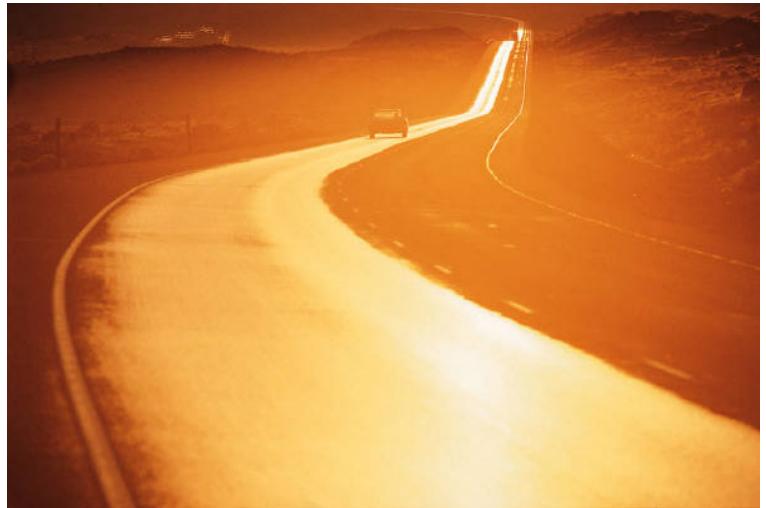


Automotive Supplier Excellence: Achieving Continuous Cost Reduction



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INTRODUCTION

Automotive suppliers are in a challenging position. Over the last several years, OEMs have issued mandates to their suppliers to reduce costs, and those pressures have only continued to increase. For example, in early October 2002, General Motors *accelerated* its schedule to negotiate and incorporate its calendar-year 2003 supplier cost reductions.¹ Ultimately, an inability to reduce internal costs year after year to meet the OEM mandates will result in eroding margins that may put the suppliers' future business at risk.

According to AMR Research, "...OEMs have done little more than force suppliers to carry a larger burden of inventory...The cost of maintaining inventory has remained the same; it's just shifted to suppliers."

From the supplier community's perspective, most OEM supply-chain improvement initiatives rely on transitioning the operational burden from the OEM to the supplier. According to AMR Research, "...OEMs have done little more than force suppliers to carry a larger burden of inventory...The cost of maintaining inventory has remained the same; it's just shifted to suppliers."² Increased inventory burden and additional responsibility to coordinate more of the OEM's supply chain has put additional pressure on the supplier community's margins and increased their operational responsibilities.

To remain competitive, many automotive suppliers have turned to mergers, acquisitions, and/or joint ventures in an effort to grow top-line revenue, maintain market share, more-effectively utilize assets, and increase leverage with the OEMs. Unfortunately, the expected benefits associated with those endeavors often fail to materialize, resulting in additional margin and performance pressure. According to Neil De Koker, managing director of the OESA (Original Equipment Suppliers Association), there has been no evidence of either improved operating margins or return on capital employed due to synergies from merger and acquisition activities.³

Automotive suppliers realize that cost control and cost-reduction capabilities must be intrinsic to their structure, processes, culture, and technology foundation if they are to survive and thrive. And the role of technology in the scenario is pivotal, according to AMR Research: "Can companies consistently improve performance

¹ "GM Rushes Supplier Price Cuts," *Automotive News*, October 7, 2002.

² John Fontanella and Kevin Prouty, AMR Research, *Alert*, October 10, 2001.

³ Neil De Koker, "The Global Automotive Industry: Strategies for Competing," April 11, 2002.

by adopting leading business practices independent of whether they have strong or weak technology? The answer is a definite no.”⁴

CRITICAL CAPABILITIES

To succeed in today’s daunting economic environment, companies will need to focus on developing and/or maintaining five critical capabilities essential to their ability to reduce costs today and in the future:

- Supply Chain Planning
- Agile Manufacturing
- Trading Partner Collaboration
- Sourcing and Procurement
- Administrative Cost Reduction

To support these critical capabilities, the automotive supplier needs a technology partner that has successfully developed and deployed applications that are comprehensive, scalable, secure, and integrated. Likewise, this partner should have solutions that support the organization’s efforts to drive out costs and inefficiencies, while creating value in all areas of the business. That technology partner is Oracle.

