



SAP for Automotive

SAP FOR AUTOMOTIVE

Innovate, Collaborate, and Win

THE BEST-RUN BUSINESSES RUN SAP™



CONTENTS

Innovate, Collaborate, and Win	3
A More Comprehensive Approach	4
Reduced TCO and Increased Flexibility Through an Open Architecture	6
What SAP for Automotive Means for Your Business	6
Focus on Industry Segments	8



INNOVATE, COLLABORATE, AND WIN

In the automotive industry today, there is no shortage of challenges. Executives find themselves being pulled in many directions – and struggling to do more with less.

Stable or declining volumes in mature markets and increased competition from emerging economies are putting pressure on prices and margins, driving shorter product-development cycles, and making asset utilization a critical issue. Meanwhile, the cost of everything from raw materials to warranties must be strictly controlled. And customers, of course, have ever-increasing expectations for quality, speed, and flexibility.

At the same time, automotive companies face the growing complexity of managing an ecosystem of partners and their own far-flung operations – which can include both mature markets and areas that hold the promise of new customers and lower labor costs, such as central and eastern Europe, China, and southeast Asia. The resulting complexity is multiplied by a growing number of regulations, such as the TREAD Act, the EU's international material data sheet, and RoHS/WEEE requirements for monitoring environmental factors.

In response to these challenges, leading automotive companies are pursuing innovative approaches and positioning themselves to thrive in a global industry. They are enabling cross-functional processes to take time and cost out of every aspect of their enterprise – from engineering and production to payables, receivables, and purchasing. They are focusing on sales and service operations to strengthen their ability to provide a differentiating, high-quality customer experience. And they are implementing a range of adaptive approaches – such as lean enterprise and Six Sigma – to ensure that customer requirements drive engineering, manufacturing, and logistics processes.

These innovations offer great potential to the industry. However, the challenge lies in approaching them systematically, enabling and supporting them in an integrated fashion. Too often, automotive companies are burdened with fragmented, disparate systems – and manual, paper-based processes – that create friction in external and internal value chains and lead to disconnects among automotive manufacturers (OEMs), automotive suppliers, and sales and service organizations. This disjointed approach makes it difficult to share information, develop an accurate view of demand, work closely with supply chain partners to understand and reach the customer, and, ultimately, turn innovative ideas into practical realities.



A MORE COMPREHENSIVE APPROACH

SAP helps companies meet their business challenges and capitalize on new opportunities with the SAP for Automotive solution portfolio designed specifically for the automotive industry. Drawing on more than 30 years of working with automotive organizations, SAP enables companies to manage and integrate critical business processes and collaborate with partners across the value network.

Today, more than 1,600 automotive companies worldwide rely on SAP® solutions. SAP for Automotive supports the entire range of industry processes, including supply chain planning, manufacturing, logistics, sales and marketing, and customer service. It provides OEMs with support for everything from research and development to planning, manufacturing, and vehicle end-of-life considerations. It gives suppliers the tools they need to handle product development, quoting, manufacturing, procurement, and logistics processes. And it enables sales and service organizations to manage processes such as vehicle configuration, service-parts logistics, and warranty claims – among many others.

SAP for Automotive is designed to help automotive companies of virtually any size. In addition to providing the tools and capabilities needed to support fundamental enterprise processes – such as finance, regulatory compliance, human capital management, and corporate services – SAP for Automotive solutions help companies perform the following activities:

- **Drive adaptive manufacturing and procurement**

SAP for Automotive supports multiple manufacturing strategies, including repetitive, lean, flow, assemble-to-

order, and forecast-driven processes.

Companies can plan, execute, analyze, and control manufacturing operations in sequenced-build and just-in-time production environments. It enables them to leverage lean manufacturing and Six Sigma to improve efficiency while reducing the complexity of synchronizing the supply of automotive components and subcomponents. And companies can draw on information about planning, accounting, human resources, materials, warehouse operations, plant maintenance, and quality to keep production in tune with overall business requirements and customer demands.

- **Perform model-option planning**

SAP for Automotive lets companies manage customized orders and closely align model mix with market demands. The portfolio offers fully integrated solutions for planning, pricing, configuration, order processing, availability checking, production, fulfillment, billing, and financial reporting, giving companies a consistent view of the product in sales orders, production plans, and profitability analyses.

- **Manage the complete vehicle order-to-delivery process**

Manufacturers, dealers, and importers can collaborate on the full range of activities associated with selling and delivering vehicles. SAP for Automotive gives importers a powerful channel-based tool for procuring, selling, distributing, and tracking vehicles and service parts, while enabling dealers to easily configure, search for, obtain, and track vehicles for their customers.

