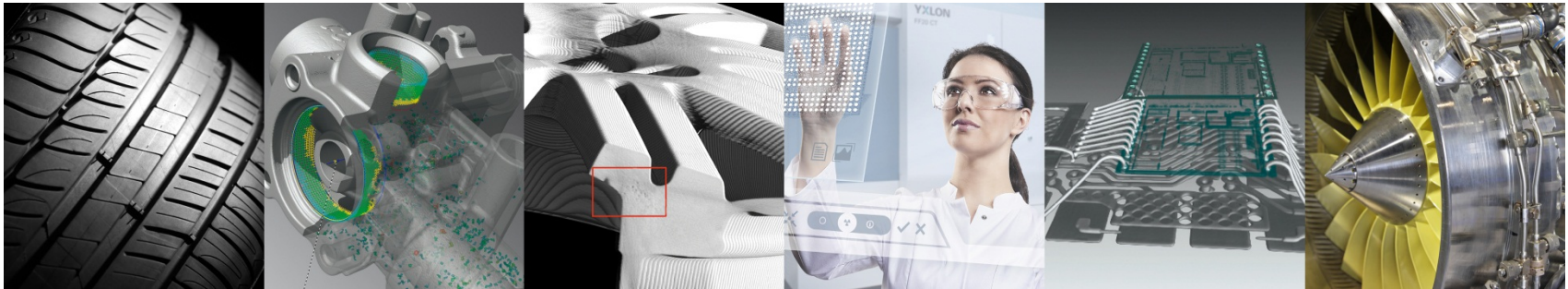


Leveraging our Leading Technology with Industry 4.0



Detlef Steck, President Industrial X-ray Systems, November 22, 2017

YXLON

Technology with Passion

We make the invisible visible

Our x-ray and ***computed tomography*** solutions
allow our ***industrial customers***
to optimize their ***production processes***,
to create ***innovative offers*** and
ensure the ***quality and safety*** of their products
in an ***efficient*** way.

Diversified in terms of industries and applications

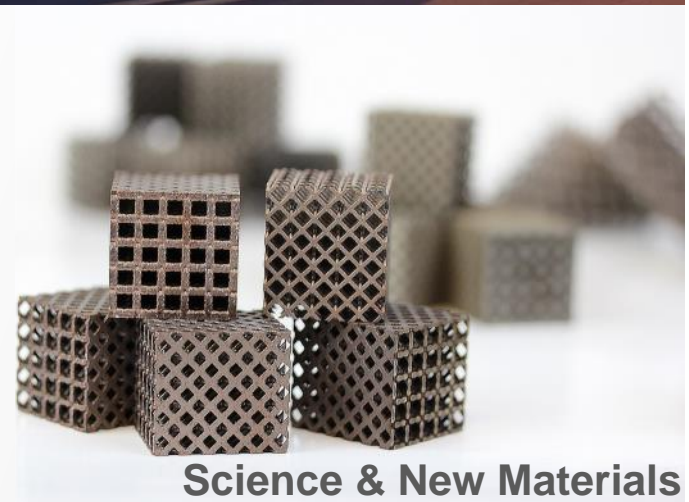
Electronics



Automotive



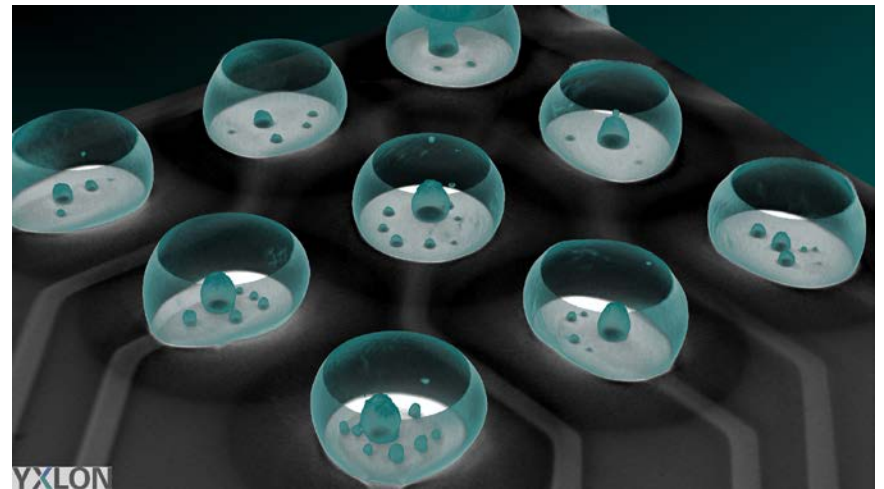
Aerospace



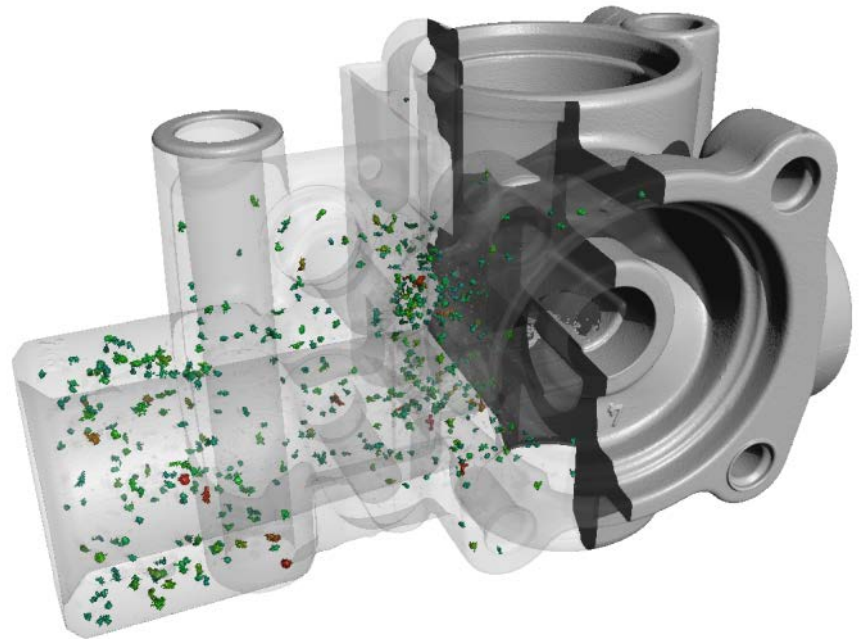
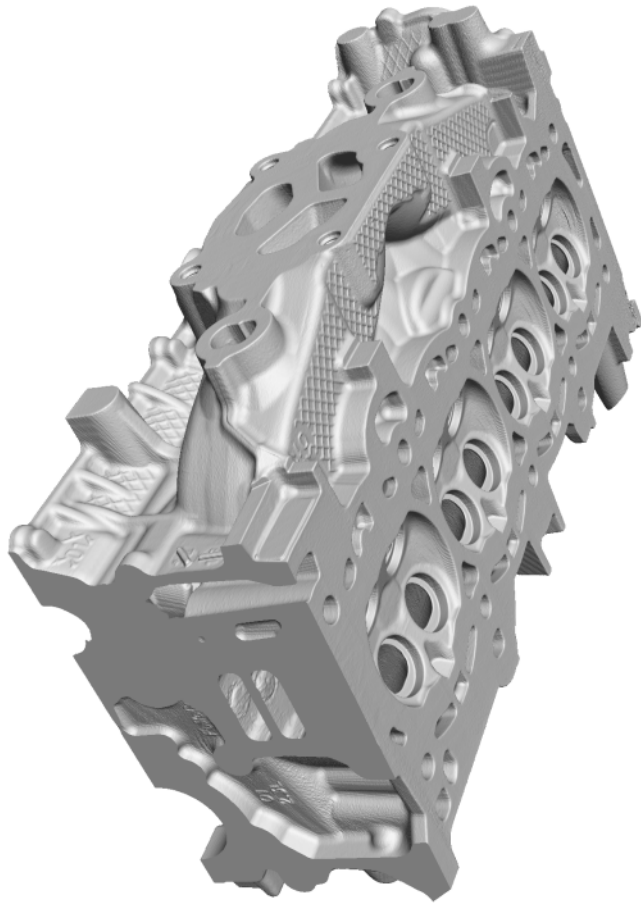
Science & New Materials