SUPPLY CHAIN PLANNING

Effective supply-chain planning is fundamental to optimizing asset utilization, minimizing unnecessary inventories, eliminating waste, and meeting or exceeding customer service-level expectations.

Oracle Advanced Planning is a comprehensive solution that delivers value through integrated demand planning driven from a consensus forecast, inventory optimization (including determining optimal postponement decisions), supply chain and manufacturing planning, manufacturing scheduling, collaborative planning, and supply-chain-intelligence capabilities. Because the applications are integrated, they can shorten implementation time, reduce the complexity of the solution, and provide a better view of the entire supply chain, resulting in better decisions and reduced costs.

Some of the key capabilities of Oracle’s supply-chain planning solutions include the ability to

- Incorporate actual or planned demand
- Holistically plan all levels and locations of the supply chain
- Rapidly adjust and re-plan

**Possibilities Not Pipe Dreams:
"Out of the box" integration and advanced
supply-chain capabilities shorten time to
benefit—reducing costs AND increasing
customer benefit.**

⁴ Frank Gens, “Supply Chain Technology and Shareholder Value: Connecting the Dots,” AMR Research, *Executive View*, August 9, 2002.

- Collaborate throughout the supply chain
- Optimally plan the level and location of all inventory in the network

The result is a much clearer and responsive supply chain with fewer barriers to achieving desired customer-service levels.

Over 450 customers, such as Cummins and Eaton, have implemented Oracle's supply-chain planning solution to increase service levels, decrease response time, and better utilize their assets and network. If capability, flexibility, integration, speed to benefit, and ease of implementation are your key requirements for a supply-chain planning solution, Oracle Supply Chain Planning applications will meet your needs.

AGILE MANUFACTURING

Automotive suppliers have known for some time that they can make significant operational and customer-service improvements by adopting a lean manufacturing approach. Increasing fluctuations in demand and shorter product lifecycles prompt companies to incorporate flow or "agile" manufacturing practices. Unfortunately, most legacy and current packaged ERP systems do not support agile manufacturing, forcing companies to create extensive workarounds or disable significant portions of their manufacturing applications to effectively leverage agile-manufacturing processes in their operations.

Oracle provides full agile manufacturing support, as well as multimode manufacturing capabilities, to allow a company to manage its manufacturing operations in the manner they are designed to operate. Oracle provides support for Kanban replenishment, workorderless completion, and backflushing for operations working in an agile environment. Oracle's manufacturing solution also provides support for suppliers with long lead times or manufacturing operations working in a make-to-stock, assemble-to-order, engineer-to-order or other manner—without sacrificing the functionality needed for any of the necessary manufacturing methods.

Oracle Flow Manufacturing allows automotive suppliers to identify bottlenecks in the production line and simulate the required assembly line takt time based on the demand of the multiple models. In addition, Oracle Flow Manufacturing allows the manufacturer to sequence vehicles, components, or modules with multiple takt times so as not to violate the total takt time. It also produces the corresponding feeder-line sequences and supplier-delivery sequences, to ensure just-in-time delivery of subassemblies and parts to the main production line.

As with all manufacturing methods, Oracle's agile-manufacturing capabilities provide full support for pegging, lot tracking, and tight integration with supply-chain planning. Maintaining control of your operations while supporting a dynamic flow environment has been difficult until recently, but organizations are realizing that both can coexist with the capabilities provided by Oracle.

Possibilities Not Pipe Dreams:
Oracle provides a manufacturing system that enables agile manufacturing as well as other manufacturing modes, while also supporting the necessary production control.

In addition, Oracle provides an advanced Release Management application that allows suppliers to quickly accommodate and respond to this high-volume, highly complex, and ever-changing environment—while supporting pricing and trading-partner-specific business rules. Oracle Release Management automates the process of accepting the OEM’s planning, shipping, and sequence schedules via EDI or XML; then processes and updates sales orders based on the OEM’s external business rules. Oracle Release Management allows the evaluation of scheduling trends and quantity fluctuations over time to better adapt, predict, and forecast customer requirements. This capability permits suppliers to better manage the increased demand fluctuations without increasing inventory or production costs.

