

PLM Supply Chain Collaboration from IBM



An integrated collaborative virtual enterprise

Is a major portion of your product design and development delivered by partners or suppliers? Do you have a global value chain with partners emerging from across the globe? Effective integration of a supplier base creates the opportunity for greater innovation in product design and development, but you may face process, cultural and technical difficulties that may be unanticipated by your program managers. We can help you integrate a complex global value chain.



A proven framework for supply chain collaboration

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, they are experiencing unanticipated delays and costs that inhibit innovation and reduce competitiveness.

We can help both OEMs and mid-sized suppliers introduce new dynamics in design and development, and deploy a flexible PLM framework to support business priorities. PLM supply chain collaboration from IBM 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.

Produce and distribute more innovative products

PLM supply chain collaboration from IBM supports:

- Improved risk management by identifying, prioritizing and targeting critical supply chain collaboration processes and participants.
- Reduced time to market through the elimination of redundant tasks and rework.
- Liberation of scarce resources through the automation of supply chain processes, collaboration and information exchange.

- Global deployment.
- 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.

Leverage global manufacturing skills

We can help you streamline business processes with tools to enforce schedules, optimize collaboration, avoid errors, improve performance and automate processes. PLM supply chain collaboration from IBM is designed to reduce cycle times and increase your company's product development capabilities by promoting a collaborative environment, from concept to delivery, across global suppliers and partners.

Efficiency—from design to distribution

Supply chains are a vital aspect of business operations. We should know. Not only have we worked with clients in many industries, but we use our supply chain to enable our own continuing business transformation.

By consolidating factory operations, taking advantage of global optimization for select manufacturing and simplifying product designs, we have overhauled our supply chain and achieved savings of US\$5.6B in one year alone.

Work smarter not harder with better communication

PLM supply chain collaboration from IBM can help you:

- Synchronize all design and manufacturing partners through the creation of a single, Web-based product record that is accessible to supply chain partners regardless of location.
- Integrate supplier expertise earlier in the product development process to help improve product quality, lower costs, accelerate time to market and speed time to volume.
- Exchange data with partners electronically, reducing non-value-add activities, such as manual data input and editing.
- Reduce printing and shipping costs for communication to remote facilities, while reducing scrap and rework costs.
- Enhance engineering productivity by increasing design re-use.

- Model and manage product costs throughout a complex and globally distributed supply chain.
- Manage historical supplier cost and performance data and make sourcing decisions based upon proven ability to deliver value.
- Define and implement advanced quality management programs to help ensure consistency of product design and manufacturing processes across the supply chain.

Magellan flies with collaborative engineering

Aerospace supplier Magellan Aerospace in the UK was looking for a single PLM solution that could integrate with CATIA V5, configure all data to manufacture, incorporate Microsoft® Project and other planning software, as well as reconcile their push/pull activities.

IBM worked with Magellan and other aerospace organizations to develop ENOVIA SmarTeam templates to form a preconfigured PLM environment. IBM's supply chain collaboration solution has been a huge success for Magellan. Benefits to date include:

- 10 to 20 percent reduction in engineering costs, with more to come.
- 15 to 20 percent increase in profitability across the business.
- 30 to 40 percent time reduction between concept design and component delivery.

Both OEMs and suppliers benefit financially

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- PLM supply chain collaboration from IBM offers advantages to both the OEM or supply chain owner, and the supplier. Through our successful implementations, suppliers have taken advantage of: Predefined PLM and industry-specific implementation to help 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.

OEMs understand these increased efficiencies in the supply chain contribute directly to their program success. The OEM can additionally benefit 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.

Develop and distribute products more efficiently

PLM supply chain collaboration from IBM enables integration of PLM data into a composite application portal for real-time exchange of information. Our solution provides asynchronous, activity-centric collaboration utilizing a role-specific portal. Users gain integrated access to information from multiple sources, viewable from a single interface.

Reduce complexity and speed implementation

Our integrated set of services, hardware and software can enable you to implement your solution faster without having to coordinate with multiple vendors. When you work with IBM you can:

- Help protect your existing investments because we support open standards.
- Incorporate leading IT infrastructure and automation technologies.
- Accommodate future growth and handle varying levels of demand with a scalable solution.
- Take advantage of our ability to develop custom code, user procedures, measurements, reports, training and administrative tools for organizations.
- Access flexible financing options to help minimize upfront costs and expedite your return on investment.

Solution conception to delivery

We provide PLM business consulting, application software, middleware and services. PLM supply chain collaboration from IBM may include:

- A consultative engagement focusing on profiling and prioritizing supply chain requirements and solution synthesis.
 - Identify key supply chain inefficiencies and improvement opportunities.
 - Profile and appropriate process, tool and method harmony.
 - Track project milestones.

- Bundles of preconfigured CATIA and ENOVIA products that facilitate co-development of work package exchanges for change management processes.
- ENOVIA MatrixOne Supplier Relationship Management products to help extend the product development process to the supply chain. From the conception of the new product, right through to delivery, ENOVIA MatrixOne solves the specific needs of role-based knowledge workers throughout the organization by helping you:
 - Transform the value chain into a virtual enterprise.
 - Implement standards-based solutions built to support global, enterprise-wide deployments.
 - Manage globally dispersed programs, project teams and connected activities.
 - Optimize industry best practices and process excellence.

Dassault Aviation sees major productivity gains

A major player in the global aviation industry with more than US\$3.9B in sales, Dassault Aviation had to transform the ways in which it designed, developed and delivered a next-generation aircraft. The conventional method of building components serially, physically testing them and then moving on to the next set of components was too slow and expensive.

To accomplish its goals, Dassault Aviation turned to IBM and Dassault Systèmes. Working together with Dassault Aviation, this extended team produced and delivered a PLM platform that integrates a collaborative workspace with core engineering systems. This approach allows Dassault Aviation to collaborate with its partners in real time, minimizing design/development errors and decreasing costs associated with physical component design and business travel. Major productivity gains are enabling Dassault Aviation to decrease the time-to-market plan by approximately 30 percent.

IBM provided the hardware and middleware (IBM WebSphere® software and IBM DB2® database software) for the technology infrastructure. Capable of managing the lifecycle of a complex product such as a business jet, the PLM platform was developed in conjunction with Dassault Systèmes and Dassault Aviation. It includes Dassault Systèmes products: CATIA and ENOVIA VPM for collaborative product development.

Build on your investments to control expense

PLM supply chain collaboration from IBM can help you control IT expenses by:

- Preserving your legacy IT investments by integrating dissimilar data, applications and platforms.
- Building on your current investment using scalable and flexible standards-based products.
- Managing development costs by using industry-standard integrated platforms.
- Reducing maintenance expenses up to 20 percent by using IBM self-managing, self-diagnosing hardware.

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