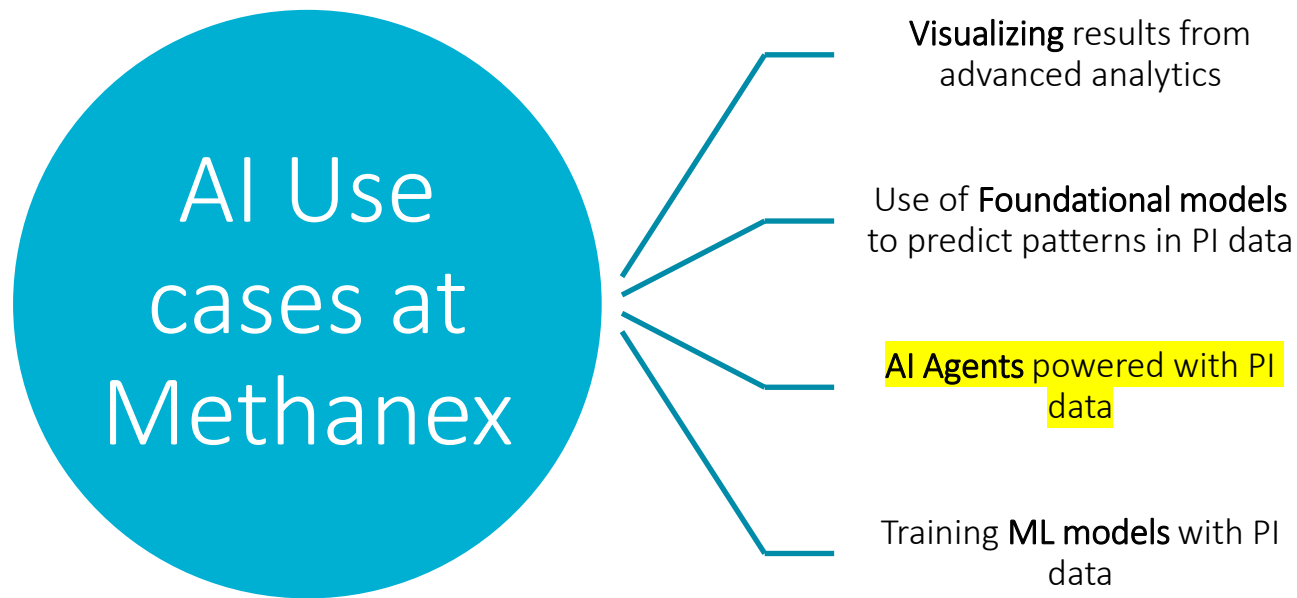
# Foundational Model

*Forecasting using TimeGEN through Microsoft AzureAI*



# How are we using CONNECT to unlock AI Potential?

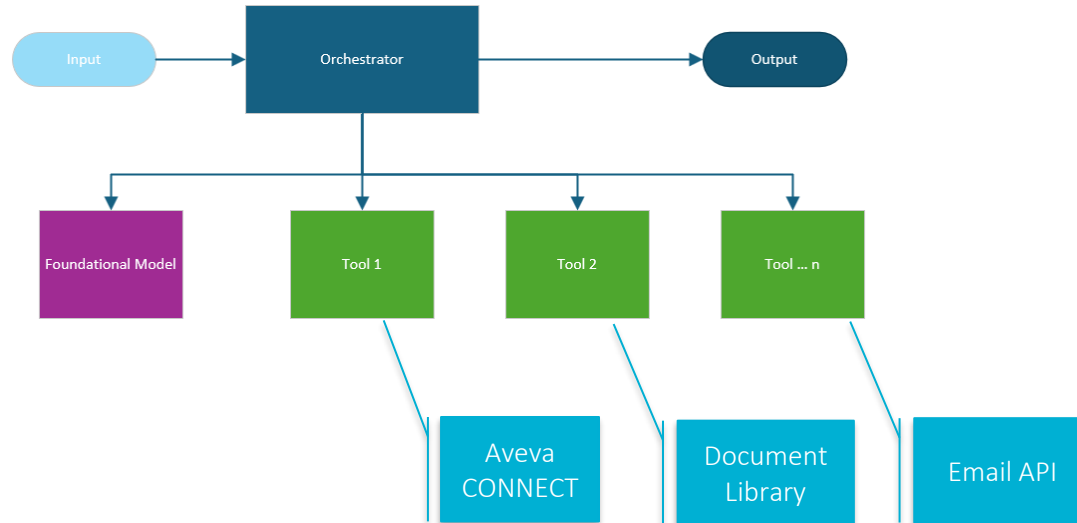
*Four use cases*



