



# SBN Energy Day

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# Evora at a Glance

- Global consulting & software provider with focus on maintenance and customer service solutions
- Locations in the USA, Germany, Austria, Brazil and India to be close to our customers and partners
- Partnerships with SAP, ServiceNow, Click (by Salesforce) and leading system integrators

**2011**

Established

**140+**

Employees

**50+**

Projects in 2020



# Our Portfolio

Solutions & Services

## MAINTENANCE

Intelligent Asset  
Management



Mobility

Scheduling

Custom Applications

## CUSTOMER SERVICE



Strategic Consulting

System Integration

Quality Assurance

Application  
Management

# Our Customers





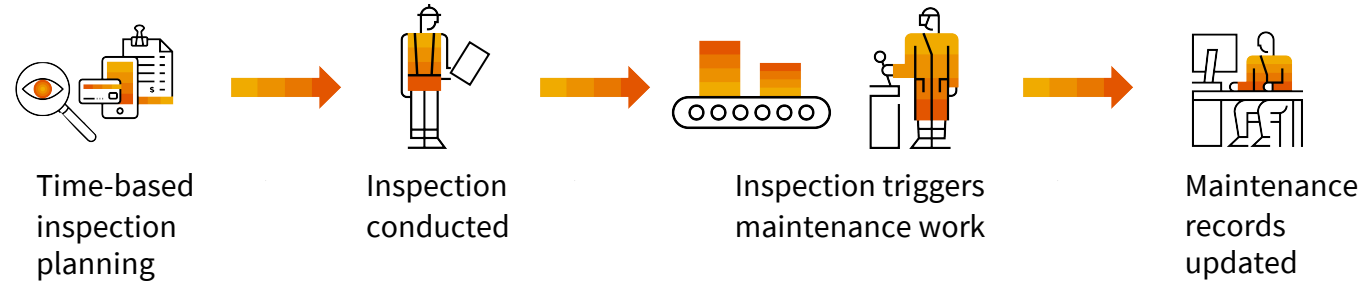
# **SAP Intelligent Asset Management**

# Reimagine Intelligent Asset Management

## Optimizing Equipment Performance

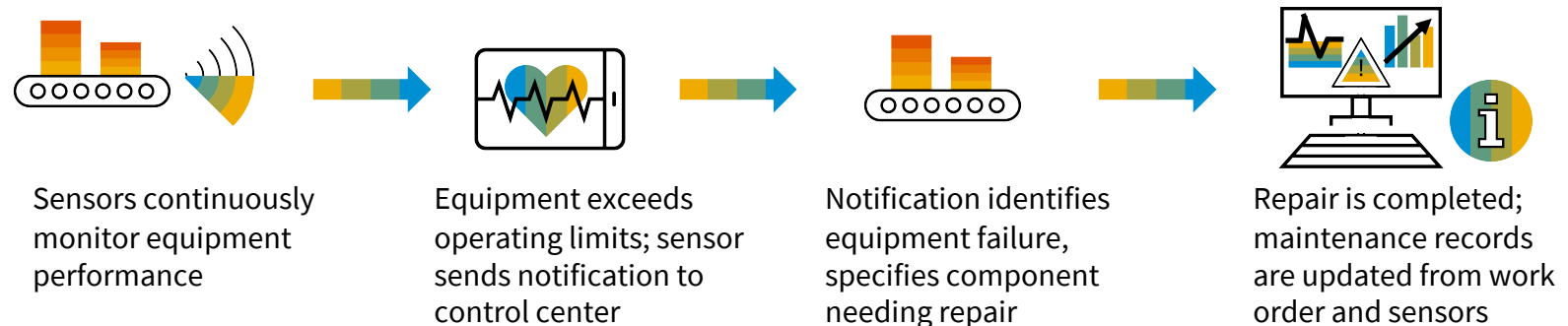
### Traditional scenario

- Time- and/or condition-based inspection and maintenance
- Unknown real-time risk of failure and performance
- No optimization of cost, risk or performance



### A new world with SAP

- Condition-health monitoring identifies failing equipment so it can be repaired before failure
- Uptime improves consistency of equipment performance
- Enables optimization of cost, risk and performance



Using automated sensors to monitor equipment condition enables the maintenance plan to be created based on real-time asset health status and prediction of failure to optimize lifecycle performance.

Top value drivers\*

**5%** Improvement in return on assets

**25%** Improvement in first-time fix rate

**15%** Reduction in unplanned asset downtime

# SAP Intelligent Asset Management Portfolio

## Business Capabilities



### State-of-the-art business processes

Leverage new technologies to enable new asset management business processes anywhere and anytime



### Real-time insights

End-to-end visibility on strategic, tactical and operational level



### Connected assets

Bring together information from operational and business systems using IoT for scalable transparency



