

FME AI FOR INDUSTRY JAAREVENT



**Bouwen van een data
infrastructuur voor
toepassing AI**

20 november 2025

Agenda

1. Michael Leonora – Siemens

Accelerate the implementation and scaling of AI in manufacturing.

2. Alexander Schlösser – MAX-AI.NL

Developing a data infrastructure that drives value

3. Vragen en discussie



Industrial AI

Accelerate the implementation and scaling of AI in manufacturing.



Every 2nd AI use case fails to move from Proof of Concept (PoC) to productive use

We've taken the first steps toward Industrial AI but struggle to bring it into productive use at scale and leverage its potential.

46%

of AI projects fail to make it from pilot to production

Source: <https://www.gartner.com/en/newsroom/press-releases/2022-08-22-gartner-survey-reveals-80-percent-of-executives-think-automation-can-be-applied-to-any-business-decision>

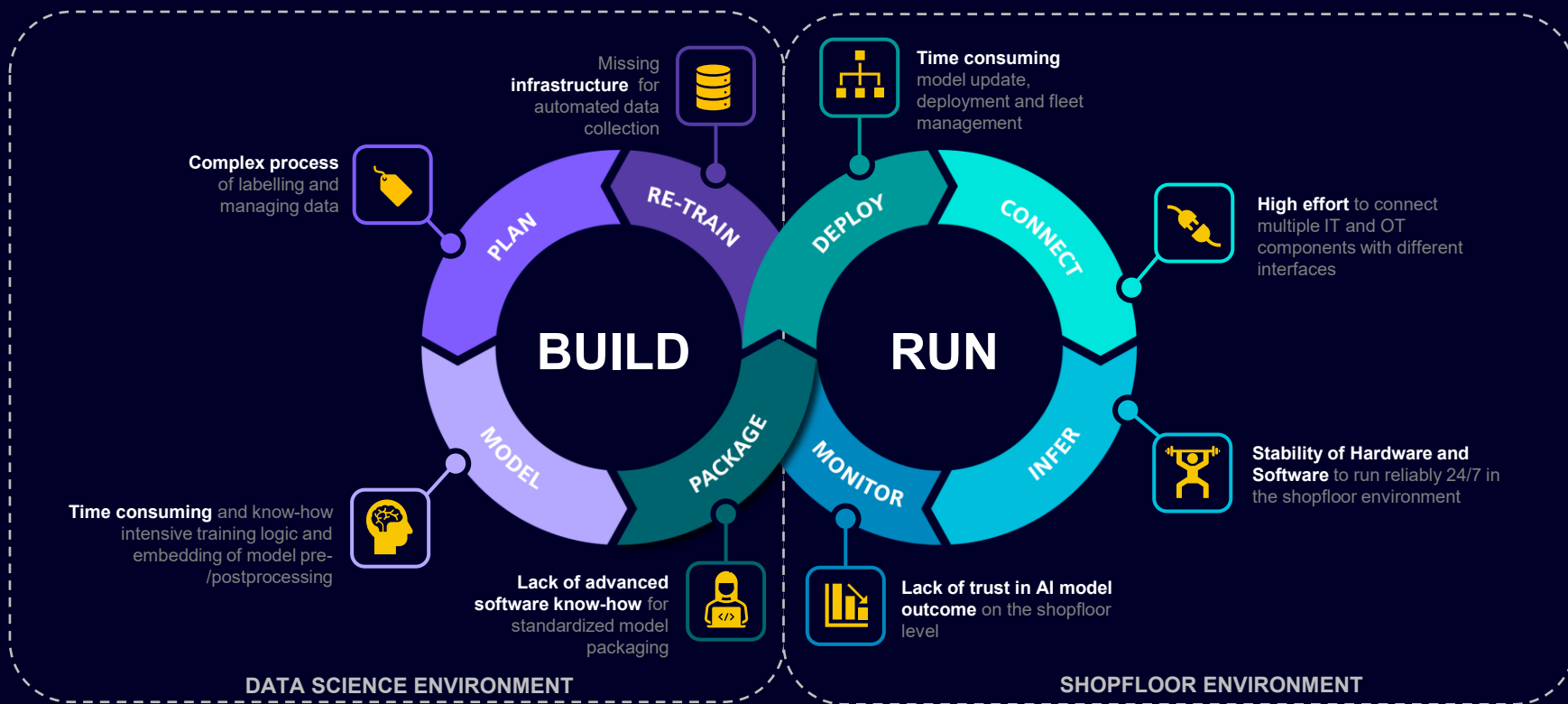
Implement and scale AI in production. A challenge we can master together!



