



Surviving and Thriving in the Global Market

A White Paper by
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The Need for Effective Response to Change

Innovation and the marketplace of ideas constantly evolve. What was once considered novel or progressive eventually becomes mainstream, or is relegated to the past. For any entity to thrive, it must constantly reassess its ideas and positions. And if your customers are constantly evolving, expecting better results faster and reassessing their needs and values—shouldn't your firm?

Though executives often talk about speed and agility in their business processes, major programs and IT projects don't mirror that philosophy. Organizations lock into long investment projects that shift attention away from the dynamics of the business—causing them to miss out on valuable new market opportunities as well as innovative technologies that could improve their market position.

Many companies will willingly spend \$1 million with McKinsey or similar firms to plan their long-term strategy. They develop elaborate strategic planning processes, make investments in plant automation, and develop long-term strategic sourcing relationships. Yet despite these significant investments in technologies and business services for the long-term viability of the company, “managing in the now” remains one of the least automated aspects of focus.

In the short term, the impact on margins, customer retention, and competitiveness is directly affected by the organization's ability to effectively respond to ever-present changes. Yet most organizations rely on manual approaches based on tools such as Outlook and Excel, regardless of their current systems environment. And in manufacturing, the problem of process change is exacerbated due to the network of influencers—trading partners who have to align and synchronize before new ideas can take hold.

Both daily and long-term changes are a constant in today's marketplace. Yet frequently the prevailing mindset is, “When this is over, we'll get back to running the business.” This is taking your eye off the ball. True market leaders build flexibility, agility, and focus into their short and long-term business strategy. They see change as a constant, and build a core competency in effectively responding to change into their value chain and technology enablers.

ChainLink Research has conducted extensive research on how supply chains behave and what leading enterprises within them do to survive and thrive in the global market. In this paper we explore supply chain practices, making the case for a higher level approach—effective rapid response—as a key performance strategy for business, and what it takes to be a supply chain leader¹. Whether these supply chain networks are a multi-stage pipeline in one large enterprise or a supply chain of multiple enterprises, the issues are quite similar. So if you are an OEM, a channel manager, an EMS, or a supplier, you must confront the issues presented here.

Response: The Next Performance Breakthrough

Businesses that don't plan are destined for failure. But in today's environment, planning is not enough. You can't plan your way out of the constant last-minute changes that create most problems. Outsourcing partners are in different time zones, customers change their minds, supply sources dry up, and dock strikes delay shipments. Internal activities such as problems on production lines, product transitions, and poor quality manufacturing lots can challenge the best-run firms. Even that long sought-after, but so difficult to predict customer strolling into your store can disrupt your plans. Some events, though intensely worked for, *are just not forecastable*. Therefore, the main issue becomes responding.

In the thriving supply chains we studied, the mastery of *responding*—both in terms of response time and the appropriateness of the response—seems to be a critical higher order performance capability.

