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Is Your Business “Network Ready”?

Preparing Your Supply Chain Processes for a Network-Dependent World



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The rapid network effect driving today’s business models is creating unprecedented challenges to the traditional view of supply chain management. Four key influencers are accelerating this change: **Globalization** is creating opportunities for organizations to access new customers in new markets and in new ways; **deregulation** (or, in some markets, increased regulation) changes the ground rules for how companies compete; an increased appetite for **innovation**, in both new products and services, means that companies must constantly keep in step with consumer desires to stay ahead of their competition; and the continual tumult of **acquisitions, mergers, and divestitures** directly affects the operational stability of the supply chain within a company.

To compete and win, companies must become simultaneously more responsive, more efficient, and more innovative. To achieve these objectives, they must continuously construct, deconstruct, and transform business processes in complete synchronization with the constantly evolving business network. And they must do so not simply within the confines of their own enterprise, but across the entire value delivery network.

As SAP’s Vivek Bapat relates in this Q&A, SAP is helping companies successfully embrace business network transformation (BNT) through the delivery of end-to-end processes that help organizations increase responsiveness, improve efficiency, and accelerate innovation.

The notion of business network transformation is ushering in a new era of thinking related to the deployment of business processes, and it reflects a fundamental restructuring of business models and partnerships.

Q: We’ve been hearing a lot about the importance of business network transformation. In what ways does BNT challenge traditional business process deployment models?

A: The notion of business network transformation is ushering in a new era of thinking related to the deployment of business processes, and it reflects a fundamental restructuring of business models and partnerships. The goal is to deliver new products and services by combining the core strengths of multiple partners to amplify the value delivered to the customer. It is the natural next step in a long evolutionary chain of business models fueled by macro-economic shifts in globalization and technology.

This approach offers benefits of significant proportions – most notably in terms of reduced costs, improved efficiencies, and accelerated innovation. Using BNT principles, more companies are concentrating on furthering their core competencies while

continuing to seek cost advantages or additional differentiated value by pushing non-core activities to network partners. Some of the best examples of this today are brand owners in consumer products industries who focus on design innovation as their core competency – and then outsource or subcontract their entire manufacturing operations and distribution to network partners. Similar dynamics are being replicated across virtually every industry and every organization, large or small.

As a result, business processes for each player in the network must now transcend company boundaries. They must be designed and implemented to ensure speed, efficiency, and responsiveness across the entire network, not simply within the organization.

In addition, the continued disaggregation of supply and demand and the global redistribution of markets add even more complexity – requiring companies to radically rethink their business process strategy.

A company's objective should be to identify those areas where they excel, to improve where they can, and to find partners to support the areas at which they are less adept.

Q: What caused this change in thinking? What spark spurred corporate leaders to study their respective business networks?

A: Macro-level shifts in technology and globalization are among the primary drivers. These two macro-shifts occurred as parallel events – and their combined impact on business was exponential.

For example, just as the Internet provided universal access to technology at low costs, new markets and opportunities began opening up across the world, most notably in emerging economies. So we had a dual dynamic – new sources of competition and new sources of opportunity emerging at the same time. Suddenly, corporate leaders who were used to working within their integrated enterprise were forced to look at sources of cost containment, efficiency, and innovation outside their own companies – for example, to expand their field of vision beyond the integrated enterprise to what we would call an extended network. Business processes now had to be executed flawlessly across companies and even across networks.

This ability to manage the network of collaboration and understand the dependencies of each step in the business process as a consequence is becoming very important to the new value equation.

Q: How does a company determine what its areas of strength are versus the areas in which it should look to collaborate?

A: There are various core competencies that companies can leverage to gain an advantage, such as:

- **Responsiveness:** Some companies have developed a highly nuanced understanding of distributed demand, and they make sure it is constantly reconciled with the distributed supply side. Such companies design processes that focus on fast and smart responses to demand and supply dynamics.

- **Efficiency:** Other companies focus on running their operations and processes as efficiently and cost effectively as possible. These companies recognize operational excellence as their core value.
- **Innovation:** Product and service innovation companies focus on bringing new ideas to market in the most creative way possible.

To succeed in today's economy, it's not enough to be responsive, efficient, or innovative alone. Ideally you want to be able to do all three well – but it is *very* difficult for one company to do that on its own. The next generation of value creation, then, comes from being good at assembling a network of partners that, together, will master these competencies and deliver differentiated value to the customer.

