
delivering the factory of tomorrow

Connecting data, machines, people, and processes at
Sample Company



Your business technologists. Powering progress



Atos

Interconnected devices drive a manufacturing revolution

In the history of manufacturing we have reached an inflexion point that is as momentous as the introduction of mass production.

In the early 20th century the electric motor paved the way for manufacturers to drive down costs and provide previously unaffordable products to the population. Today, the Internet of Things (IoT) is driving an equally significant revolution.

The Internet of Things

The IoT connects data, machines, people, and processes in a seamless network. Transceivers are already finding their way into smart devices enabling new forms of communication, between humans, between humans and machines, and between the machines themselves.

What does this mean for manufacturers? Greater adaptability and agility to meet customer's demands, shorter development times, more product models and variants, greater product personalization, increased efficiency and, ultimately, the opportunity to drive revenues up.

The challenge for CEOs is understanding these developments and how they can be harnessed to drive their company forward and increase competitiveness.

This e-book explores the impact the IoT will have on manufacturing, discusses the Atos Smart Factory powered by the SAP HANA® platform, and gives practical examples of how Atos is using it to help companies transform.



50 billion

devices will be connected to the Internet of Things by 2020 according to estimates

Learn More

Find out about the Internet of Things
[Read the white paper >>](#)

Discover how IoT is driving new business trends and operational parameters

[View the thought leadership piece >>](#)

The Smart Factory promise

Converging information and operational technology for Sample Company.

The convergence of information technology and operational technology will enable cyber physical systems that will drive fundamental changes in manufacturing.

With these intelligent, interconnected systems manufacturers will be able to:



Deploy anywhere design and manufacture through the ability to resource flexibly and create factories that can make anything the organization needs



Accelerate product lifecycles and evolve products in real time by enabling more effective collaboration between departments and geographies



Gain end-to-end visibility across plants and disciplines, driving improved decision making and flexibility



Sense and respond to events more proactively by putting in place real-time intelligence and sensors at every level of the factory and production cycle



Achieve real-time planning and production mapping with embedded intelligence and the real-time analysis of massive amounts of production data



Increase efficiency with automation and machine-to-machine communications

Smart Factory Building Blocks

Connected Applications



- ▶ Process/IT alignment, vertical and horizontal integration
- ▶ Digital representation of the real world in real time

Connected Machines and Products



- ▶ Cyber physical systems
- ▶ Remote access
- ▶ Predictive maintenance
- ▶ Smart services

Connected People



- ▶ Augmented operator
- ▶ Knowledge worker
- ▶ Cross functional communities
- ▶ Centers of operational excellence

Connected Enterprise



- ▶ Global products, local variants
- ▶ Make to individual
- ▶ Real-time visibility
- ▶ From capacity to capability



Learn More

Discover how Atos helps deliver the next generation of manufacturing

Visit our web site >>

Bringing the Smart Factory to life

Combining Atos in-depth skills and knowledge with SAP applications.

Atos has the deep industry knowledge and SAP expertise to help Sample Company on its journey to the Smart Factory, starting with awareness and progressing through strategy definition, justification, implementation and benefits realization. Here are just a few examples of the projects we have undertaken on behalf of our clients:



Connected applications:

Improving regulatory compliance

At a medical device manufacturer we designed and implemented corporate Manufacturing Execution System (MES) solutions that enforce the stringent FDA requirements and regulations. The project was delivered in 16 weeks, with an initial prototype after eight weeks.



Connected machines: Simplifying custom machine integration and data collection

We designed and implemented corporate template MES solutions that enforce the stable and repeatable processes for an industrial machinery and components company. As a result, it now has a repeatable global template deployed across multiple geographies.

Thanks to cyber-physical systems the factory of the future will integrate production, supply chains, and individual customer preferences in real time.



Learn More

Discover how Atos helped a global truck manufacturer build a new, state-of-the-art production facility
[Read the case study >>](#)

Bringing the Smart Factory to life

Combining Atos in-depth skills and knowledge with SAP applications.