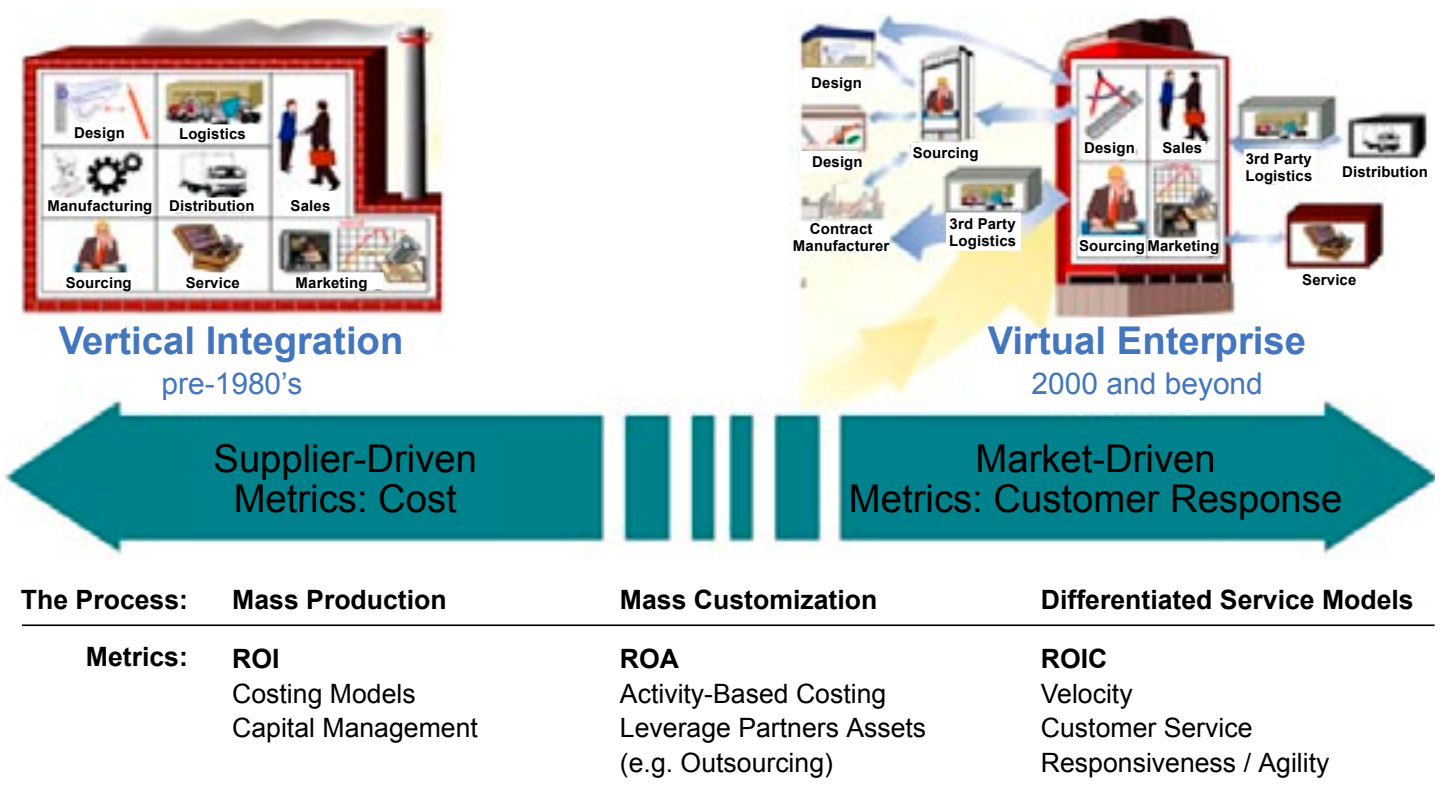
High-value goods chains such as luxury products, high tech, and automobiles continue to pursue the responsiveness goal. They focus on becoming lean and fast, since any inventory is expensive and the value of each product is high. Approaches like customization and build-to-order based on response time *agreements* are the current strategies for these types of supply chains. Firms like BMW, Teradyne, Dell, Honeywell, and others focus more efforts on these approaches than other supply chain techniques of the past.

However, responsiveness is critical even in lower-cost yet fashion-sensitive products like cosmetics. Coty, for example, is mastering effective response techniques, dealing with a high volume of changes from Wal-Mart and other customers and rapidly committing to (and keeping) customer promises involving thousands of SKUs every week. This challenges the concept that consumer products firms cannot build more responsive business models.

The growing use of outsourcing to enhance supplier flexibility has created another fundamental shift in supply chain practices. Now we contract for performance. So, as one supply chain manager said, “Each year we raise the bar on our suppliers, asking for faster response times. We want quicker changeovers, shorter delivery times, and more accurate information.” And the suppliers, frequently in markets where product is not the differentiator, must learn to use *service and responsiveness* as their chief competitive weapon. In the EMS market, for example, Jabil has focused on responsiveness—visibility, control, and flexibility—to compete against its competitors and build customer loyalty, after realizing that competing on cost alone was not enough to gain market leadership.

Firms need to think through how *their business has changed through virtualization*, how high performance can be achieved throughout the supply chain, and what will be the measure of success.

Figure 1 Evolution of Performance



Agility

No one would argue that agility is a worthy capability. But why is it so hard to achieve? One of the recurring themes we hear from businesses is that attention and resources are focused elsewhere when unexpected challenges appear. Capital is already isolated and allocated to multi-year programs that aren't designed to produce near-term implementations or returns. These investments lead to a chain of "starvation" of people, process, programs, and response mechanisms—freezing capital spending and absorbing knowledge resources.