Sources:
GTMA
Apple
Tesla
Yxlon

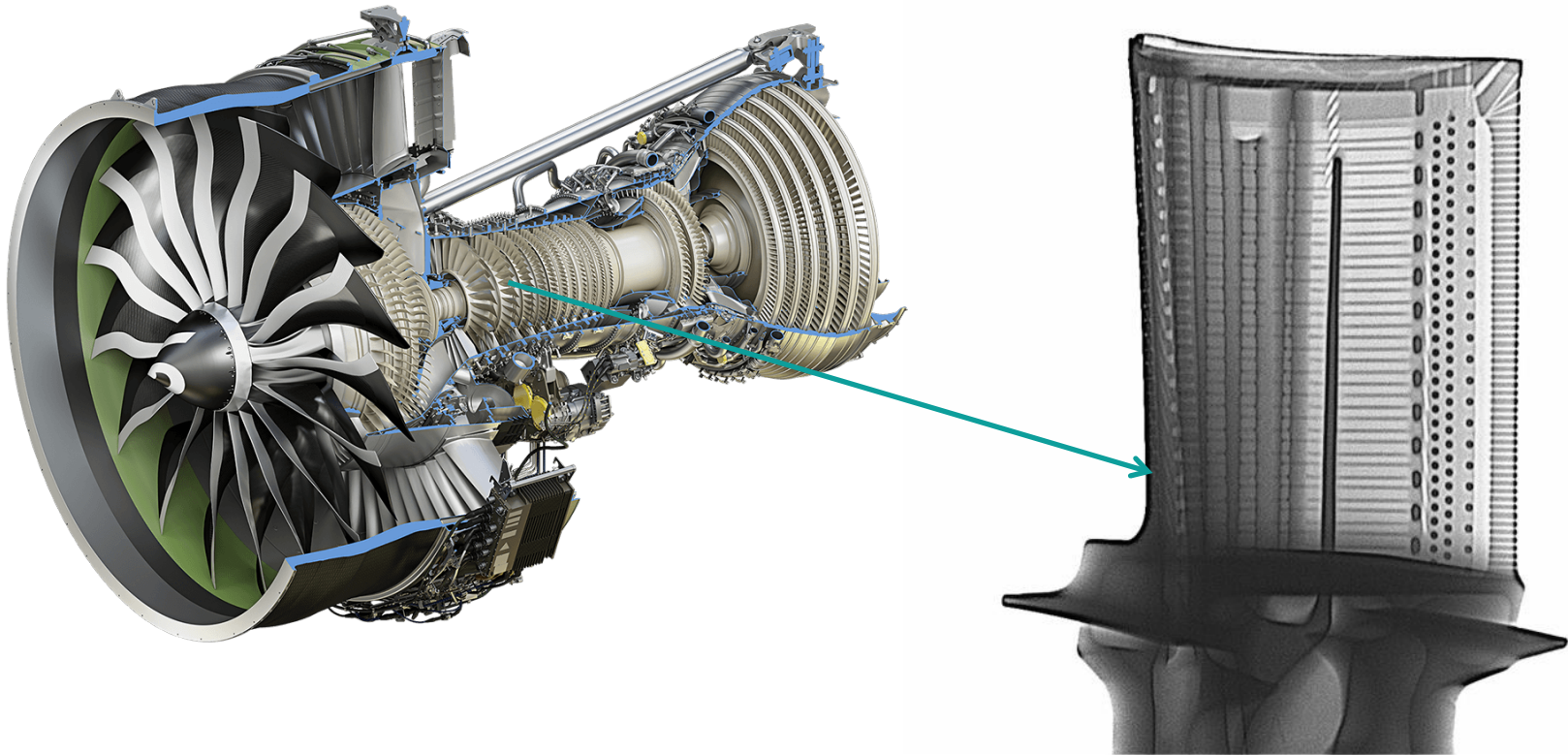
Electronics



Automotive



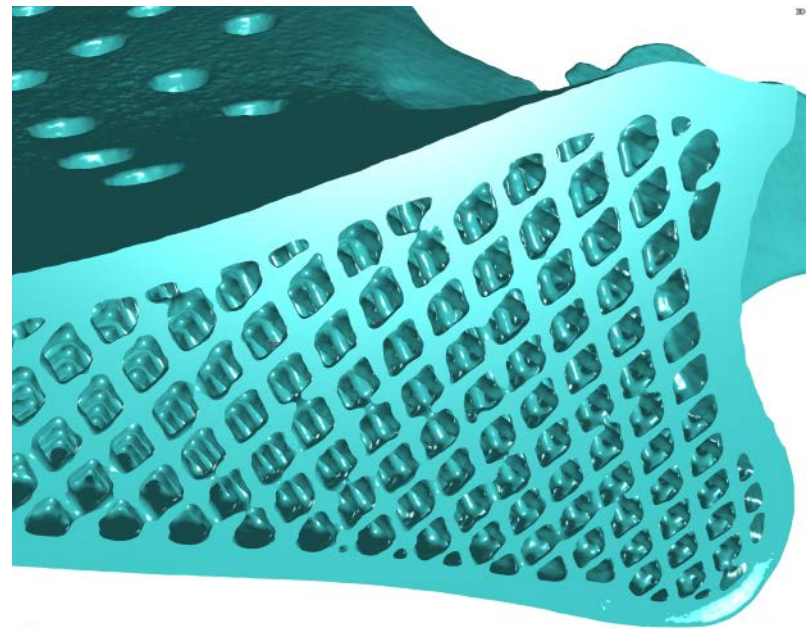
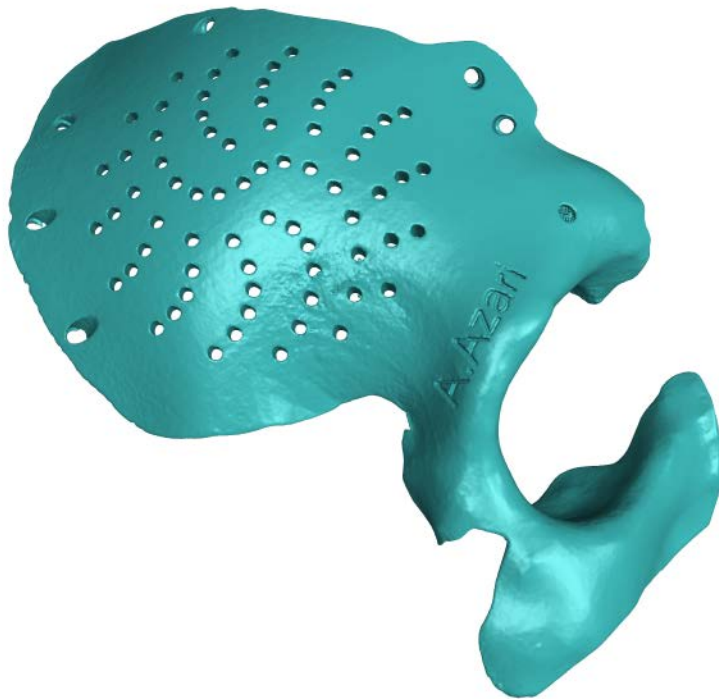
Aerospace