Why

is it so challenging to implement and scale
Industrial AI?

The challenge of transforming complex pilots into productively operating scalable AI systems



Our mission is to enable and accelerate the implementation and scaling of Industrial AI solutions

Our mission is fulfilled when manufacturing industries have no barrier to leverage the power of AI in production automation!

How

are we facing the challenge to implement and scale Industrial AI?

Integrating the real and digital worlds to accelerate the adoption of industrial AI solutions



Combining operational and information technology
(real and digital worlds)
to empower customers
and partners
to scale up their operations
and drive innovation



A digital and IoT enabled
portfolio with offerings from
**Siemens and certified
partners form an open
ecosystem**
accessible through the
Xcelerator marketplace



Our **AI framework**
provides hardware,
software, and services
enabling to create,
operate and scale AI
solutions

Our framework enables to create, implement and scale Industrial AI solutions



Standardized infrastructure is essential

Siemens industrial AI framework provides reliable standardized infrastructure while ensuring serviceability and process compliance



Easy to deploy, run and monitor

Our applications allow automation engineers with no prior data science experience to easily deploy, run, and monitor your AI solutions



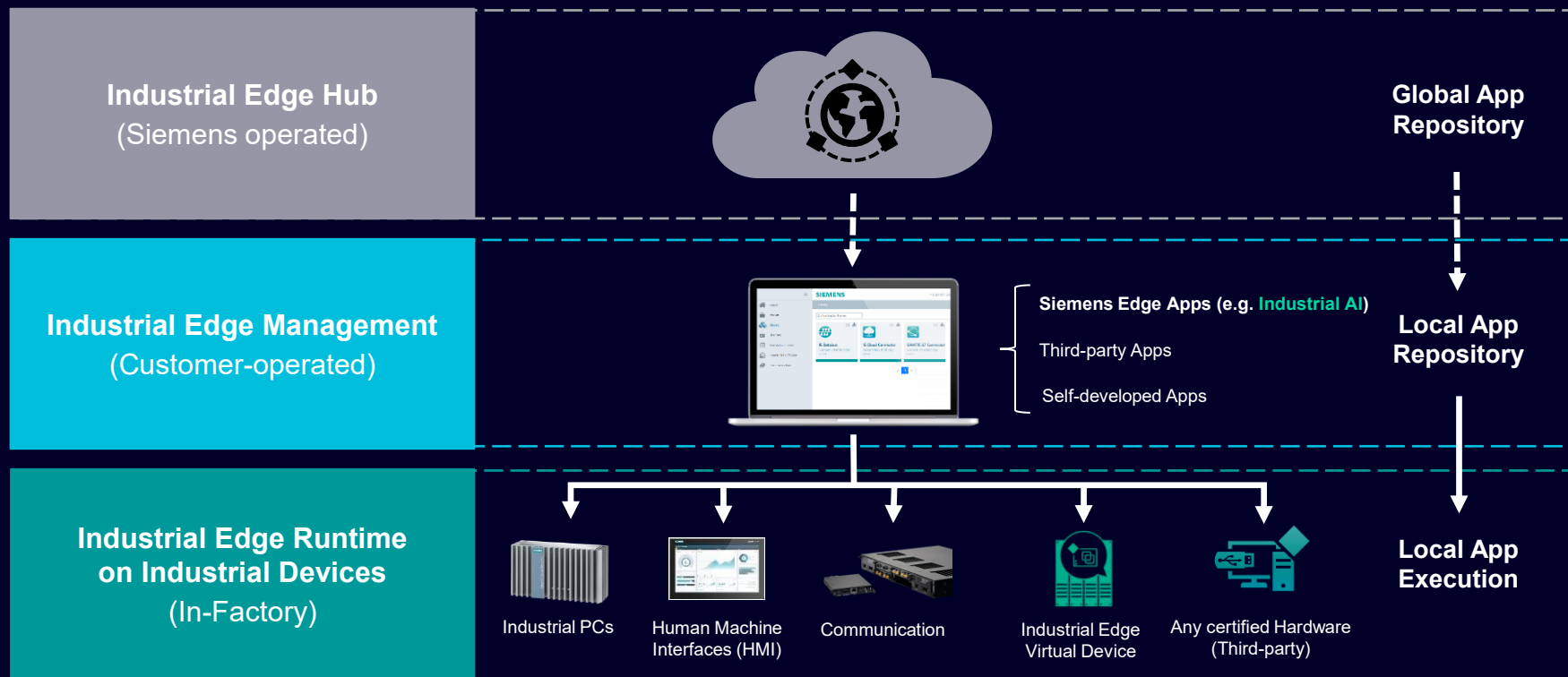
Reliability and security standards

With our Industrial Edge platform, we ensure reliability and security to deploy industrial AI to the shopfloor