Increasingly, enterprises are refocusing their approach to invest in processes, technologies, and partnerships that mirror business cycles:

- Utilizing third parties with focused capabilities in areas such as logistics and contract manufacturing
- Designing flexible manufacturing techniques
- Adopting build-to-order or mass customization practices
- Implementing modern distribution techniques like in-transit merge/cross docking and packing
- Using fast cycle project management (such as IT implementations or process changes)

To complement these efforts, companies need real-time tools that allow them to see events in action and seize the opportunity at hand.

Response Requirements

If *response* capabilities in terms of time and appropriateness are the higher order goal that firms must now pursue, what challenges and requirements are involved? Certain processes benefit more than others from a rapid response approach. Getting there first (time to market) is an issue for all products. But beyond product launch, companies must deal with the dynamics of change as well as the different philosophies of various supply chain trading partners. This makes achieving a "one number forecast," agreements on stocking levels, consensus on what is considered successful performance, and similar goals quite challenging.

The importance of data management agreements, common calendars, and shared process definitions cannot be overemphasized. What is the universal language of success? So while manufacturing cycle time, transportation delivery time, and other operational elements may have been cut significantly in the last few years, most firms still lack process alignment—the seamless and speedy hand-off in the supply chain relay race. They also lack technology linkages to create a cohesive view, and agreed-on measures to assess performance improvements.

The supply chain winners we studied purposefully view their response and agility measures—e.g., customer wait times, time to market, and excess inventory (a "just-in-case" measure in place to compensate for poor responsiveness)—as fitness measures. Table A depicts various response orientations and processes that benefit most from this approach.

Firms also need to be able to cope with the downside, not just the upside, of market dynamics², and preserve capital for its better purposes. Lucent faced this very challenge during the Telco meltdown and used rapid response tools to analyze and sidestep burgeoning problems in the chain of agreements with suppliers—avoiding huge inventory liability and waste due to downside challenges.

Volatility is a business constant. Companies unable to respond effectively to downsides such as cancelled orders and market swings may find themselves suffering massive losses on an ongoing basis. Developing a core competency in responding effectively to change is the best strategy for proactively managing volatility and gaining competitive advantage.

	Process	Comments	High Impact Industries	Value
Channel /Retailer	Special Orders	Large or high value products are not maintained on the Retail floor	<ul style="list-style-type: none"> • Electronics • Automotive • Aerospace-parts 	Capture high margin business with lower inventory
OEM	Rapid Replenishment or JIT/Kaban	Pull components to point of use or consumption	<ul style="list-style-type: none"> • Electronics • Automotive • Industrial Mfg 	<ul style="list-style-type: none"> • Lean • Customer Delivery Performance
OEM to EMS	Collaborative ATP	Order promising for BTO/ ETO products	<ul style="list-style-type: none"> • Electronics • Automotive • Industrial • Customer Consumer 	<ul style="list-style-type: none"> • Customer Response • Order Accuracy • On-time
OEM	New Product Introduction	Ensuring that new process are not starved for needed material (this frequently occurs due to demand variability and poor market assumptions	<ul style="list-style-type: none"> • Electronics • Medical Devices 	<ul style="list-style-type: none"> • Market Share • Working Capital Management • Revenue
OEM, EMS, Suppliers	Engineering Change Orders	When to perform product transitions	<ul style="list-style-type: none"> • Electronics • Industrial • Pharmaceutical • Medical Devices 	