Picture sources: GE Aviation

Science & New Materials

e.g. Additive manufacturing of medical implants



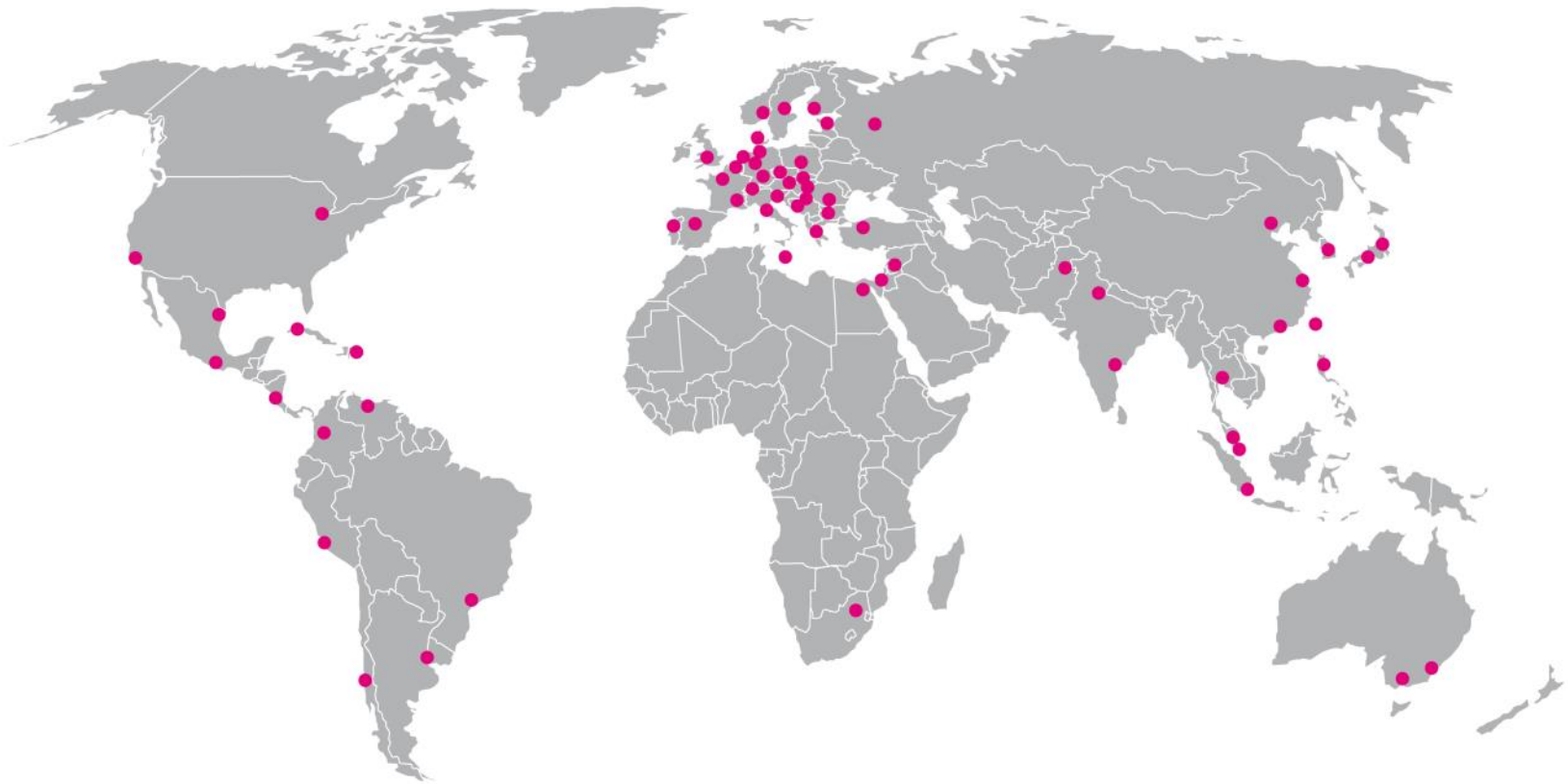
amber implants



Prof. Abbas Azari

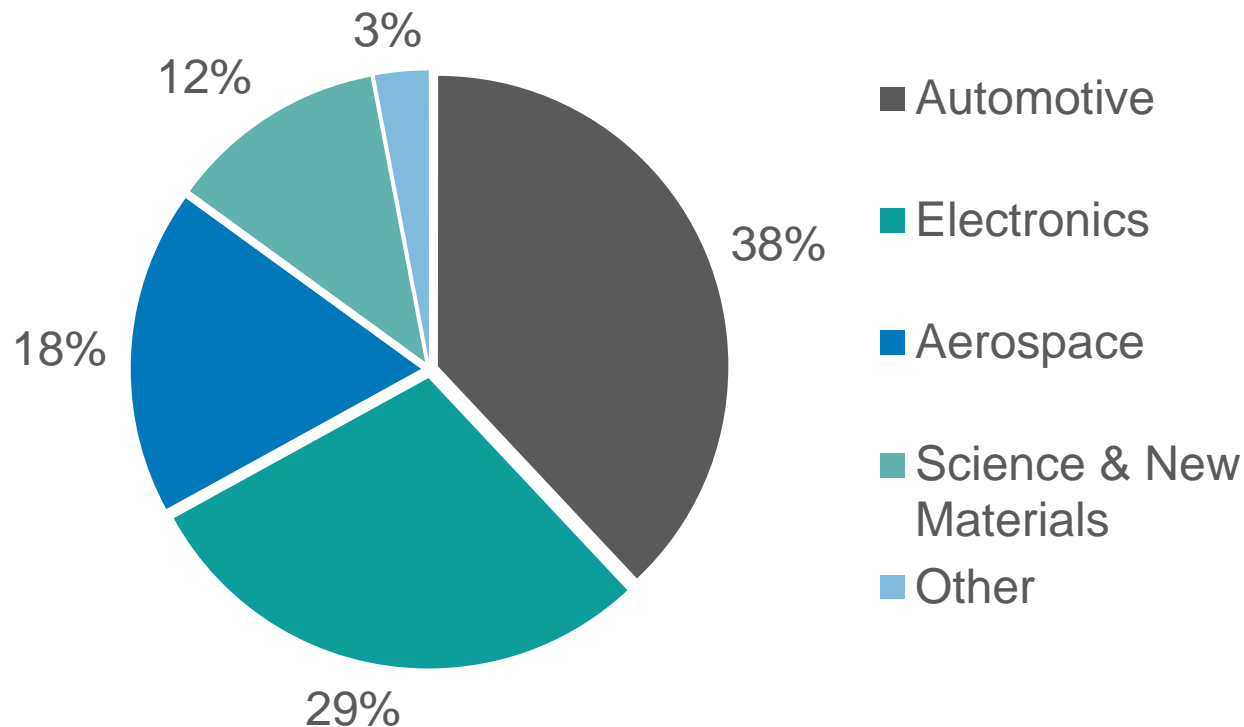
Global reach: representatives in > 50 countries