- **Manufacture and deliver components**

Suppliers in all tiers can use SAP for Automotive to ensure compliance with customer mandates for receipt of material releases; to synchronize production with demand; for data capture and error-proofing on the shop floor; for packaging, labeling, and shipping; and for generating advance-shipping notifications to maximize operational efficiency and effectiveness.

- **Handle warranty claims with efficiency and accuracy**

SAP solutions enable dealers, importers, OEMs, and suppliers to process warranty claims and automate the claims-payment process for increased efficiency. The software facilitates the processing of warranty claims across brands and handles multiple-warranty programs. Companies can use SAP software to examine and report on data from various sources and transform warranty information into additional product knowledge. They can analyze campaigns, components, dealerships, and vehicles to drive strategies based on an understanding of factors such as parts-failure and returned-parts patterns and participation levels for a given recall campaign.

- **Streamline the service-parts process**

SAP for Automotive lets companies manage today's complex service-parts operations with powerful planning, fulfillment, and logistics tools. They can perform time-phased demand and replenishment planning while handling procurement, warehousing, distribution, and workload scheduling. And it gives them visibility into dependent and independent demand, parts inventory, supply, and customer

and system fill levels. The service-parts management capability supports re-manufacturing, core management, and entitlement controls.

■ **Enhance dealership management**

The SAP Dealer Business Management solution – part of the SAP for Automotive portfolio – lets independent, group-owned, and OEM-owned dealers manage their entire business, even when working with multiple brands, franchises, and locations. Using the integrated set of solutions, vehicle retailers can manage everything from procurement of service parts and accessories to sales of new and used vehicle, as well as finance and marketing. SAP Dealer Business Management enables dealers to work seamlessly with their parent group or OEM to boost efficiency and meet customer needs.

■ **Collaborate across engineering and design**

SAP solutions provide tools for internal and external collaboration at every stage of engineering, including design and production start. The software supports collaborative product-development processes involving OEMs and suppliers, such as the Advanced Product Quality Planning (APQP) process and ISO/TS 16949, the globally accepted quality-management system that links customer satisfaction with the measurement and improvement of processes.

■ **Strengthen the management of programs and projects**

SAP solutions provide the tools companies need to plan, manage, and control programs and projects of any size; oversee project structures, timelines, costs, and resources; and optimize resource allocation across programs and projects.

■ **Manage relationships with customers and partners**

SAP for Automotive gives companies the sophisticated customer relationship management tools needed to manage sales and service interactions with all partners in their value network, including dealers, OEM customers, partners, and suppliers. A comprehensive set of marketing, sales, and service tools integrated with vehicle and product data ensures that knowledge-driven interactions improve customer satisfaction and increase collaboration.

■ **Deploy enterprise shared services**

SAP for Automotive enables companies with diverse, geographically distributed operations to adopt and deploy back-office processes through shared-services centers. As a result, companies can leverage enterprise best practices and achieve savings from reduced redundancy and the centralization of transactional information about suppliers and customers.

■ **Understand and control operations in greater depth**

Comprehensive tools for analytics, forecasting, and reporting help companies plan, budget, and optimize internal and external processes; improve sales planning and monitoring; and work with a complete picture of operations.

■ **Improve the management of enterprise assets**

Support for enterprise asset management covers the complete asset life cycle, including specification and design, development and procurement, opera-

tions, preventive and predictive maintenance, and disposal – helping companies reduce operating costs and minimize downtime.

■ **Ensure compliance with government regulations**

Comprehensive capabilities address the full range of reporting requirements, including the Sarbanes-Oxley Act; global trade and customs rules; and environment, health, and safety regulations. Companies can track detailed data about quality, materials, components, and products throughout the value chain.





REDUCED TCO AND INCREASED FLEXIBILITY THROUGH AN OPEN ARCHITECTURE

SAP for Automotive replaces fragmented point solutions, disparate technologies, and manual processes with an open, comprehensive, and modular set of solutions that reduces integration support and infrastructure costs.

SAP for Automotive is based on the SAP NetWeaver™ platform, the open integration platform that makes it easy to integrate SAP and non-SAP applications and streamlines connectivity across the enterprise and the supply chain – while leveraging a company's IT investment. Enterprise Services Architecture builds on the power of Web services to deliver on the promise of a service-oriented architecture that provides both flexibility and business efficiency without increasing costs. With Enterprise Services Architecture, compa-

nies have a cost-effective blueprint for composing innovative new applications by extending existing systems while positioning themselves for future process changes.

In the long run, the solutions help automotive companies keep up with changes in technology and the industry by giving them the flexibility to add functions and capabilities as needs evolve – quickly and easily. Today, for example, companies can look to the SAP NetWeaver platform to support enterprise portals, business intelligence, and technologies such as radio-frequency identification systems that can dramatically increase accuracy in the tracking of goods through shipping, receiving, and material handling.

