



# ACHIEVING SUPPLY CHAIN INTEGRATION

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CONNECTING THE SUPPLY CHAIN INSIDE  
AND OUT FOR COMPETITIVE ADVANTAGE

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# Achieving Supply Chain Integration

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will, in turn, improve customer-centric responsiveness and quality. It can be very easy to fall victim to the demands of entities and agencies external to the organization and to make hasty investment decisions based on the actions of competitors and the pressures caused by regulations, customer demands, and the like. However, in the longer term, organizations will be better served to consider these demands along with the goals of the organization in order to make the best investment decisions possible. Beginning with clearly defined goals for IT capabilities and then following that with investments in integrating their IT infrastructure will not only address the immediate pressures but will also provide organizations a means to achieve a high level of supply chain effectiveness.

## Endnotes

1. Randy V. Bradley is an Assistant Professor of Information Systems and Supply Chain Management, Bogdan C. Bichescu is an Associate Professor of Management Science, and Joon In is a doctoral candidate in supply chain management, all at the University of Tennessee's Haslam College of Business.
2. Norton, S. 2014. Target's Canada Woes Highlight Supply Chain Shortfalls. <http://mobile.blogs.wsj.com/cio/2014/05/22/targets-canada-woes-highlight-supply-chain-shortfalls/>.
3. Ross, J.W., P. Weill, and D. Robertson. 2006. *Enterprise Architecture as Strategy: Creating a Foundation for Business Execution*. Boston, MA: Harvard Business School Press.

## Bending the Chain: Deriving Value from Purchasing-Logistics Integration

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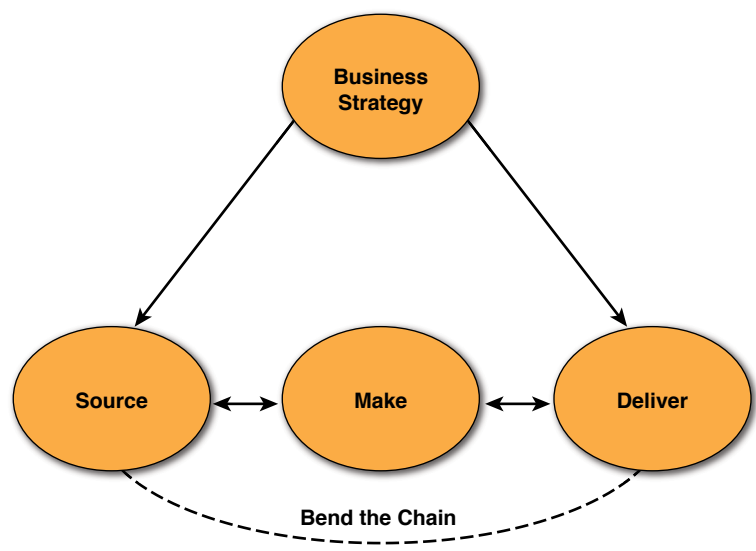
Over the past several decades, supply chain (SC) professionals have focused on performance issues that have emerged from a lack of commercial/business alignment with supply chain operations. Significant improvements have been made, and systemic processes like integrated business planning (IBP) and sales and operations planning (S&OP) have been developed to drive a fully integrated business. As business integration has continued to improve, the biggest supply chain opportunities have shifted.

Every year, the Haslam College of Business's Global Supply Chain Institute networks with hundreds of companies, requesting information on emerging supply chain issues. Our recent research shows that one of the greatest business integration opportunities is found within the traditional supply chain functions themselves. Specifically, we believe a major strategic integration opportunity exists between purchasing and logistics, and failing to capitalize on this opportunity is causing many firms to miss important opportunities to create value.

Based on our research, we believe it is probable that your firm is organized, measured, and incentivized in ways that essentially prevent you from deriving the full benefits of collaboration. In fact, it

is highly likely that your company encourages behaviors that destroy value, both in the short term (by suboptimizing total system costs) and in the long term (by generating superficial gains from functional cost reductions while failing to leverage asset investments).

We have also uncovered strong evidence that organizations that align procurement and logistics decisions vertically with business unit strategy and horizontally between functions enjoy heightened levels of both functional and financial performance. In essence, these high-performing companies are able to *bend the chain* of plan, source, make, and deliver to enable alignment between purchasing and logistics. The result is that they serve customers better with lower operating expenses, cost of goods sold, and inventory.