More than 420 employees world-wide ensure we are close to our customers



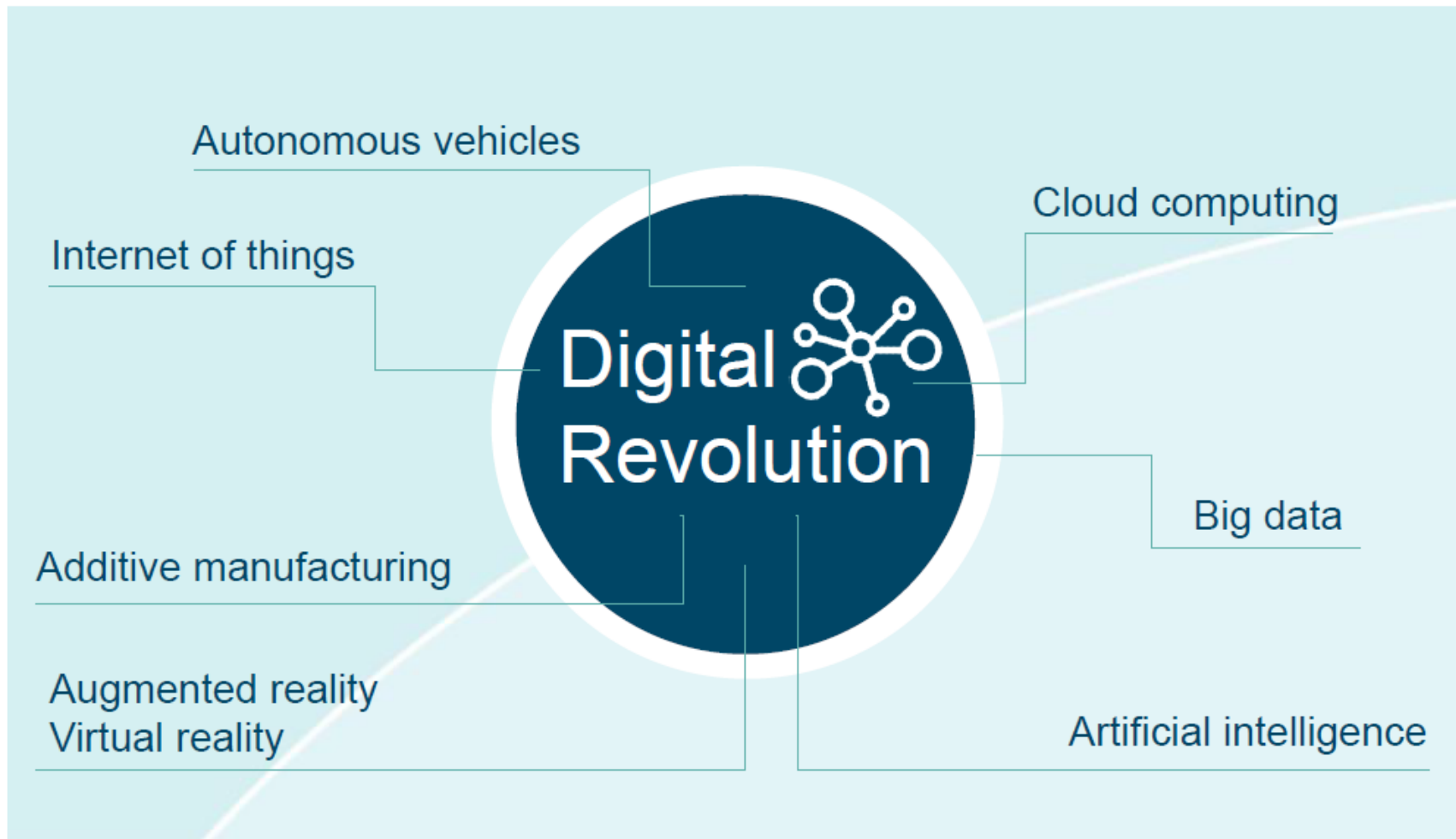
Profitable business with dynamic growth

Sales 2016: 121 MCHF

