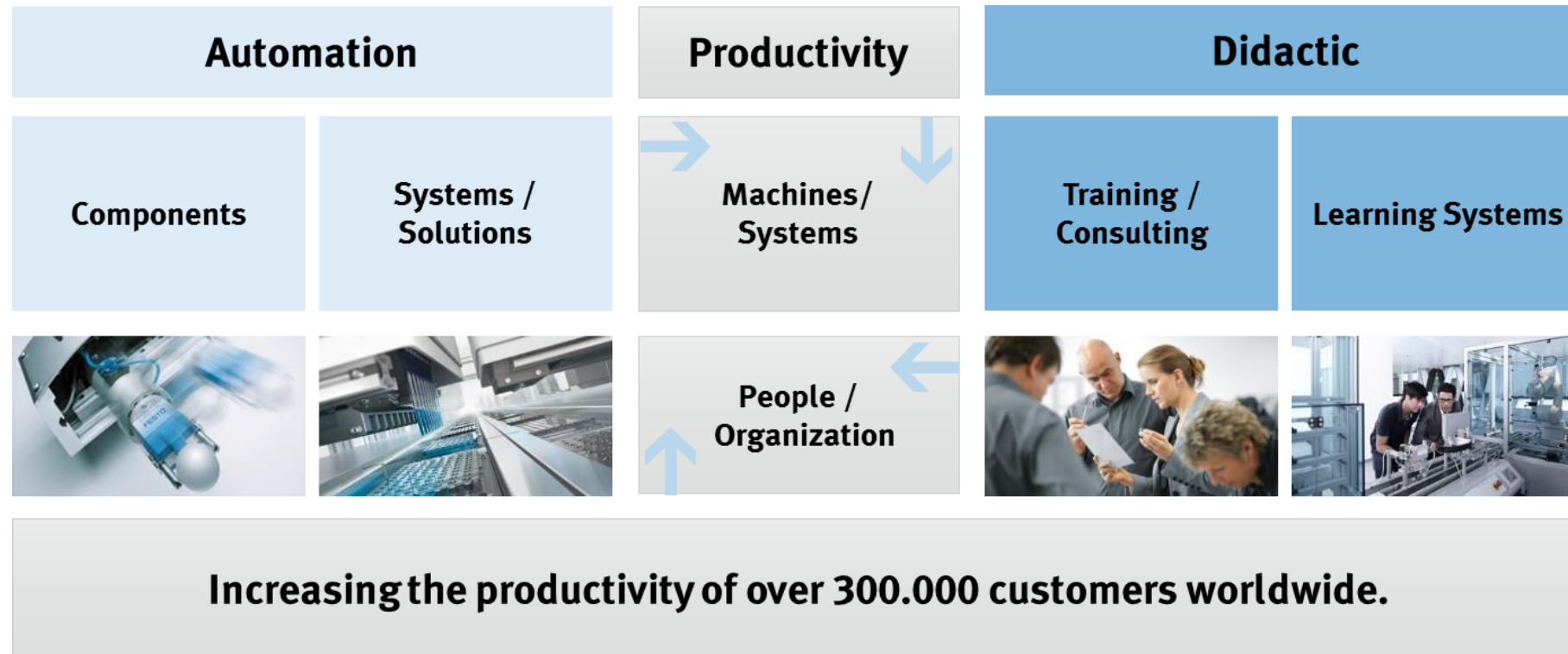


Personalised Manufacturing from an Automation Point of View

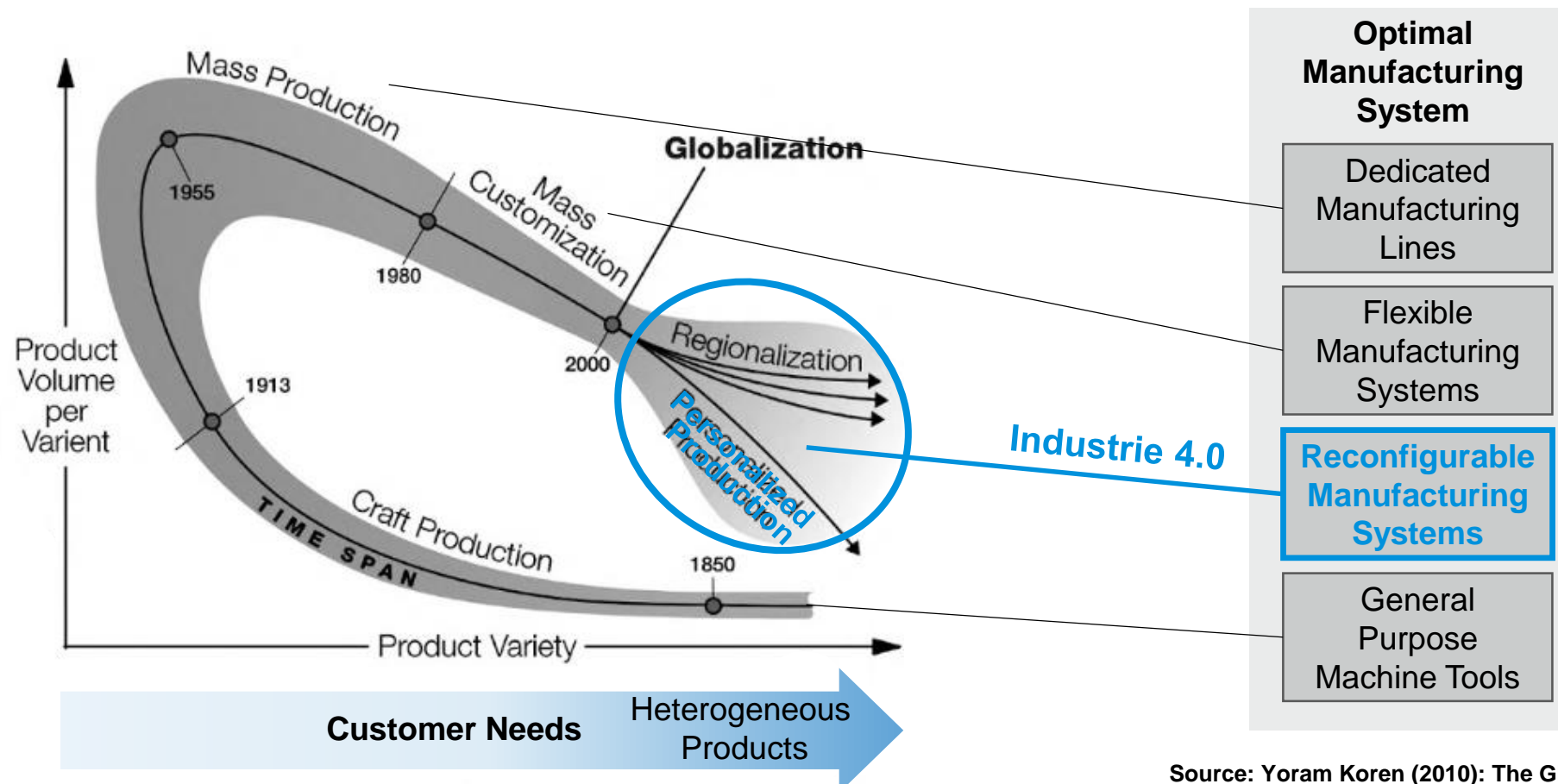


Festo AG – An Independent Family-owned Enterprise

- 18,800 Employees in 61 countries worldwide
- 2.74 billion € turnover with around 8% for R&D
- Pneumatic and electrical automation technology for over 35 customer industries
- World market leader in industrial education



Personalised Manufacturing: “Back to the Future” or New Manufacturing Paradigm?



