Manufacturing of Industrial Equipment in the New Global Economy

Challenged, Transformed and Poised for Growth

**Challenges Facing the Industry**
The Industrial Equipment industry is at a significant point in its history as it battles challenges exacerbated by the global economic slowdown. Like any other sector, this industry faces increased competition in domestic and overseas markets, volatile fuel prices, and stricter environmental regulations. But certain challenges are particularly pronounced.

**Balancing Supply and Demand:**
In their home countries, Industrial Equipment Manufacturers (IEMs) are striving to succeed in highly competitive and slow-growing markets. Demand in North America and Europe has slowed as customers reduce or delay capital spending and slash production.

**Increasing Globalization, Growth in Emerging Markets:** Rapid globalization is generating new opportunities and new competition in emerging regions, as some former “low-cost” economies transform into attractive markets in which to sell goods. This has led to increasingly complex supply chains and growing competition from domestic manufacturers in these markets.

**Volatile Energy Costs, Stricter Regulations:**
Highly volatile energy and commodity costs, together with government and public pressure have led IEMs to focus on minimizing their impact on the environment and reducing energy bills. In many cases, this has resulted in operational challenges as they look for greener ways to source, manufacture and ship their products.
Key Levers to Manage the Challenges

Capgemini is helping Industrial Equipment Manufacturers use six key levers to address these challenges.

1. **Product and Service Innovation:**
   This lever focuses on bundling the product offering with value-added services and leveraging technology partner relationships. Essential to managing this lever is establishing close collaboration with customers and suppliers earlier in the product lifecycle and across the value chain.

   Capgemini’s solutions and methodologies are designed to help companies create and manage products and services throughout their lifecycle and include Innovation and Lifecycle Management, our Accelerated Solutions Environment\(^1\) and RAIN\(^2\) centers.

   In addition, Capgemini’s TechnoVision framework provides a comprehensive perspective on the evolution of technologies and addresses the impact of technology on the business. The TechnoVision mapping process can be particularly valuable in addressing the challenges of product and service innovation.

2. **Cost Reduction:**
   Key elements of this lever include shifting some portion of manufacturing offshore, outsourcing non-core business processes, and restructuring initiatives such as consolidation, standardization and harmonization of processes and systems.

   Capgemini’s solutions include Outsourcing/Offshoring Strategy, Business Transformation, Shared Services/Business Process Outsourcing (BPO) and Cost-Reduction Planning. In addition, our “One Manufacturer” approach harmonizes complex system architecture to improve productivity, reduce costs and create headroom for innovation.

3. **Services Focus and Sales Growth:**
   With slow revenue growth and tight margins, some IEMs are beginning to shift their focus towards services, while at the same time taking advantage of emerging markets and multi-channel sales and distribution strategies.

   Solutions to help IEMs focus on this lever include Service Strategy and Transformation, Multi-Channel Optimization, Sales/Market Roadmap Development, Campaign and Loyalty Management, Sales Effectiveness, and Price and Revenue Optimization (PRO). In addition, Capgemini’s Service Management “Insight Days”

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1. Capgemini’s Accelerated Solutions Environment (ASE) combines world-class facilitation teams, patented decision-making processes, global knowledge bases and innovative workspaces to enable organizations to make better and faster business decisions.

2. Short for RApid INnovation, RAIN is a physical and virtual environment dedicated to transforming organizations into Service-Oriented Enterprises (SOEs). The RAIN centers are operated by Capgemini and Intel.
can help manufacturers develop a service management transformation strategy and roadmap, leveraging a toolkit of best practices, case study examples and benchmarks.

4. Operational Excellence: To achieve operational excellence, IEMs must focus on issues such as supply chain visibility and optimization, and demand and inventory planning/integrated business planning, while also rationalizing their supplier base.

Capgemini can help companies improve operations through Inventory and Supply Chain Optimization and Transformation, Sales and Operations Planning (S&OP), Operational Excellence and ERP/IT Solution Deployment.

5. Customer Centricity: As the industrial landscape becomes more global, partnerships grow in importance. Critical success factors include an improved understanding of the customer’s business and closer collaboration. Long-term customer relationships will be achieved via approaches such as integrated aftersales service.

Solutions designed to improve customer centricity include Customer Relationship Management (CRM), Call-Center Operations, Service Parts Management and Repair, and Business Information Management (BIM).

6. Green Initiatives: To address environmental, ecological and ethical concerns, IEMs need to focus on designing and developing sustainable products, as well as implementing a green IT strategy.

Capgemini is working with clients in the development of green data centers, sustainable desktop strategies, and developing and deploying sustainable products.