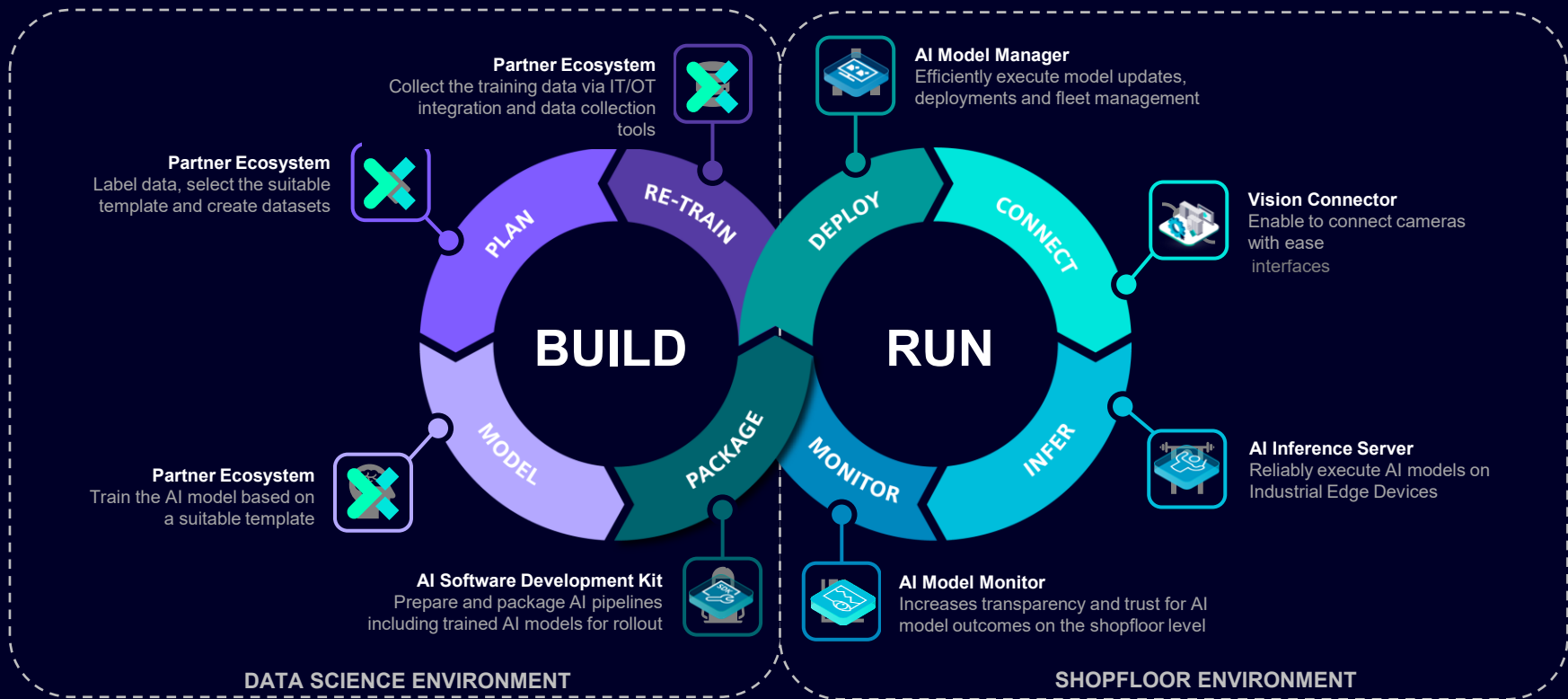
What

do we offer to get Industrial AI running productively
at scale?