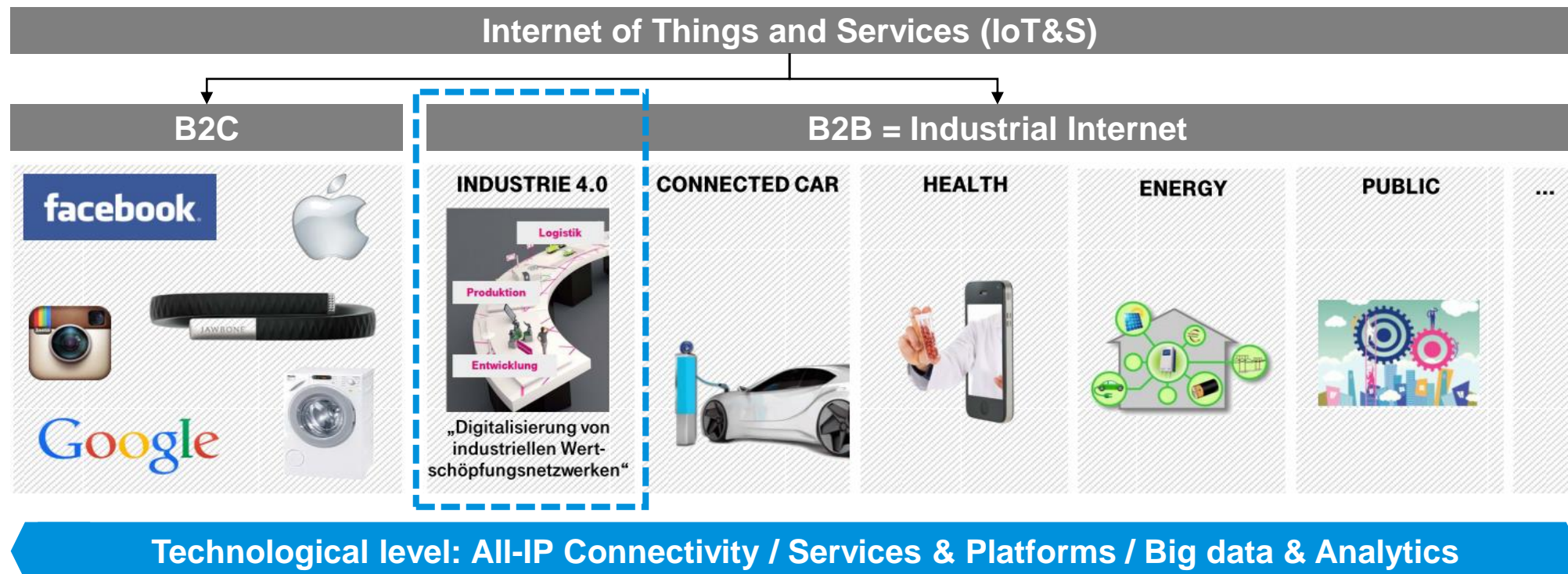
Source: Yoram Koren (2010): The Global Manufacturing Revolution

Personalised Manufacturing from an Automation Point of View

- ➡ Business & Service models: Digital Customer Journey and Service Platforms
- ➡ Manufacturing Systems: Agile Systems Adaptive to Changing Needs
- ➡ Working Environment: Human Machine Interaction and New Skills

