



Exploit existing data and build an AI-driven I&M strategy

Tips and tricks for a cost-effective roadmap

Giulia Baccarin - Veronica Brizzi



We bring prediction into factories and cities,
respecting **sustainability** and **social inclusion**.

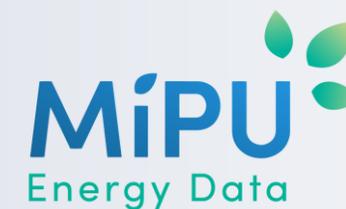
Speakers



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Tips and tricks for a cost-effective roadmap

1

DEFINE THE GOAL

2

AI IS NOT ALWAYS THE ANSWER

3

CHOOSE THE BEST AI METHOD

4

START FROM THE EXISTING

5

MANAGE YOUR AI

1 Define the goal

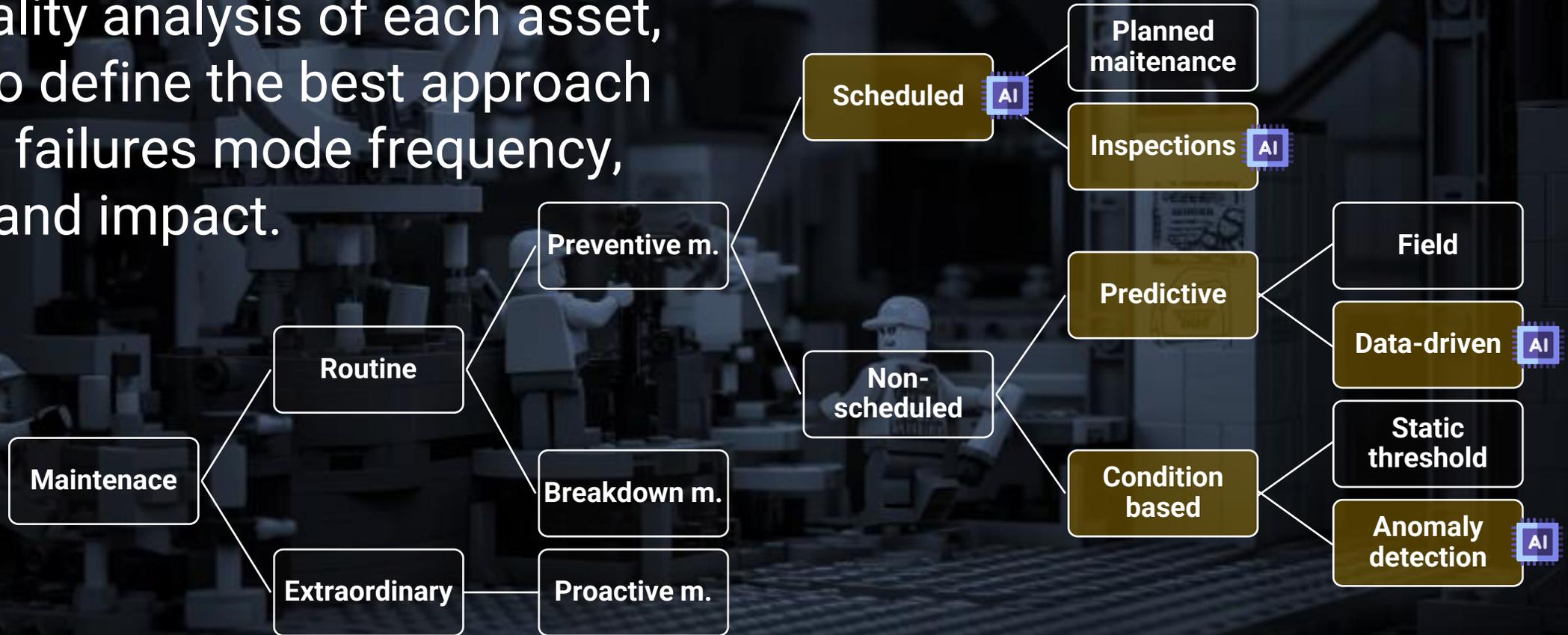
A **simpler solution** could be better, cost effective and more user friendly for a **specific goal**.

A technology-first rollout means that solutions are deployed without a clear link to real value opportunities, business challenges, or capability requirements. The result: undermining crucial buy-in from the people charged with making deployment work.

McKinsey, Capturing the true value of Industry 4.0

2 AI is not always the answer.

A balanced I&M strategy starts from the criticality analysis of each asset, in order to define the best approach based on failures mode frequency, duration and impact.



3

Choose the best AI method

Understand the technology and how it can be used for the **goal**. Know its **strenght** and **limits**.



Anomaly detection and predictive maintenance

Know in advance what is likely to happen thanks to real time monitoring of the process conditions. **Decrease breakdown** occurrency. **Plan inspections only if needed**. **Optimize** inspection based on previous planning and scheduling. **Minimize risks**.



Inspection support

Use image recognition to support technicians in the **visual inspections**
Support operators in the **failure diagnosis**
Remotely monitor main parameters and identify **drifts** before they turn into costs and breakdowns



Planning and scheduling optimization

Define the planning in order to **minimize waiting times**.
Organize **skills and tools** based on availability.
Optimized teams schedule based on places and times.

4 Start from the existing

Hardware

Software

People

Dont' forget the knowledge of people working every day on the field. Their business experience can be a game changer.

Retrofitting is hard. Try to start from existing data and systems in order to maximize the value from existing data.

5

Manage your AI

AI models are **intangible asset**: in order to maximize their value, they need to be **maintained**. Engage technicians and business people by designing **human in the loop strategies**.

Retraining
Continual learning
Model monitoring
Feedbacks from the field

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DO SOMETHING GREAT

MiPU 

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