



Supply chain and the bottom line: A critical link

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Supply chain excellence is directly tied to a company's financial performance. Which is why top performers incorporate supply chain management into their business strategies.

For computer maker Dell, the supply chain is “the biggest leverage point we have,” in the words of one executive. At global clothing manufacturer and retailer Zara, “the supply chain is the business model,” notes one observer. And an executive at Hong Kong-based global trading group Li & Fung opines that “customer value lies in our ability to architect and operate supply chains.”

These observations may not, in fact, be typical of most companies. However, they do reflect the experience and insights of more and

more of today's successful businesses: A correlation exists between an organization's financial success and the depth and quality of its supply chain. That connection—supply chain excellence directly linked to financial performance—is a key finding of a major study undertaken by a team of researchers from Accenture, Stanford University and INSEAD working with hundreds of companies in Europe and North America.¹

But the report's identification of a direct link from supply line to bottom line is only part of the story. Researchers also reached conclusions about how and why successful companies incorporate supply chain management into their business strategies. Another channel of inquiry focused on the design and development of integrated operating models, which the research team found to be the key strategic difference between supply chain leaders and also-rans. The researchers also devoted significant effort to understanding how supply chain leaders execute against their operating strategies and adapt them to changing market needs (see "About the research," page 44).

Overall results bolster our hypothesis that the mastery of core competencies like supply chain management is a critical component of high performance. Four key findings emerged from the research.

1. Shareholder value and financial success:

Senior executives at leading companies view supply chains as critical

drivers of shareholder value and competitive differentiation. Confirming that perspective, the research shows a strong connection between high-performance supply chains and financial success.

Nearly 90 percent of respondents to a Web-survey component of the research said that their supply chain is "very important" or "critical" to their success. An equal percentage reported having increased their supply chain investments in recent years.

Far trickier to ascertain, however, was how supply chain mastery contributes to an increase in shareholder value. To establish that relationship, the team analyzed corporate disclosure data from 636 global companies in 24 industries. For each company, three supply chain performance variables were measured: inventory turns, cost of goods sold (COGS) as a percent of revenue, and return on assets (ROA). Two time periods—1995 to 1997 and 1998 to 2000—were used to correlate gains or declines in supply chain performance with improvements or deterioration in financial performance.

Superior supply chain performers were then defined as those whose supply chain execution ranked in the top one-third for two of the three variables (inventory turns, COGS and ROA). Companies were assessed according to these criteria for each time period and placed in one of four categories:

- *Leader.* Superior supply chain performance was demonstrated across both time periods.

- *Transformer.* Supply chain performance moved from the inferior range during the first time period to the superior range during the second time period.

¹ The full report, "Connecting With the Bottom Line: A Global Study of Supply Chain Leadership and Its Contribution to the High-Performance Business," is available at www.accenture.com/supplychain.

- *Decliner.* Supply chain performance declined from the superior range during the first time period to the inferior range during the second time period.
- *Laggard.* Superior supply chain performance was not achieved during either time period.

A similar exercise was used to categorize each company's financial performance across the same time periods. Superior financial performance was defined as a better-than-average compound annual growth rate (CAGR) of market capitalization within an industry. Again, each company was defined as a leader, transformer, decliner or laggard based on financial performance across both time periods.

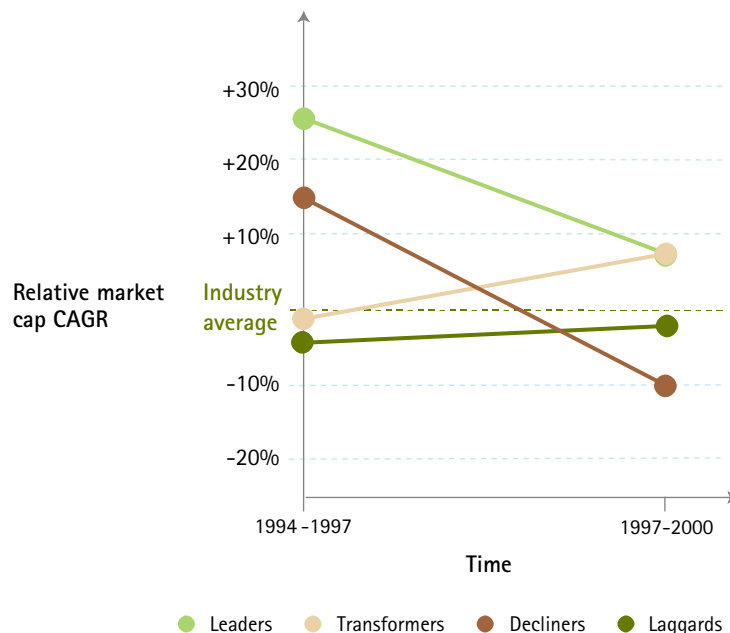
From there, the team cross-tabulated the companies studied in the supply chain and financial performance categories. What they observed was an exceptional degree of consistency. Supply chain leaders showed a higher-than-expected probability of also being financial leaders, supply chain decliners showed a higher-than-expected probability of also being financial decliners, and so on. This pattern strongly suggests a direct relationship between a company's supply chain performance and its financial performance.