Business & Service models

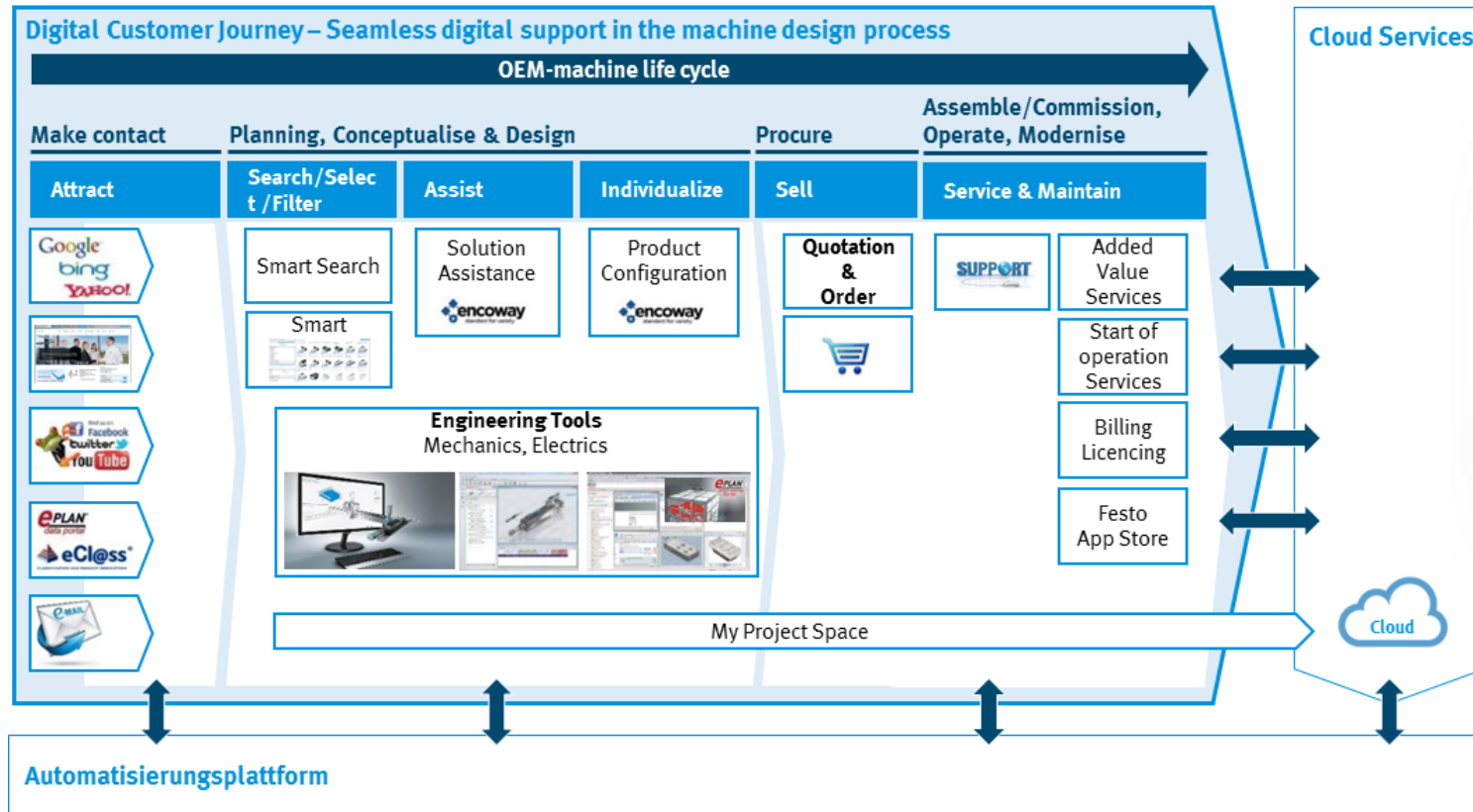
Industry 4.0 in the world of new business models and markets



Quelle: T-Systems, 14.4.2015

Business & Service models

Digital Customer Journey



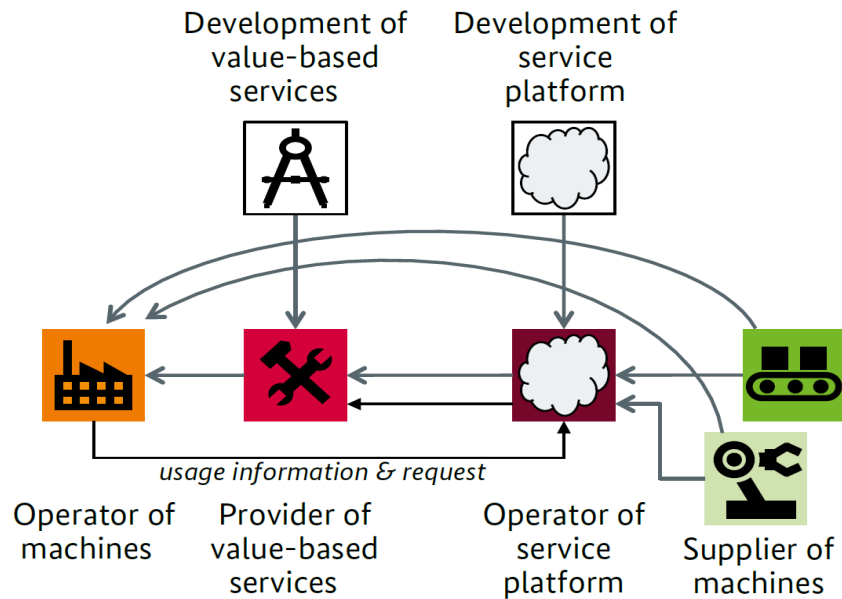
www.festo.com/handling-guide



Business & Service models

Digital Manufacturing Platforms

Example of platform for value-based services:



Examples of EU activities / projects supporting digital platform building:



PLATFORMS
4CPS



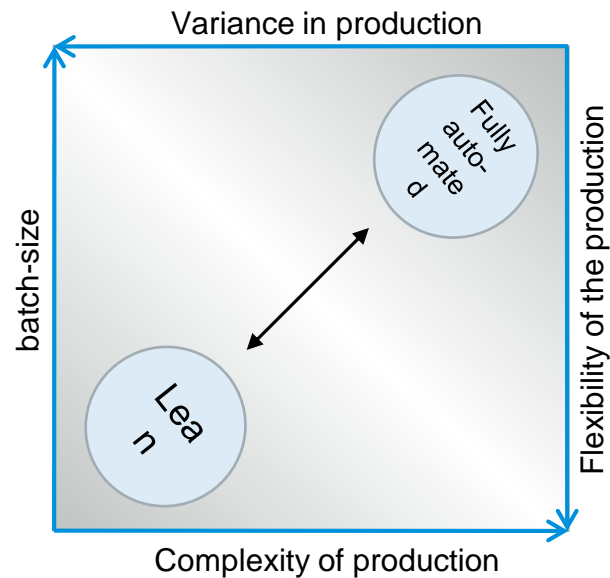
Analysis of interdependencies with value creation in circular economy:



Manufacturing systems

Transformation to agile systems adaptive to changing needs

Manufacturing Systems of Today



Drivers

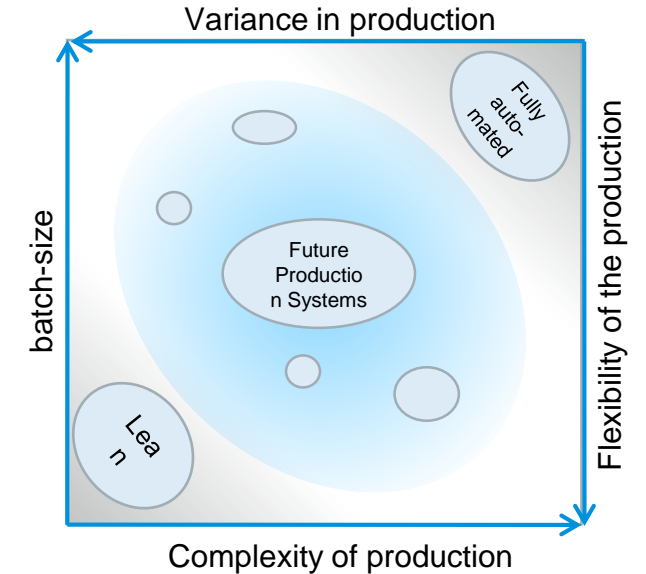
modular

networked

flexible & adaptive

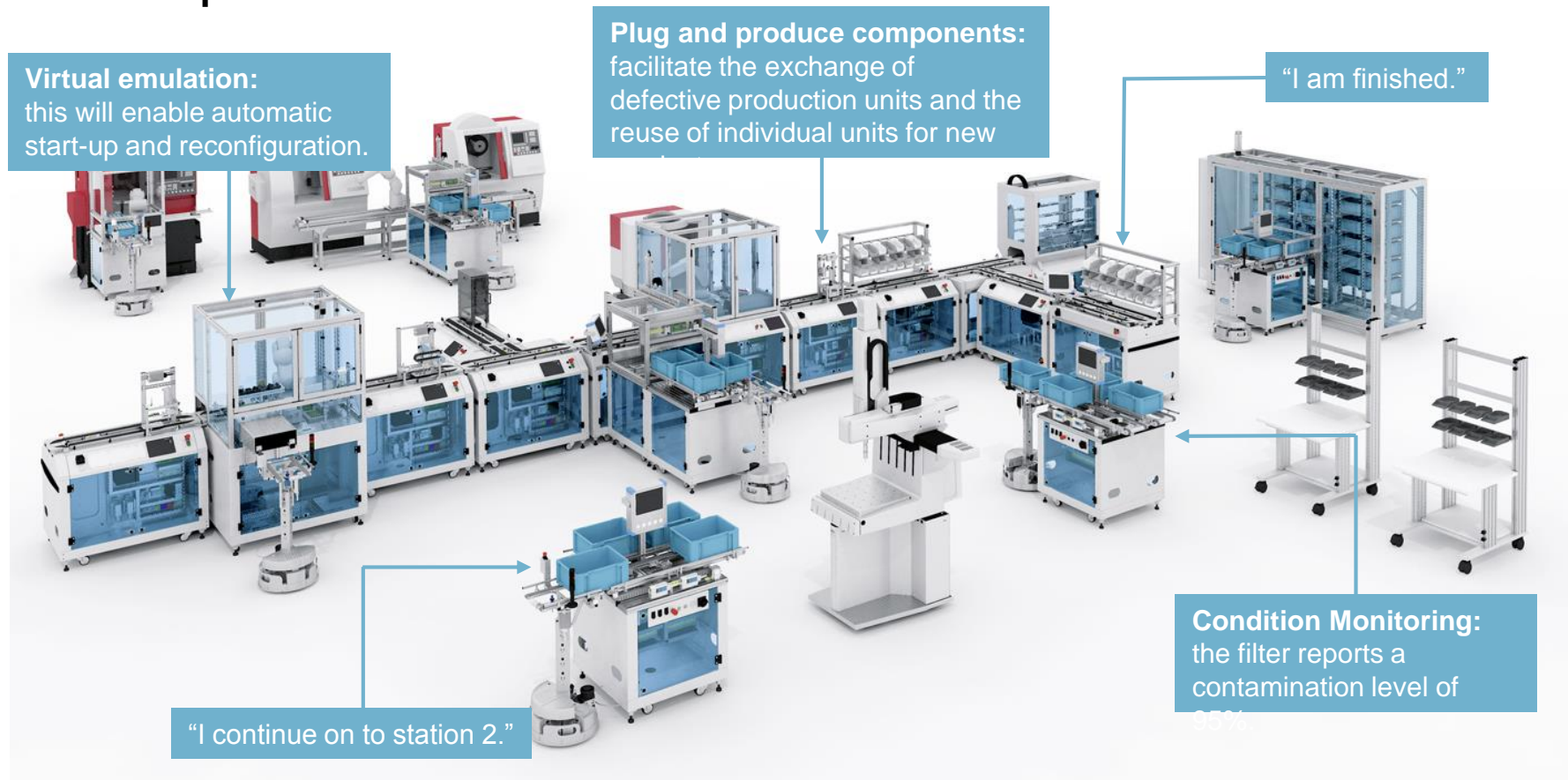
Plug & Produce Technology

Manufacturing Systems of Tomorrow



Manufacturing systems

Intelligent and networked production



Working Environment: “It’s all about people”