Connected enterprise: Optimizing the manufacturing location
Through continuous analysis of production data and a dynamic simulation model we gave a global chemicals company the tools to instantly decide what is the best plant/location to produce a specific product, taking into account the respective rate of yield, the location of the client, the local purchase price of raw materials and current weather conditions.

Connected applications: Optimizing scheduling of servicing
We helped a major energy technology manufacturer connect its worldwide systems running a wide range of different protocols. As a result, the company was able to implement intelligent system diagnostics based on self-learning techniques, allowing condition-based maintenance that has reduced system downtime significantly for its customers.

Smart Factory: Improving data accuracy and confidence
In the high tech industry we replaced one customer's long established processes with more efficient paperless ones. As a result, the company not only has real-time data that improves decision making, but the improvement in data accuracy has given managers more confidence in the key performance indicators the solutions delivers.

22.5%

average annual improvement in total cost per unit by users of manufacturing execution systems (MES)

Source: LNS Research and MESA International



Atos has experts in the full range of SAP solutions for manufacturing

- ▶ SAP 3D Visual Enterprise
- ▶ SAP Environment, Health, and Safety Management
- ▶ SAP HANA® platform
- ▶ SAP Manufacturing Execution
- ▶ SAP Manufacturing Integration and Intelligence
- ▶ SAP Organizational Change Management
- ▶ SAP Portfolio and Project Management
- ▶ SAP Product Lifecycle Management
- ▶ SAP Quality Issue Management

Atos and SAP in manufacturing

Helping Sample Company on its transformational journey.

With an engineering and industrial heritage that goes back for more than a century Atos knows manufacturing.

We also have over 30 years of experience of SAP and 10,000 skilled business technologists, supporting over one million SAP end users.

Atos helps manufacturers maximize their benefits from SAP faster than would otherwise be possible, at much lower cost, by using packaged templates and components. And, by combining these with our accelerated implementation method, you gain all the benefits of a tailored solution at a competitive cost.

Our commitment to continuous innovation and improvement ensures that we always provide solutions optimized for your business, whether delivered on-site (as software placed within your environment) or on-demand (as Software-as-a-Service).

Plus, our global network of delivery centers enables us to support your business over the long term, regardless of scale or geography.



Next steps

Now that you have seen how the Smart Factory can help you connect data, machines, people, and processes at Sample Company why not spend some time talking to us about your particular situation?

With our in-depth SAP and manufacturing experience we can help you chart a course and reap the benefits of next generation manufacturing.

Simply use one of the methods below to get in touch and we'll arrange an introductory meeting.

Frenk Verburgt
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Telephone: +31622920339
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Keep in touch with us:

Watch our YouTube channel >>

Join our LinkedIn group >>

Visit our web site >>

Follow us on Twitter >>

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About Atos

Atos SE (Societas Europaea) is a leader in digital services with 2013 pro forma annual revenue of €10 billion and 86,000 employees in 66 countries. Serving a global client base, the Group provides Consulting & Systems Integration services, Managed Services & BPO, Cloud operations, Big Data & Security solutions, as well as transactional services through Worldline, the European leader in the payments and transactional services industry. With its deep technology expertise and industry knowledge, the Group works with clients across different business sectors: Defense, Health, Manufacturing, Media & Utilities, Public Sector, Retail, Telecommunications and Transportation.

Atos is focused on business technology that powers progress and helps organizations to create their firm of the future. The Group is the Worldwide Information Technology Partner for the Olympic & Paralympic Games and is listed on the Euronext Paris market. Atos operates under the brands Atos, Atos Consulting, Atos Worldgrid, Bull, Canopy, and Worldline.

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About SAP

As market leader in enterprise application software, SAP helps companies of all sizes and industries run better. From back office to boardroom, warehouse to storefront, desktop to mobile device – SAP empowers people and organizations to work together more efficiently and use business insight more effectively to stay ahead of the competition. SAP applications and services enable more than 253,500 customers to operate profitably, adapt continuously, and grow sustainably.

For more information, visit www.sap.com.

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