

SMART INDUSTRY

MACHINE LEARNING

BIG DATA

INTELLIGENT CONTROL

The key benefits of digitising value chains

- Enhanced productivity
- Advanced process control
- Agile production for customization
- Better quality and less waste
- Reduced maintenance costs
- Increased traceability by digitalized manufacturing
- New revenue models

SMART SENSORS

Revenue to rise by
493 US\$
bn p.a.
until 2020

Costs to be reduced by
421 US\$
bn p.a.
until 2020

35%
expect revenue gains over 20% over the next five years

43%
expect to lower costs more than 20% over the next five years

56%
expect to increase efficiency by more than 20% over the next five years

Investments are expected to total
907 US\$
bn p.a.
until 2020



Manufacturing

- Digitalization of manufacturing
- Real-time control applications
- Improved yield
- Agile production



Safety & environment

- Energy savings
- Waste reduction
- Remote IoT-based maintenance
- Traceability of production



IoT

- Easy data collection through IoT sensors
- Cloud computing
- Big data
- Sensor fusion



Quality

- Raw material inspection
- Real-time quality monitoring
- End-product quality inspection
- Measuring material content



Predictive maintenance

- Input and outcome monitoring
- Advanced machine learning
- Soft sensors
- Reduced maintenance costs

WITH OUR TECHNOLOGIES

 SPECTRAL ENGINES

