Industry 4.0

A BearingPoint Accelerator

The BearingPoint Smart Factory Model makes you experience Industry 4.0: machines communicate and share information about their status, the workpiece or occurring disorders (horizontal integration). With the connection to commercial planning systems, the convergence of the shop floor level with the corporate management level is demonstrated (vertical integration).
Market Drivers

Industry 4.0 & Digital Manufacturing

Global Trends (e.g. Progressive volatility of markets) and Technological Achievements (e.g. Intelligent machinery and products) determine Market Drivers for Industry 4.0 and digitization Solutions:

- Demand for the individualized product
- Need for high quality and short delivery time at a competitive price
- Lot size 1
- Flexibilization and optimization of production processes
- Shortened product life cycles
- Increasing demand for service
- Innovative business models based on „data refining“ and enhanced possibilities for service
- New opportunities of connectivity through Internet of Things/cloud as well as standardization of interfaces
- Capability to perform remote service/interaction and predictive analytics

Significant megatrend:
Convergence of production IT/data with commercial/management IT
Our Approach
Industry 4.0 & Digital Manufacturing

- Smart Factory Model as a focal part of a comprehensive scenario to demonstrate main principles of Industry 4.0
- Clarification of the digital linkage of the entire supply chain from engineering to after sales
- Integration of the Internet of Things and the cloud
- Identification of (product-) cost saving potential and respective use-cases
- Cooperation with industrial partners, among them: SAP, FORCAM, CISCO and BOSCH SI
- Development of an Industry 4.0 Quick Check to evaluate the maturity/readiness of companies

Starting point for discussion with clients

BearingPoint as a management and IT-consulting firm has extensive know-how and experience in the field of commercial data, planning and management environment and can link these areas profitably with the production environment
Client Benefits
Industry 4.0 & Digital Manufacturing

**Increase of productivity and efficiency**
- Coupling of business data/IT with production data/IT > Reduction of interfaces and gain of quickness
- Total vertical integration of processes
- Managing complexity and increasing robustness and raise overall efficiency
- Optimization of production processes across locations
- Increase of customer loyalty and development of new areas of business through innovative service models

**Increase in flexibility**
- Short-term flexibility through smart production facilities
- Change requests can be taken into account during production
- Automatization even for smallest series or lots
- Consideration of individual customer specs throughout the entire product life cycle
- Ability to react to errors in a decentralized and flexible manner
By expanding the existing service offering with permanent surveillance, our customer achieved significant improvements through technological aspects from the Industry 4.0 context.
References

Shop Floor Integration with Manufacturing Execution System (MES) at a leading producer of specialty cheeses

- Standardized MES environment across all plants reduces total cost of ownership and facilitates comparability
- Optimized user interfaces to reduce handling errors and enhance productivity
- MES as integration platform for automation systems provides standardized interfaces for connection of various production resources
- Automatic recording of downtimes, output quantities
- Application of Industry-specific SAP components for planning, procurement, warehousing and production complemented by Wonderware MES
About BearingPoint

BearingPoint consultants understand that the world of business changes constantly and that the resulting complexities demand intelligent and adaptive solutions. Our clients, whether in commercial or financial industries or in government, experience real results when they work with us. We combine industry, operational and technology skills with relevant proprietary and other assets in order to tailor solutions for each client’s individual challenges. This adaptive approach is at the heart of our culture and has led to long-standing relationships with many of the world’s leading companies and organizations. Our global consulting network of 9,700 people serves clients in more than 70 countries and engages with them for measurable results and long-lasting success.

For more information, please visit: www.bearingpoint.com

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