

# DIGITAL FACTORY ASSESSMENT

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## 1) WHAT?



The **digital factory assessment** has been designed for manufacturers that want to optimize their shopfloor but are unsure where to start and are looking for guidance in identifying the most promising digital solutions to improve and start their digital manufacturing transformation.

Based on the company's individual situation, we offer **four different versions** of this assessment that varies in length (e.g. rapid vs. comprehensive) and depth (e.g., holistic vs. deep-dive).

## 2) HOW?



The digital factory assessment is comprised of three phases:

- **Planning phase:** aligning on goals and filling out data request
- **On-site visit incl. assessment:** Gemba walk and interviews
- **Analysis and review phase:** analyze and share findings

## 3) WHY?



The digital factory assessment creates **transparency** on the as-is situation incl. an assessment of technical (e.g., IT infrastructure) and business data (e.g., offerings, gaps).

The assessments goals is to **identify key digital services solutions** with **positive business case** thus laying the ground to improve individual company/factory goals e.g. improve OEE.

# 1) BASED ON THE INDIVIDUAL COMPANY NEEDS, WE OFFER FOUR DIFFERENT TYPES OF ASSESSMENTS

## Rapid assessment (~2 days)

Holistic view

- **Approach:** ~2 days **digital maturity assessment** (to be customized on individual needs) incl. site observation (0.5/1 day) + pre-selected interviews
- **Deliverables:**
  - Light **maturity overview** across 16 dimensions (process, technology, organization)
  - light summary of **potential gaps/risks** in current state IT/OT infrastructure + system landscape

## Comprehensive assessment (~1 week)

- **Approach:** 3-5 days **factory maturity assessment** (to be customized on individual needs) incl. site observation (1.5/2 days) + interviews
- **Deliverables:**
  - Holistic **maturity overview** across 16 dimensions (process, technology, organization)
  - summary of **potential gaps/risks** in current state IT/OT infrastructure + system landscape

Deep dive

- **Approach:** ~2 days **factory maturity assessment** incl. site observation + interviews with specific recommendation related to a pre-defined topic: e.g.,



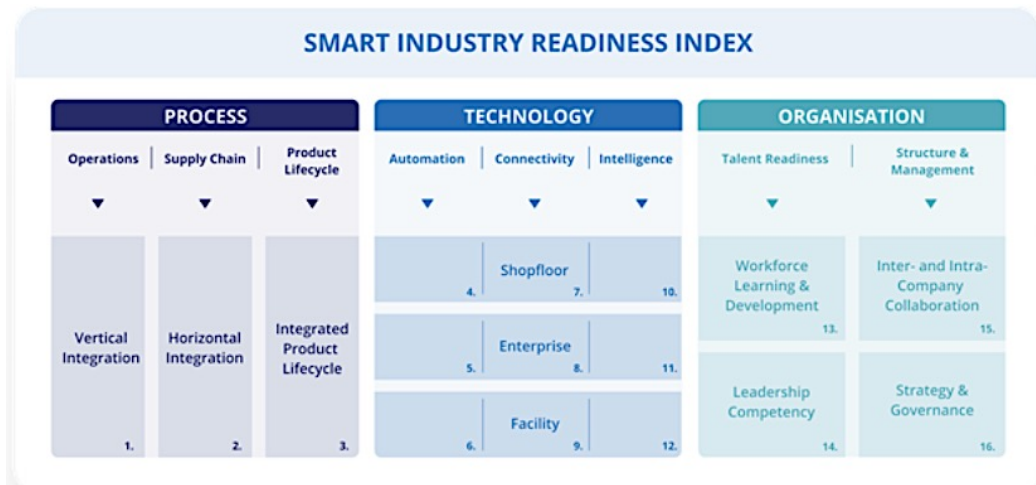
- **Approach:** 3-5 days **factory maturity assessment** incl. site observation + interviews with specific recommendations related to a pre-defined topic: e.g.,



