

IBM PLM Supply Chain Collaboration

Supporting globally distributed product design and development



Value chain globalization

Today, 60 to 80 percent of a product's design and development value may be delivered by partners or suppliers. As the value chain continues to globalize, new partners are emerging in China, India, South America and Eastern Europe. Meanwhile, existing partners and suppliers are reinventing themselves to deliver new capabilities.

This increasingly complex supplier ecosystem gives rise to the design and development of more innovative products. The results are process, cultural and technical difficulties often unanticipated by program managers.

The challenge now is to orchestrate the complex global value chain into an integrated collaborative virtual enterprise.

The collaboration challenge

The supply chain is being stretched to innovate in two directions. In one direction, enterprises are aggressively developing their business models to harness the benefits of partnerships and outsourcing at a global level. In parallel, design and development organizations are grappling with the challenge of applying new processes and technology to support the new methods of working.



Two-way pressure on the supply chain

Such developments generate a host of questions regarding how enterprises should work with their partners and suppliers in the new collaborative world. For example, exactly how much collaboration is required? What level of process commonality is needed? Is common technology required across all partners? What enabling IT infrastructure is required? Furthermore, what new skills are needed to operate effectively in a collaborative enterprise?

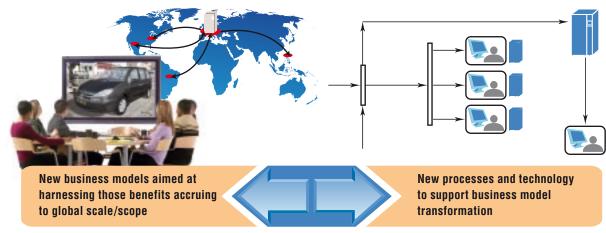
The integration of product lifecycle management

Original Equipment Manufacturers (OEMs) have traditionally recognized that an integrated product lifecycle management (PLM) capability throughout the product lifecycle is vital to sustained competitive advantage. With the migration of design and development activities into the supply chain, a rethink of this landscape is required as the existing PLM infrastructure may in fact only support 20 percent of the value creation.

In many supply chains, business models have already evolved ahead of the processes and technologies required to support them. These supply chains are now struggling with processes and technologies that were designed for legacy business models. As a result, these chains are experiencing unanticipated delays and costs that inhibit innovation, and reduce competitiveness.

Both OEMs and mid-sized suppliers need to understand the new dynamics of design and development, and deploy a flexible PLM framework to support business priorities.

Two-way pressure on the supply chain



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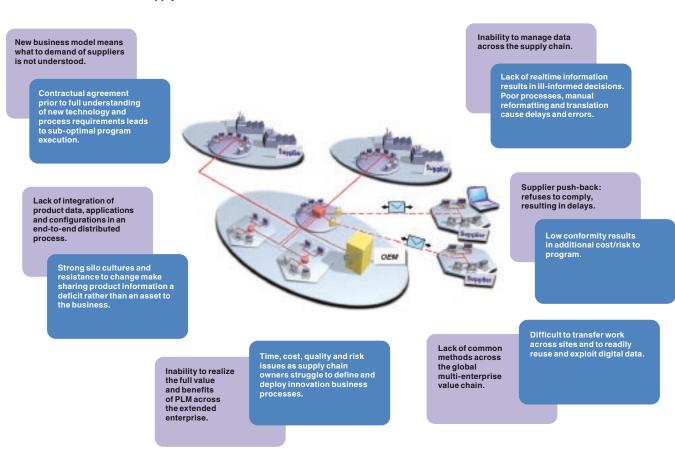
To address the needs of design and development customers with complex and evolving supply chains, IBM has created a flexible portfolio of solutions.

IBM PLM Supply Chain Collaboration delivers the process enablement and technology required to support globally distributed product design and development.

IBM PLM Supply Chain Collaboration supports:

- Improved risk management by identifying, prioritizing and targeting critical supply chain collaboration processes and participants
- Reduced time to market through the elimination of duplicated tasks, redundant checking and reduction of rework
- **Liberation of scarce resources** through the automation of supply chain processes, collaboration and information exchange
- More effective global deployment via the enablement of partners and suppliers in any geography
- Process synchronization to support the establishment of common processes and tools across key areas of the supply chain, and the ability to profile suppliers, with solutions aligned to their role.

Innovation inhibitors in the supply chain



A proven deployment framework

The IBM PLM Supply Chain Collaboration solution is based on a proven consulting framework that unites supply chain owners, partners and suppliers to synthesize and design a cohesive supply chain strategy. This enables the development of solution components and an extended enterprise deployment aligned to the individual needs of the project, business unit or enterprise.

