

The digital transformation: Turning challenges into opportunities

Dr. Jan Mrosik, COO Digital Industries
Manufacturing Performance Days
Tampere | June 5, 2019

Our customers have essential requirements

SIEMENS
Ingenuity for life

New business models



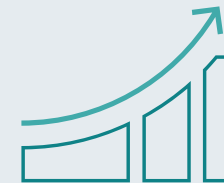
Speed



Flexibility



Quality

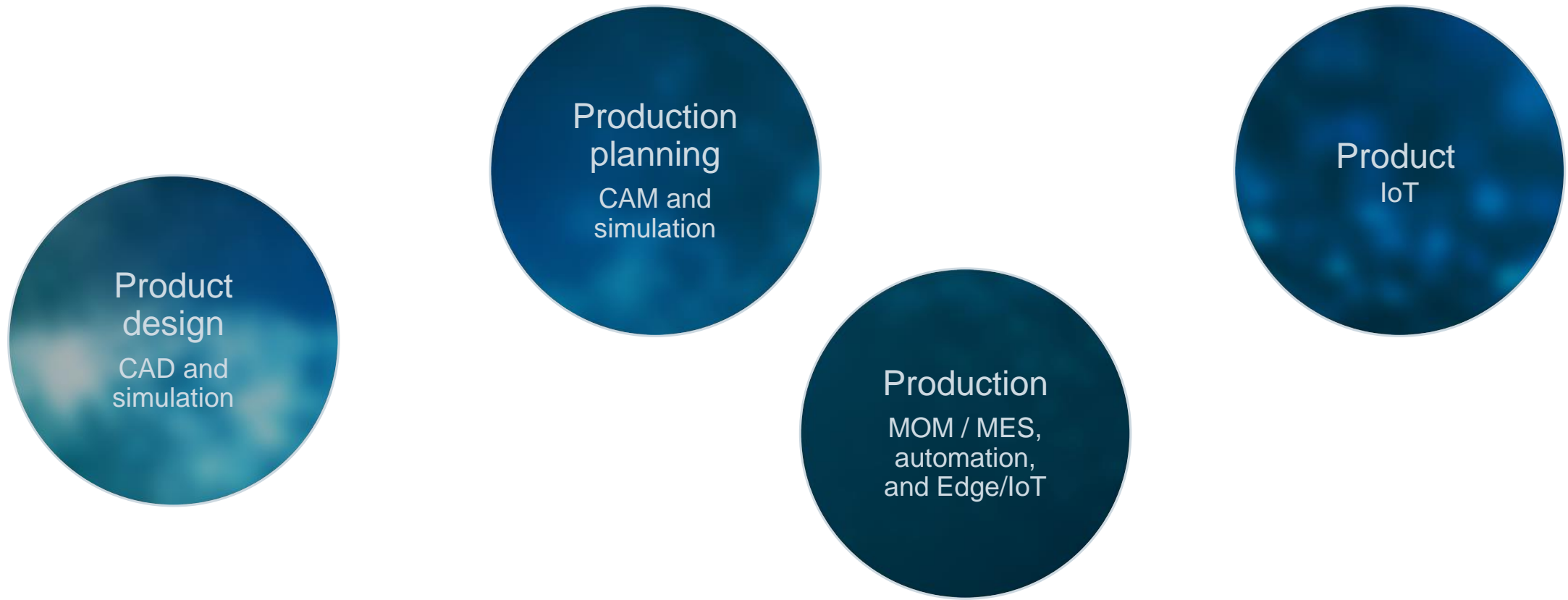


Efficiency



Security

Powerful automation platforms and industrial software already provide first-level benefits



Maximum benefit of Digital Enterprise is leveraged only through integration of the entire value chain

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Ingenuity for life



The Digital Twin of the product reduces time to market

**Digital Twin
Product**

Virtual
product

Design, simulate, and verify products digitally, including mechanics and multi-physics, electronics and management of software