Several customers have realized significant improvements in their operations from employing Oracle’s agile manufacturing solutions. Oracle provides critical support for agile manufacturing and removes common barriers, helping organizations gain the tremendous benefits and reduced costs that agile manufacturing can offer.

TRADING PARTNER COLLABORATION

The ability to interact with all levels of the supply chain has become more critical as the performance bar has been raised. Finding ways to better share information within the supplier’s network, reduce lag time, and improve accuracy and predictability can have a significant impact on the supplier’s inventory and costs. Before today, the typical EDI infrastructure and network was too expensive for the small- to mid-size supplier. This issue has left many suppliers unable to leverage any collaborative capabilities, leaving them at a competitive disadvantage vis-à-vis the other players by requiring them to work with their trading partners primarily through phone and fax.⁵

Oracle’s collaborative solution gives the supplier community an inexpensive yet extensive application to gain the benefit of the networked supply chain. Suppliers can define and share product-design collaboration, vendor-managed inventories, advanced-shipment notifications, demand and capacity plans, and more with all trading partners at all levels of the supplier’s supply chain.

Oracle’s collaborative solutions allow companies to not only reap the benefits of electronically sharing the standard transactional information—such as planned deliveries—with their trading partners, but also the more sophisticated planning and optimization capabilities. Companies can create, share, and measure demand plans for accuracy and improvement opportunities. Oracle has also built other capabilities into the collaborative applications to make the supply chain more efficient—for example, the applications support full bidirectional pegging up and down the entire supply chain. Collaborative inventory visibility is available to allow an organization to search through its global inventory or another pooling partner’s inventory for critical inventory items. Robust exception and event management

Possibilities Not Pipe Dreams:

Oracle is leading the way by delivering on the potential of Web-enabled, inexpensive, and extensive supply-chain collaboration.

⁵ “Automotive b2b,” *Just-Auto.com*, February 2001.

between a company and its trading partners allows the entire trading community to respond to issues with their operations, plans, and performance.

By leveraging the power of Oracle's architecture, a company has the ability to quickly and easily set up the events, thresholds, notification methods, and workflow steps that ensure its supply-chain operations remain within tolerance and issues are resolved quickly. Security is also addressed with robust rules, roles, and procedures, ensuring that all players are limited to their defined responsibilities and appropriate access. A company can achieve these benefits quickly by using these applications with the Oracle Supply Chain Planning applications described earlier. Out-of-the-box integration with Oracle's supply chain planning applications can speed the time to benefit while lowering cost and risk, versus the typical collaborative-commerce implementation

By using Oracle's applications, companies of all sizes and at all levels of the supply chain can finally take advantage of the capabilities that were previously reserved for the very few. Likewise, today's suppliers can electronically enable their organization at a much more attractive level of effort and investment.

SOURCING AND PROCUREMENT

In most industries, a company's profitability rests substantially on its ability to obtain goods and services at the lowest total cost. For automotive companies specifically, a product's cost for direct material is designed and built-in during the sourcing process.⁶ Companies have realized there are significant material, service, and administrative cost savings to be gained by improving their existing internal procurement and sourcing processes and capabilities.

For the majority of automotive companies, a substantial amount of potential benefit remains tied up in nonautomated and complex procurement and sourcing processes. According to Goldman Sachs, "...supplier procurement processes add an additional \$455 to the cost of the systems, components and raw materials that go into the production of a single vehicle."⁷ That cost is compounded by the sourcing inefficiencies that hamper a supplier's ability to bid, source, procure, and use vendors that would provide the lowest total cost for materials and services.

Oracle offers procurement and sourcing capabilities that allow a company to manage the full supply process—from comprehensive sourcing analysis; building and issuing multiple-round, online RFx's; and the full procure-to-pay process. One system that handles all types of spend (direct, indirect, services, and so on)—with full integration for the entire cycle—can allow a company to include more of its spend under stronger agreements, while reducing the administration requirements and cost. The net benefit is improved margins and operations.