Solutions in Action: Client Success Stories
Capgemini works with many of the world’s leading IEMs, including 90% of the largest Original Equipment Manufacturers (OEMs) and suppliers, and 70% of the biggest diversified manufacturers worldwide. Following are examples of our collaboration with IEM clients.

An Outsourcing Challenge for a Global Corporation
The company is a world leader in automation and electricity management. Having witnessed strong organic growth, the Group faced challenges of harmonizing processes across its heterogeneous legacy organizations and optimizing global IT costs.

Part of the solution lay in outsourcing IT activities in some 31 European countries. At its core, the solution entailed management of all applications and infrastructure and the transfer of over 1,000 professionals to an external partner. Management sought a partner who could bring real value by helping the Group transform its IT infrastructure, consolidate a portfolio of data centers and standardize operating systems through a company-wide implementation of SAP.

The team successfully transferred almost 600 people across 26 countries by the first anniversary (five countries were not subject to transfer of people). Overall results included:

- Delivery of new functionality to help grow the business.
- Management of people, and the ensuing scale of change, was seen as critical to success at meeting objectives.

Best-in-Class Networked Value Circle Model for Industrial Equipment
Capgemini is helping manufacturing clients move toward best-in-class operations with a new model we call the Global Networked Value Circle. This model helps Industrial Equipment Manufacturers focus on three strategic capabilities: identifying global competencies by realizing core competencies and connecting to other value chains; identifying relationships that will be either long-term assets or strategic assets to gain competitive advantage in a value chain; and using their management skills and technology to form, manage and exploit relationships whether they are two-company partnerships or wide, open, network relationships.

Source: Capgemini
Transforming the Business and IT in Gas Turbine Manufacturing

Turbine blades—supported by complex global supply chains—are the most success-critical components in gas turbine manufacturing in the company. The high intrinsic value and long production time put the supply chain management focus on continually reducing lead times and inventories. In addition to an optimally configured global supplier network, a precisely planned and operated supply chain offering end-to-end process transparency in real-time is a prerequisite for effective performance.

With this in mind, the company, supported by Capgemini, designed and implemented a global business transformation program. Joint teams developed a target process model comprising six end-to-end main processes with clearly defined sub-processes and activities.

The optimized and harmonized business processes and SAP support led to precise supply chain planning and processing, with end-to-end, real-time transparency. Increased process accuracy and speed optimize supply chain performance.

Annual IT Costs Reduced by 60%

An international manufacturing technology firm’s division needed effective support for its business through the complete lifecycle, from purchasing, stock control, sales, distribution and production to internal and external accounting. For a number of years, the division has applied Capgemini’s standard configuration for the manufacturing industry, which is based on SAP.

Building on this configuration, the new solution gave the client complete business support and enabled the project to be run efficiently and cost effectively. The new system provides total, at-a-glance control, making the checking of material and purchase needs easier and more efficient. Significantly, total annual IT costs have been reduced by at least 60%.

CHROME: Accelerating Solutions at Optimum Costs

CHROME, Capgemini’s Center for Manufacturing Excellence, is a virtual global community with a dedicated solution lab located in Mumbai, India. The center captures best-practice benchmarks, solutions and enablers that accelerate process execution for our clients. Capgemini’s industry-specific solutions are supported by a repository of tools and accelerators that help systems go live quickly, at lower costs and with less risk. These include:

- End-to-end preconfigured SAP templates for Automotive manufacturing, including hundreds of reusable components; as well as Maintenance, Repair and Overhaul (MRO) and Discrete Manufacturing.
- Preconfigured solution kits for PLM for Aerospace, Air Traffic Management for Aerospace, Testing Services, Application Lifecycle Services.
- A ready environment to build, test and demonstrate the proofs of concept for specific solutions.
- SAP Deliver 2.0, Capgemini’s world-class SAP delivery methodology.
- A Manufacturing Business Process Template, a repository of Application Maintenance tickets with ready solutions with reusable code blocks and test scripts, and a global manufacturing subject matter expert locator – providing quick access to various skills.

In addition, Capgemini’s Innovation Showcase and Center of Excellence in China hosts specific templates for Industrial Equipment manufacturing.

About Capgemini and the Collaborative Business Experience

Capgemini, one of the world’s foremost providers of consulting, technology and outsourcing services, enables its clients to transform and perform through technologies. Capgemini provides its clients with insights and capabilities that boost their freedom to achieve superior results through a unique way of working, the Collaborative Business Experience™. The Group relies on its global delivery model called Rightshore®, which aims to get the right balance of the best talent from multiple locations, working as one team to create and deliver the optimum solution for clients. Present in more than 30 countries, Capgemini reported 2009 global revenues of EUR 8.4 billion and employs 90,000 people worldwide.

More information is available at www.capgemini.com

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