Subdivide Face

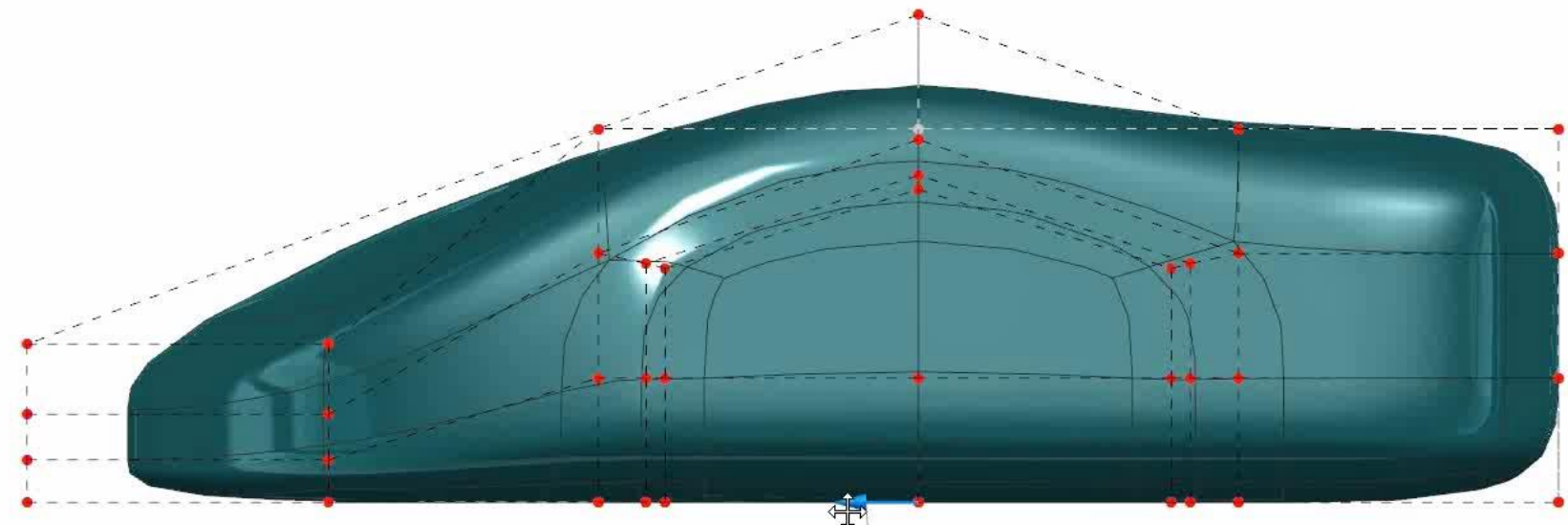
Face

Select Face (6)