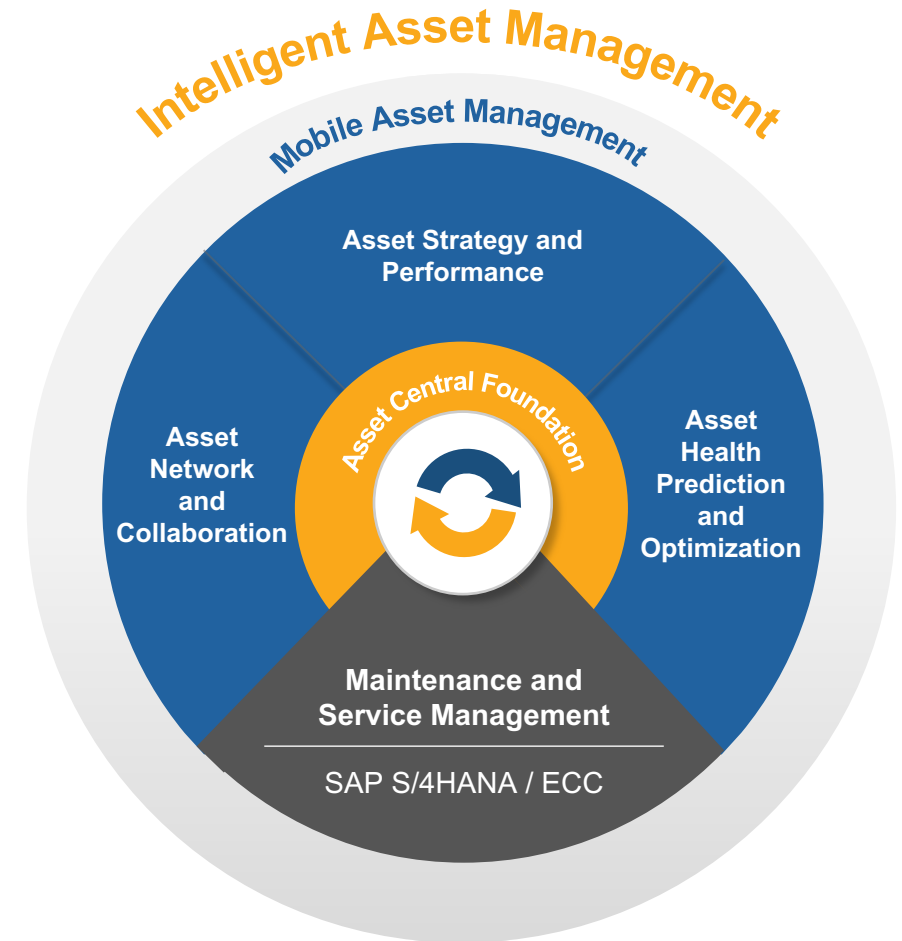
### The power of prediction, optimization and simulation

Drive smarter decisions, improve reliability, and reduce outages



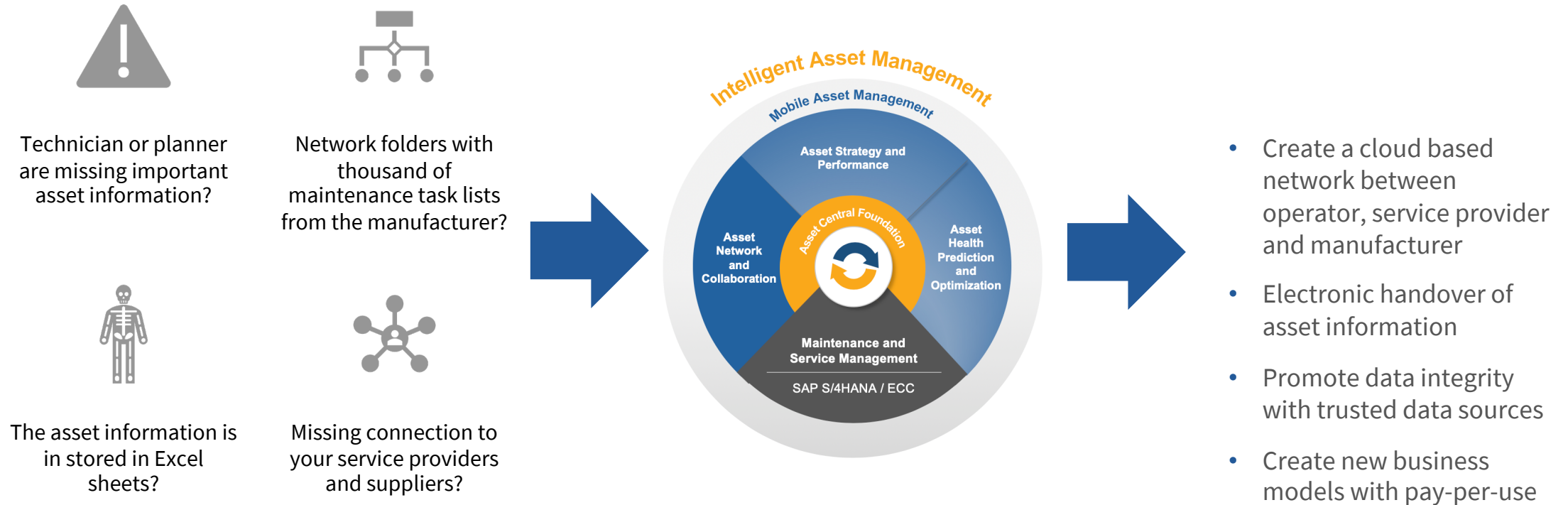
### Collaboration throughout the asset lifecycle