A company's objective should be to identify those areas where they excel, to improve where they can, and to find partners to support the areas at which they are less adept. The smart companies will leverage their own core strengths and then get the rest from their business networks.

Q: What does BNT mean for end customers? How does this shift from the traditional way of doing business manifest itself?

A: Companies formerly designed and operated supply chains in a relatively controlled environment where demand was adequately normalized and supply was fairly structured and reliable. In this zone of control, the mantra was efficiency – as in, how do I optimize my operations to bring costs down, increase efficiency, and maintain margins?

Today, businesses have entered a zone of unpredictable complexity (see **Figure 1**), where demand is increasingly distributed, disproportionately unstable, and very volatile, and where supply is multi-tiered, unstructured, and can change quickly as the network evolves. In addition, companies must continuously deliver new products, reach out to new customers, and rely on new partnerships to make it happen.

Furthermore, supply chain and manufacturing lead times are shrinking, and consumer preferences are changing rapidly. Everyone in the network must tune their processes to adapt at a moment's notice to respond to new demand, interrupted supply, or unforeseen events or operational failures.

The companies that will succeed will be those that manage this transformation and extend from their

Business Network Transformation: Background and Insights

For more insights about how companies can refocus their IT investments for better business performance in a networked economy, please see:

- “Business Network Transformation: IT's Next Great Opportunity to Shine” by Philip Lay and Geoffrey Moore (*SAP Insider*, April-June 2008, www.SAPinsideronline.com)
- “New IT Strategies for a Global Networked Economy” by Peter Graf (*SAP Insider*, January-March 2008, www.SAPinsideronline.com)

zone of control into the zone of complexity – all the while anticipating customer demand. To do so, they must rapidly build new business processes to be responsive to market dynamics, but also automate these processes for efficiency.

Q: These challenges seem quite complex and rather intimidating. What is SAP's approach to BNT, particularly as it applies to the supply chain? And how can it help steer customers down the right path?

A: Our customers are telling us that they need to rapidly deploy end-to-end business processes that cross application boundaries and allow multiple vendor solutions to work together. They also need processes that span departmental and enterprise boundaries – and that even extend past the enterprise into a broader business network.

SAP is committed to continuing its long-standing practice of building deep, functional capabilities within our products, across all of our applications. At the same time, we're building industry-specific, end-to-end, integrated business processes that our

customers can deploy to help them coordinate across a business network (see **Figure 2** on the next page).¹ We're also using our business process platform and

¹ See Rolf Weiland's article "Achieving Operational Excellence: How SAP's Process Approach Arms You with the Tools You Need" in this July-September 2008 issue of *SAP Insider* for an in-depth description of SAP's business process deliverables.

FIGURE 1 ▼ By shifting away from a traditional supply chain to a business network, SAP customers are moving out of a zone of control, where they simply had to supply to meet demand, to a zone that's more complex

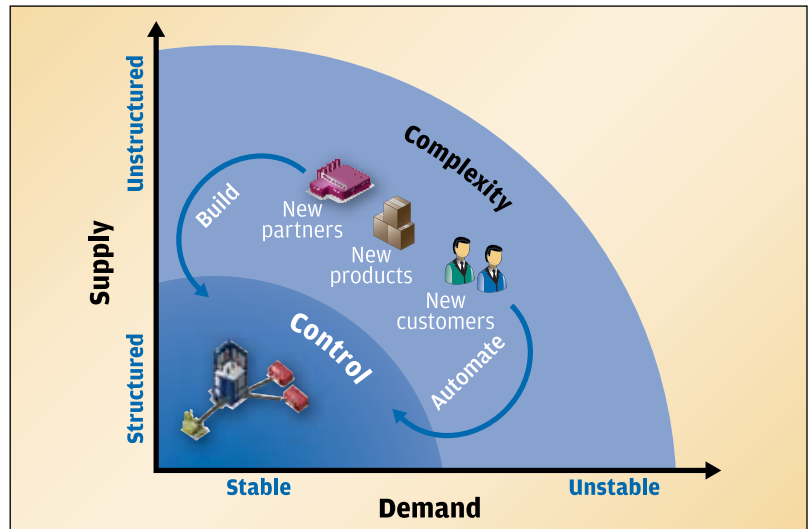


FIGURE 2 ▼ SAP's deliverables make business network transformation a technological reality

innovations in service-oriented architecture to allow our systems to interoperate and integrate with other vendors' systems. Customers can begin building these processes in a modular, step-by-step fashion – at their own pace and related to their unique needs.

