Good Bad Ugly Industry 4.0

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Chair AT S Global
The Independent Solution Provider for Smart Digital Transformation

our experience, your success
About ATS Global

An Independent Provider for solutions and services for **Smart Digital Transformation**

A global organization with local focus

Thought leadership in:

- Manufacturing Operations Management
- Smart Automation, Quality and IT Excellence
- Application Packaging and Virtualization
- Solutions for Precision Engineering
- Education, Consultancy and 24x7 Support Services

Thousands of manufacturers trust ATS with their production critical applications

Note: All statistics as on 1st January, 2018
Smart Technologies

- Industrial IOT and Services
- Machine-Machine Comm. (M2M)
- Product-Machine Comm. (P2M)
- Small / Big Data and Cloud
- Predictive & Smart Decisions
- Cyber Security & Cyber Physical

- Control Technology
- SCADA and HMI
- Industrial Robotics
- Machine and Vision Systems
- Engineering Metrology
- Product Location & Identification

- Communication & Networks
- Programming Languages
- CAD/ CAM
- Databases
- Data Collection
- ERP Integration
The Good

Clear vision

Wide government and industry support

Technology and IT orchestration

Internet of Services major opportunity for manufacturers

Government, Academic, Industry Funding

Opportunities for the agile to exploit new business models
The Bad

Rapid technology, IT and social changes make it hard to plan and predict.

Few organisations have developed a strategy for coping with the rapid changes.

Hype has fogged the definition of Smart leading to misinformation/misunderstanding.
The Bad

Danger that organisations who fail to adapt will not survive/fail

Danger that organisations who do adapt make poor decisions and do not survive/fail

Governments fail to create a successful regulatory environment
The Ugly

Lack of standards and/or standard proliferation massively increases costs

Security Issues ignored

System robustness ignored

People, skills, redeployment, retraining and employability concerns

Artificial Intelligence replaces people leading to social unrest

Level of investment required
New Business Models: service delivery

- Automation & IT
- Lean & Six Sigma
- MES / MOM
- PLM
- Quality Management
- Supply Chain Management (ERP)
- Smart Manufacturing / Industry 4.0
- Application Packaging & Virtualization

**Business Drivers**

- **ATS Training & Workshops**
- **ATS Consulting**
- **ATS Software Developments**
- **ATS Products & Partners**
- **ATS Projects**
- **ATS Support Services**

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**Productivity increase by 3 - 5%**

- **10 – 40% reduction of Maintenance costs**
- **20 – 50% reduction in time to market**
- **30 – 50% reduction of total machine downtime**
- **45 – 55% increase of productivity in technical professions through automation of knowledge work**

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**Forecasting accuracy increased to 85%**

- **Cost for quality reduced by 10 – 20%**
- **Cost for inventory holding decreased by 20 – 50%**

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1. Client experience
2. McKinsey analysis
3. Maintenance, repair, and operations
5. McKinsey analysis
7. Cf. McKinsey Global Institute: Big data: The next frontier for innovation, competition, and productivity

**SOURCE:** McKinsey
Barriers to Digitalization

- **People**
  - Unclear economic benefits, excessive investments
  - Insufficient qualifications of employees. Big Cultural Change
  - Lack of standards, regulations and forms of certification
  - Digitalization required both at OT and IT levels
  - Low maturity level of required technologies
  - Unresolved questions concerning data security
  - Need to complete the 3rd revolution before starting the 4th one

- **Money**

- **Security**

- **Standard**
Good Bad Ugly
Industry 4.0

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