**Figure 5-1** Strategic Alignment

Our research also sheds light on the structures, processes, and tactics top firms employ to enable this type of functional integration. Data from more than 180 supply chain leaders (firms ranging in size from over \$20 billion to under \$100 million) were collected and have allowed us to draw the following high-level conclusions:

- Procurement and logistics frequently are found in a broader supply chain or operations organization, but really exist as two separate and disconnected functions.
- Both procurement and logistics are well aligned independently to their business unit's strategy and activities but not nearly as well aligned to each other.
- Despite formal organizational links between purchasing and logistics, interaction between these functions is typically informal and unstructured.

Similarly, in our own experience we have found that when functional elements of the supply chain align with each other, improvements in firm financials and earnings per share invariably follow. Without integrated decision making, financial performance is at best suboptimized and at worst destructive to value. Firms must refocus organizational design, metrics, talent, and incentives to align activities across the value chain.

Finally, we conducted an analysis to determine whether the data provided any indication as to whether procurement and logistics integration (referred to as PLi in this chapter) was perceived as being an important lever of overall business success. The data clearly show that *integrated purchasing/logistics organizations deliver better business results* (that is, cost productivity, working capital productivity, and product availability).

Additionally, the many interviews we conducted with leading supply chain firms clearly suggest that companies with “best-in-class” supply chains consistently deliver the strongest business results. These best-in-class organizations tend to employ a set of four best practices:

- Fully integrated end-to-end supply chain organization integrated with common metrics.
- A talented supply chain organization that rewards people for in-depth mastery and end-to-end supply chain leadership.

- A purchasing and logistics network with an operating decision framework based on best overall total value of ownership (TVO; total cost of ownership plus level of customer value creation).
- Effective information systems and work processes that enable superior business results by providing multifunctional supply chain teams with the proper tools and information.

Finally, through our research and best-in-class interviews, we have been able to define a short list of actionable steps supply chain leaders can take today to make a difference.

1. *Get it on business leader scorecards.* Change the business reward system and culture from “suboptimal functional goals” to “total value creation for the enterprise.”
2. *Champion TVO.* It is not enough to talk about use of total value of ownership with your direct reports. Personally lead the change in the supply chain.
3. *Make R&D your best friend.* Create a seamless technical community that is aligned on total business value creation between R&D and supply chain. New product supply chain design should be a seamless technical community deliverable.
4. *Set clear expectations on the use of multidiscipline teams in analysis and decision making.*
5. *Champion an end-to-end and integrated supply chain organization.* In the short term, align on a common direction if the purchasing and logistics teams have different leadership. Ensure that both organizations have a common supplier direction, scorecards, and rewards.
6. *Build supply chain talent that includes end-to-end supply chain mastery.*
7. *Partner with finance.* Work with finance leadership to align on how your multidiscipline teams quantify value for quality, customer service, environmental, sustainability, delivery, cost, and inventory.

## The Surprising Challenge: Purchasing and Logistics Integration

Quality management icon W. Edwards Deming asserted more than 30 years ago in the first of his famous 14 points that a business enterprise needs constancy of purpose to succeed. Without this consistency of purpose, the business is not an organization but rather a collection of functions acting in disjointed and contradictory ways, impeding or even destroying value. Obvious improvements cannot be implemented, and ultimately business activities fail to create a chain that produces value for the company and its customers. Deming's solution to this fundamental problem was to focus on overt collaboration between functions. However, as our research shows, most companies still fail to follow through on his prescription.

Instead of adopting this advice, all too often organizations have focused on developing technical centers of functional expertise to drive scale and meet short-term financial and market expectations.

In the past five years, we have conducted more than 700 interviews with managers across all industries as part of the University of Tennessee's College of Business supply chain audit program. At the end of every interview, we always ask a "wish list" question: if you could change the world, what would you do to improve things in your company? By far the most common answer to that question is the desire for all the functions in the company to work together and become perfectly aligned toward a common purpose. People we interview pine for an environment where the functional silo walls have come down. They intuitively know that these disconnects are the real reason things are not improving faster.

In this chapter we discuss the results of a large-scale research initiative, along with real-life industry examples, which point to the fact that collaboration across functions and between enterprises is woefully missing from the value chain practice despite at least three decades of focus in the popular and academic press. More important,