As seen in the chart below, supply chain leaders showed a market cap CAGR that was between 7 and 26 percentage points higher than the industry average. Over time, transformers showed an average increase

Is there a relationship between supply chain mastery and shareholder value?

Leveraging supply chain mastery

The "leaders" in the chart below are companies with superior performance in supply chain management and better-than-average compound annual growth rates of market capitalization within an industry in both time periods under study. (Time periods cover four years to calculate three-year CAGRs.)



SOURCE: ACCENTURE ANALYSIS

Integrated operating models are increasingly critical to successfully balancing supply and demand.

in relative market cap CAGR of 8 percentage points. Conversely, laggards' market cap CAGRs trailed the industry average growth rate by 2 to 5 percentage points, while decliners showed an average drop in relative market cap CAGR of 25 percentage points.

These results validate the efforts of forward-thinking executives who are increasingly looking to the supply chain to spur corporate differentiation and growth in shareholder value.

2. Business strategy:

Leading companies incorporate supply chains into their business strategies and devote significant attention to designing integrated operating models.

The interviews and surveys conducted by the research team reveal that virtually all winning business strategies have competitively advanced supply chain management at their core. For example, Nokia's frequent and rapid product introductions—major contributors to fast revenue and profit growth—are supported by a very flexible and efficient global supply chain. In effect, Nokia has altered the playing field with rapid-response manufacturing, quick-ship logistics and a global supply web that links Nokia suppliers and plants; the company also supports vendor-managed inventory and collaborative planning.

Another example is Zara, a Spanish clothing manufacturer and retailer. The company's supply chain strategy: dictate industry standards for time to market, costs, order fulfillment and customer satisfaction.

Zara owns nearly all of its 582 retail stores. Its managers send customer feedback to in-house

designers via handheld devices, keeping the designers instantly abreast of fast-changing trends, which helps Zara cull less desirable merchandise more quickly. The result is better-managed inventories, tight links between supply and demand, and reduced obsolescence costs.

Zara also acquires fabrics in only four colors and postpones dyeing and printing until close to manufacture, thus reducing waste and minimizing the need to clear unsold inventories. With these supply chain innovations, Zara can deliver new styles in three to six weeks, compared with up to five months for competitors.

The researchers also observed that few companies spend sufficient time designing integrated operating models prior to implementing detailed processes and capabilities. However, integrated operating models are increasingly critical to successfully balancing supply and demand; hence, they are core components in any supply chain strategy.

These models vary significantly by industry. But they always incorporate world-class business processes—particularly customer relations, supplier management, new product design and core logistical operations. They also tend to be the product of a management culture that encourages supply chain excellence.

The research team identified three distinct approaches to defining an integrated operating model. The first, *out of the box*, develops an industry-redefining operating model as a core strategic component. Dell pioneered the direct-to-customer supply chain model for PCs, bypassing traditional, higher-cost channels and enabling consumers to customize their purchases and deliveries.

Other companies, such as Seven-Eleven Japan, use a *later in life* approach. These companies migrate to an integrated operating model as new opportunities present themselves. Seven-Eleven Japan moved to eight store deliveries per day when it realized that customized assortments of key products oriented to time-of-day shopping could enhance revenues and profits.

Finally, some companies are *focused transformers*: they adopt an integrated operating model in a specific part of the business. General Electric and Home Depot, for example, teamed to develop a “buy one/make and ship one” model for home appliances. This approach minimizes inventory in retail stores and distribution channels, while giving consumers more product options, customized deliveries and post-sale services.

3. Innovation:

Companies that excel in supply chain management build innovation into their operating models, with particular regard to outsourcing, internal/external integration, and matching supply and demand.

Most of the world’s top companies understand that the basis of competitive differentiation is new—that is, *innovative*—ways to improve operating performance. The team identified three capabilities that foster or reflect innovation and supply chain leadership.

Matching supply and demand. Supply chain leaders’ core operating principle and most critical supply chain process is balancing market needs with available supply. Researchers identified several best practices associated with this capability, including ultra-high-frequency deliveries, dynamic pricing coupled with customized assembly,

and collaborative forecasting and inventory management.

A good example of the latter is an initiative undertaken by Henkel (a multinational manufacturer of household cleaners, adhesives, toiletries and other home-care products), Condis (one of Spain’s largest supermarket chains) and several packaging suppliers. These companies established a CPFR (collaborative planning, forecasting and replenishment) process for laundry and home-care products that involves daily data interchange for key items, coordinated business planning and jointly developed key performance indicators.

Next-generation efficiency gains.

To minimize operating costs and employed assets, supply chain leaders are more likely than most companies to implement leading-edge operating strategies and technologies. Some top food companies, for example, have implemented collaborative transportation management approaches, while innovative retailers such as Staples and Wal-Mart have combined cross-docking and advanced warehouse management to reset the bar in distribution.

