Digitalization
Consulting in practice
Factory tour



Implementation & integration

Realization

Systematic approach



# Closed Loop Manufacturing

How to implement

Future of automation

Co-creation / Co-working





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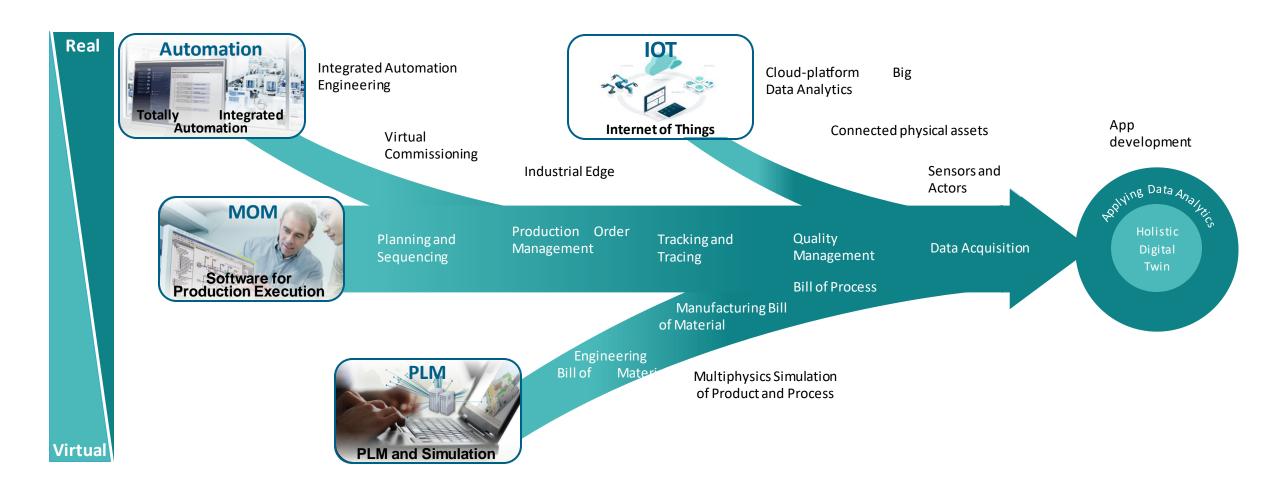
www.siemens.com/digital-enterprise-services





## Today's technologies enable the next level of productivity, flexibility and quality

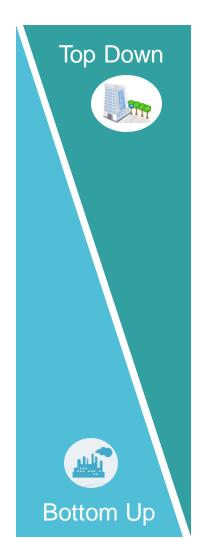




To fully exploit the potential of technologies, processes must be integrated and streamlined

## To sustainably implement digitalization in your organization we recommend to combine Bottom-up and Top-down approach





Make digitalization strategy a top priority within your company

Describe the reference IT architecture (PLM, MOM, ERP and CRM)

Set clear targets and mandates for HQ and factories



Leverage the potential of Digital Transformation to stay competitive

#### **Digital Transformation Accelerator**

Set-up dedicated Lean/Digital team (from HQ & factories) Built factory clusters and reference processes to secure scalability

Prototyping and Proof the Value of Use Cases

Industrializing the Use Cases

Scaling to factory network







Prioritize digital Use Cases and create high-level business plans

Teach, gather experience and create insights in an experimental way

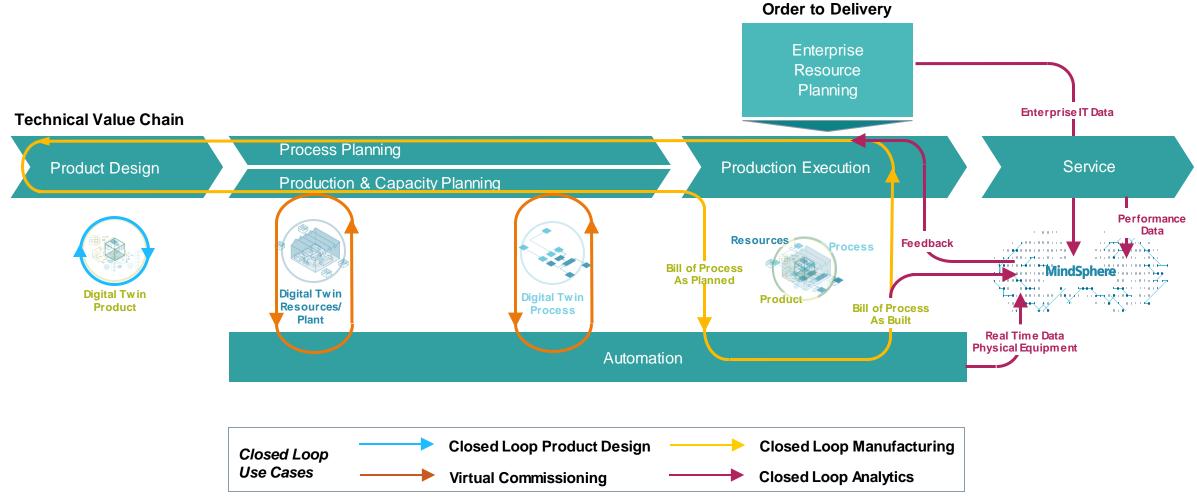
Select and educate future key resources in your factory