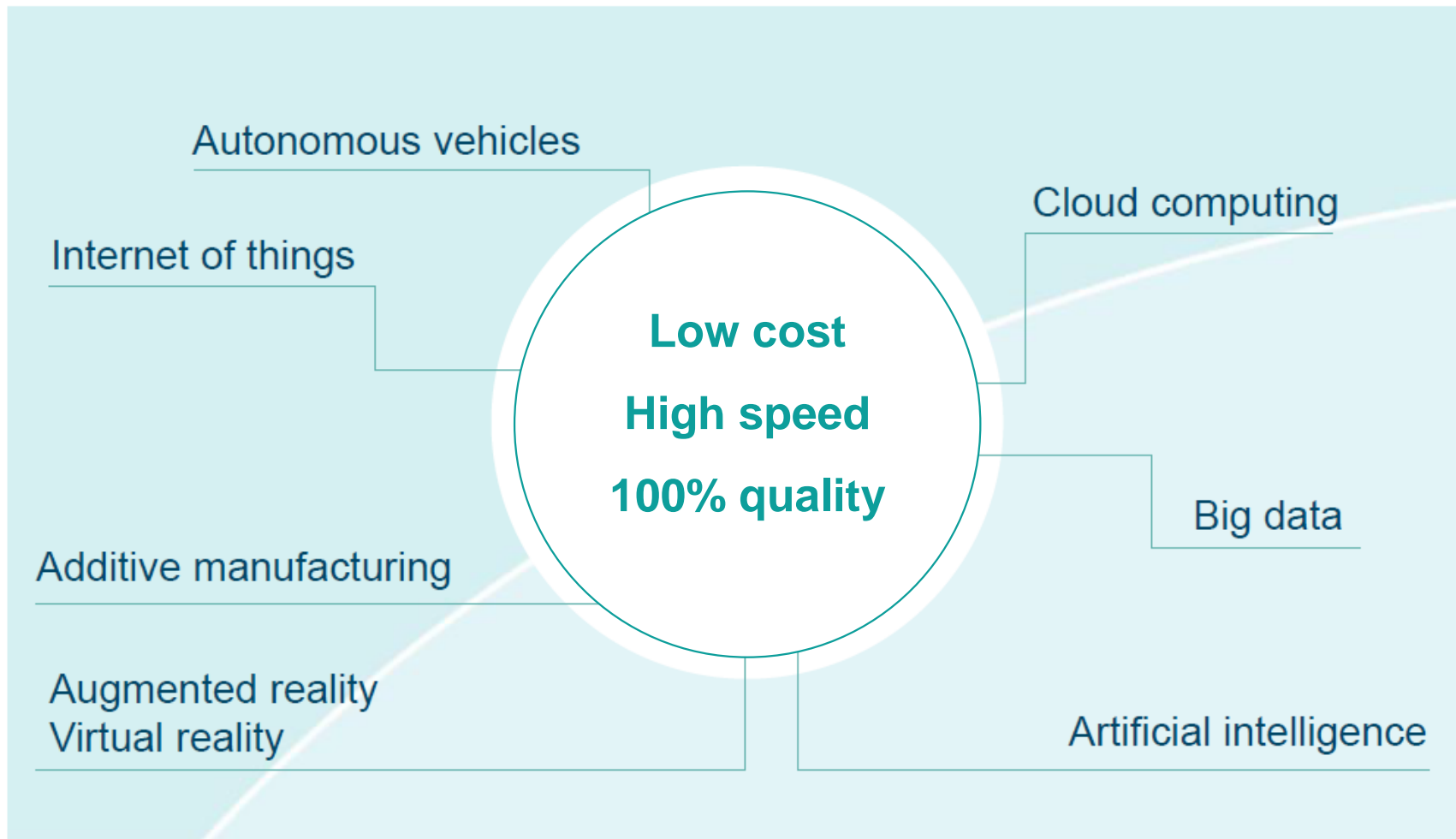


**Growth: 12% CAGR
(2015-2017)**

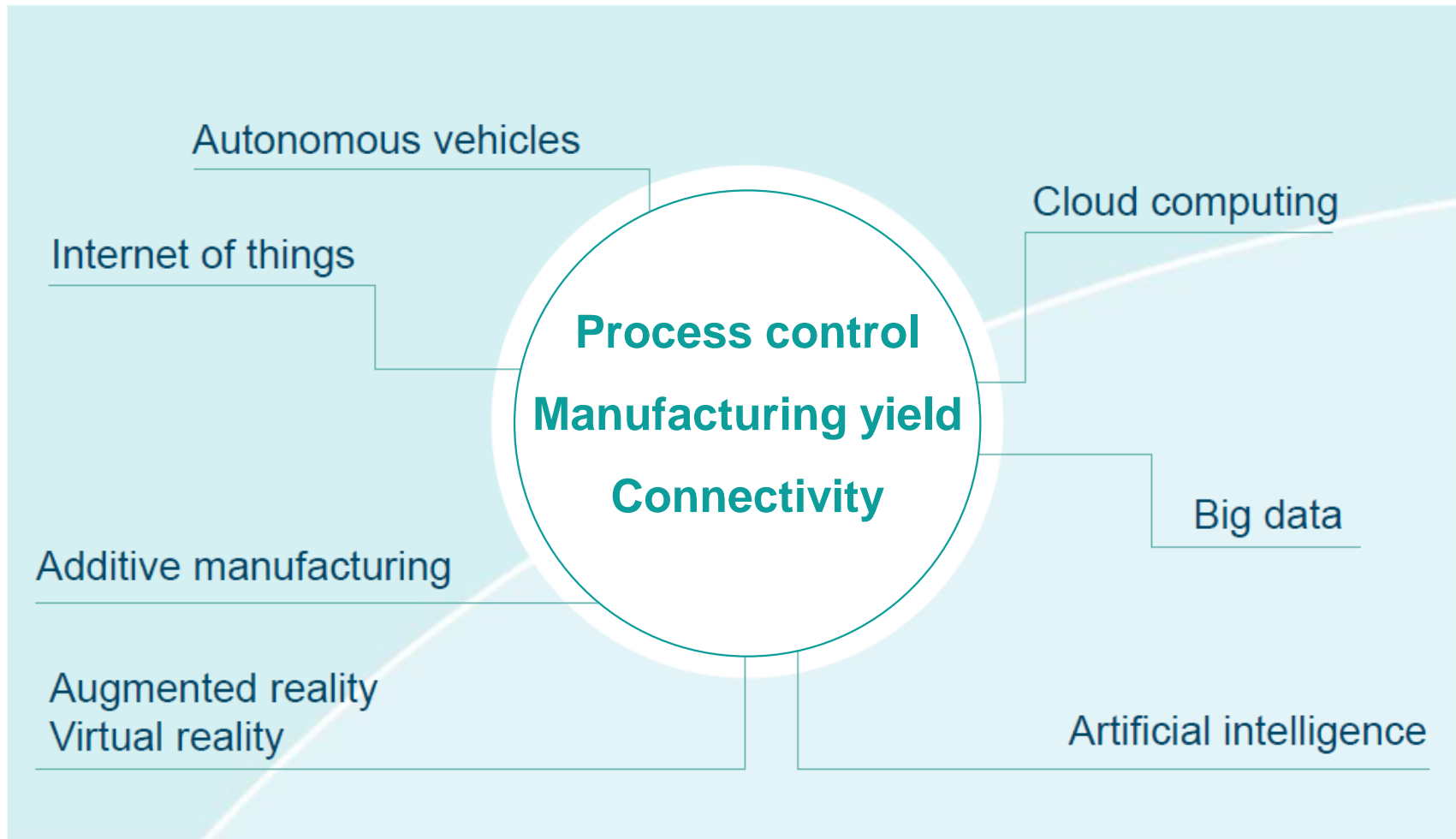
Digitalization – a huge opportunity leveraging the three technologies of Comet Group