The deployment process is structured around five customizable phases:

1. Executive workshops

- Helps demonstrate the business and financial potential of IBM PLM Supply Chain Collaboration solutions
- Ensures a clear executive-level understanding of the value of the solution.

IBM PLM Supply Chain Collaboration deployment phases



2. Capability and needs assessment

- Analyzes company data, collected via executive interviews and workshops, to assess an enterprise's supply chain needs
- Identifies critical supply chain collaboration processes and participants via supplier PLM capability reviews
- Delivers a customized capability report, including guidance on how to proceed and potential implementation benefits
- Helps establish a compelling business case for IBM PLM Supply Chain Collaboration.

3. Strategic roadmap

- Generates a supply chain PLM strategy based on the outcome of the capability and needs assessment
- Provides a proven improvement path to help an enterprise quickly and easily maximize the benefits of IBM PLM Supply Chain Collaboration, with minimized cost and risk.

4. Technology roadmap

- Takes the strategic roadmap to an implementation level
- Creates supply chain owner and supplier PLM roadmaps to deliver a detailed solution implementation plan addressing process, technology and organizational requirements.

5. Training and implementation

- Aims to facilitate a full implementation of the IBM PLM Supply Chain Collaboration solution that provides a cohesive supply chain in practice
- Uses regular assessments to monitor implementation progress and facilitate adjustments
- Enables supplier profiling to align solutions to their role to support process synchronization for efficiency gains.

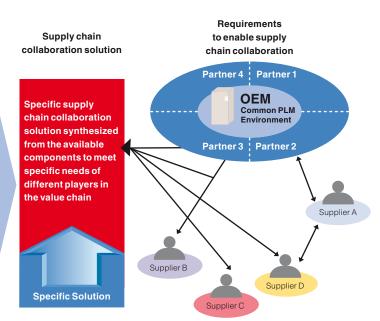
A tailored solution

The IBM PLM Supply Chain Collaboration solution draws on an extended portfolio of IBM, and IBM Partner, capabilities. The result is a customized enterprise solution aligned to the specific needs of each member of the value chain. The extended IBM portfolio includes:

- IBM Business Transformation Consulting
- Pre-configured data management environments developed with industrial partners
- Supply chain integrations, interactions and interfaces, pre-configured and tested, and based on IBM's middleware and service oriented architecture (SOA)
- IBM and IBM Business Partner PLM application software, configured and packaged for specific program suppliers
- IBM PLM Services to help enable international supply chain partners.

Developing a customized IBM PLM Supply Chain Collaboration solution

Components Supplier capability assessments Supplier roadmaps OEM/Supplier Process Harmonisation Business Transformation Consulting Organisation Change Strategy Value Chain Strategy Consulting PLM Application Software OEM sponsored CAD and PDM software Automotive and Aerospace packaged offerings Visualization PLM Portals Data exchange and translation CAD and PDM Implementation Global Supply Chain Training WebSphere Integration Services Workflows, Process Templates, Customized databases Supply chain methods and practices Middleware IBM Information Management, Lotus, Rational, Tivoli and WebSphere portfolio Hardware IBM Systems, Servers and Storage



Real business benefits...

IBM PLM Supply Chain Collaboration offers advantages to both the OEM or supply chain owner, and the supplier.

The supplier can take advantage of:

- Pre-defined PLM and industry-specific implementation to increase implementation speed and time-to-productivity by up to 30 percent
- Reduced engineering costs by 10 to 20 percent
- Enhanced process efficiency by 30 to 35 percent throughout the development lifecycle
- Increased overall profitability by 15 to 20 percent
- Lower program risk due to:
 - Enhanced process control
 - Improved data management
 - Common understanding of maturity of product information.

OEM's understand these increased efficiencies in the supply chain contribute directly to their program success.

The OEM additionally benefits from:

- Reduced program cost and risk by synchronizing key processes
- Improved collaboration and integration across the supply chain
- Confidence that supplier data and development processes are under control
- Increased opportunities for process innovation.

...from a partner you can trust: IBM

Both internally, and throughout your value chain, IBM PLM solutions can help enable innovation by bringing people and processes together, and providing the required resources.

IBM does not just install technology – we serve as your trusted advisor to provide the best-of-breed PLM applications, IT environment, integration capabilities and business strategies to help you meet your enterprise's supply chain collaboration objectives.





For more information contact your IBM Representative, IBM Business Partner, or visit the IBM PLM Web site at:

ibm.com/solutions/plm

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