Offset

Percentage 14

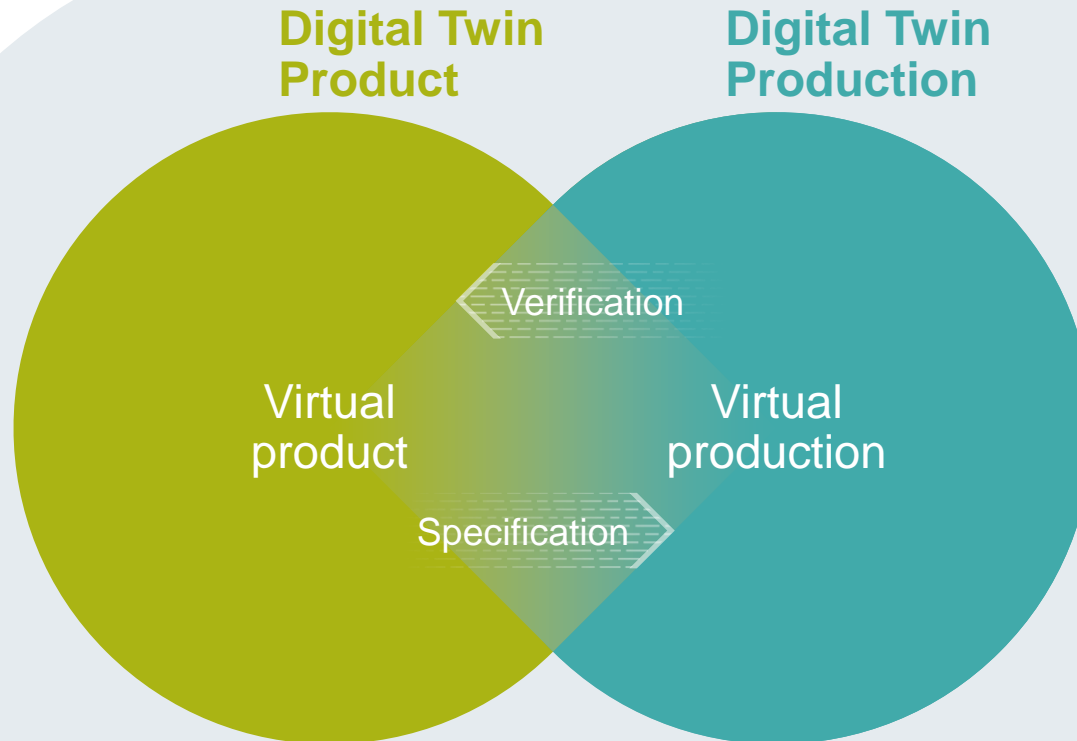
< OK > Apply Cancel



Percentage 16

- Dependencies
- Details
- Preview

The Digital Twin of the production accelerates planning, setup, and optimization



Plan, simulate, predict, and optimize production digitally including PLC code generation and virtual commissioning.

File Home Author Assemblies View PMI Application Visual Reporting Render

2D Planning View Edit Reusable Component Replace Reference Set Connect Components

Sketch in Task Environment Datum Plane Extrude Revolve Block Cylinder Pattern Feature Unite Shell Edge Blend Face Blend

Move Face Offset Region Replace Face Delete Face Move Component Assembly Constraints Replace Reference Set Create Subset

Show Grid Snap to Grid Resize Connectors... Simple Distance Simple Angle Measure Distance Measure Angle

Reuse Library

- Classification Root
 - Resource Management
 - Factory Resources [42]
 - Architectural [3]
 - Conveyors [7]
 - Industrial [14]
 - Material Handling [8]
 - Robots [8]**
 - Vehicles [0]
 - Workers [2]
 - Machines and Devices
 - New Resources [0]
 - Robots [10]
 - Weld Guns
 - Custom Symbol Library