Researchers also cited an initiative in Europe, where UK-based supermarket chain Tesco has been testing Gillette Mach 3 razor blade packages that have been tagged with radio frequency identification devices. These tags make it possible for both companies to track inventories down to the item level, thus reducing channel volume and enhancing forecasting and planning capabilities.

Organizational integration. Supply chain leaders align internal and external organizations to maximize product lifecycle revenues. To achieve this, they use value-analysis tools, shared metrics, and post-sale

Continuous improvement and innovation should never come at the expense of smooth, ongoing execution.

support and management. Take US carmaker Saturn Corporation, which emphasizes total lifecycle ownership value by providing low prices and high levels of after-sale service. The company also pools retailer inventories and links demand data with external parts suppliers to support production planning.

4. Strategies, capabilities and execution:

Companies that focus on supply chain mastery rigorously execute against their strategies and capabilities, and they constantly adapt them to changing market needs.

Simply put, leading supply chain companies do the basics well by ensuring that processes are

designed to be easily executed and that strict performance standards are met.

Nokia drives end-to-end process excellence across its operating model. It builds market-driven processes from the customer back through internal functions.

Other companies foster process-oriented, collaborative cultures within and across organizations. Sun Microsystems' customers, for example, receive consistent service and quality across the globe from Sun employees with instant access to all account, ordering and delivery information. And still other companies, such as the Esquel Group, develop corporate-wide, high-level metrics. Driven by

About the research

To establish the link between supply chain and financial performance, and to identify the success factors that lead to supply chain excellence, researchers from Accenture, Stanford University and INSEAD analyzed corporate-disclosure data from 636 of the world's 3,000 largest companies, and conducted in-depth interviews with more than 75 executives from 60 companies.

The research team also analyzed more than 100 responses to a Web-based survey designed to capture the supply chain insights and experiences of leading executives from companies across North America and Europe. In addition, the team consulted with industry analysts, academic experts and Accenture executives, and analyzed and compared results from previous Accenture, Stanford and INSEAD studies.

Researchers pursued three primary lines of inquiry.

Why is the supply chain strategic?

- In what contexts do executives see the supply chain as a vital (that is, strategic) component of their business?
- Can a clear relationship be established between supply chain performance and shareholder value?

How are leading companies using the supply chain to drive competitive advantage?

- What forms of business value do companies most frequently desire from their supply chain initiatives?
- What supply chain functions are thought to provide the greatest improvement opportunities?
- What are the most widely applied best-practice capabilities of supply chain leaders?
- On an ongoing basis, how do business leaders increase the value of their supply chains?

What is the nature and success probability of various supply chain transformation initiatives?

- What alternatives exist for structuring and managing supply chain transformation projects?
- What is the likelihood of success for each identified planning and implementation alternative?

well-designed and strongly enforced performance measures, all operating units at the Hong Kong-based high-end apparel supplier collaborate to improve supply chain performance.

Supply chain leaders also understand that successful execution is a journey that combines the focused completion of everyday operations with continual supply chain innovations. Put another way, they recognize the importance of continuous improvement and innovation, but never at the expense of smooth, ongoing execution. Three companies that are particularly adept at introducing new initiatives without upsetting day-to-day operations are Microsoft Corporation, DuPont and Grainger.

Microsoft, for example, used an extensive network of contract manufacturers and logistics providers to support the successful launch of its Xbox game machine. Customers for DuPont's paints are an integral part of the supply chain process, taking responsibility for mixing final colors and ensuring paint quality, which significantly reduces DuPont's supply costs. Industrial products distributor Grainger, on the other hand, has suppliers assume primary responsibility for product quality through a four-step approach: educate, establish objectives, continually improve processes, and ensure tight and frequent communication.

Strategic cornerstones

Taken together, the observations made by Accenture, Stanford University and INSEAD imply that at least three supply chain management strategies are common to most business leaders, regardless of industry.

- *Relentlessly shorten the supply chain* to reduce costs and enhance

profits. A prime practitioner in this area is Zara, which is able to introduce 11,000 new designs to the market each year—generally with a three- to six-week lead time and with costs that are markedly lower than its competitors' costs.

- *Flawlessly execute supply chain capabilities* internally and with partners. Dell has eliminated inventory echelons and reduced supply chain costs by fostering broad partnerships with suppliers.
- *Continuously evolve strategies and operating models* in anticipation of new market conditions. Seven-Eleven Japan makes multiple daily deliveries to individual stores to match consumer desires that shift according to the time of day. Deliveries also are coupled with new product and service offerings.

The importance of these three strategies is their ubiquity: They are the cornerstones of virtually every leading company's supply chain transformation agenda. Of course, no two companies will follow an identical transition path. But the ones that succeed most completely are certain to have constructed short, tight supply chains that are flexible and fundamentally collaborative. They also will demonstrate supply chain innovation in a way that cogently reflects their unique mission as well as their high-performance aspirations. ■

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