Q: But not everyone is using SAP, or relying solely upon it to run their business. Certainly no business can guarantee that the partners in a business network will be SAP shops?

A: You're right. We would love it if all of our customers were wall-to-wall SAP, and better still if all of our

SAP Supply Chain Process Roadmap		
Product	Delivered in 2007	To be delivered in 2008 and beyond (highlights)
SCM	<p>Duet for Demand Planning: The first Duet-based application that uses the full capabilities of Microsoft Excel as a planning front end for SAP Supply Chain Management (SAP SCM)</p> <p>Sales and Operations Planning: A composite, cross-departmental tool to manage, agree upon, communicate, and measure the sales and operations planning (S&OP) process</p> <p>Object Event Repository: A standard platform for cross-enterprise data exchange and RFID/EPC/UID data capturing</p> <p>Supply Network Collaboration: New capabilities to manage and collaborate with contract manufacturers</p> <p>Extended Warehouse Management: Enhanced labor management functionality for tracking employee performance against engineered labor standards or other metrics</p> <p>Transportation Management: A new transportation management solution to manage transportation planning and execution processes for manufacturers and logistics service providers</p>	<p>Collaborative Demand and Supply Planning:</p> <ul style="list-style-type: none"> ▪ Improved forecast accuracy leveraging point-of-sale data and other demand streams ▪ Enhanced collaboration capabilities for cross-enterprise planning, especially for outsourced manufacturing ▪ New planning features for process industries, for industries planning on characteristics, and for industries selling through retail channels ▪ Improved offline planning capabilities ▪ Advanced partner onboarding and user management ▪ Decision support driven by enhanced analytics <p>Logistics and Fulfillment:</p> <ul style="list-style-type: none"> ▪ Enhanced integration between transportation, warehouse, and production processes ▪ Increased planning efficiency through process enhancements, analytics, and workflow management ▪ Compliance for global trade and environmental security ▪ Industry-specific enhancements, such as parcel processing ▪ Increased visibility through graphical layouts and new monitoring capabilities
Manufacturing	<p>SAP Manufacturing Integration and Intelligence (SAP MII) 12.0: First SAP MII release that uses the SAP NetWeaver J2EE stack for streamlined user management, enhanced supportability, and monitoring; also provides enhanced integration capabilities, a new workbench to build SAP MII content, and templates to support SAP MES-to-SAP ERP integration following the ISA S95 standard</p> <p>SAP Lean Planning and Operations (SAP LPO) 5.60: Supports Lean manufacturing practices that follow the Toyota Production System; enables pacemaker leveling; and provides production KANBAN and Supermarket</p> <p>SAP ERP 6.0 enhancement package 3: Offers shift reports and notes as alternatives to the paper-based shift book to document events and incidents; xSteps for discrete industries to create electronic work instructions for production orders; and process batches for better work in process (WIP) tracking</p> <p>Enterprise service bundles: Support integration of MES systems, manufacturing work instructions, batch traceability, quality inspections, and easy inspection planning</p>	<p>Manufacturing Network Planning and Execution: Enhanced planning and execution functionality across all manufacturing facilities (internal and outsourced), including batch traceability</p> <p>Efficient Manufacturing Operations: Enhanced functionality for enterprise planning and control, plant and cell level planning and control, and manufacturing execution</p> <p>Outsourced Manufacturing: Functionality that streamlines the subcontracting process and tightly links operations at the contract manufacturer with the brand owner – through direct exchange of traceability data, for example</p>