Focus on People: skills – knowledge – training

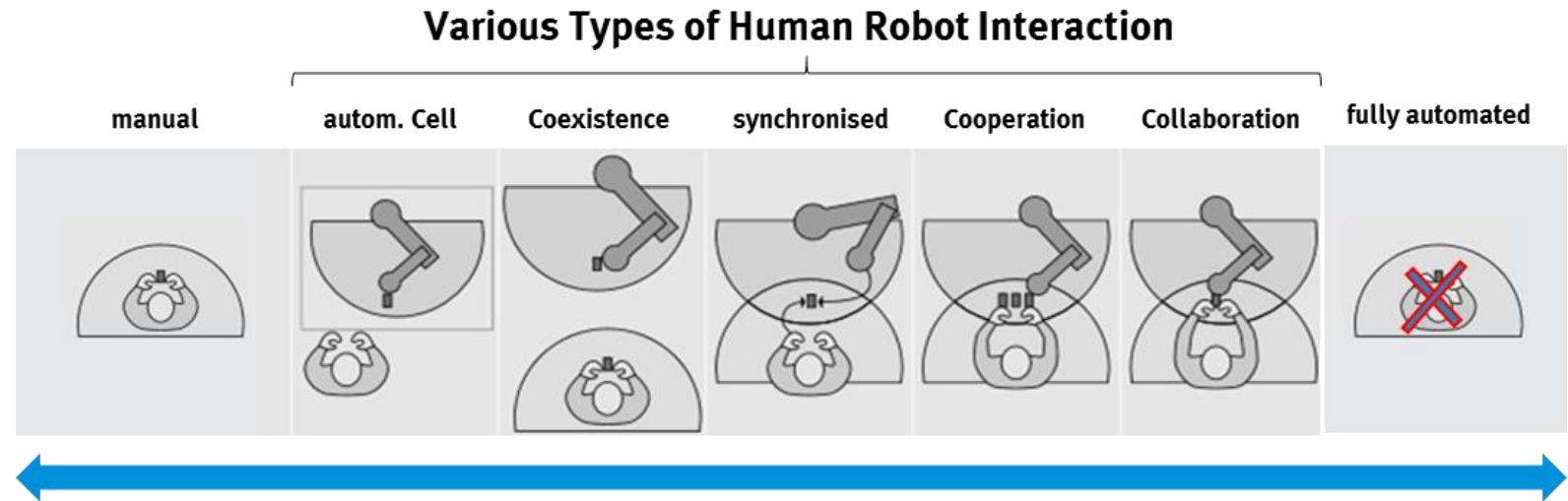
- Adaptation to changing working environments
- Human-machine interaction
- Simple and intuitive operation
- Innovative assistance systems

