

e-Supply Chain Management: Prerequisites to Success - PART I -

by R. Michael Donovan

The supply chain is made up of all the activities that are required to deliver products to the customer - - from designing product to receiving orders, procuring materials, marketing, manufacturing, logistics, customer service, receiving payment and so on. Anyone, anything, anywhere that influences a product's time-to-market, price, quality, information exchange, delivery, among other activities is part of the supply chain.

If you don't think e-Commerce is that big of a deal, think again. Consider that e-Supply Chain Management is digitally connecting the entire world into one big (very big) network of supply chains. Trillions of dollars a year of business-to-business commerce is being conducted on the Internet, which is many times the amount of business-to-consumer (Amazon, E-Bay, etc.) transactions. The growth estimates for the next few years for business-to-business e-commerce are astounding. Most would agree that nothing in business approaches has hit so hard and so fast as e-Commerce.

Where's The Payoff?

Where does the Internet enhance the creation of value? Is it just a vehicle of convenience to shop, check stock prices, send e-mail, and rummage through various websites? Web-based marketing and catalog sites have become very familiar communication mechanisms between prospects, customers and suppliers. The self-service web sites that provide for unassisted sales are significant in sales volume, but the fastest growing and highest volume by far is business-to-business transactions in supply chains. Internet capabilities already have, and will continue, to fundamentally change business-to-business supply chain models.

Be assured that e-supply chains are making, and will go on making, inroads into manufacturing, like no technology ever seen before, in terms of the number of companies who will voluntarily *and involuntarily* adopt e-Supply Chain Management. The fact is, you will have to rapidly evolve to the e-Supply Chain in the near future or be left behind because the old ways of communicating and transmitting information are plainly no longer fast or cost effective because new standards of performance have developed.

Big Company Influence

Some of the most influential business leaders have made some very bold statements about the Internet and e-Commerce. For example, many companies have launched very aggressive e-Commerce initiatives - so aggressive, in fact, that one CEO publicly stated "...all of our suppliers will supply us on the Internet or they won't do business with us." Now that is a statement that will give many a supplier heartburn.

There is no doubt about the heavy emphasis on e-Commerce and e-Supply Chain activities. Large staffs, big information technology investments and other resources have been deployed to create sophisticated e-supply chains. The scope of these e-supply chains will include everything from product development, Supply Chain Management, marketing, sales and accounting activities. Suppliers, regardless of size, should have received the signal loud and clear...*the e-Supply Chain has arrived.*

Even more intriguing is the rapid evolution of the digital marketplace which allows buyers and sellers to transact in a single intelligent, multidimensional marketplace that connects multiple trading exchanges. This allows buyers to consolidate orders from multiple vendors and subsequently provide for the effective integration of the final logistical activities. Putting intelligence into super portals so customers can get their information their way is essential.

As you can see, the larger company adopters will create huge ripple effects into their smaller company supply bases. Your best choice - - - *Be Prepared.*

Transformation Is Needed

Management, across all industries, will need to embrace collaboration with customers and suppliers in the planning and replenishment process. As customers and suppliers band together in mutually beneficial partnerships, the need for better Supply Chain Management processes and systems is very evident and a very high business priority.

For many companies, it has become clear that a supply chain that flows information and material best can be a significant competitive differentiator. All the way to the boardroom, improving Supply Chain Management is getting lots of attention because forward-thinking managements know it is the best strategy to increase marketshare, reduce costs, minimize inventories and, of course, improve profits. In many industries, marketshare will be won and lost based on supply chain performance.

With the stakes so high, there is a frenzy of activity along the supply chain front. Executives are assessing how their companies do business, especially in supply chain activities. They often find dysfunctional sets of policies, processes, systems and measurements. And these exist at all points in the supply chain, including business partners. The existence of a "company of silos" becomes apparent and, most importantly, a new clarity of needs and goals emerges for Supply Chain Management. There is a need to transform from dysfunctional and un-synchronized

decision-making - which results in disintegrated and very costly supply activities - to a supply chain that performs in such a way that it is one of the company's competitive advantages.