FIGURE 2 ▼ Continued

Product	Delivered in 2007	To be delivered in 2008 and beyond (highlights)
PLM	<p>SAP Resource and Portfolio Management 4.5: New features including decision flow management, product profitability analysis, support for closed-loop resource management, and enhanced project management</p> <p>UI and usability improvements in:</p> <ul style="list-style-type: none"> ▪ SAP cProjects 4.5 ▪ SAP cFolders 4.5 ▪ SAP Environment Health & Safety ▪ SAP Recipe Management <p>Enterprise services for PLM: Enterprise SOA-enabled easy document management, providing high flexibility for fast ROI</p>	<p>Product Intelligence: A new user-centric UI, including powerful search capabilities and a 360-degree view on all product and product-related data</p> <p>Product Synchronization: Enhanced collaboration capabilities combined with extended access control management to protect company knowledge; a new layer for CAD integrations to provide more flexibility and openness for MCAD, ECAD, and other software development tools</p> <p>Integrated Product Development: Improved collaboration between design, procurement, manufacturing, and service</p> <p>Product Portfolio Planning: Phase/gate innovation process support and a synchronization framework to align PLM with ERP, budget, and resource information</p>

customers' business partners were wall-to-wall SAP – but we realize that's not a reality. SAP needs to be friendly with legacy systems that our customers are still using, and we need to arm them with the ability to rapidly build new processes that are platform neutral. And we are. We realize that, in most cases, rip-and-replace is not an option. The strength of our business process platform – and the services enablement that comes with it – provides the depth and breadth of interoperability into multivendor environments. The good news is that we are able to deliver value to customers by helping them get more out of their existing IT landscape, while continuing to add efficiency and agility into their business processes. Line of business users get what they need – and fast – while IT is still able to lower TCO.

To help customers address this migration into business networks, SAP will deliver end-to-end processes on top of our functional solutions to closely match the strategic initiatives companies use to differentiate themselves in the market. These initiatives include operational excellence, responsive supply networks, and product and service leadership (see **Figure 3**). I encourage you to read the feature articles in this issue of *SAP Insider* for more insights about how we plan to support these initiatives.

The rate of globalization and market change gives you only a short window of opportunity to become business network-ready, and the old IT architectures, designed to increase efficiency, cannot keep up with new requirements to optimize business opportunities, grow beyond enterprise boundaries, and continuously transform the company and its business network.

With SAP, you have the ability to enjoy integrated business processes out of the box. You also have the

ability to compose and quickly automate custom business processes using the business process platform, and to leverage best practices to scale these processes across your network partners. ■

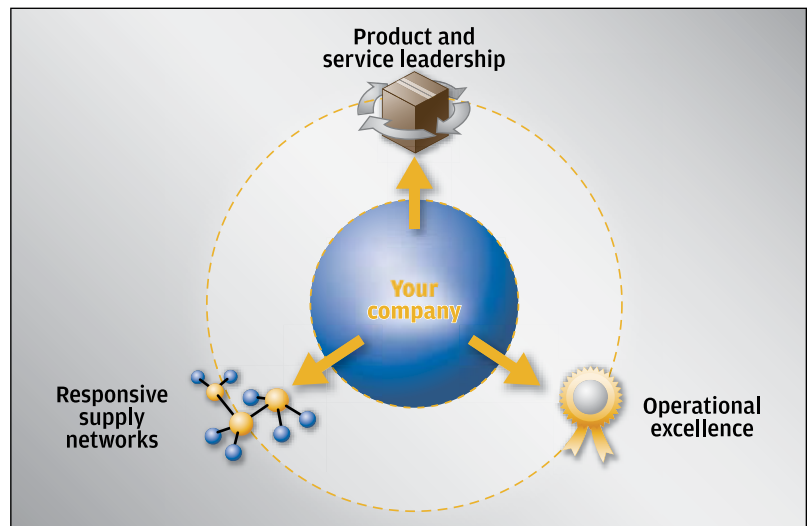


FIGURE 3 ▲ Three example axes of capabilities within a business network: operational excellence, responsive supply networks, and product and service leadership

Additional Resources...

...from **SAP Insider**

- The **Logistics and Supply Chain Management 2009** conference in Orlando, March 2-4, 2009, for best practices on streamlining your supply chain from start to finish (www.sapscm2009.com)
- The **Manufacturing 2009** conference in Orlando, March 2-4, 2009, for expert advice on production planning, asset management, and manufacturing intelligence and integration (www.sapmanufacturing2009.com)
- The **Product Lifecycle Management 2009** conference in Orlando, March 2-4, 2009, for case studies and coveted tips and tricks on how to ensure top quality throughout your product life cycle (www.saplpm2009.com)