Industrial Edge architecture as base layer for Industrial AI



Our Industrial AI portfolio supports customers to productively operate and scale their AI use cases beyond a PoC



References

Examples how our customers leveraged the potential of AI

Our customers went beyond experimentation and use Industrial AI productively

Predictive Maintenance with AI and Edge Computing

Challenge

Aggressive milling dust causes drive bearing to **get stuck**.
Machine **stands still**: **high** associated **costs**.
Drive system of the entire **spindle must be changed**.

Solution

Artificial Intelligence and Edge Computing predict machine breakdown up to 72 hours before it occurs.

Predict failures up to

3

days in advance

Preliminary spindle failures

100 %

decreased

For 1 machine up to

30k €

savings / a



Our customers went beyond experimentation and use Industrial AI productively

Visual quality inspection: Brake pad classification

Challenge

Workers group brake pads **by experience** in 4 classes. Traditional vision systems are **not applicable**.

Solution

Neural network analyses the pictures of a camera and **generates a quality indicator** for classification

Up to

80 %

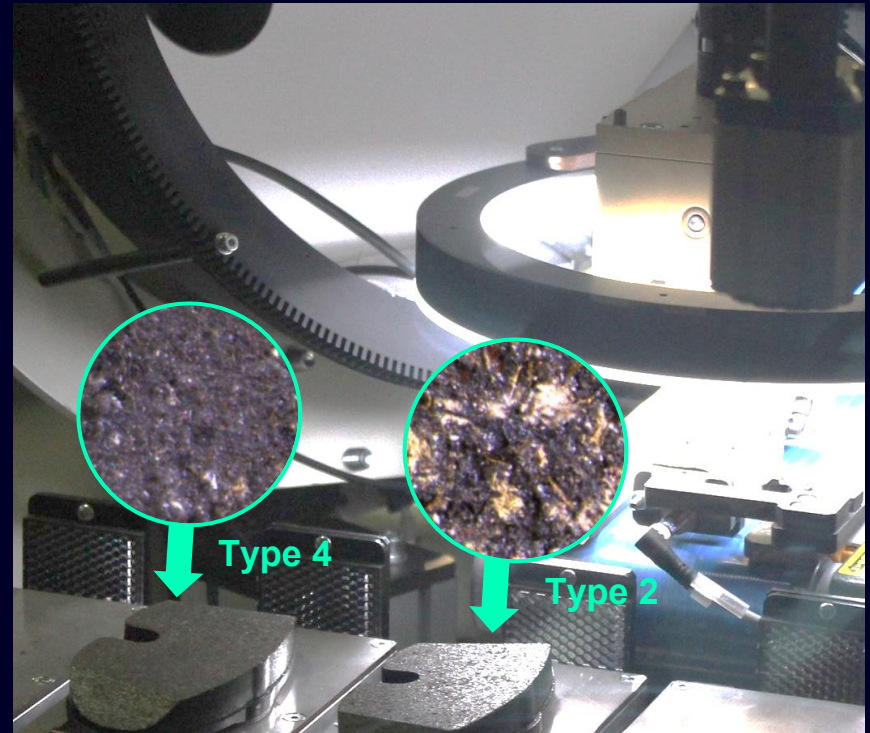
less manual effort

Easy

integration

100 %

test coverage



Key take-aways

to accelerate the implementation and scaling of
Industrial AI

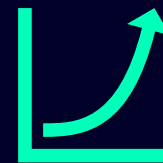
Key take-aways



The **open Siemens ecosystem** covering hardware, software and services **enables flexibility and seamless integration**



A **standardized infrastructure** is key for efficient integration, operation and scaling of AI solutions