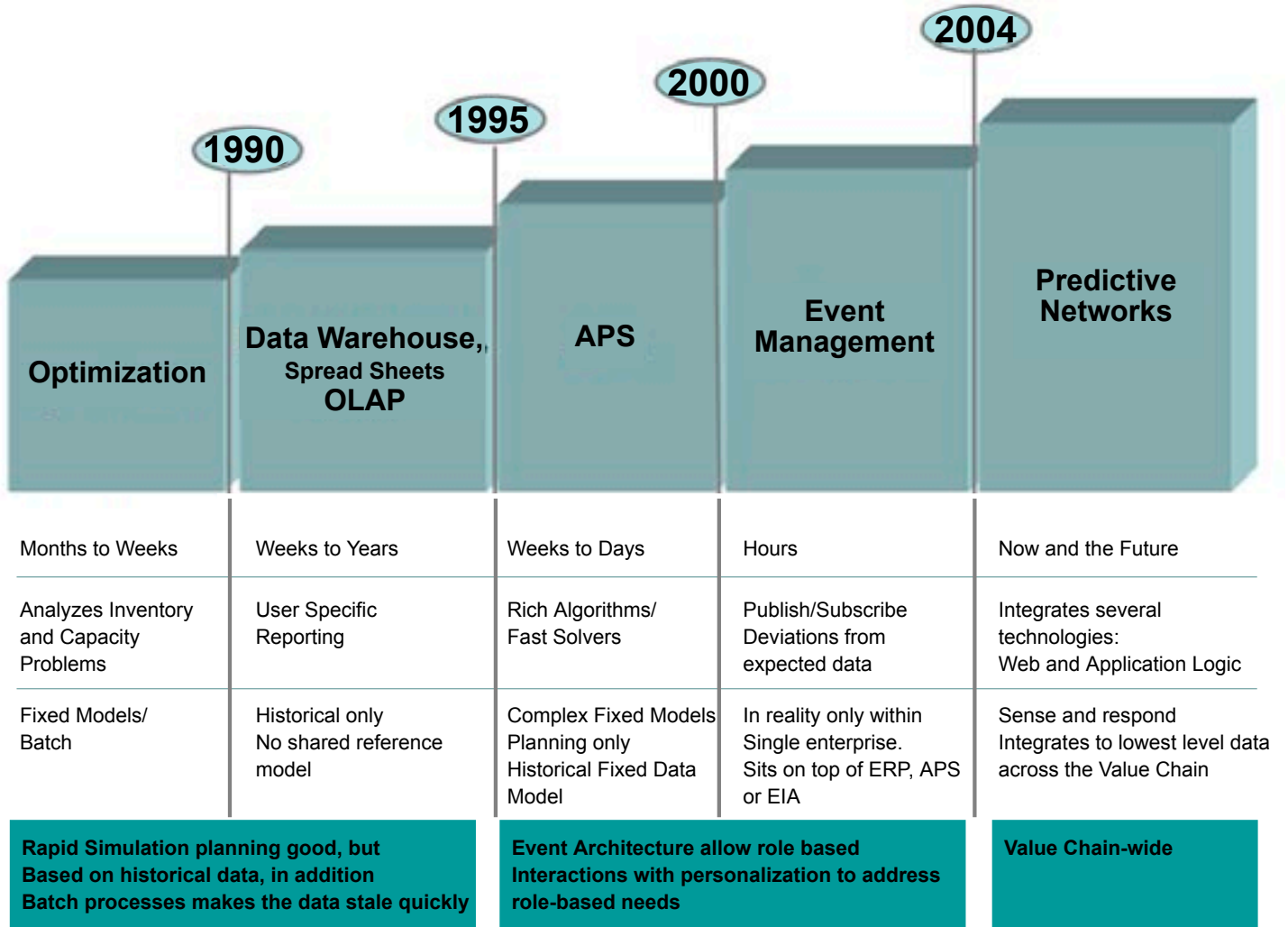
A key to achieving responsiveness, then, is having *active and shareable processes and information among supply chain partners*. Part of an effective response management approach is to catch events as they are happening, so appropriate and timely action can be taken. Obtaining this active and responsive capability requires a new approach in technology.

Technology Enablers: Achieving Responsiveness by Linking the Supply Chain

In today's supply chain, myriad players—suppliers, personnel, transportation, and the disparate systems they utilize—introduce a number of *choke points* where things can go wrong. Managing the complexity this adds to the supply chain requires more visibility—timely, accurate information—in communication between all participants if companies are to maintain or improve supply chain performance.

Visibility must be role-based and in the hands of everyone involved with responding to change—from buyers to planners, managers, customer service representatives, financial analysts, and program managers. Visibility must also extend to include the full supply chain. OEMs need access to contract manufacturer data, since they are ultimately accountable to the end customer. And contract manufacturers must have visibility to OEM forecast data and supplier information at the other end. Only through a global view of the extended supply chain can participants gain the visibility required to rapidly and appropriately respond to change.

