

Product Lifecycle Sourcing enabled by Teamcenter's SRM solutions

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white paper



- ▶ In today's era of outsourcing, most companies find that the lack of coordination among suppliers, procurement and product development has led to process inefficiencies that can no longer be ignored. Product Lifecycle Sourcing integrates strategic sourcing and product lifecycle management, enabling common processes and information for engineering, procurement and suppliers. The result is a shorter, cost-effective design process that ultimately improves the top and bottom line simultaneously.

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► Applying established sourcing practices to product development

A Tier 1 automotive supplier recently stated, "...as opposed to the old, traditional approach of going out and saying (to suppliers), 'Give me 5 to 10 percent cost reduction,' I'd rather work with them up front to design cost out of the product."¹ Cultural differences have traditionally separated product development and procurement organizations. However, in today's era of outsourcing, most companies find that the lack of coordination among suppliers, procurement and product development has led to process inefficiencies that can no longer be ignored.

Most sourcing managers get involved in the product development process too late to have maximum impact on product costs, quality and time-to-market cycles. This is because most product costs are determined in the very early stages of product development. After the product is designed, all but 15 to 20 percent of cost reduction opportunities have disappeared. In some companies, product development does not share information with anyone – inside or outside the company. Procurement organizations and suppliers are kept in the dark until the last stages of new product introduction. Unfortunately, this almost always leads to suboptimal results such as:

- Introduction of new parts vs. usage of currently purchased parts
- Lost opportunities to get volume discounts on existing contracts
- Lost opportunities to decrease time-to-market by outsourcing component design to strategic suppliers
- Lost opportunities to take advantage of supplier innovation
- Additional redesign costs because parts chosen by product development are on limited supply

Consider the cost of a product over time. Multiple design changes, late purchasing involvement, delayed launches, cost creep and other factors all heavily impact the bottom line.

Savings from the "before" state can be achieved through process and technology improvements within an organization. Examples are:

- Enforcing an approved vendor list across projects, programs and portfolios
- Developing more accurate cost estimates early in the design cycle
- Consolidating existing parts databases and part re-use
- Simplifying and automating workflows between product development and procurement to automatically populate sourcing tools with electronic BOM information

These more efficient development practices result in cost savings, quality benefits and an earlier product launch. They can be achieved with product lifecycle management tools.

Incremental improvement can be obtained by formalizing how the company works with suppliers. To achieve maximum benefits, suppliers should be engaged efficiently and early in the design process.

Consider an early supplier involvement example from an aerospace company. Potential suppliers are engaged in the concept phase of development. Once high-level design alternatives are established,