Share asset information, access one version of the truth, and collaborate on a cloud-based business network with integrated processes



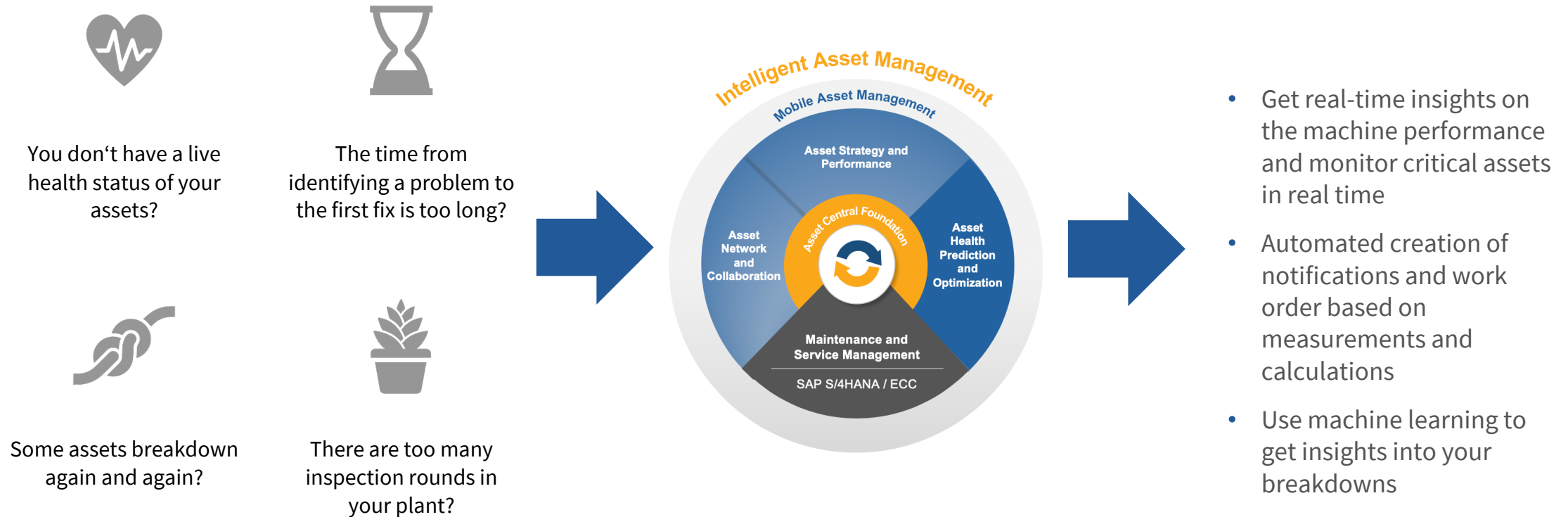
# SAP Asset Intelligence Network (AIN)

Why would you use this?



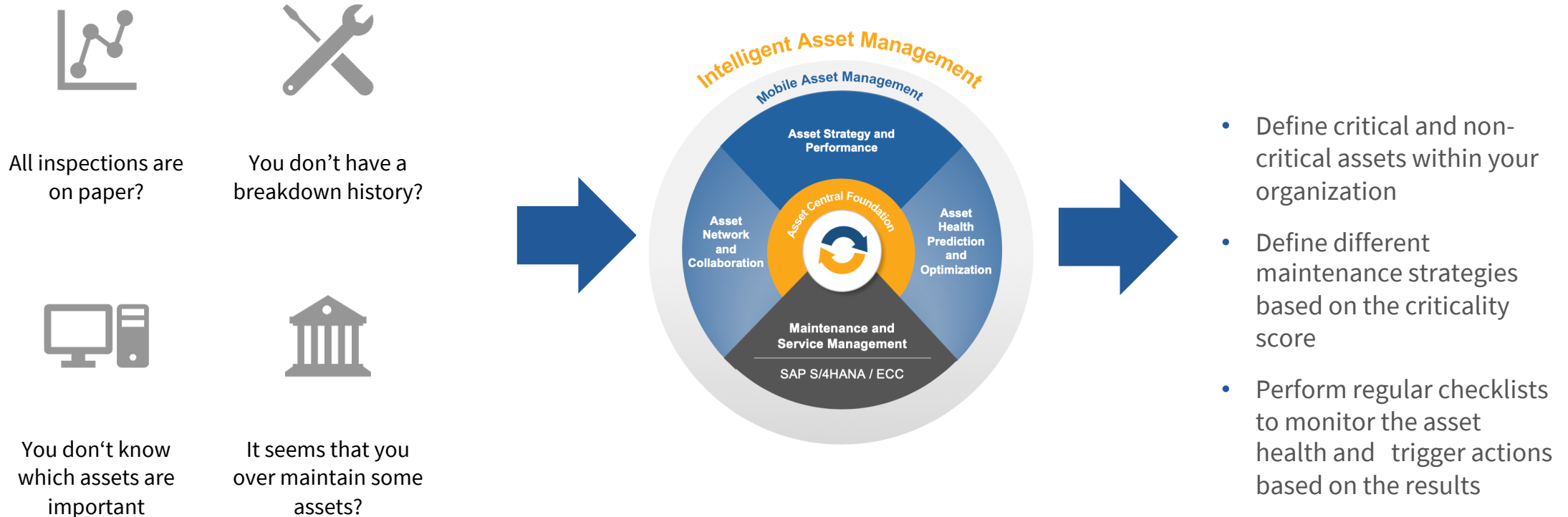
# SAP Predictive Asset Insights (PAI)

Why would you use this?