Working Environment

Human Machine Interaction



Human Robot Interaction

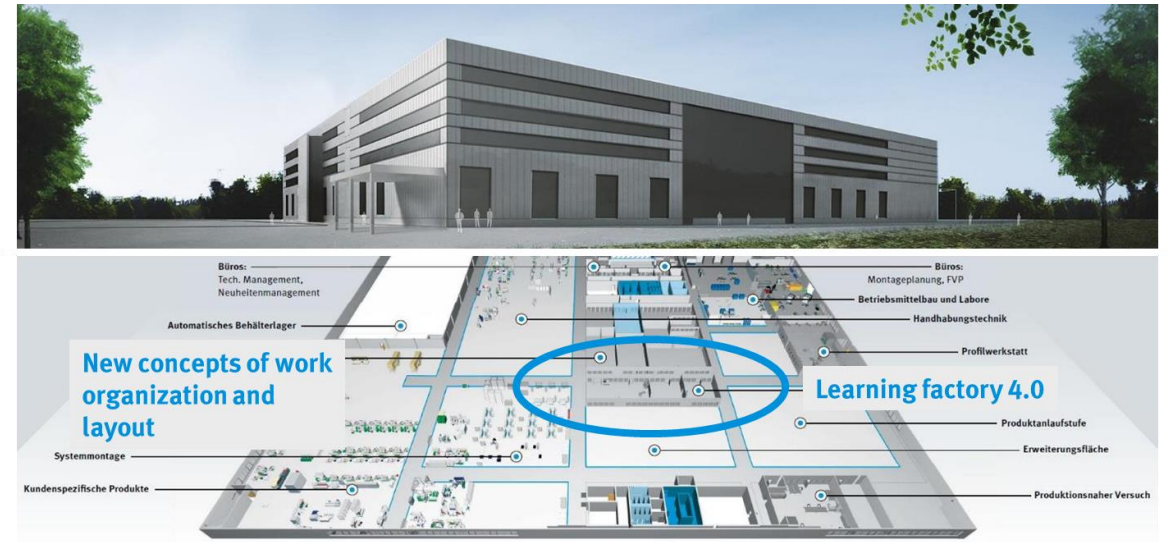


Working Environment

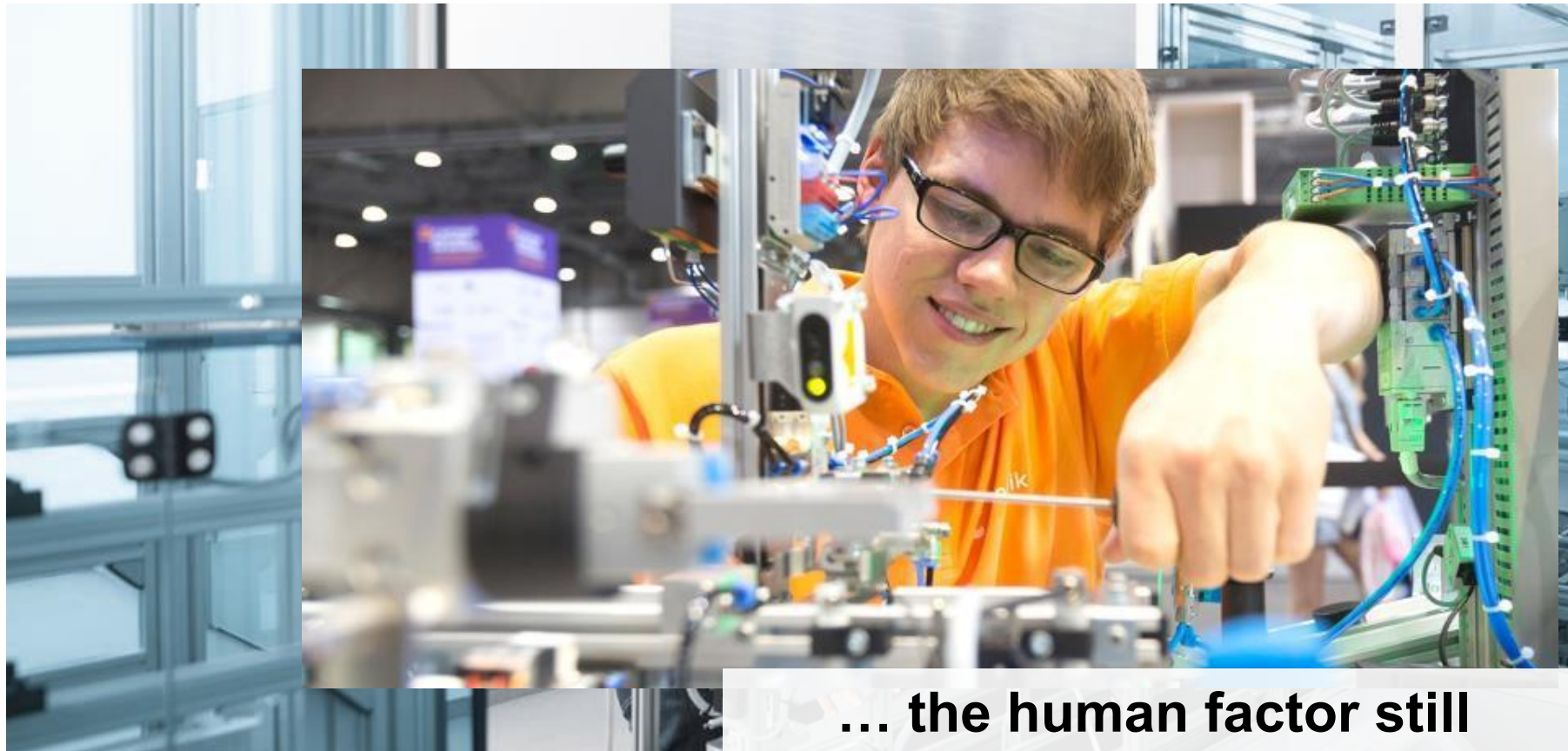
Festo Didactic with learning factories 4.0



Learning factory 4.0 inside our new Festo factory



For personalised manufacturing of the future ...



**... the human factor still
matters !**

Dr. Björn Sautter
Research Cooperations and Services
Festo AG & Co. KG