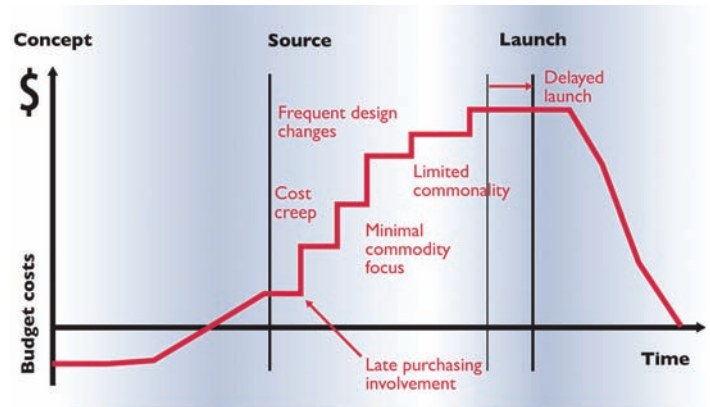


Figure 1: Product lifecycle cost

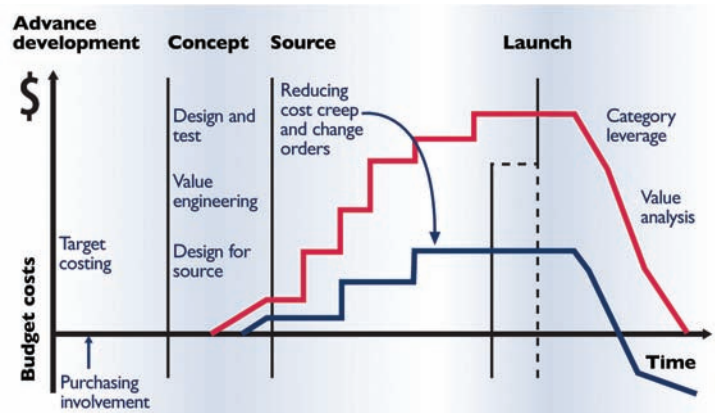


Figure 2: Impact of internal improvements

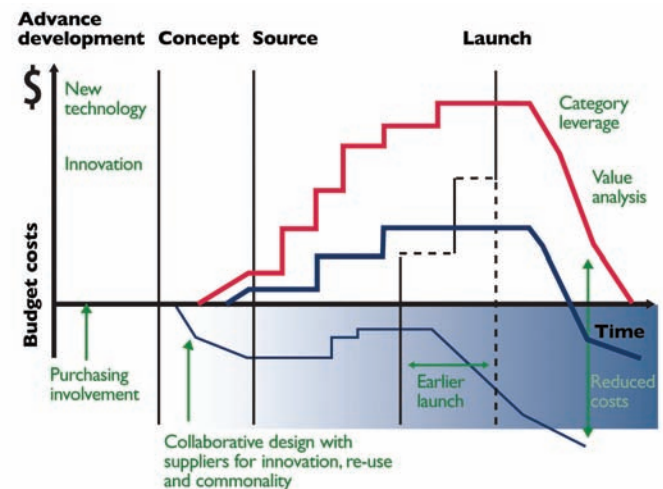


Figure 3: Impact of early supplier involvement

¹ Supply & Demand Chain Executive, December 2003/January 2004

► Introducing Product Lifecycle Sourcing

designers begin collaborating with the potential suppliers. Suppliers provide information regarding their core competencies, product development capabilities and performance history. Technical and rough pricing information is also exchanged.

Value engineering is performed with the potential suppliers to ensure customer requirements and cost targets are met. At this time, specifications and requirements are clarified, and revisions are considered. The supplier suggests design alternatives to increase innovation, re-use and commonality.

Imagine all of this information being recorded and eventually organized in a formal RFI/RFP process that is integrated with design. Information generated in the RFX processes is readily available for generating a contract when the supplier selection is made.

The aerospace company in this example not only reduced time-to-market significantly, but also manifested a 40 percent cost savings for a product in a cost-sensitive and rapidly-growing market. This allowed the company to capture significant market share.

Companies are starting to appreciate the value of early supplier involvement. As a result, supplier relationships are changing from a “meet this spec” perspective to a collaborative perspective, where teams work together to define the best product. With this shift to supplier engagement, companies are now concerned with effectively coordinating their supplier relationships.

When organizations are small, the problem of coordination is overcome by personal communications. However, this remedy is not

scalable. As organizations grow in size, with business units and partnerships around the globe, the problem becomes severe due to the lack of tools to collaborate. Sourcing decisions are often eclipsed by time considerations that render these decisions inconsistent and out of synch with real-world imperatives.

Real process improvement is difficult given the pace and complexity of both product development and strategic sourcing. Process integration and “perfect information” that only technology can provide is required. That is why Product Lifecycle Sourcing integrates strategic sourcing and product lifecycle management, enabling common processes and information for engineering, procurement and suppliers. A key component is a collaborative environment that enables global product teams, suppliers and allied partners to quickly join together and interactively capture, share, exchange and organize innovative ideas as well as structured documents and information.

The Product Lifecycle Sourcing value proposition is undeniable. Cost improvements traditionally driven by strategic sourcing solutions consolidate spending and automate negotiations to provide the transparency that drives down costs. Product Lifecycle Sourcing combines strategic sourcing with product lifecycle management’s traditional value proposition of driving faster product innovation. The result is a shorter, cost-effective design process that ultimately improves the top and bottom line simultaneously. The Aberdeen Group estimates companies that implement Product Lifecycle Sourcing can achieve cost savings of up to 20 percent and reduce time-to-market 10 to 20 percent.