# SAP Asset Strategy and Performance Management (ASPM)

Why would you use this?



# SAP Intelligent Asset Management

## Asset Manager



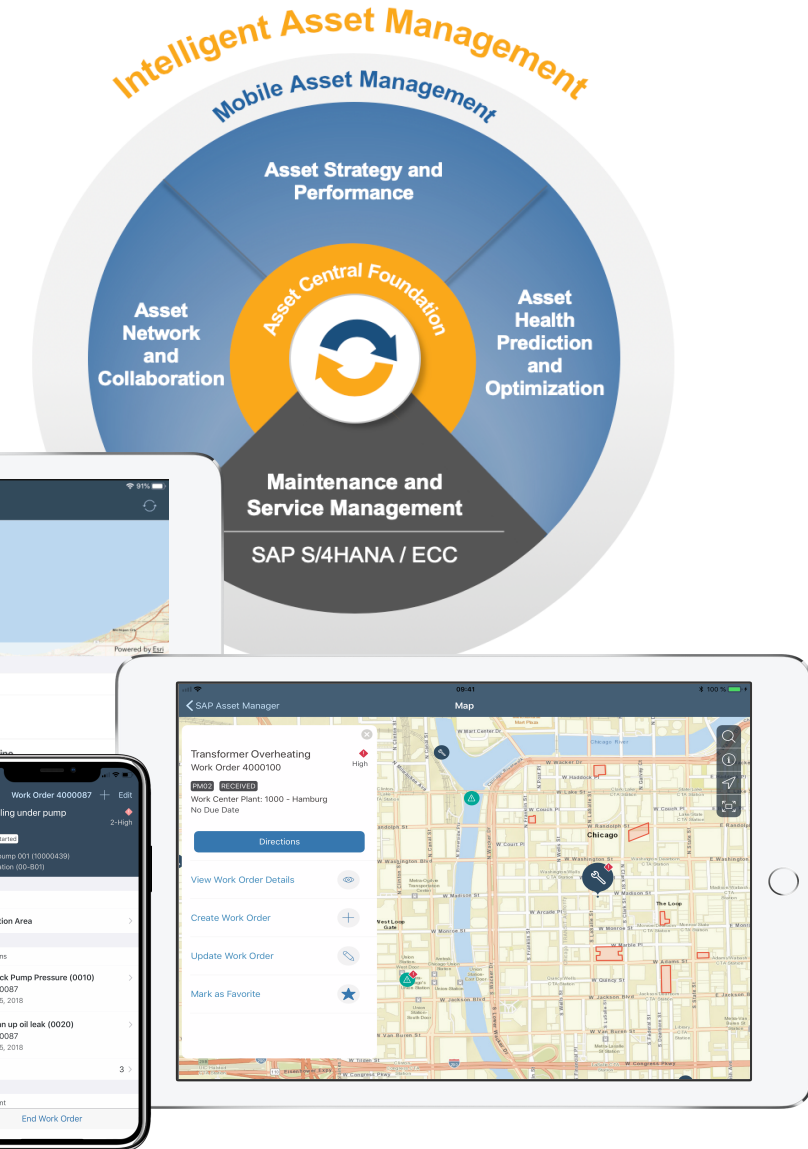
Eliminate paperwork while reducing downtime and maintenance backlog