Implement a digital mindset in your workforce to secure continuous improvement

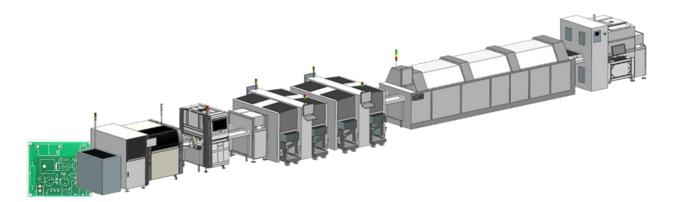
## Data consistency and feedback loops along the Technical Value Chain delivers the full value proposition of digitalization





### A real world example: **Soldering Line Siemens Factory Amberg – Germany**

- 99.8% good quality produced
- To ship 100% quality we X-ray all PCB's at the end of the line
- X-raying costs 20% of the through-put time
- The soldering line is the bottle neck in the factory
- We have 18 soldering lines in Amberg





#### **SIEMENS**

Ingenuity for life

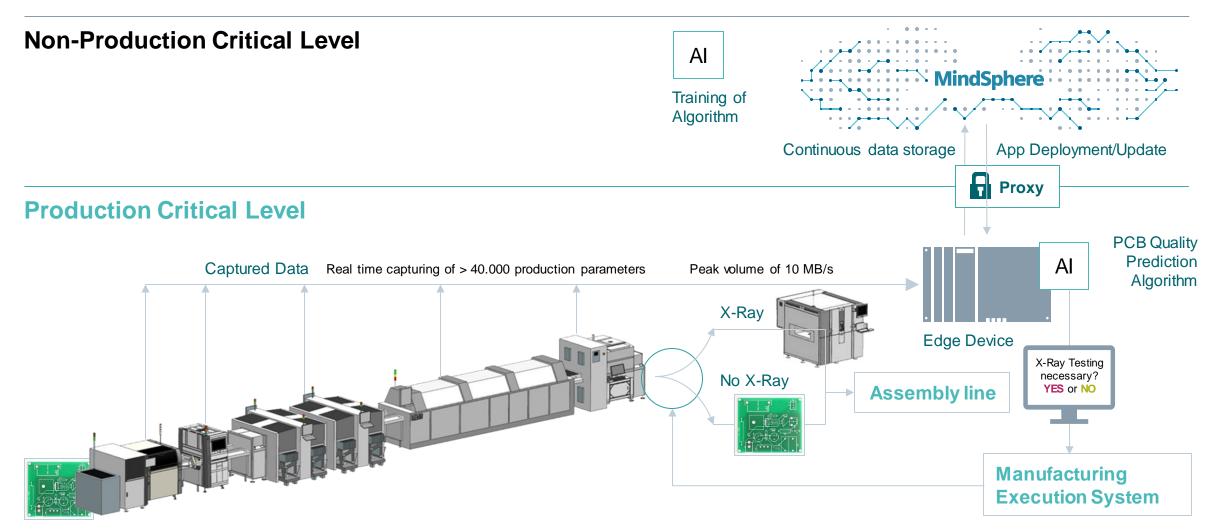
## **Question:**

Could we skip X-ray-testing by predicting the quality of a PCB?



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## SIEMENS Ingenuity for life



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# 

Productivity improvement achieved!

## We provide more than Consulting – as Siemens we bring business and technical expertise to our customers



We understand your challenges from running our 270+ own factories with latest process, digitalization and automation technologies



Siemens Lean Digital Factory

- We consider our factories as role models for the use of our digital technologies
- We create a digital mindset in our workforce to secure future competitiveness



Application and Implementation Competence

- We apply latest technologies like Al and robotics in end to end solutions
- We understand the brownfield and the need to set the right basis in Factory IT (MOM & Automation) and Enterprise IT (PLM and ERP)



Consulting and Transformation Competence

- We support the definition of your Digital Transformation Strategy
- Focus on delivering business impact not just paper-work
- Empowering your teams and organization to drive digital change independently