Business Drivers for Smart Manufacturing

10 – 40% Reduction of **Maintenance Costs**

Productivity Increase by 3 – 5%

20 – 50% Reduction in Time to Market

Forecasting Accuracy Increased to 85+%

30 – 50% Reduction of Total **Machine Downtime**

Cost for Quality Reduced by 10 – 20%

Cost for Inventory Holding Decreased by **20 – 50%**

45 – 55% Increase of Productivity in Technical Professions Through **Automation of Knowledge Work**

Wheel segments:

- Virtual Guided Self-Service
- Remote Maintenance
- Predictive Maintenance
- Rapid Experimentation and Simulation
- Concurrent Engineering
- Customer Cocreation/Open Innovation
- Data-Driven Design to Value
- Data-Driven Demand Prediction
- Digital Quality Management
- Advanced Process Control (APC)
- Statistical Process Control (SPC)
- Batch Size 1
- Real-Time SC Optimization
- In Site 3D Printing
- Automation Of Knowledge work
- Digital Performance mgmt
- Remote Monitoring and Control
- Human-Robot Collaboration
- Augmented Reality for MRO
- Predictive Maintenance
- Remote Monitoring and Control
- Machine Flexibility
- Routing Flexibility
- Real Time Yield Optimization
- Intelligent Bots
- Smart Energy Consumption

Inner ring:

- Services/Aftersales
- Resource/Process
- Time To Market
- Asset Utilization
- Supply Demand Match
- Quality
- Inventories
- Labor