# AI Agents

## AI Agents

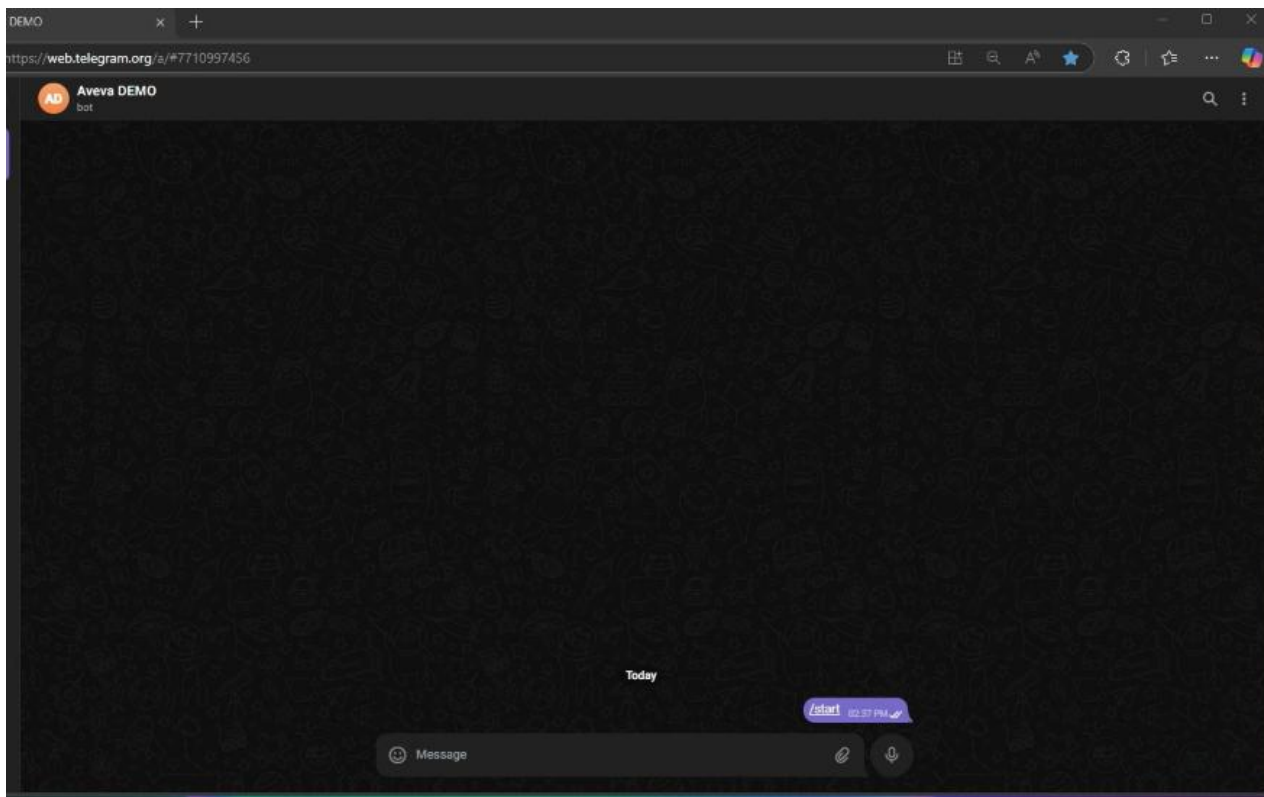
AI agents are software programs in which no business rules are explicitly programmed; instead, an AI model autonomously selects the tools it needs to complete a task