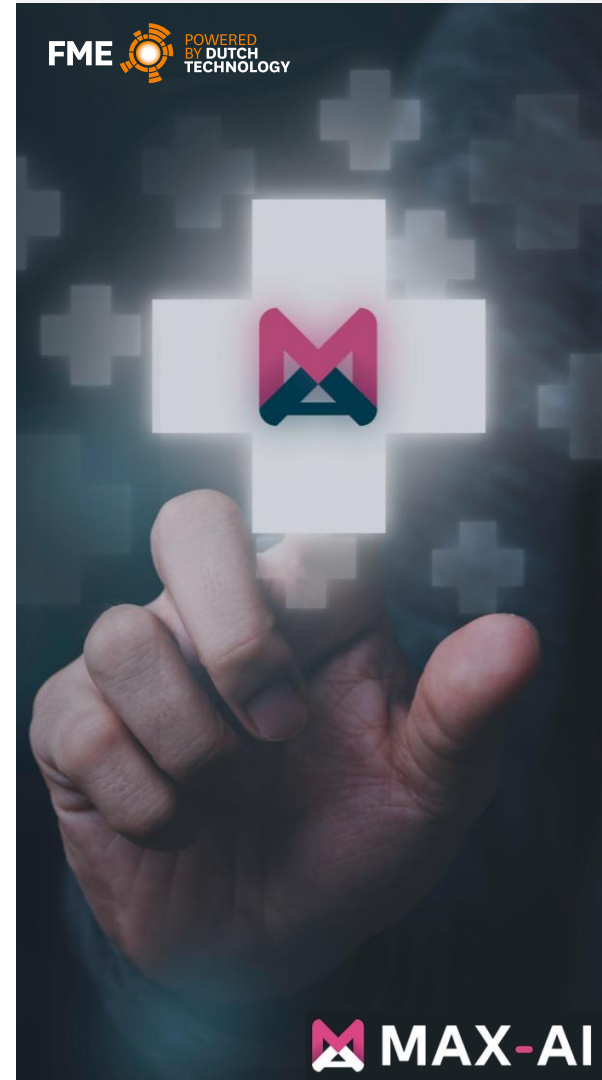
Moving beyond **experimentation** and operating AI efficiently at scale **improves productivity and quality while reducing cost**

DEVELOP A DATA INFRASTRUCTURE THAT DRIVES VALUE

MAX-AI.NL



- We help organizations realize business value by digitization.
- We introduce the latest AI technology into the heart of our customers business.
- We advise on the best proven technology suited for the problem of our customer.
- We train, optimize and consult businesses in all branches.
- We provide standard solutions for complex problems.
- Our solutions integrate SaaS and OnPremise using 1500+ standard connectors.



To generate business value from data you need to get 5 things in place.

- 1** **Sources**
Devices that generate data
- 2** **Ingestion**
A platform that can receive (large volumes) of data
- 3** **Storage**
Storage of raw and processed data
- 4** **Processing**
Process and transform data
- 5** **Presentation**
Make data available for user and applications

Start with the goal in mind



A data infrastructure should be driven by business value,
not by data creation capabilities

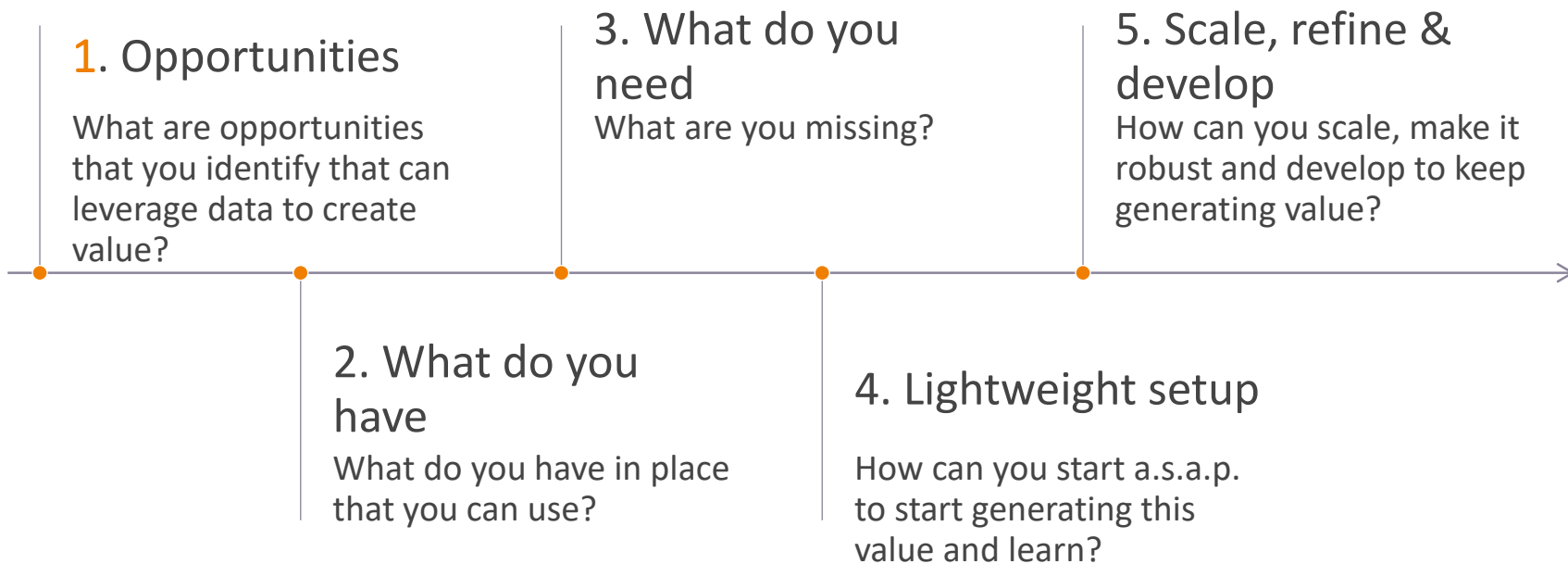
Starting with the platform (e.g.):