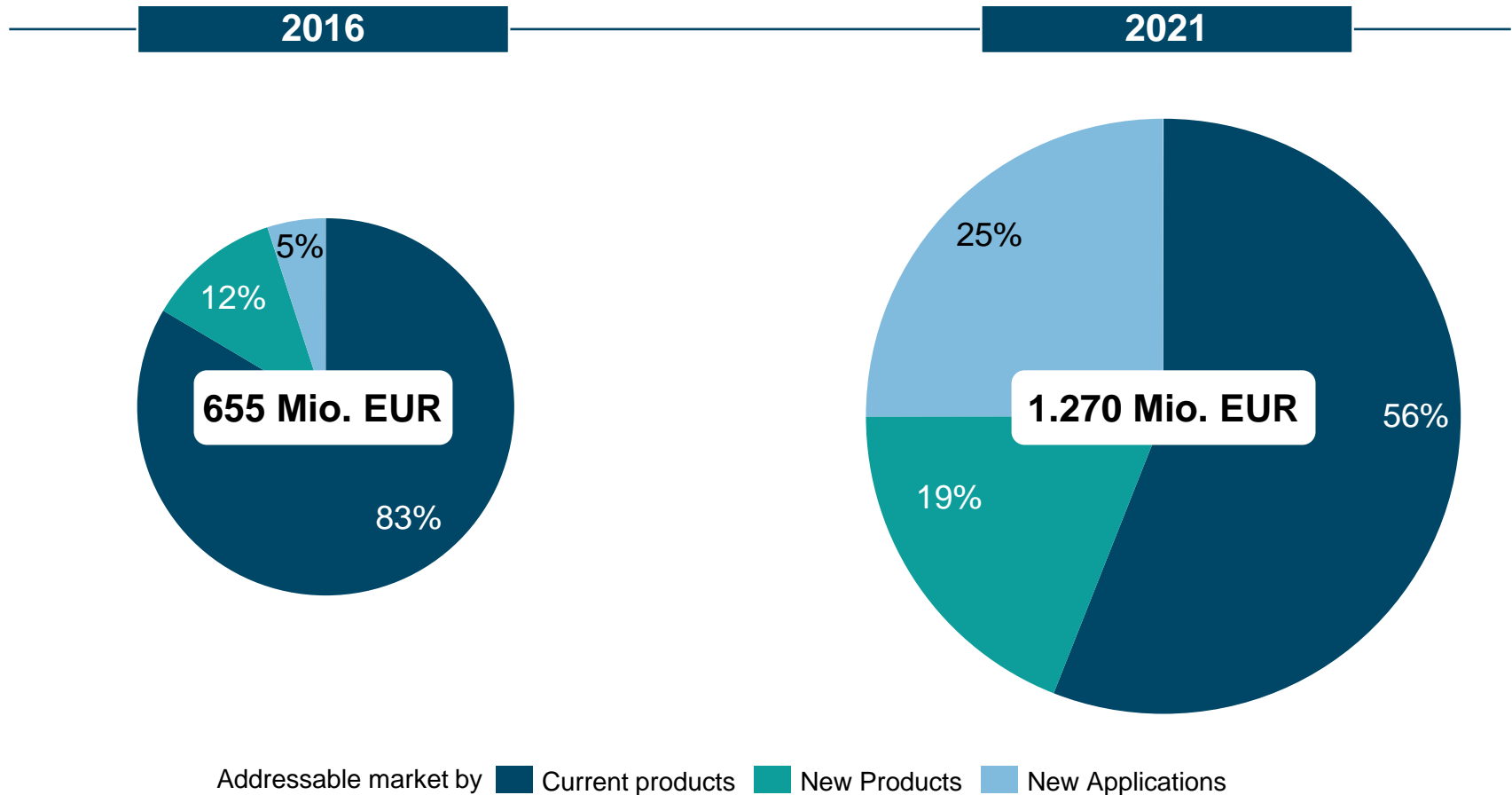
Digitalization – a key driver of customer needs



