

SAP Customer Success Story Automotive



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Project Manager, Shanghai General Motors Company

AT A GLANCE

Summary

Shanghai General Motors Company Limited (Shanghai GM) cut inventory costs and improved manufacturing flexibility by enlisting the help of SAP® Custom Development to customize its SAP Advanced Planning & Optimization component, which is found in the mySAP™ Supply Chain Management (mySAP SCM) solution.

Industry

Automotive

Web Site

www.shanghaigm.com

Key Challenges

- Cut lead time for components
- Increase flexibility in production
- Improve inventory management and forecasting accuracy
- Implement lean manufacturing practices

Project Objective

Customize existing SCM software to help reduce stock volumes and long shipment times

Solutions and Services

SAP Custom Development, an SAP service

Why SAP Service

- Provided one-stop solution for all elements of consultancy, design, development, and implementation
- Helped minimize risk and protect existing investment
- Provided ongoing support and maintenance for customized solution

Implementation Highlight

Designed, developed, and implemented custom solution in 6 months

Key Benefits

- Reduced lead time for components from 60 days to 40 days
- Enabled accurate prediction of changeover time for components on production line
- Provided ability to make changes to production schedule on day of production
- Improved planning and forecasting, thanks to real-time visibility of stock levels
- Enabled company to provide accurate bills of materials with shipped vehicles

Existing Environment

mySAP SCM

Database

Oracle (8.1.7.4.0)

Operating System

HP-UX (database server)

SHANGHAI GENERAL MOTORS COMPANY

SAP® Custom Development Enables Shanghai General Motors to Ensure Lean Manufacturing Processes

Shanghai General Motors Company (Shanghai GM) made the right decision when it called on SAP® Custom Development to help it adapt its SAP Advanced Planning & Optimization (SAP APO) component, which is found in the supply chain management (SCM) solution from SAP. “SAP Custom Development enabled us to drive out waste, streamline a complex and lengthy production cycle, and ensure lean manufacturing practices both internally and across the supply chain,” says the project manager at Shanghai GM.

A Commitment to Lean Manufacturing

A 50-50 joint venture between General Motors and Shanghai Automotive Industry Corporation (SAIC), China’s largest passenger car manufacturer, Shanghai GM’s 24,000-square-meter plant is powered by world-class facilities and leading-edge technology.

The company has always been fully committed to implementing lean manufacturing methodologies – as evidenced by its decision to implement the mySAP™ SCM solution. Shanghai GM chose the SCM solution to help synchronize and automate the complex supply chain processes for its vehicles, engines, and transmissions. The solution’s SAP APO component provided comprehensive support for detailed planning, scheduling, and forecasting for the company, whose output grew by 81% in 2003. Shanghai GM now ranks among China’s top-three passenger car manufacturers, with a 9.8% market share.

Custom Solution Needed for Efficiency Improvements

Shanghai GM's complete knock-down (CKD) manufacturing process involves assembling vehicle components from parts that are imported from around the world. Lengthy shipping times meant that parts were ordered up to two months in advance, which was tying up working capital and impacting cash flow. Due to last-minute changes to manufacturing schedules, engine or chassis parts destined for later production runs were sometimes used to fulfill customer orders, resulting in shortages and delays to subsequent production runs.

Shanghai GM's imprecise inventory management processes also made it difficult to predict the exact break point or changeover time when parts from one vendor would run out and be replaced by parts from another. The inability to establish a clear component break point also led to poor lot traceability in the event of a quality problem or issue. SAP APO changed all that.

Complete Solution from SAP Custom Development

Shanghai GM wanted to adapt SAP APO to its unique requirements to improve long-term planning visibility, adjust capacity to meet changes in demand, cut lead time for ordering parts, and predict exact changeover times. The company initially considered using

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its own experts to modify SAP APO but rejected this option after evaluating SAP's complete portfolio of custom development services. It subsequently commissioned SAP Custom Development to build a solution that would incorporate the specific functionality needed and integrate it with Shanghai GM's existing SAP platform and third-party systems.

Long-Term Business Value

SAP Custom Development experts analyzed Shanghai GM's requirements and delivered a solution that met the company's needs within six months. “SAP Custom Development was able to offer an end-to-end solution encompassing consultancy, design, development, implementation, and ongoing support and maintenance,” says the project manager from Shanghai GM. “As well as minimizing risk, using SAP Custom Development would protect our IT investment by ensuring that our customized solution could be upgraded to integrate with future releases of SAP APO.”

Toward Just-in-Time Ordering

Using the specialized software developed by SAP Custom Development, Shanghai GM can now predict the exact changeover time for components on the production line. Real-time visibility of stock levels enables the company to make part changes on the day of production, instead of 24 hours before production. Shanghai GM now has an accurate bill of materials for each vehicle and complete traceability of all components. And it has managed to reduce the order cycle for components from 60 days to 40 days as well as substantially lower inventory levels held in stock.

Leveraging Software Investment

SAP Custom Development's commitment to meeting the immediate and long-term needs of each individual customer has enabled Shanghai GM to leverage its investment in SAP and increase the return on its existing software, hardware, and people investments. The company is now implementing software from the SAP for Automotive set of solutions to further speed product development and delivery and offer even higher levels of service to dealers and end customers.

“SAP's ability to develop solutions that meet our specific and unique requirements establishes it firmly as a long-term, trusted business partner,” says the project manager at Shanghai GM. “SAP underpins our strategy for growth by helping us build high-quality products that meet the needs of our customers as cost-effectively as possible.”