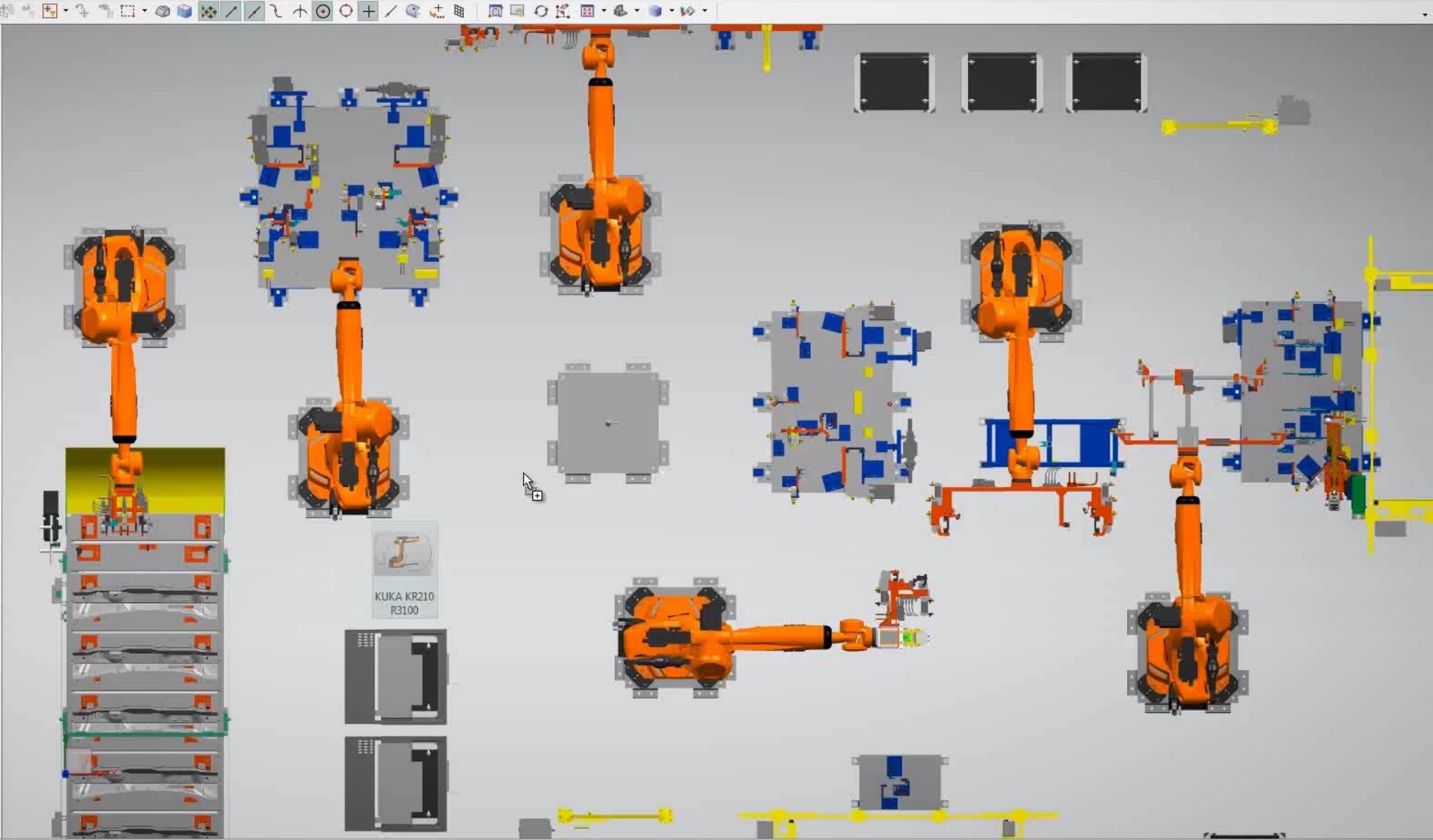
Search

Member Select

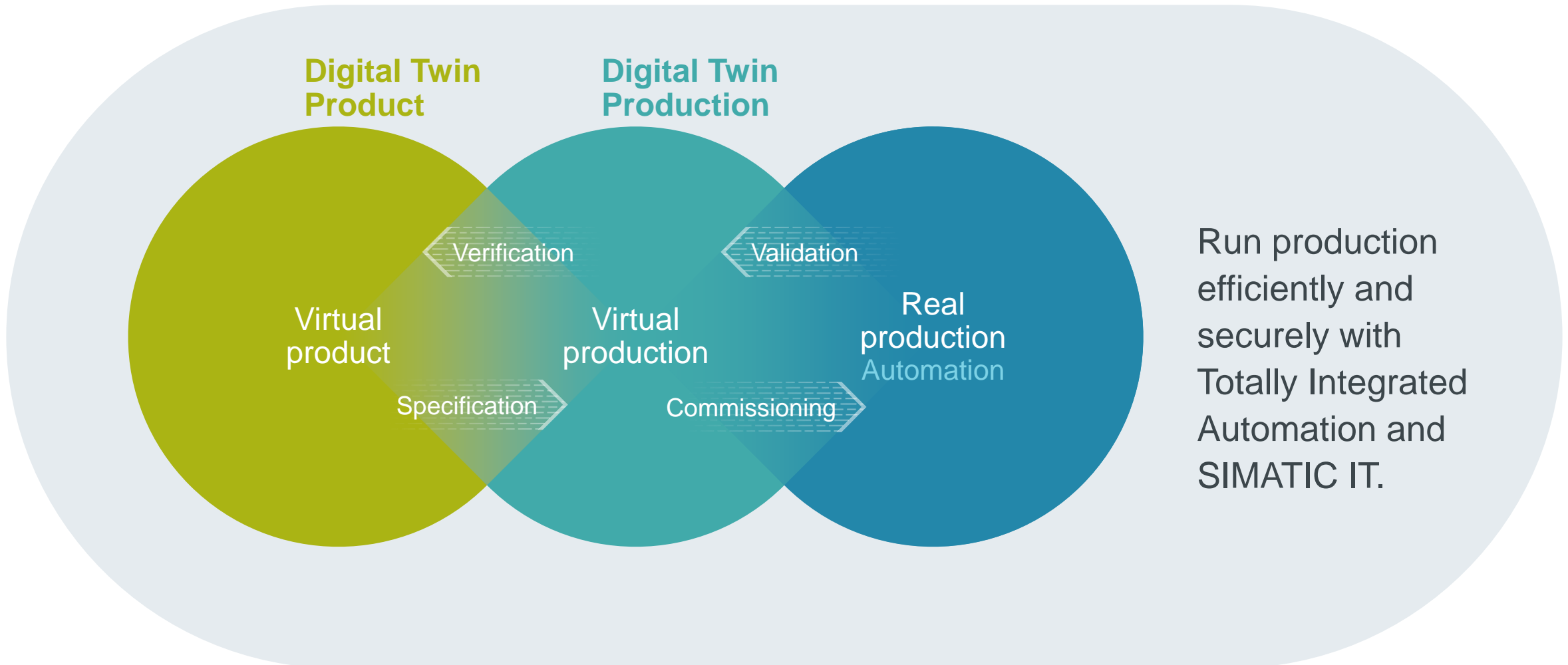
1-1 of 1

KUKA KR210 R3100