IXS well positioned to create additional customer value



Market volume expected to nearly double by 2021

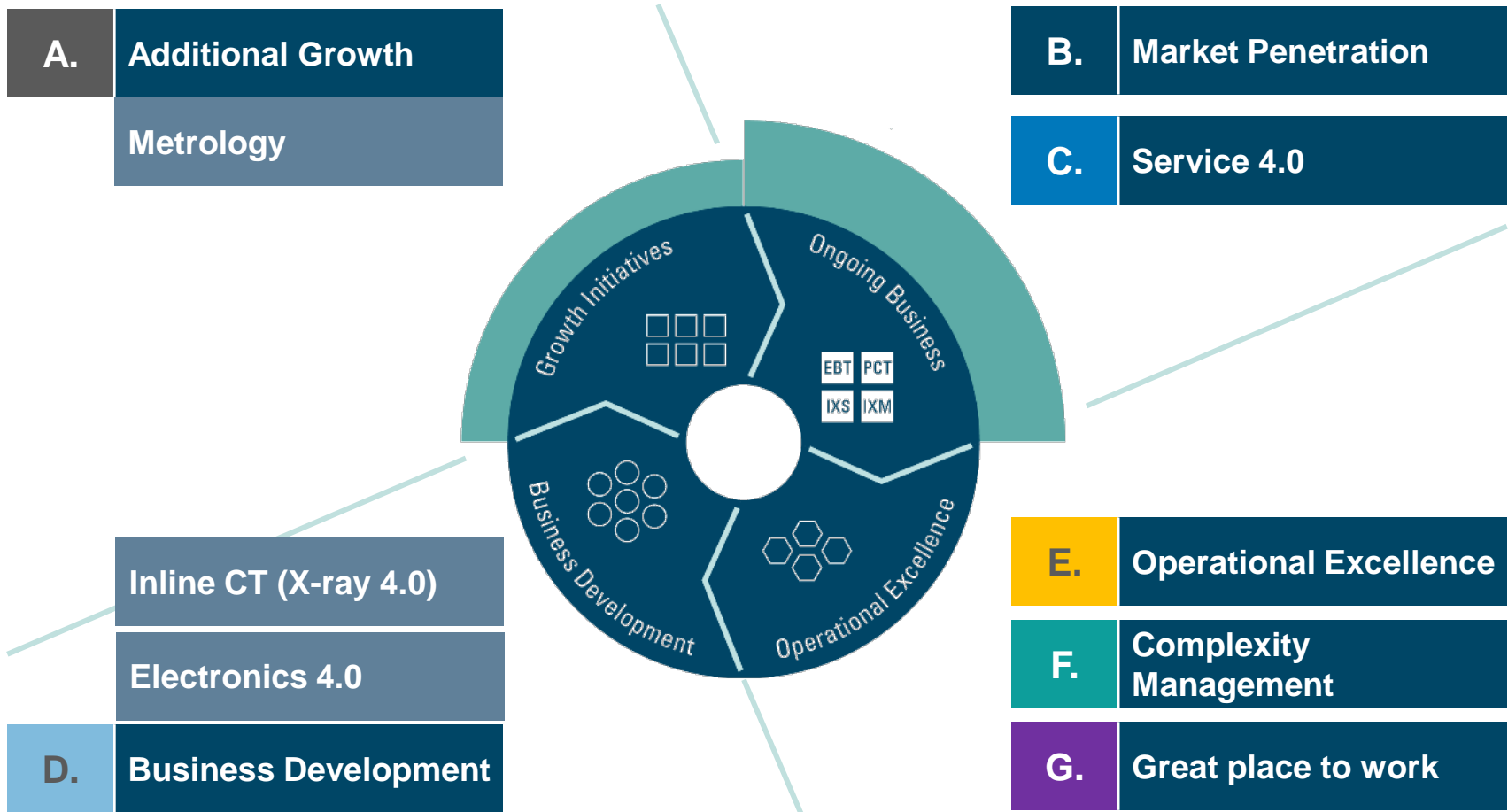


Strategy sharpened to seize these opportunities

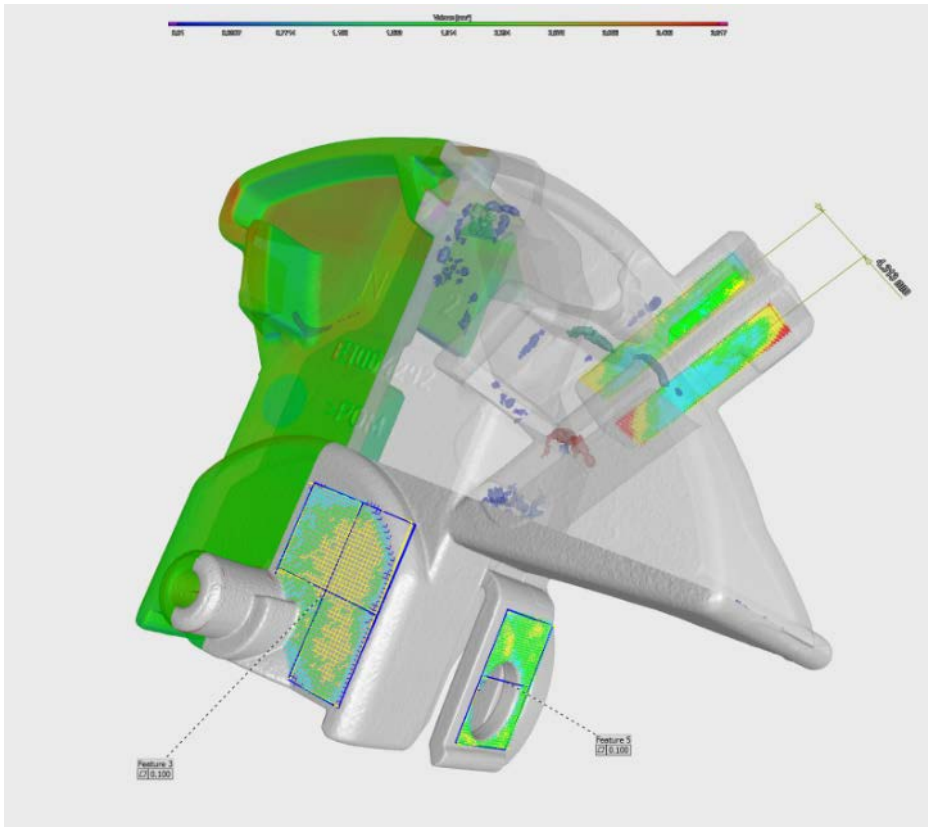
We will

- enhance our **software knowledge**
- apply a **modular approach** to reduce complexity
- **partner** with end users, OEMs and system integrators
- **invest** in new technology, portfolio renewal, processes and developing our culture
- continue to **grow dynamically**, accepting lower profitability in the short term

Strategy with 7 workstreams to drive growth



Metrology – from evaluating to measuring

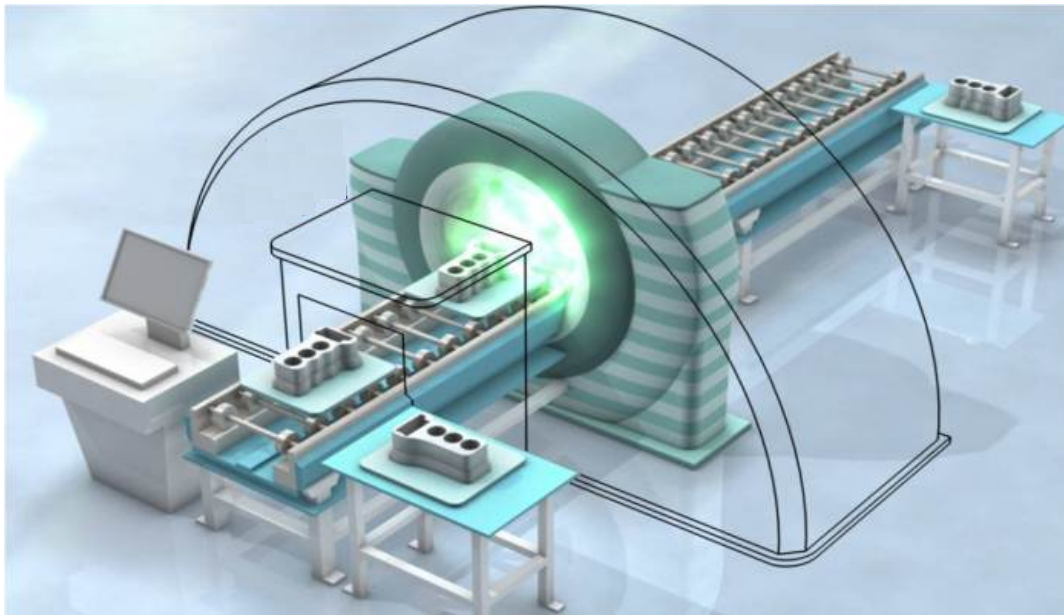


- The invisible becomes measurable
- Multiple advantages over other methods
- Complex components like in additive manufacturing (bionic design)
- Highly precise reverse engineering
- Increases overall value of CT

Metrology – market reaction confirms growth potential

- Dedicated metrology systems launched at Control 2017
- Growing number of projects from 1,8% of total OI in 2016 to 8,7% in 2017
- Proven accuracy (4 μm , classified according to VDI/VDE 2630)
- Target markets; electronics, automotive, medtech, consumer goods, tool manufacturing, life science
- Partnership with Hexagon Manufacturing Intelligence: FF35 CT Metrology installed at Suzhou Demo Center, dedicated sales team established
- Interoperability with most relevant 3rd party metrology software solutions ensured