Armed with sufficient and applicable visibility, these employees then need tools to collaboratively and rapidly create “what-if” simulations to identify appropriate action alternatives and align the actions they take with corporate objectives.



Fortunately, supply chain technologies have significantly evolved in the last ten years to provide—at extremely inexpensive prices—the ability to create and maintain the visibility and capabilities organizations need to respond effectively to change. Key technologies to achieve this responsive supply chain, then, are:

- A Web-based real-time message layer between the entities
- Alerting systems that penetrate firewalls and bypass legacy batch systems in order to reach personnel
- Subscribing systems that can take advantage of incoming real-time information to respond to events in action
- Collaborative “what-if” simulation capabilities to identify viable action alternatives
- Active/Predictive metrics for real-time and proactive assessment of decisions and measurement of performance against corporate objectives (requires accurate and granular data to support correct decisions)

Today’s supply chain technology has significantly evolved from the enterprise-focused approach of the mid-1990s. These changes in technology, combined with increasing knowledge about supply chain processes, are giving companies a significant opportunity to increase the speed and responsiveness of their business—and therefore capture greater market share.

Managing the Process for Results

Armed with better ideas and technology, businesses can make significant performance improvements. However, they frequently miss the increase in administrative process steps, operational touch points, and decision points in the supply chain. The alignment of process to truly respond effectively cannot be short-changed, and requires examining the processes within and between trading partners and throughout the enterprise. Honeywell, for example, has transformed itself from being a bastion of bureaucracy by embracing a response management philosophy. The results are evident at both the executive level and in supply chain operations.

Again, the new outlook is a high-velocity business model, so businesses don't want to spend weeks in conference rooms redesigning process. This concept was tackled by Network Appliances, which implemented a *lights out* Capable to Promise (CTP) strategy to deal with hundreds of change orders in a rapid and hands-off method. This resulted in higher accuracy, better responsiveness to order promising, and on-time delivery improvements. The excellence the company has achieved in manufacturing and supply chain responsiveness has become a competitive advantage.

Of course, companies must put the supply chain improvement plan in a framework focused on performance. What are the goals, policies, and process changes that must be made and adhered to in order to be more responsive? In addition, what enablers—such as technology and third-party partner capabilities—are needed to succeed? Figure 3 shows an example of what one firm did to increase customer response time and reduce inventory.

Conclusions

There is an argument to be made (and businesses have been debating this) to create more agile business models so that companies can respond to new business opportunities. Many firms say they do this, but their efforts focus mostly on product—rather than overall philosophy and culture. However, supply chain winners see these as bedrock issues, built into the processes of their enterprise. They shun the isolationist programs that don't add value to customers or directly add to corporate brand, reputation, and agility. And they pass these values down to their supply chain through the *Chain of Agreements*.

We frequently hear statements from firms like, "I don't want to be real time—I don't want to jerk around my supply chain." But there's a real difference between "nervousness" in the supply chain and true market intelligence. Winners take information and act on it. They have high-performance business processes and people who know how to seize opportunity and mitigate risks. They don't spend time in *isolation wards*—meetings with paper reports that don't create real solutions! Instead, winning firms leverage technology and process innovations such as real-time simulations that enable them to understand the performance implications and impacts of decisions before they are made. They educate and empower their employees and give them tools that add intelligence to their tasks.

Supply chain winners also have different core principles on managing their supply chains. Focusing on responsiveness and velocity measures like return on invested capital (ROIC) vs. return on investment (ROI) or asset utilization makes their supply chains market-focused—customer-focused. Supply chain winners see value-added investments as those that increase top line growth, rather than just cutting costs (e.g., boosting sales and introducing new products, rather than eliminating plants and people).

They focus on *brand reputation* because they can respond to market conditions and customer issues with grace under fire and fulfill the customer's needs.

They preserve capital for its intended uses, rather than wasting it through poor project management techniques. They organize the structures and leverage the technologies that open up alternatives for them—creating more time and making them more responsive. These rewards come to winning firms through constant pursuit of the highest performance.