Prerequisites To Success

Effectively integrating the information and material flows within the demand and supply process is what Supply Chain Management is all about. In most companies, however, two major and very interdependent issues must be simultaneously addressed. The first deals with delivering products with customer-acceptable quality, with very short lead times, at a customer-acceptable cost - while keeping inventories throughout the supply chain at a minimum. The second issue, which tends to be less understood and accepted, is the need for high quality, relevant and timely information that is provided when it needs to be known. For many customers and manufacturers, business processes and support systems will not measure up to the task of quickly providing planning and execution information from the marketplace to production and onto vendors so that the customer's objectives are consistently met. The fact is, most information supplied is excessive, often late and frequently inaccurate.

For many companies, the nagging question about superior Supply Chain Management remains, "What is it going to take to get ahead and stay ahead of our competition?" The answer to that question is, of course, "plenty," but successful extended enterprises share some characteristics. The following list of questions about supply chain characteristics can be used as a beginning benchmark of how well your company is progressing with Supply Chain Management. The following self-assessment checklist can be used with your entire management team to provoke thought and useful discussion and to develop action plans.

	<u>YES</u>	<u>NO</u>
• We clearly understand the strengths and weaknesses of our current supply chain sub-processes and have developed action plans for improvement?	<input type="checkbox"/>	<input type="checkbox"/>
• We have defined our supply chain improvement objectives and have unwavering management commitment to achieve superior performance in our industry?	<input type="checkbox"/>	<input type="checkbox"/>
• Our supply chain system provides high quality, relevant and timely information flow that effectively supports decision-making for inventory replenishment, capacity activation and for synchronizing material flows at all tiers within the supply chain?	<input type="checkbox"/>	<input type="checkbox"/>
• Supply chain process operational responsibilities are well-defined and personnel are thoroughly trained and cross-trained?	<input type="checkbox"/>	<input type="checkbox"/>

	<u>YES</u>	<u>NO</u>
• Our supply chain does not operate on “push” technology rather it is based on “pull” to actual demand?	<input type="checkbox"/>	<input type="checkbox"/>
• We have dismantled organizational silos that resulted in cross-functional barriers to high velocity information and material flows?	<input type="checkbox"/>	<input type="checkbox"/>
• We continually pursue improving our supply chain processes by streamlining information and material flows to support short-cycle, synchronized and lower cost performance?	<input type="checkbox"/>	<input type="checkbox"/>
• Our trading partnerships are well-formulated and grounded in strategic supply chain alliance agreements?	<input type="checkbox"/>	<input type="checkbox"/>
• All organizations in our extended enterprise have been trained to perform new roles which require fast, high quality decision-making and material flow?	<input type="checkbox"/>	<input type="checkbox"/>
• We continually review evolving logistical business models for their impact on distribution planning, movement of goods, cost, cycle time and customer service?	<input type="checkbox"/>	<input type="checkbox"/>
• We utilize E-commerce for selling, buying and business-to-business paperless transacting?	<input type="checkbox"/>	<input type="checkbox"/>
• Our information technology provides a system that truly mirrors what we want to do throughout the supply chain?	<input type="checkbox"/>	<input type="checkbox"/>
• Our supply chain has effective techniques for real-time planning, execution and control including the simulation of alternatives to support the short-cycle pull of material through the supply chain?	<input type="checkbox"/>	<input type="checkbox"/>
• We use performance measurements that encourage and reward behavior that improves supply chain performance?	<input type="checkbox"/>	<input type="checkbox"/>
• Our company has developed Supply Chain Management to a core competency level?	<input type="checkbox"/>	<input type="checkbox"/>

As always, the challenge for top management is setting the right priorities, allocating appropriate resources and, of course, achieving the required results. Complicating the challenge is the enormous risk of not keeping pace in the marketplace, which can result in driving your customers into the waiting, open arms of your more aggressive competitors. The impact of a lost customer on revenue and profit are compounded by the costs a company will incur to recapture or replace lost customers.

The e-Supply Chain

High speed, low cost, communication and collaboration with your customers and suppliers are critical success factors to more effectively manage your supply chain. Then, the e-Supply Chain is very likely in your future. The very essence of Supply Chain Management is effective information and material flow throughout a network of customers and suppliers. The potential for improved productivity, cost reduction and customer service are enormous. Of course, the benefits are based on effectively employing the right processes and supporting information technology. This is a higher priority than ever before. Providing the right amount of relevant information to those who need to know it, when they need to know it is, in fact, effective Supply Chain Management from an information point of view.