Preview



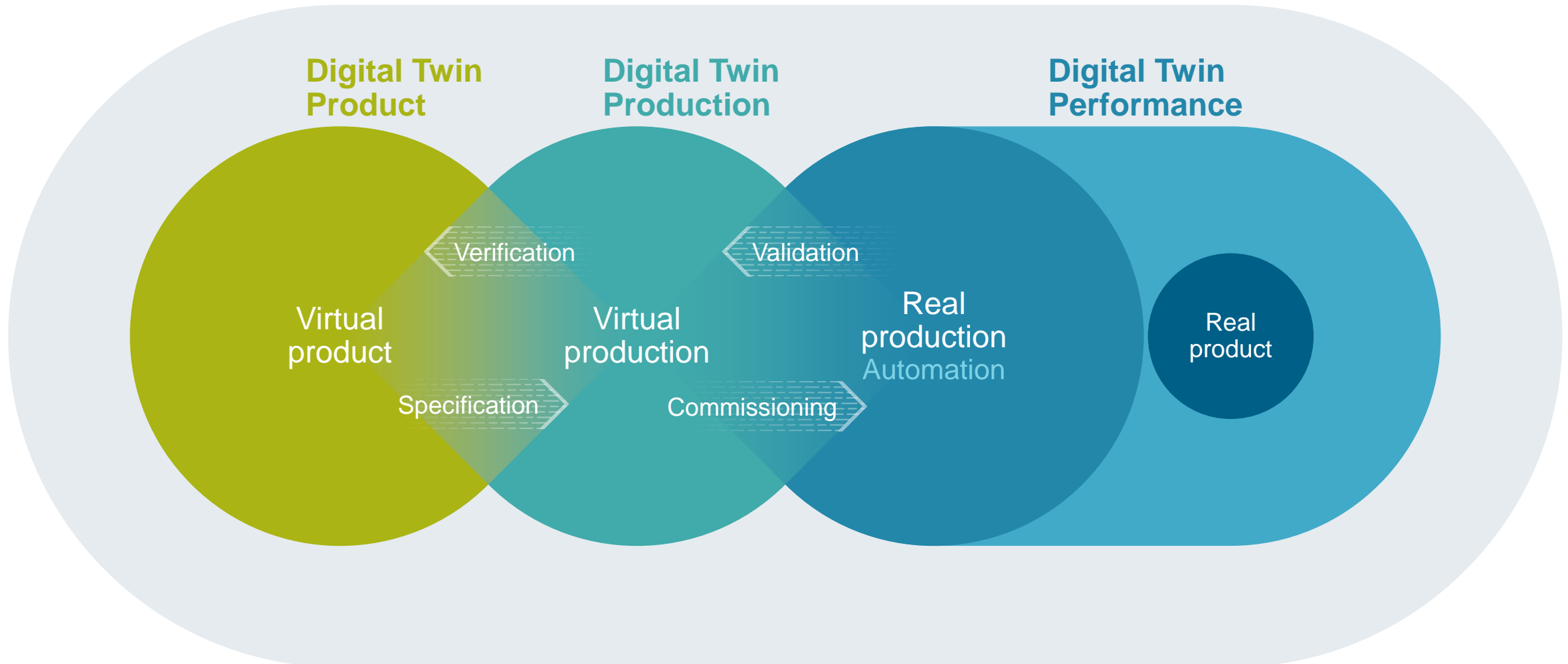
Holistic automation portfolio increases productivity on the shop floor