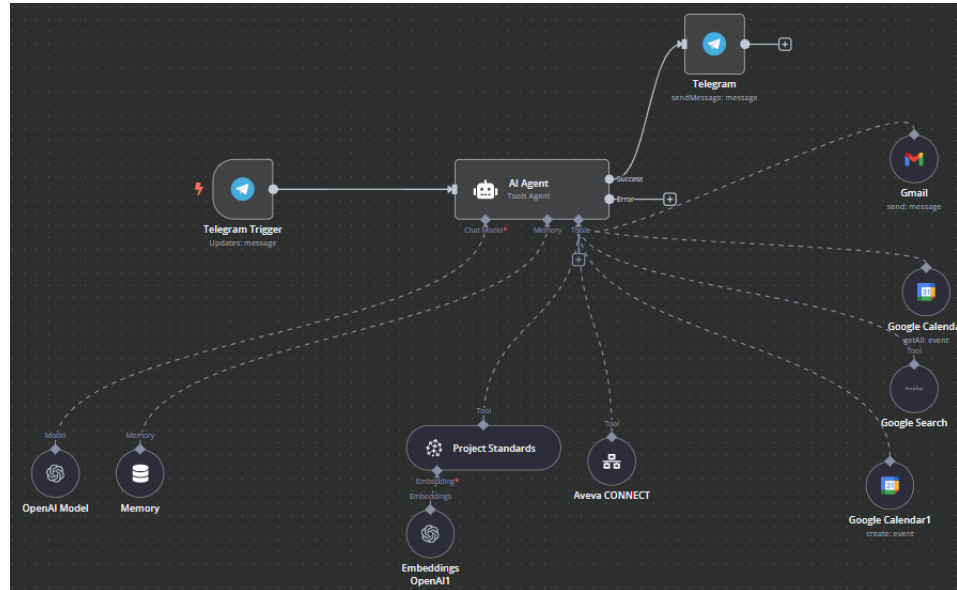
# AI Agents

## Demo



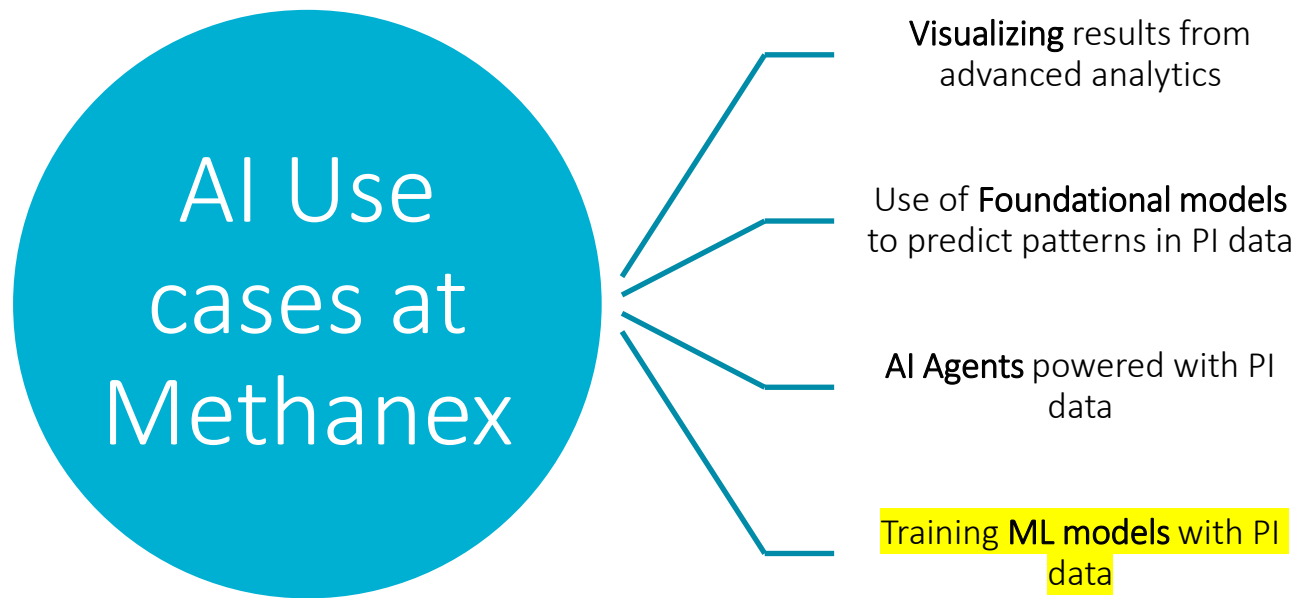
# AI Agents

CONNECT proves to be integrable with AI Agents platform such as n8n



# How are we using CONNECT to unlock AI Potential?

*Four use cases*



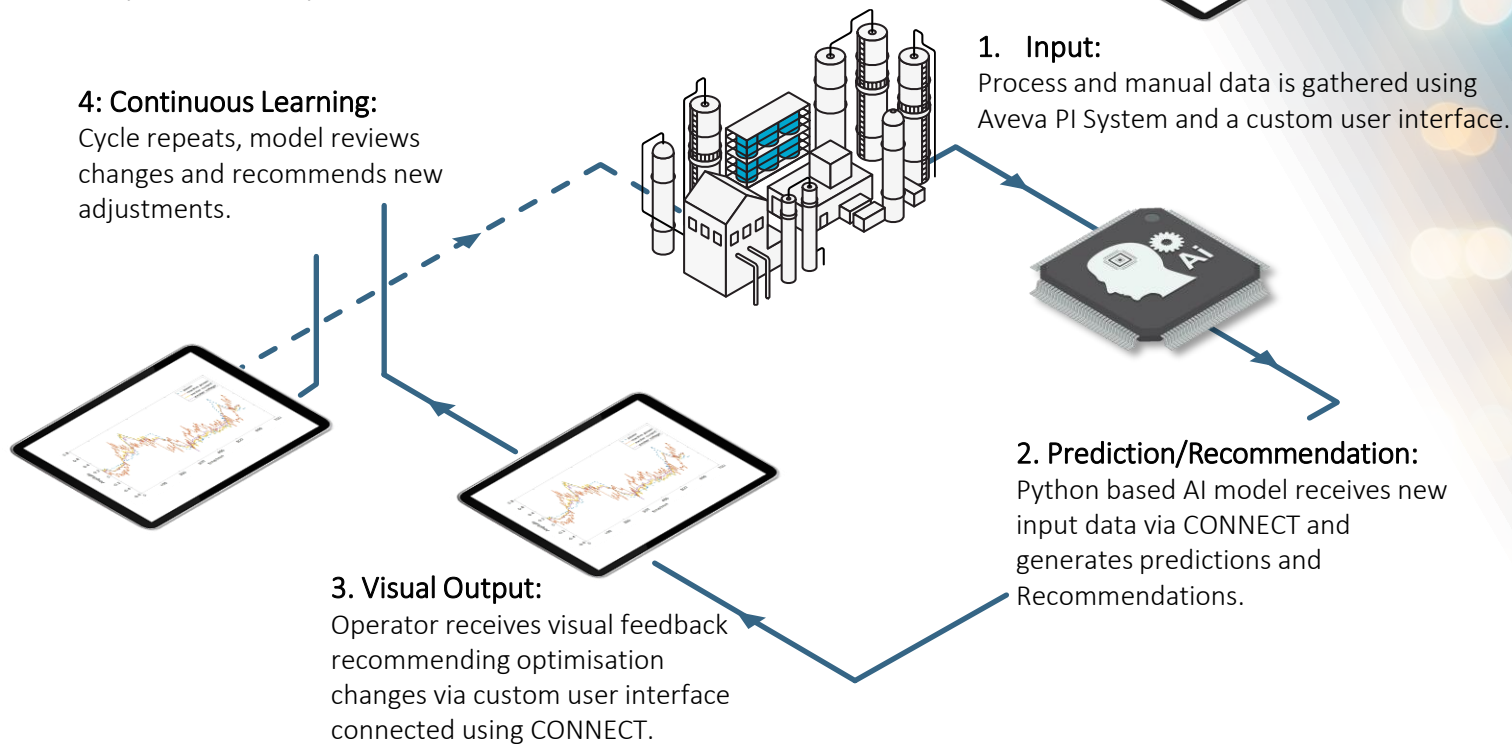
# Operations Optimization Assistant

- Some optimization is manual and nonlinear
- The optimization is time-consuming and inefficient
- So we trained an AI to assist the operator



# Operations Optimization Assistant

Transform raw operational data into actionable insights, using AI-driven analytics, predictive modeling, and real-time monitoring—enhancing efficiency and reliability.





# Methanex drives global collaboration and reduces downtime

## Challenge

- Siloed data and SME knowledge across a globally distributed organization led to slow decision-making
- Needed to prevent critical equipment failures and reduce costly downtime
- Lack of visibility into operational data hindered improvement efforts and agility

## Solution

- Deployed AVEVA™ PI System™ and CONNECT enabling rapid, data-informed and AI-enhanced decision-making—anytime, anywhere

## Results

- Enabled global collaboration amongst SMEs, vendors and IT professionals, and visualized results from advanced analytics, improving rapid decision-making
- Used foundational AI models to predict patterns in PI System data, driving significant operational benefits
- Deployed customized AI solutions tailored to operational needs
- Simplified IT infrastructure integration with other platforms



# Questions?