- A company has 1,500 devices, each capturing one snapshot per second (over 100 million per day).
- The platform must ingest, process, store, and analyze these snapshots.
- The output is a dashboard used by an operator to perform 100 actions per day.

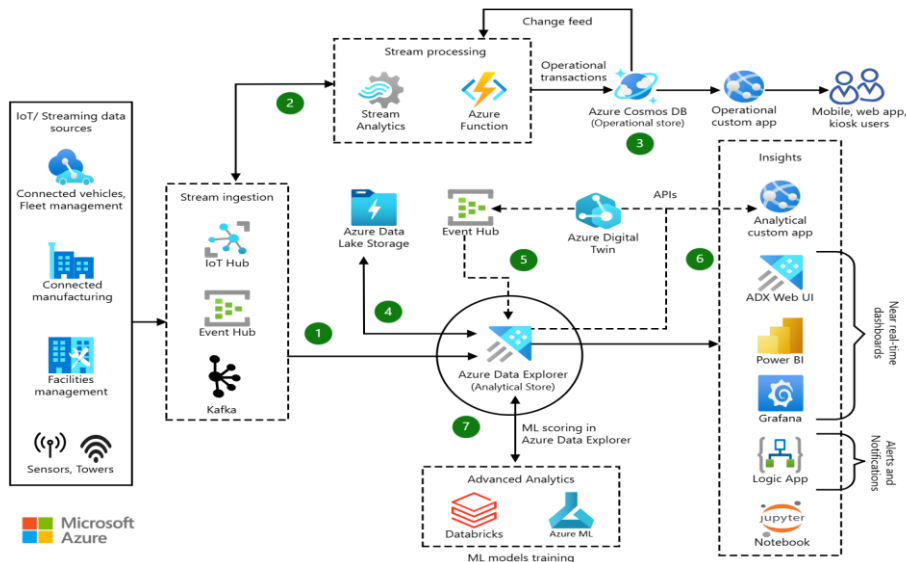
Starting with the goal (e.g.):

- The output: 100 actions per day.
- To determine these actions 1000 key data points are needed
 - (a combi of temp + noise thresholds)
- The device manufacturer can do the event management part.
 - (smart Edge devices prevent a lot of data traffic, platform optimizes event creation)
- The company receives only relevant events (1,000 per day) and processes and enrich them using their data platform.
 - (enriches them with other sources like ERP/CRM information).

Approach



Example architecture



Developing your platform:

- Azure (Microsoft) and AWS (Amazon) are the main platforms being used.
- Solutions use multiple cloud services.
- You probably can start small.

Reference: <https://learn.microsoft.com/en-us/azure/architecture/solution-ideas/articles/iot-azure-data-explorer>

DEVELOP A DATA INFRASTRUCTURE THAT DRIVES VALUE

MAX-AI.NL



We help organizations realize business value by digitization.

- Opportunity spotting to business case
- (Help you) Design, Build, Run and Develop the optimal platform
- (Independent) Advise and consultation on your specific issue.

Speciaal aanbod voor u als deelnemer van dit FME AI event:

We bieden een 2 uur durend gratis consult aan om te sparren over de mogelijkheden die u ziet in uw bedrijf.

Bedankt voor je aandacht!

Meer informatie:

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- Alexander Schlösser – MAX-AI – alexander@max-ai.nl

FME Platform AI for Industry:

- Patrick Blommerde – FME – patrick.blommerde@fme.nl



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**Bedankt voor
je aandacht!**