



Product Lifecycle Management Integration and Collaboration Solution from IBM



Accelerate business agility and market responsiveness

Our solution enables tighter integration and collaboration in the automotive design process—within your organization and beyond—so you can develop and deploy new and more innovative vehicles and parts in less time. It can also help you:

- **Reduce time to market and produce higher quality products with earlier availability of design and change information to downstream users.**
- **Gain a more cost-effective product design process due to engineers having access to key enterprise resource planning information such as price, part availability and inventory levels.**
- **Speed up manufacturing planning steps that are affected by engineering data and processes.**
- **Reduce the cost of late cycle changes resulting from data entry errors.**

• Increase parts reuse and decrease the cost of managing a large parts inventory.

• Increase productivity and help lower training costs by reducing the number of applications employees must learn to use.

Win the race for innovative product development

The faster you can get the right automobile to market, the greater your profit potential. And if your company can't respond quickly to changing customer demands, market conditions, competitive landscapes, and mergers and acquisitions, your very survival may be in question. Whether you manufacture passenger vehicles, trucks, or automotive systems or parts, the PLM integration and collaboration solution from IBM can help you gain a single view of product and project information on which to base business decisions.

Power up decision-making abilities

Stimulate innovation to drive product design and meet the needs of your customers by putting the best ideas and latest information at the fingertips of your designers, engineers and project managers. We can help you achieve the flexibility and integration needed to manage your product-related intellectual capital—from initial conception to retirement. With the PLM integration and collaboration solution from IBM, you can manage activities and share confidential data within your organization—and with partners and suppliers—through instant messaging, e-mail, Web conferencing and more.

By streamlining daily activities and sharing common business processes with everyone involved in the design process, you can:

- Increase productivity and speed product development
- Rapidly evaluate the financial viability of new vehicle models or aftermarket parts in a dynamic business environment
- Manage increasing product and process complexity
- Manufacture the number of new models needed to grow market share
- Remain profitable
- Leverage new technical innovations to create differentiation without an adverse impact on quality.

Capture every aspect of the automotive development lifecycle

Accelerated change. Rising cost of materials and labor. Environmental regulations. Pressure on margins. Innovative product development is the key to future survival in the automotive world. How do you share data with suppliers and designers? Integrate this information throughout your business? You need a single view of vehicle or automotive parts design and project information on which to base business decisions. The PLM integration and collaboration solution from IBM can help.

Why IBM? Check under our hood.

IBM has worked to accelerate innovation and help the automotive industry address some of its most pressing challenges worldwide. We have:

- More than 1,200 certified PLM consultants and a worldwide network of more than 2,500 automotive experts to help us deliver end-to-end, integrated solutions that solve problems unique to the automotive industry.
- Innovative thinking—IBM and the Original Equipment Suppliers Association (OESA) hosted the 2007 Automotive Supplier JAM, the first industry-wide virtual collaboration event to address the challenges facing the North American supplier industry.
- More than 25 years experience delivering PLM solutions to tackle tough client problems of integration.
- More than 25 years of active involvement in the Automotive Industry Action Group (AIAG), receiving its Outstanding Achievement Award

Design integration and collaboration on full throttle

Better business and data integration can connect systems, processes and people, helping the entire value chain work together more effectively. Engineering can communicate product changes to procurement and manufacturing quickly and easily. Procurement can provide engineering with the latest product costing information for smarter design decisions. Sourcing personnel can share current information with suppliers and partners.

Our PLM integration and collaboration solution can help:

- Enhance the collaborative design environment by providing a means for virtual real-time access to data and information.
- Provide consistency in the use of both product- and plant-related information by personnel in organizations throughout your business.
- Help reduce the time to bring new and better vehicles and parts to market at a lower cost while improving quality.

Depending on your unique needs we can incorporate collaborative online applications into your automotive infrastructure, such as:

- PLM 3D visualization—enabling engineers to view product simulations for issues such as fuel economy or aerodynamics online without the need for costly prototypes.
- Instant messaging—for faster communication among teams and across an extended global enterprise.
- Part search—providing one point of access to quickly locate parts from a central database.
- Calendar and scheduling—reducing administrative duties and facilitating time-saving options for daily tasks.
- Team rooms—an easy-to-access repository for sharing project information.
- Threaded discussions—reducing the necessity for filing and risk of lost data.
- People finder—enabling faster access to contact information when people are needed.

Automate business process workflows

A global first-tier auto supplier's exchange of car and part design information between OEMs and suppliers was made more complicated by the use of individual and proprietary data formats by each OEM. This meant the company had to tailor data-exchange methodologies for each client, leading to multiple implementations. This prevented process automation, forcing the use of manual processes, which led to higher costs and productivity loss. The company needed one central platform to enable quick and easy data exchange between their external customers and suppliers, and within their own internal systems.

The auto supplier selected IBM WebSphere® Process Server to provide advanced capabilities required to construct complex business process workflows, as well as to monitor their execution. As a result, the company was able to dramatically reduce exchange efforts, providing higher quality data to engineering significantly earlier in the process. The results? Lower costs and improved productivity, which means the company is better able to compete in a crowded industry.

From bumper to trunk—turn ideas into market-leading products

Implementing the PLM integration and collaboration solution from IBM can help your company:

- Improve business agility and market responsiveness by automating flexible business processes across your extended value chain.
- Produce product designs more cost-effectively due to engineers having easy access to key information, such as price, availability and lead times.
- Enjoy greater user productivity and successful brand or model launches resulting from state-of-the-art design management.
- Take higher quality vehicle and automotive parts to market faster as a result of earlier availability of design and change information to downstream users.

Configured to meet your PLM needs

Whether you manufacture cars and trucks or shock absorbers and brake systems, your installation of the PLM integration and collaboration solution from IBM may include:

- IBM Product Development Integration Framework—consists of a variety of automotive industry extensions built on SOA, which provide an open standards-based platform for integrating multiple applications.
- IBM WebSphere Application Server—is the foundation of the IBM WebSphere software platform, and a key building block for SOA; delivers a high-performance transaction engine that can help you build, run, integrate and manage dynamic applications.
- IBM WebSphere Message Broker for multiplatforms—distributes information and data generated by business events in near real time to people, applications and devices throughout your extended enterprise and beyond.
- IBM WebSphere Enterprise Service Bus—applies Web services connectivity and Java™ Message Service (JMS) messaging, improving flexibility through the adoption of service-oriented interfaces.
- IBM WebSphere Process Server—accelerates SOA through standards-based connectivity and process automation.

SOA extends the value of your investment

Whether you produce vehicles or the parts that make them run, the PLM integration and collaboration solution can stimulate innovation to drive product design. Our solution can help you:

- Provide a proven infrastructure and a wide array of integration capabilities, including integration with legacy applications.
- Enable the secure exchange of rich-media information between internal and external business associates, while lowering development and support costs.
- Support company infrastructure and security with the integration of application servers.
- Be readily configured and tailored to your unique needs, and include digital mockup and virtual modeling capabilities, which can help ensure flexibility and engineering efficiency.
- Support component-based applications and interoperability—with SOA, you simply plug in new business processes, applications, systems and devices, or combine them individually



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