Good supply chain practitioners know that information should be passed on only to those who need to know it, in the form they need to have it. Demand information, inventory positions, order-fulfillment, supply management and a whole host of other information exchange activities will change how we sell products, supply products and make and receive payments for goods and services. The e-Supply Chain will have customers and suppliers seamlessly linked together, throughout the world, exchanging information almost instantly. The velocity of relevant information flow will be so fast that, as a result, responding to the inevitable changes in expected vs. actual customer demand will mandate demand-driven manufacturing and supporting processes that provide for faster changes in the actual material flow to match demand.

Fast access to relevant supply chain information can pay-off handsomely in lower costs, less inventory, higher quality decision-making, shorter cycle times and better customer service. One of the biggest cost savings is in the overhead activity associated with lots of paperwork and its inherent redundancies. The non-value added time of manual transaction processing can instead be focused on higher revenue creation activities without proportional increases in expense. The result in cycle time compression, lower inventories, decision-making quality, reduced overhead costs, among other benefits makes e-Supply Chain Management a highly desirable strategy. Supply chain processes can be more streamlined and efficient than could have been imagined just a few years ago. For many companies, more effective Supply Chain Management is where the profit and competitive advantages will emerge and be sustained.

Developing an e-Supply Chain Strategy

e-Supply Chain Management significantly changes the way in which business does business. As a result, management needs to change how they view and serve markets. Yesterday's methods are no longer sufficient, especially for those companies seeking to increase marketshare. As more and more companies evolve new supply chain models, management is compelled to take the right actions or risk being left behind. However, the question is – will the actions taken produce the desired results?

Supply Chain Management systems will be substantially altered in terms of strategy, process, and system. Mistakes here could prove very costly in the near-and longer terms. e-Supply Chain

Management has redefined and will continue to redefine how companies will compete for customers. While the internet offers some exciting opportunities to improve Supply Chain Management effectiveness by lowering costs and increasing the speed of order-to-delivery, it is by no means the first step on the right path to having highly competitive e-Supply Chain capabilities.

Just throwing more software at the problem is not the answer to the core issues of Supply Chain Management. Although software is needed, it is very necessary to define the process of information flow that will activate material flow at the right time. Lessons learned by early adopters of new technologies is that overzealous adoption of those technologies without a carefully planned strategy can prove very costly, especially when the target is missed, or worse, not defined in the first place.

Why Take The Leap?

Certainly, before taking a big leap into the e-Supply Chain, companies need to know why they are taking the leap. By no means should any company perform a leap of faith into applying the latest technology without getting thorough and appropriate answers to questions such as:

1. What business opportunities are available for us to improve market presence, sales, cost of operation, service, communication, cycle time, supply-base management, etc.?
2. Do we know and understand our supply chain priorities?
3. How should we structure internet-enabled linkages with our customers and suppliers for preeminent supply chain performance?
4. What e-Supply Chain approaches can we appropriately invest in for near-and longer-term business performance gains?
5. Do we have an executive-level champion providing the necessary linkage to top management for effective implementation of e-Supply Chain Management?
6. Have we carefully defined an action plan for pre-implementation preparation activities?
7. What are the missing technical links in our current system or our software of choice?
8. What planning and implementation tasks will be accomplished and when?
9. Do we understand the real benefits of an e-Supply Chain versus the cost to develop?
10. What e-Supply Chain strategy will give us the leverage to transform ourselves into marketplace leaders?

Spend Time Up-Front

More than likely, your company has many internal information and material flow process problems to solve before going external. Fixing your internal process problems first will provide more immediate business performance improvements as you continue to build your supply chain on a solid foundation.

Spending time on up-front strategy development for improving the order-to-delivery cycle and Supply Chain Management will pay big dividends. The hard part is discovering and thinking through supply chain opportunities and then developing a strategy and plan for an e-Supply Chain that will improve your performance more than that of your competitors. But without an e-Supply Chain roadmap, the direction you take may not get you to the desired destination. The biggest loss from missing the target can never be regained - *time*. It is essential to do it right the first time.

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