**Possibilities Not Pipe Dreams:
Integrating supplier relationship
management with Web procurement, from
sourcing to payment, is a possibility today.**

⁶ Center for Automotive Research, Altarum Institute, "Automotive Suppliers and the Revenue Acquisition Process: What's Working, and What's Not?" Morell, Swiecki, and Andrea, September 2002.

⁷ Gary Lapidus, Goldman Sachs Investment Research, "Gentlemen, Start Your Engines," *eAutomotive*, January 2000.

Companies have come to realize that a true sourcing and procurement solution is more than a point application that manages analysis, auctions, procurement, or payment processes. The true benefit can only be realized when these processes are fully integrated and managed together. Oracle can provide this capability, with extensive functionality and complete integration.

ADMINISTRATIVE COST REDUCTION

Due to the automotive supplier's cost structure, the greatest area of opportunity for continuous cost reduction centers on the operational areas, and thus requires the critical capabilities listed earlier. The most successful companies, however, are also identifying the need and the opportunity to substantially reduce costs in the supporting areas of their business. Reducing administrative costs, manual effort, and overhead can allow an organization to be more efficient, effective, responsive, and profitable.

Oracle provides a number of applications and services that can add dollars to the bottom line and drive down the SG&A (selling, general, and administrative) expenses. Oracle's extensive capabilities in this area fall into three categories: self-service applications, collaboration applications, and rationalized IT infrastructure.

Possibilities Not Pipe Dreams:

The most successful companies are reducing costs throughout all supporting areas of their business by using Oracle's enabling technologies and services.

Self-Service Applications

Oracle's applications are designed and built specifically for the Web, use graphical workflow, and can be customized to meet the unique business rules of the company, allowing for more of the business activities to be managed by the individual employee. This improves responsiveness and accuracy while reducing paper and administrative costs. Applications such as Oracle *iExpense*, Oracle *eTravel*, Oracle *iLearning*, and the suite of HR (human resources) applications are designed to allow employees to better manage their own work environment while selecting goods and services from approved sources. The Oracle *iProcurement* solution also allows a company to more efficiently manage its indirect spend while providing a full procure-to-pay solution that also is integrated with the direct-procurement application.

Collaboration Applications

Oracle Collaboration Suite provides a solution to the challenge of integrating a company's e-mail, calendar, file sharing, voice mail, wireless and voice access, and enterprise search. Furthermore, Oracle is revolutionizing the economics of individual, group, and IT productivity. Oracle Collaboration Suite provides a complete collaborative environment at a fraction of the cost of the equivalent products available from Microsoft. Integrated, secure, scalable, and reliable, Oracle Collaboration Suite can provide enhanced capabilities while lowering the IT organization's costs.

Rationalized IT Infrastructure

Many companies struggle with adding new systems capabilities and functionality while attempting to find ways to reduce IT spend. Information technology can be both a savings blessing and a cost curse. Oracle has focused significant resources on building a technology and application infrastructure that reduces the high cost of integration, limits extensive hardware requirements, and diminishes the need for high levels of internal support. Oracle is also a leader in providing proven application and technology outsourcing. Outsourcing can significantly reduce a company's IT spend and shorten the time to benefit, while assuring that the company will be able to take full advantage of the applications as they are improved and upgraded. Providing "one hand to shake" for application and technology solutions can allow a company to focus on improving its business operations while leveraging the technology and functionality that Oracle provides.

With Oracle's integrated technology, broad capabilities, and deep functionality, administrative cost management can become a powerful tool for increasing margins.

CONCLUSION

Achieving continuous cost reduction will continue to be a challenge and a key focus for the automotive supplier. Suppliers will not have the luxury of focusing only on one area to "stem the tide." To be successful in this environment, companies will need to make progress across the board.

Oracle is uniquely positioned to help automotive suppliers address these needs and achieve dramatic results. Oracle can provide the critical capabilities necessary to enable a company to aggressively reduce its costs, eliminate waste, and improve relationships. Oracle's applications are modular and scalable—as the situation warrants, you can bolt on additional capabilities, upgrade a specific business flow, or replace your legacy system suite. From the vendor to the customer, from the shop floor to the back office, Oracle makes achieving supplier excellence a possibility, not a pipe dream.



Achieving Continuous Cost Reduction in the Automotive Industry

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