Extend and improve asset life and reliability by shortening work cycles



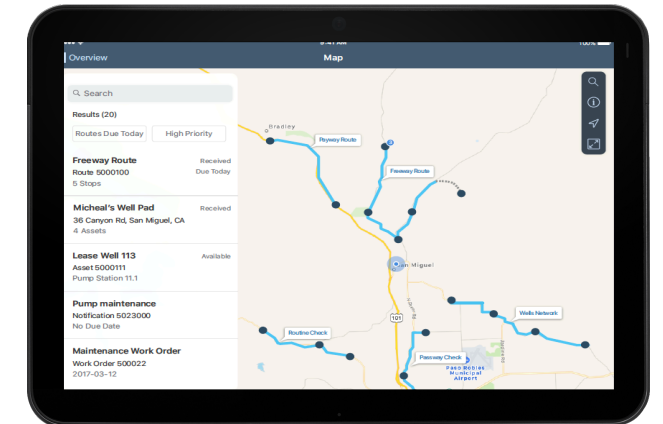
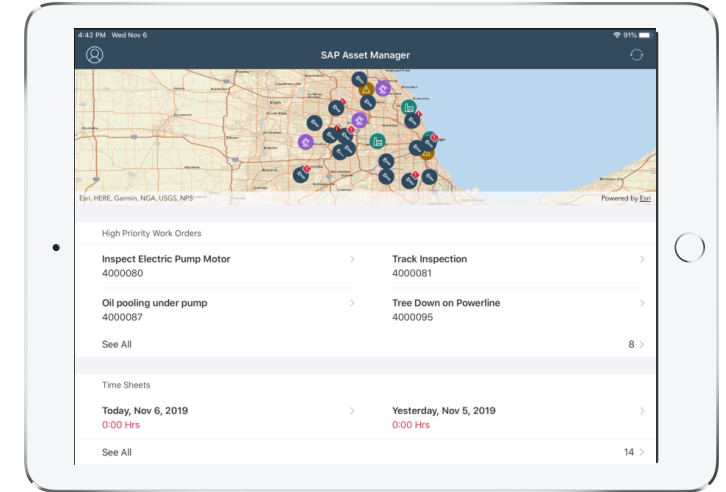
Manage existing work and asset data whether you're online, offline, or occasionally connected



# SAP Asset Manager

## Key capabilities

- **Mobile-enabled processes integrated with enterprise systems**  
Enables easy and timely execution of end-to-end asset management on the go
  - Discovering assets regardless of location
  - Create notifications and execute work orders
  - Taking measurements made easy
  - Enabling repair work by providing task lists and management of parts and tools
  - Worker safety functionality included
- **Industry specific components to enhance specific business processes**
  - Crew reporting
  - Meter management
  - Customer service





# SAP Intelligent Asset Management

## Starter Packs

### Workshops

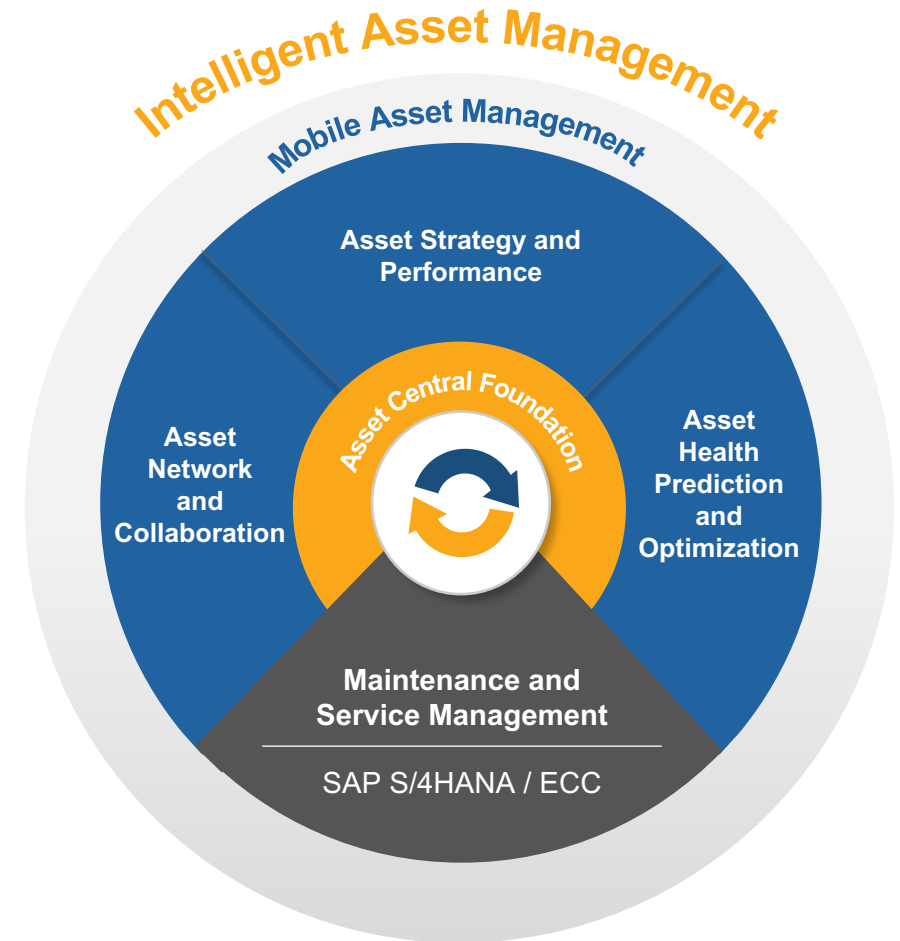
Understand the different solutions and map it to your requirements

### Collaboration

Work with your business to define the requirements and work with IT to setup the landscape

### Quick Turnaround

Simple use cases can be done in 4 weeks



# OMV

## Mobile Asset Management using Augmented Reality

## Mobile Asset Management using Augmented Reality



- Industry: **Oil & Gas**
- OMV produces oil and gas, innovative energy and high-end petrochemical solutions
- Group sales of **EUR 23 bn** and a workforce of around **20,000** employees in 2020
- OMV New Zealand is a subsidiary of the OMV Group
- OMV New Zealand is one of New Zealand's largest liquid hydrocarbon producers, the largest gas producer, and a major explorer in a number of offshore basins around New Zealand
- Active since **1999**
- Significantly investing in **sustainability initiatives** with a positive impact on the environment and the community