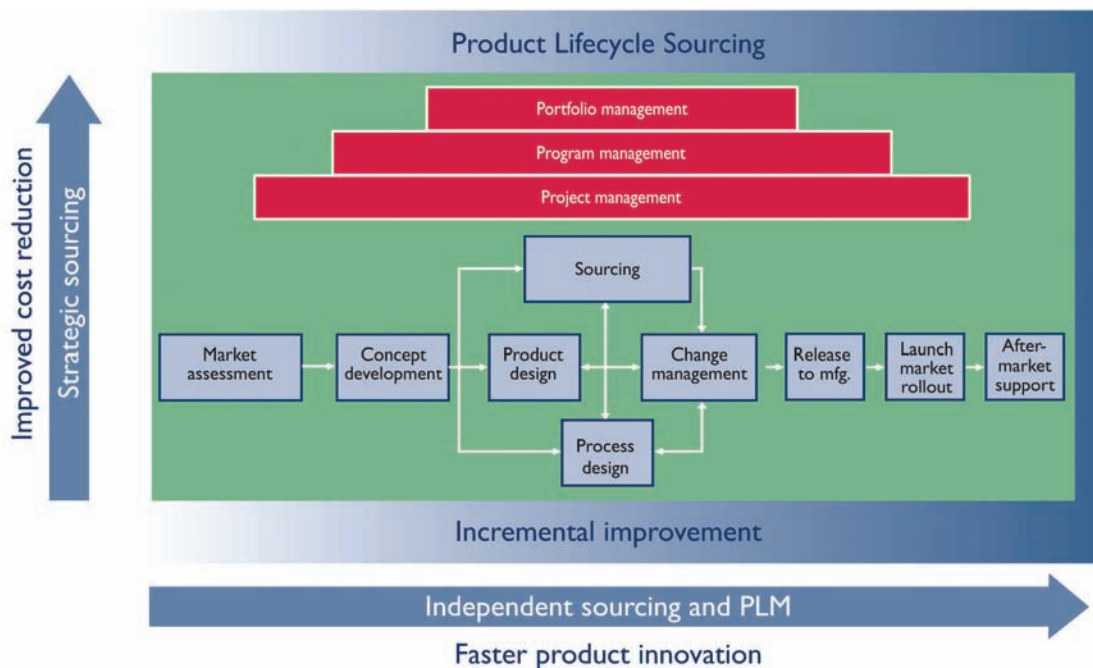


Figure 4: Product Lifecycle Sourcing value proposition

► A proven solution

Teamcenter® supplier relationship management (SRM) capabilities comprise Siemens PLM Software's proven portfolio of strategic sourcing solutions. Siemens has incorporated these best-in-class strategic sourcing technologies into Teamcenter's product lifecycle management (PLM) foundation. This provides a direct and efficient connection between product development, procurement and suppliers that is required for Product Lifecycle Sourcing.

Teamcenter for SRM offers the following major capabilities.

- Insight into past procurement patterns, enabling optimum supplier selection
- Template-driven automation of negotiations with potential suppliers including reverse auctions
- Teamcenter integration that enables companies to automatically populate the bill of material (BOM) with RFX information, as well as update their product data with supplier pricing

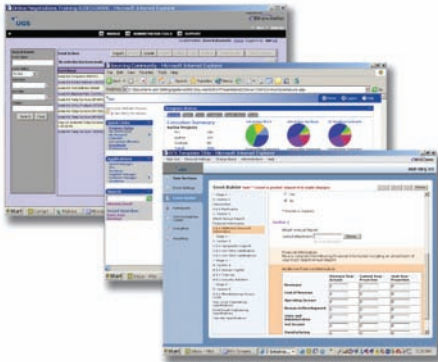


Figure 5: Role-based user interfaces

- Ability to integrate with mission-critical systems including ERP, MRP and CRM applications
- Analytical tools that monitor and measure supplier bids with user-defined attributes and weighting
- Analytical tools to RFX responses
- Single repository for all contracts and purchasing agreements
- Visibility into contract information and alerts for contract events, including expirations
- Sourcing process tracking
- Part libraries mapped to commodity structure
- Supplier status and part cost information mapped to engineering BOM
- Real-time access to single source of product and process data
- Supplier collaboration tools including visual conferencing and visual issue management
- Integrated workflows
- BOM grading for sourcing constraints

Teamcenter's SRM architecture supports:

- Modular deployment
- Integration with legacy applications to enable sharing of enterprise information
- Easy-to-use, role-based user interfaces for engineers, buyers and executives
- Secure environment with controlled sharing
- Scalability to support a global supplier network

Obtaining tangible results on your PLM investment

Some companies heavily invest in information technology only to discover that their investment does not produce the transformational results they expected. With Teamcenter's SRM capabilities, you are assured that you will receive the tangible business results you expect regardless how much PLM or strategic sourcing experience you have.

Siemens' experienced consultants use methodologies, such as value sequence analysis and the PLM maturity assessment, to gain a better understanding of your company's business issues in order to recommend effective technology and process solutions. They will work with you to define a solution roadmap that assists you in aligning your technology and business goals, creating the fastest time-to-value possible for your company.

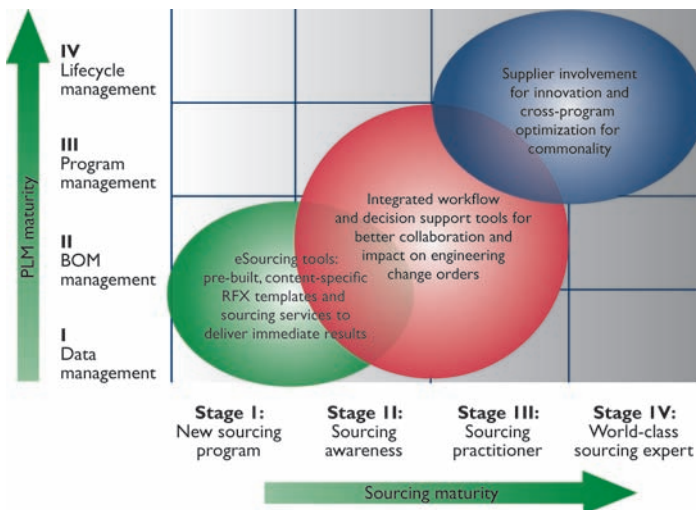


Figure 6: Teamcenter Product Lifecycle Sourcing maturity levels

About Siemens PLM Software

Siemens PLM Software, a business unit of the Siemens Industry Automation Division, is a leading global provider of product lifecycle management (PLM) software and services with 5.5 million licensed seats and 51,000 customers worldwide. Headquartered in Plano, Texas, Siemens PLM Software's open enterprise solutions enable a world where organizations and their partners collaborate through Global Innovation Networks to deliver world-class products and services. For more information on Siemens PLM Software products and services, visit www.siemens.com/plm.

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