Inline CT – computed tomography moves from the lab to the production line



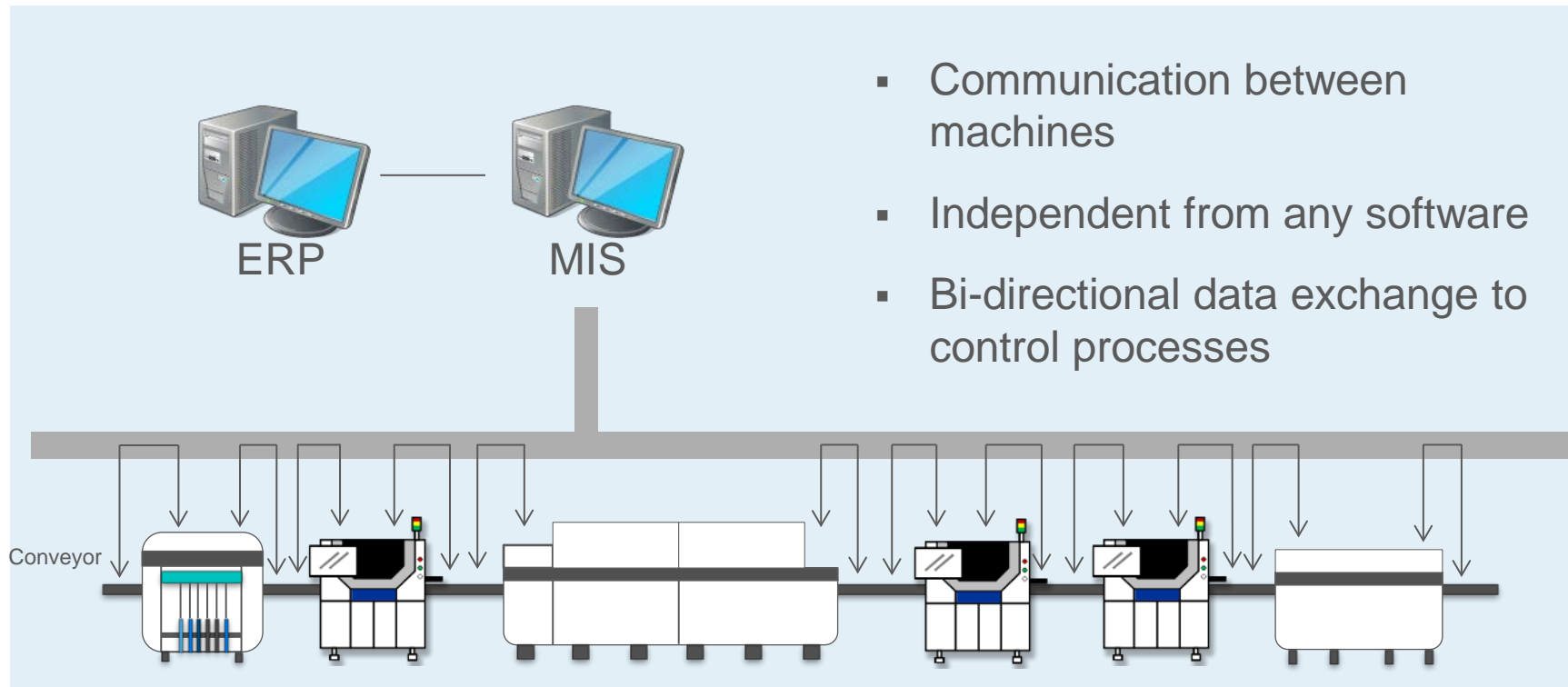
- Fast sensor
- 100% sensor
- Fully automated
- Real-time information
- Enables manufacturing process control

Inline CT – strong customer pull to produce quality rather than inspect quality

- Prototype under construction
- Evaluation of pilot projects with customers
- Building on our experience from inline solutions with ADR in tire and wheel
- Microvista SW acquisition accelerates market entry



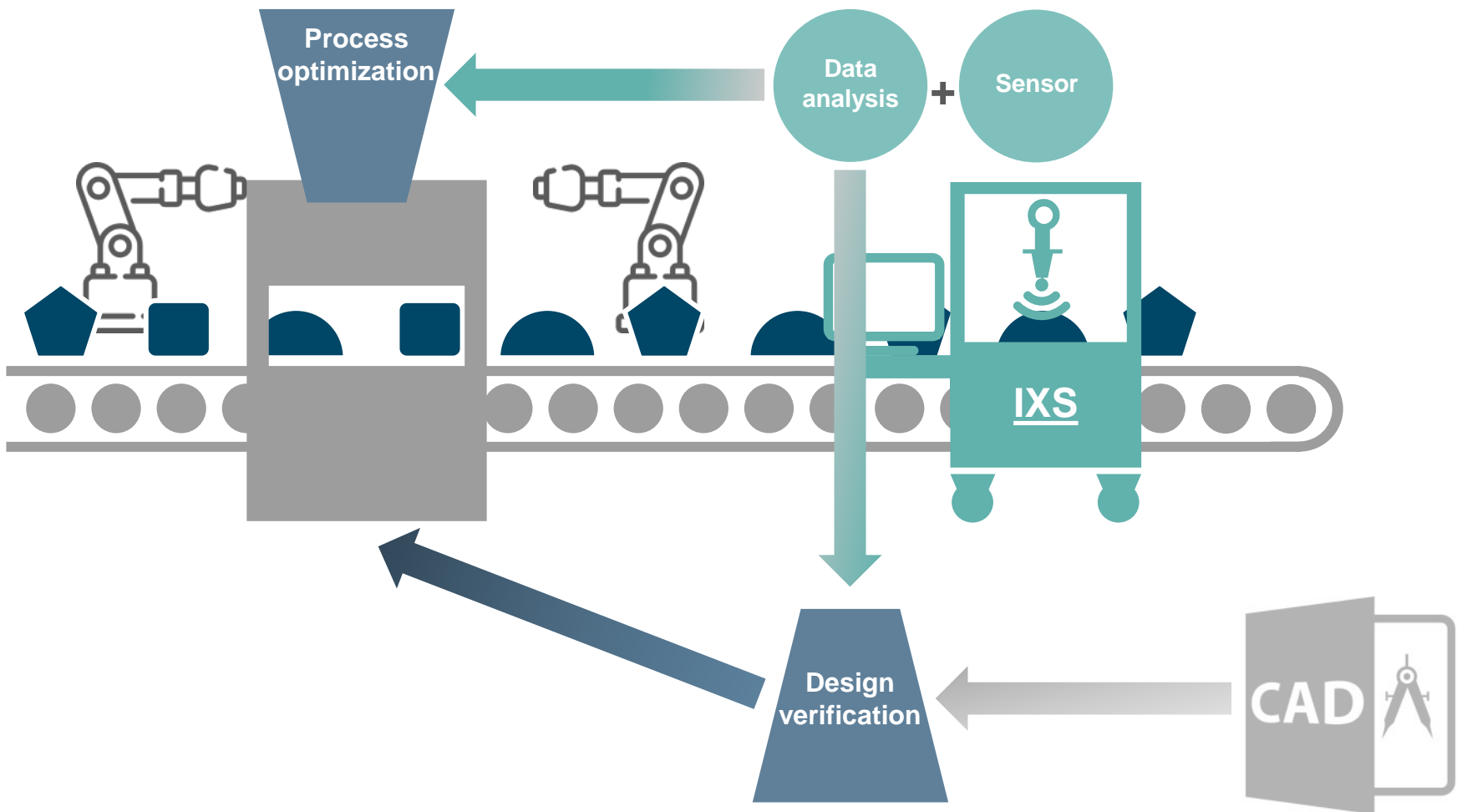
Electronics 4.0 – enabling connectivity for Industry 4.0



Electronics 4.0 – first solutions successfully implemented

- Successful proof of concept with Smart Loop solution
- Participating in industry initiatives to define and implement standard protocols, e.g. Hermes, OML, V-One
- Hermes ready products Cougar EVO and Cheetah EVO launched at Productronica 2017
- Collaborating with leading equipment suppliers to create integrated solutions
- Pilot projects in test mode with leading EMS (Electronics Manufacturing Services) companies

Creating value in an Industry 4.0 environment



Leveraging our Leading Technology with Industry 4.0

- Based on our **leading technology** we have a **profitable business** with a **strong market position**.
- Digitalization and its related trends create substantial **growth opportunities**.
- We have **sharpened our strategy and invest in new products** to strongly benefit from these trends.

IXS – the solution provider for the smart factory

Thank you for your attention.