# OMV - Mobile Asset Management using AR



## Challenges

- Siloed Inspection Tool without interfaces to SAP S/4
- Data redundancy in different systems
- Intensely paper-heavy process for planning onshore and offshore inspection work packs including mark-ups on drawings and printouts
- Paper-based documentation of inspection results with attachments to SAP Work Orders limiting reporting and data analysis opportunity



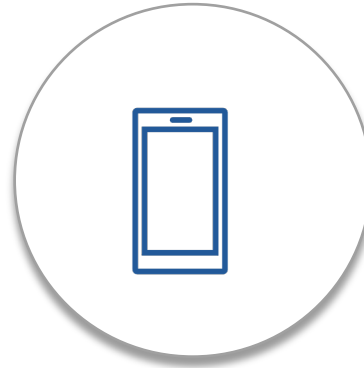
## Goals

- Retire Material and Corrosion Isometric drawings through the digital twins as single source of truth
- Integrated Workflow Management system
- Real-Time data entry and malfunction reporting which leads to less admin tasks and verifications
- Hands-free interaction to increase productivity and improve safety with the focus on inspection work and not in data gathering

# OMV Usecase – Project Details



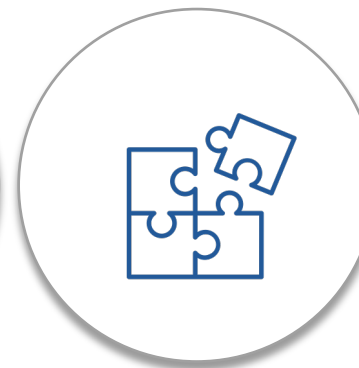
**SMART  
DIGITAL TWINS**



**MOBILE  
SOLUTIONS**



**SAP ASPM  
CHECKLISTS**

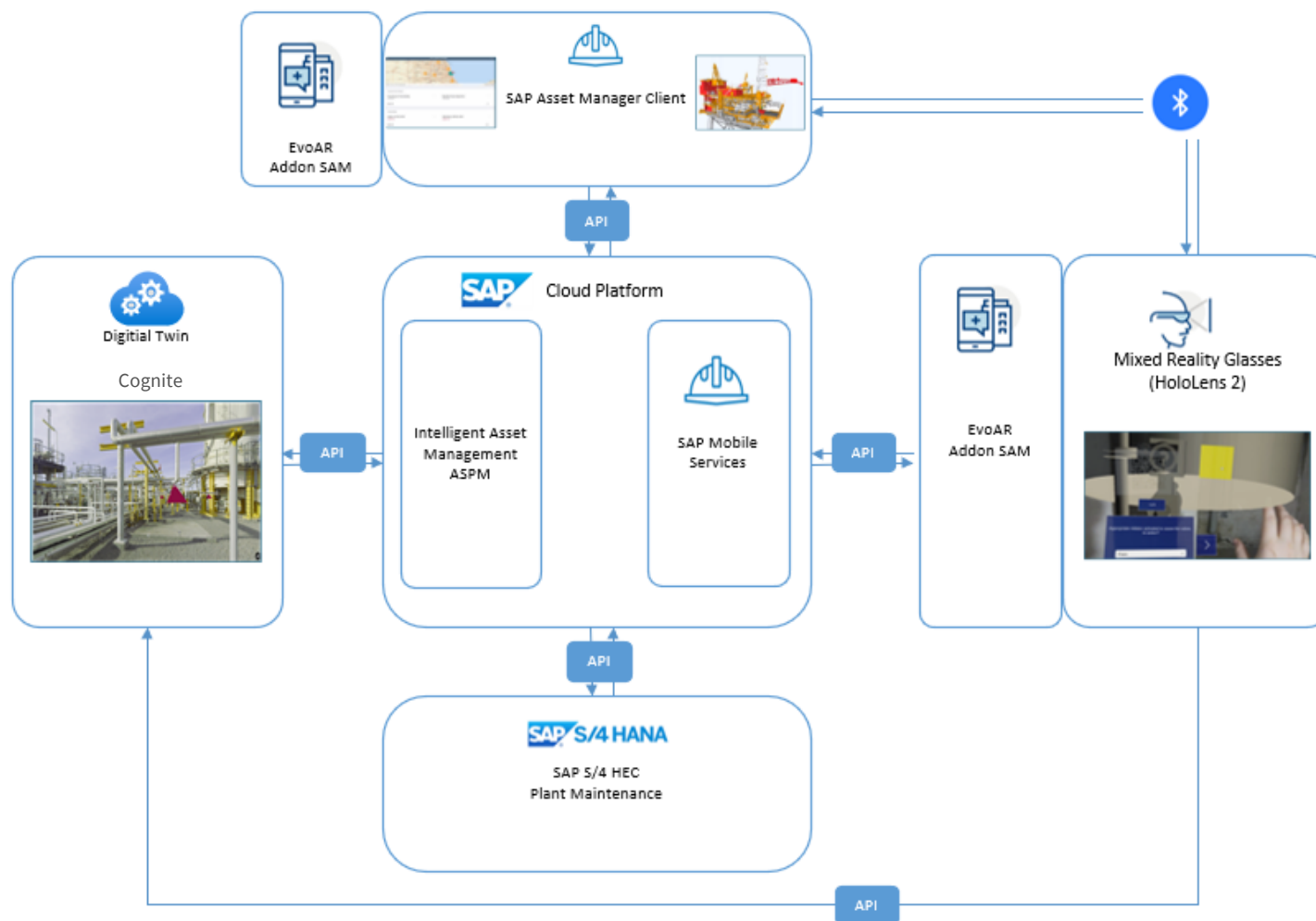


**INTEGRATED  
WORKFLOWS**

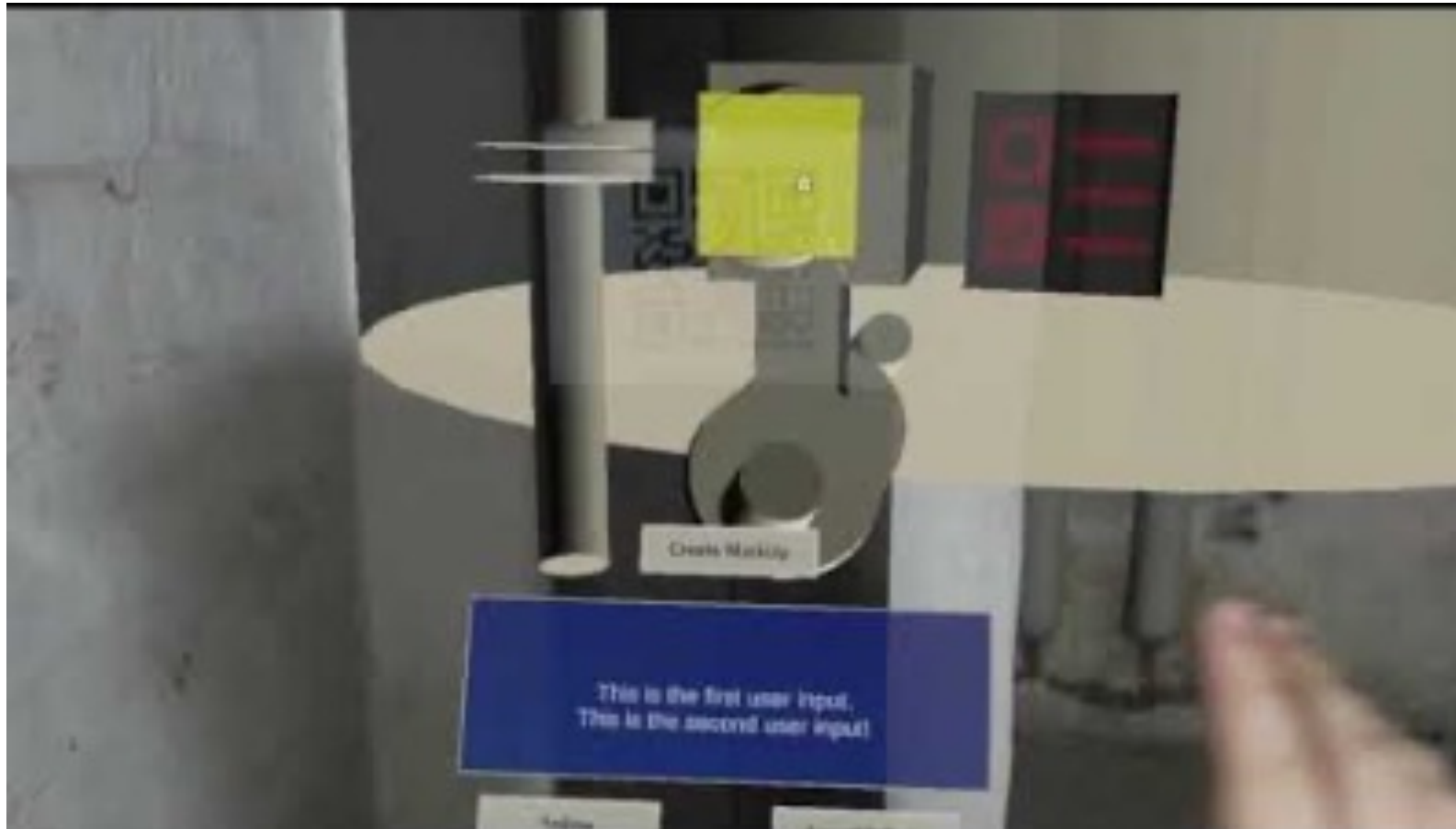


**AUGMENTED  
REALITY**

- Harmonized and Integrated Workflow Management using SAP PM, SAP IAM Suite, SAP Asset Manager and Hololens 2
- Create a Smart Digital Twin and a 3D point cloud visualization of the plant using Cognite Data Fusion as a basis for Planning and Execution of Inspection and Maintenance activities.
- Implementation of a new Inspection Data Management System (IDMS) within the SAP IAM Suite linked to the SAP S/4 Hana System.
- Provide Inspectors field tablets with SAP Asset Manager and embedded 3D Model for work order and notification management
- Use of SAP Asset Manager together with the Hololens 2 headset to improve the productivity and safety during Inspection and Maintenance Execution with real-time access to data. The ability to record inspection results and anomalies on the fly with the help of Asset Manager as well as ASPM checklists.
- Use of Mixed Reality with the Hololens 2 to enable hands-free interactions, mark-ups and remote assists
- Use of Mixed Reality for use in the field to assist inspection execution using augmented reality overlay.