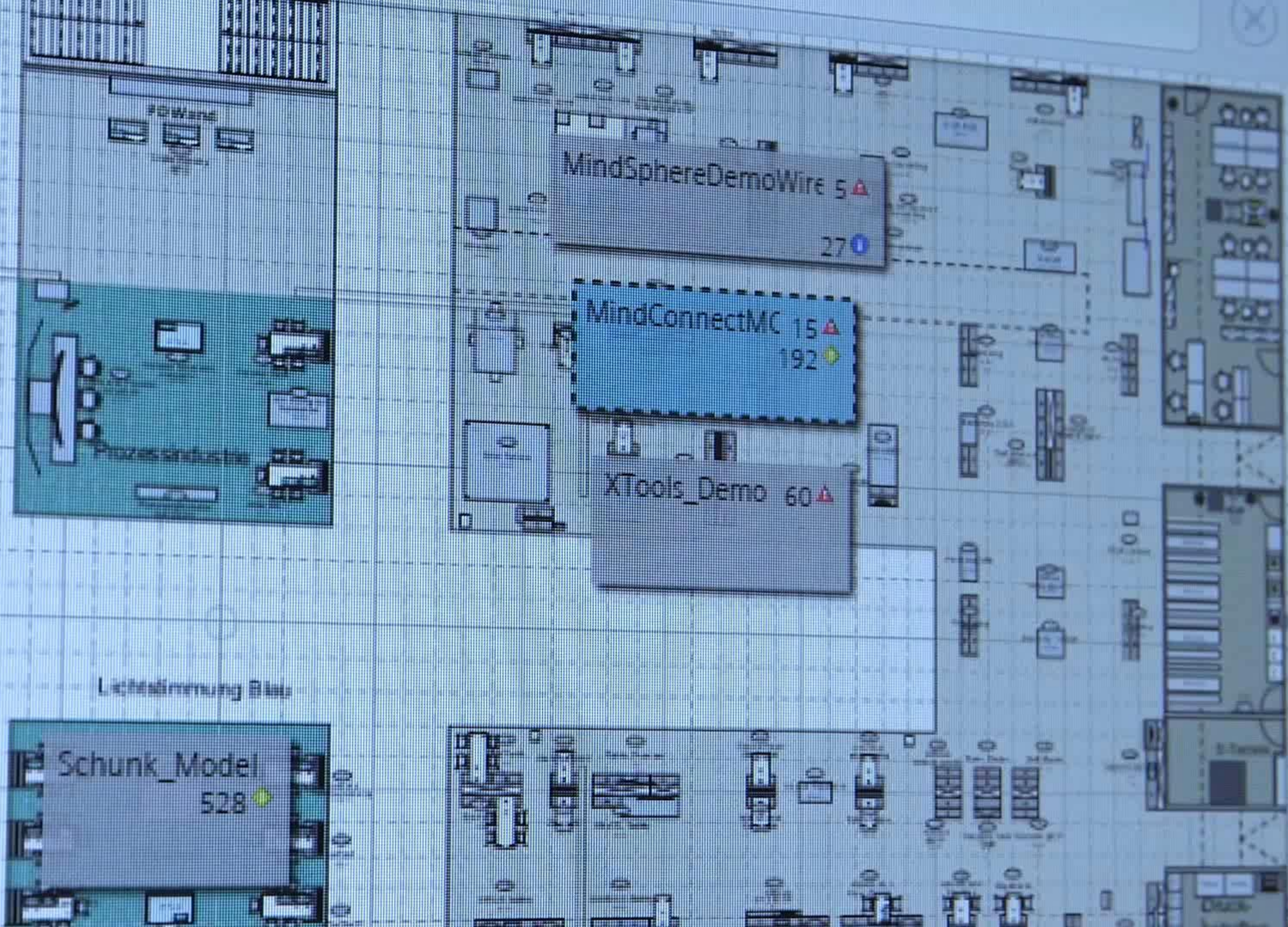


Run production efficiently and securely with Totally Integrated Automation and SIMATIC IT.

