

When factories become  
smart, who will manage  
your shop floor data?

Smart products & smart factories

■ ■ ■  
The better the question. The better the answer.  
The better the world works.



EY

Building a better  
working world

# Smart products & smart factories

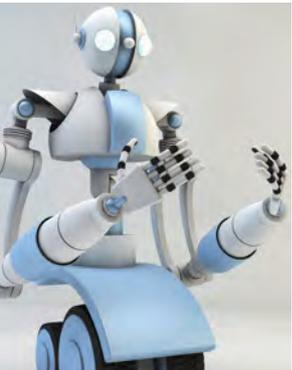


Industry 4.0 and the Internet of Things have become mainstream. New business and service models are constantly being developed on the basis of smart, interconnected products and existing processes revolutionized by the introduction of innovative technologies. However, while opportunities for companies to benefit from digital technologies are numerous, there is also a high risk of not keeping up with the competition. Digital transformation entails changes that necessitate considerable investments and in some cases reengineering of entire business models and processes. As such, digital transformation is not just the remit of the IT department. It is a sustainable competitive advantage and should be given the highest priority in all business segments to safeguard your company.

**Now is the time to answer the question: what does digital transformation mean for your company, your partners and customers?**

Whether your focus is on smart products, networked production machines or the holistic digitalization of a supply chain, we can help you choose the right path.

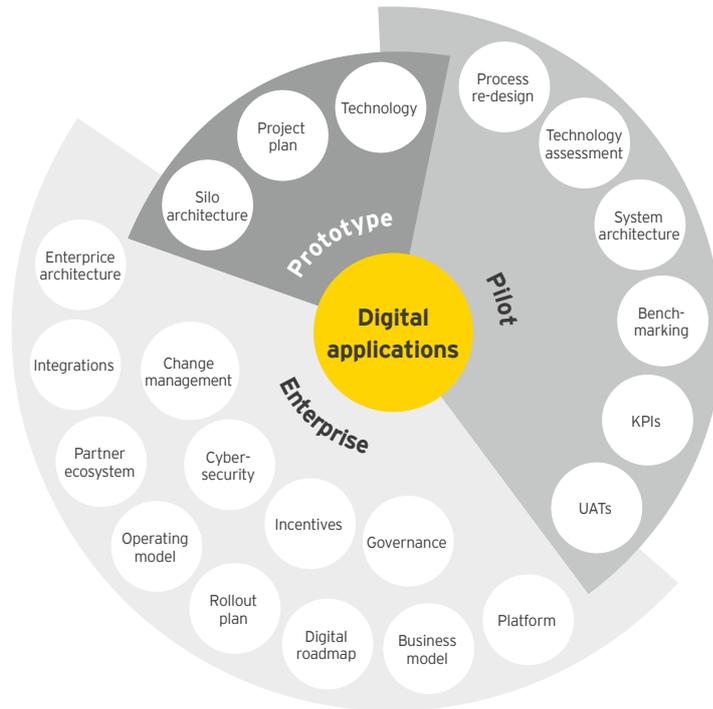
- ▶ Devise a futureproof strategy together with us and an interdisciplinary plan for your transformation into a digital company.
- ▶ Have you already taken your first step into the digital world? We can help you enhance your digital strategy and digital landscape, skills and processes



# The digital transformation

## From prototype to company-wide implementation

Each phase of the transformation brings a new challenge. We will ensure that your initiatives are not only technically feasible but also futureproof.



# Exploit the market potential of smart products and smart factories



The digitalization and interconnection of products, value chains and business models present considerable market opportunities for companies. We can support your company's digital transformation in the areas of planning, sourcing, production and logistics.

## Smart design

- ▶ Integrated product development
- ▶ Rapid prototyping
- ▶ Digital twin
- ▶ 3-D modeling



## Smart sourcing

- ▶ Low inventory levels vs. JIT supply
- ▶ Automated ordering systems
- ▶ Just-in-sequence deliveries
- ▶ Route optimization
- ▶ Condition monitoring



## Smart factories

- ▶ Flexible production
- ▶ Preventive maintenance and quality
- ▶ Remote and guided maintenance
- ▶ Lean manufacturing



## Smart products

- ▶ New revenue models
- ▶ Forward-looking services
- ▶ Automatic parts ordering
- ▶ Preventive maintenance
- ▶ Intelligent cross and up-selling

# Timetable for a successful transformation process

As part of our i4.0 SCAN, we assess the current level of digitalization of your company in collaboration with you.



**1 Digital vision:** We help you understand how your entire value chain can be optimized with digital technologies and strategies.

**2 Business impact analysis:** We quantify the business impact of each of your steps.

**3 Maturity assessment:** We assess the maturity of your company in terms of resources, partner ecosystems, know-how and capacity.

**6 Roadmap:** The result is a prioritization of digital initiatives and change management measures.

**5 Readiness assessment:** We analyze your existing IT landscape and interdisciplinary topics such as accounting, compliance, taxes, recruiting, processes, partners and more.

**4 Benchmarking:** We analyze the competition. The result shows where there is potential and where your company has a competitive edge or disadvantage.

**7 Technology assessment:** Based on the results, we choose the right technology for you.

**8 Project plan:** We prepare your roadmap to becoming a digital company.



# Our service portfolio for digitally transforming your company



We work closely with the leading providers of Industry 4.0/Internet of Things solutions, have access to relevant platforms and have at our fingertips a global network of startups focusing on Industry 4.0, Internet of Things (IoT), analytics and cybersecurity.



*\* Overall equipment efficiency*



## **IoT-/I4.0 Strategy**

- ▶ I4.0 SCAN
- ▶ New/digital business models/ services
- ▶ Technologies for OEE\* and process optimization
- ▶ Machine connectivity/ IoT technology

## **IoT-/I4.0 Technology**

- ▶ Cloud platform/IoT architecture
- ▶ System integration
- ▶ IoT/IT integration
- ▶ Augmented reality/virtual reality
- ▶ IoT connectivity

## **IoT-/I4.0 Laboratory**

- ▶ Implementation of innovation processes
- ▶ Setting up I4.0/IoT organizations
- ▶ Ecosystem and startup network
- ▶ Enterprise-ready pilots

## **Cybersecurity Analysis**

- ▶ Threat detection and prevention
- ▶ Cybersecurity frameworks and concepts
- ▶ Proof of concept/ implementation

## **IoT-/I4.0 Analysis**

- ▶ "Data to intelligence"
- ▶ Predictive analytics
- ▶ Prescriptive analytics
- ▶ Machine learning
- ▶ Artificial intelligence

## **Interdisciplinary Planning**

- ▶ Risk, compliance and liability
- ▶ New business models, joint ventures, startups
- ▶ Taxes, compensation modeling
- ▶ Subsidies

# Your EY contacts

Our teams of advisors have a wide range of multidisciplinary skills and specialist knowledge in the digital environment. With our proven track record in the field of digital transformation, extensive technical IT know-how and excellent supply chain and business process knowledge, we can offer you custom solutions, from management advisory services to technical implementation. With the aid of big data analyses and forecasting tools, we can give you new insights securing you substantial competitive advantages while also keeping an eye on the tax aspects.



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