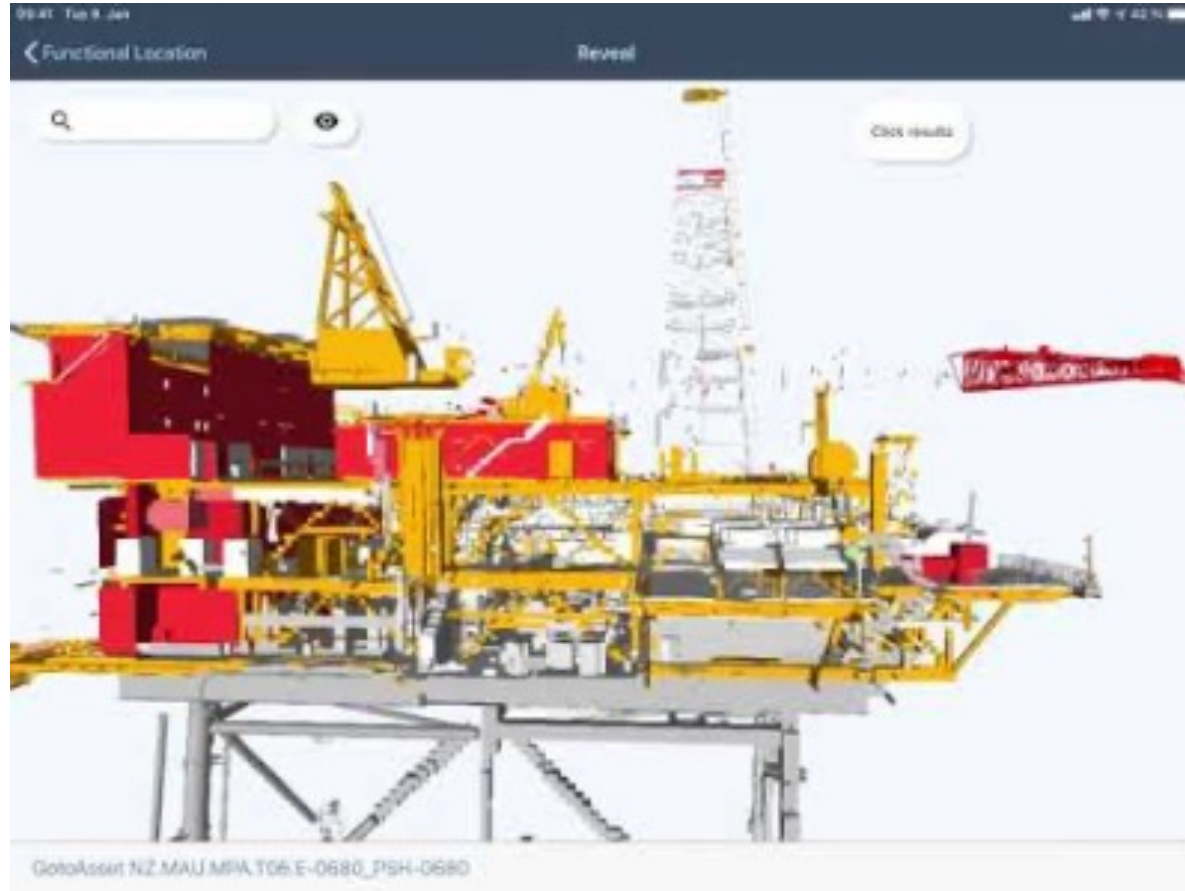
# OMV - HoloLens in action



<https://www.youtube.com/watch?v=jQCr6sr5Zns>



# OMV - Augmented digital twin scenario



<https://www.youtube.com/watch?v=RAYxnfaLsv4>



## Benefits and Outcomes

- **25%** Reduced planning time and back-office work by direct data input in the 3D Model and Asset Manager
- **10%** Cost reduction due to workflow optimization
- **30%** Reduced work execution time using AR+ and new technologies
- Smart Digital Twins as single source of truth to retire Material and Corrosion Isometric Drawings
- Hands-free interaction with mixed-reality headset to identify equipment and to improve productivity and safety with the focus on the inspection work rather than data gathering
- Augmented Reality experience to field personnel supporting simplified mark-up annotations, checklist data entries as well as overlay of the digital twin with real-time access to data and documents.

**Nominated for SAP innovation award**

# Thank You



## Evora IT Solutions

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