# 1) FOCUS OF THE ASSESSMENTS IS TO PROVIDE A MATURITY ASSESSMENT AND AN OUTLOOK ON MOST PROMISING DIGITAL FACTORY USE CASES

## Digital maturity assessment (Siri) (~20%)

- (Light or detailed) maturity assessment of all /selected parts of the Smart Industry Readiness Index: process, technology and organization
- Assessment following SIRI frameworks allows for **objective maturity benchmarks** and potentially cross-comparing maturity of different production sites



## Identification of key digital solutions (~80%)

- Screening and assessment of the as-is shopfloor processes from a technical and business perspective
- **Identification and prioritization of digital initiatives** with positive business impact with focus on all or selected areas incl.:
  - Sustainability/energy
  - Quality/Automated visual inspection
  - Predictive maintenance
  - Connected factory/worker
  - Supply Chain



# 1) EXAMPLARY DIGITAL FACTORY USE CASES

	Assessments to define roadmap	Collection <sup>1</sup> & connectivity	Visibility of data	Analysis of (real-time) data	(Selected exemplary) Digital solutions based on intelligent insights from data to improve business		
<b>Manufacturing</b>	Overarching manufacturing <b>digital factory</b> and use case assessment		Production Control Tower & Dashboard	Real time analysis	Digital Twin	Omniverse	...
<b>Quality</b>	Quality assessment & workshops		Quality Control Tower & Dashboard	Root Cause analysis	Automated visual inspection	Parameter Control	Worker guidance
<b>Asset connectivity / Predictive Maintenance</b>	Maintenance assessment & workshops		Asset monitoring & Dashboard	Predictive (failure) analysis	Predictive asset maintenance	Automated spare parts delivery	Asset lifetime optimization
<b>Energy</b>	Energy assessment & workshops	Connect relevant manufacturing data to edge/cloud/ERP/ ...	Energy monitoring & Dashboard	Real-time consumption peak analysis	Equipment and system optimization	HVAC	Alternative energy sourced simulation
<b>Worker enablement/ Connected worker</b>	Rapid AI assessment		Worker monitoring & Dashboard	Real-time activity tracking and analysis	Industrial Co-Pilot (worker enablement)	Hands-free operation	Reskill AR platform
<b>Sustainability / ESG</b>	Sustainability assessment & workshops		Emissions monitoring & ESG KPI tracking & Dashboard	Real-time ESG data	Automated emissions management & reporting	Health & Safety (PPE tracking)	Raw material transparency reporting
<b>Supply Chain</b>	SC assessment & workshops		Control Tower & Dashboard	Demand forecasting	Supply Chain Platforms	Inventory Levels Optimizer	Warehouse transformation roadmap

1) For data collection: we are working with a range of different hardware partners. Please approach us if you need a recommendation

# 2) ALL ASSESSMENTS FOLLOW THE SAME PROCESS



Description of main tasks

- Align on **expectations** and **goals**
- Send, complete and review **data request**
- Plan and prepare **on-site visit** and **interviews**

- **Conduct site visit** (Gemba walk)
- **Conduct interviews** with pre-selected participants
- **Identify areas** for improvement via digital solutions

- **Summarize findings** and share with management and key stakeholders
- **Provide outlook** on prioritized **digital solutions**

	Preparation	On-site assessment	Analysis
Rapid assessment	~ 0.5 day (remote)	~ 0.5/1 days (on site)	~ 0.5 days (remote)
Comprehensive assessment	~ 1 day (remote)	~ 1-2 days (on site)	~ 1-2 days (remote)

**Close collaboration** between participants e.g., plant manager, operations manager, support function manager, other managers... needed in order to have relevant data and insights available to come up with meaningful assessment

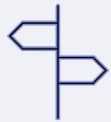
# 3) THE ASSESSMENTS HELP TO CREATE TRANSPARENCY AND PRIORITIZE INITIATIVES



**Transparency and clarity on current technical and business situation and processes**



**Overview on existing and missing components / capabilities to enable digital roadmap**



**Digital roadmap ahead with a prioritized list of digital initiatives**