WHAT SAP FOR AUTOMOTIVE MEANS FOR YOUR BUSINESS

SAP for Automotive helps companies integrate the full range of industry processes – internally and externally – and weave OEM, peer and lower-tier suppliers, and sales and service organizations into a collaborative business network that is focused on increasing efficiency and responsiveness to customers.

SAP for Automotive helps companies achieve solid business benefits in several areas. The integrated, open approach enables companies to perform the following activities:

- **Improve customer-quotation performance and shorten time to market** with cross-functional processes and communication; consistent, accurate data across the enterprise; and sophisticated capabilities for managing programs and projects
- **Reduce costs and increase efficiency** with automated processes, improved visibility into inventory, better asset utilization, and analytical tools that help companies pinpoint and address high-cost activities and production inefficiencies
- **Reach deeper and more effectively across the value chain** with increased visibility into cross-company processes and operations; better collaboration among employees, partners, and customers; and integration of the end-to-end value chain
- **Grow the business** with greater ability to anticipate and adapt to market needs, improved insight to identify new business opportunities, and enhanced flexibility to enter new markets quickly and profitably

- **Increase responsiveness** with better – and earlier – insight into demand, capacity, and inventory; and enhanced coordination within the value chain to adapt to changes in demand, customer requirements, and economic conditions
- **Improve customer service** with sophisticated service-parts management, tighter control over service operations, and a better understanding of customer needs
- **Strengthen the brand** by getting closer to customers, understanding customer needs with increased precision, and delivering an improved customer experience throughout the customer life cycle

To Find Out More . . .

With SAP for Automotive solutions, companies can integrate the entire enterprise and unify the complete value chain – from supplier to OEM, dealer, and customer. The result: more adaptive and agile business networks, a stronger focus on the customer, and the ability to compete and grow in a competitive industry.

To find out how SAP for Automotive can help your company, visit www.sap.com/automotive





FOCUS ON INDUSTRY SEGMENTS

In addition to support for core industry and enterprise processes, SAP for Automotive provides capabilities and tools that target processes for OEMs, suppliers, and sales and service organizations.

For OEMs, SAP for Automotive supports:

- **Optimized assembly plant scheduling** – Replenish line-side inventory, manage complex vehicle scheduling and sequencing activities, and cost-effectively optimize plant performance
- **Operational procurement and inbound logistics** – Collaborate with suppliers and third parties, schedule and manage just-in-time deliveries, and receive advance-shipment notifications
- **New-product development and introduction** – Define product strategy, handle sourcing, develop products, track engineering changes, and manage launch requirements
- **Strategic sourcing** – Strategically manage the global supply base with spend and commodity analyses; extend capabilities for quotations, bid processing, and contract negotiations; and improve quality assurance and readiness capabilities

For suppliers, SAP for Automotive supports:

- **Make-to-order and make-to-stock manufacturing** – Replenish line-side inventory, manage complex production planning and scheduling activities, manage outbound-parts processing and transportation, and optimize plant performance in a lean environment that supports a mix of production, service, and aftermarket demand streams
- **Sales order management** – Use electronic data interchange and Web-based cumulative-release processes to support customer requirements for order scheduling, execution, and receipt management
- **Operational procurement and inbound logistics** – Collaborate with customers, order parts from tier 2 through tier n suppliers based on just-in-time delivery requirements, send and process advance-shipment notifications, and manage invoicing

- **New-product development and introduction** – Enable key stakeholders – including OEMs and tier 1 through tier n suppliers – to collaborate with internal and external process owners throughout the product life cycle
- **Strategic sourcing** – Strategically manage the global supply base; handle strategic sourcing processes, such as spend analysis, bid processing, and contract negotiations; and improve quality assurance and readiness capabilities

For sales and service organizations, SAP for Automotive supports:

- **Order-to-delivery management** – Respond to customer requests for new and used vehicles with streamlined order management and vehicle search, locate, and reserve processes
- **Channel management** – Integrate dealer systems and employees, manage the sales distribution channel, and handle parts ordering
- **Warranty management** – Automate claims processing, validate claims against contracts, execute payments, and initiate service operations
- **Brand and customer management** – Take control of the information needed to manage sales campaigns, customer loyalty programs, and customer relationships
- **Service-parts management** – Ensure integrated dealer-to-supplier visibility into demand, parts inventory, and supply and delivery processes. Capabilities also support supply chain collaboration, remanufacturing, core management, procurement, warehousing, and logistics.
- **Dealership management** – Integrate every area of a dealer's business, including new and used vehicle sales, service management, procurement and sales of service parts and accessories, finance, and marketing