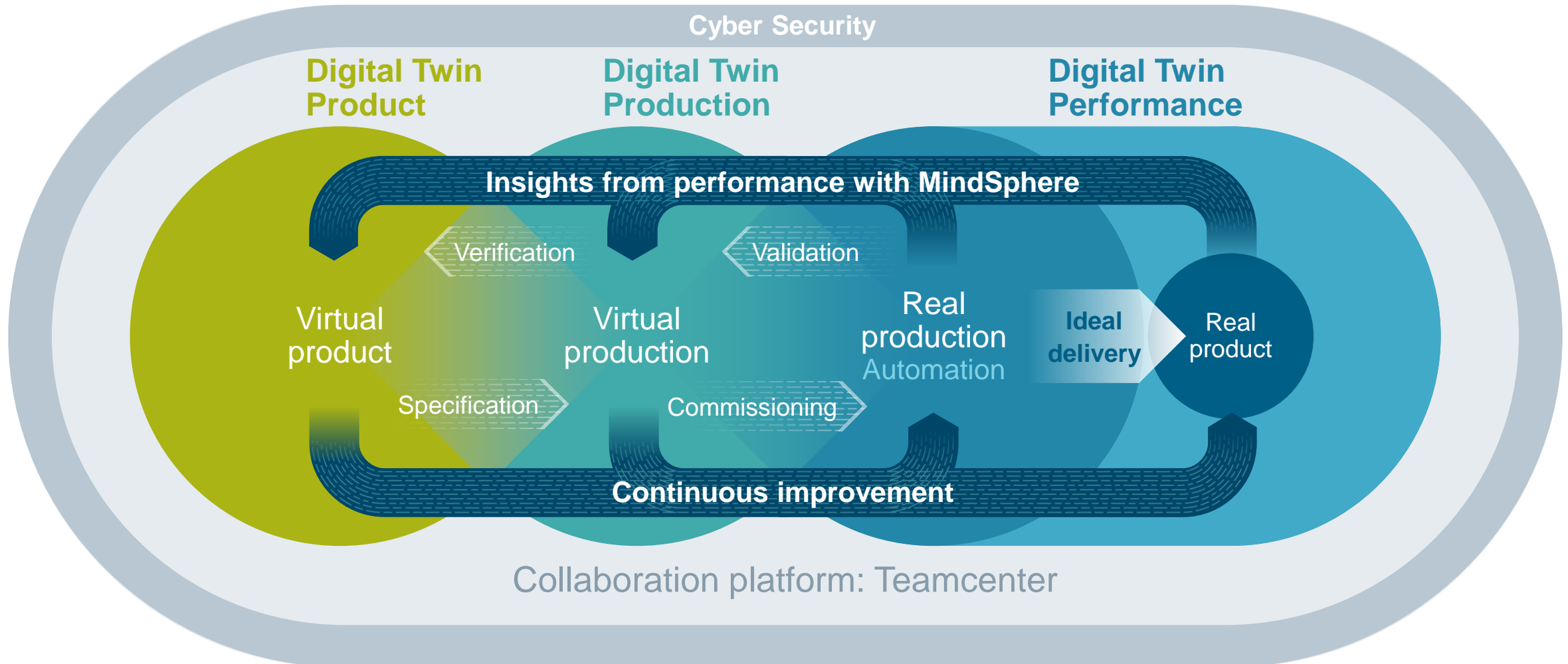


The Digital Twin of the performance enables continuous analysis of both product and production





Feeding back insights enables continuous optimization the value chain







+30%

Engineering
efficiency until
2020



“With an integrated digital twin platform, we see major potential in speeding up the product development process, reducing prototypes, increasing traceability and thus improving quality and reduce development cost.”

Juha Pankakoski, Executive VP,
Technology at Konecranes

KONECRANES®



We help our customers to master their digital transformation



Consulting

Making sure our customers' way towards digital transformation is the right one

Implementation

Helping customers implement and optimize the digital enterprise

Optimization

Continuous improvement by analyzing ongoing operations

Financing

Supporting customers with smart financing solutions

Example: The digital transformation of Nestlé Juuka – We accompany Nestlé along the entire journey



Value Hacker consulting for Proof of Vision



Pre-project Phase, 03/17 - 11/17

Status: Completed

Modernization and Digitalization foundation



Phase I, 11/17 – 12/18

Status: Completed

Performance Contract for Digital Transformation



Phase II, 2019 – 2023

Status: Ongoing

Example: Digital Twin of production with Plant Simulation



**Digitalization is a journey –
we are there every step of
the way!**