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## Value Chain Innovation

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*Transforming Traditional Supply Chains  
To Achieve Superior Financial Performance*

Prepared by Manufacturing  
Executive Research Services

# Value Chain Innovation

*Transforming Traditional Supply Chains  
To Achieve Superior Financial Performance*



**T**he notion of value chain transformation gained widespread currency after author and Harvard Business School Professor Michael E. Porter coined the term in his seminal 1985 book, *Competitive Advantage: Creating and Sustaining Superior Performance*. Porter's idea was that companies should operate as more than isolated collections of people, resources, equipment, and functions, each independently pursuing its own activities and goals. Instead, Porter said, companies could gain sustainable competitive advantage by transforming their traditional supply chains into value chains, in which the supply chain is seen as one integrated piece of a broader set of processes that add value through each phase of the product lifecycle.

Whereas traditional supply chains are optimized around the transactions that enable the efficient flow of physical supplies and products and also reduce costs, value chains emphasize the enhancement of customer and enterprise value. That enhanced

value is typically achieved through business strategy alignment and tight collaboration between the supply chain team and other functions such as new product development, engineering, production, quality, supply chain, and service management inside the enterprise, and suppliers, customers, and partners on the outside.

Or, as Gartner puts it, “In the past, supply chain designs focused on physical flows to improve costs. Today, supply chain teams design to improve time-to-market for new products, harvest opportunities through tax efficiency, meet corporate sustainability goals, balance risk with opportunity, and manage product complexity.”<sup>1</sup>

So, for example, in addition to driving supply/demand efficiency, a supply chain organization within a value chain model would also work closely with the company’s new product development, engineering, quality, and production functions as well as suppliers to ensure rapid time-to-market for new product innovations, or to verify that a new product meets the company’s sustainability goals.

A supply chain team within a value chain model would, for example, collaborate with sales, marketing, and product development to segment customers and products to align demand, product, and supply cycles and deliver greater value.

This value chain approach, according to Porter, results in better-integrated, closed-loop processes that deliver greater customer value and higher profit margins while allowing manufacturers to reduce time-to-market and more quickly respond to competitive challenges and opportunities.

It may not be surprising, therefore, that 27 years later, Porter’s ideas resonate more than ever. According to an exclusive Value Chain Transformation survey conducted in May 2012 by Manufacturing Executive

Chart: 1

### Value Chain Transformation a High Priority

**Q:** Does your company have as a goal the transformation of its traditional supply chain into an integrated value chain?

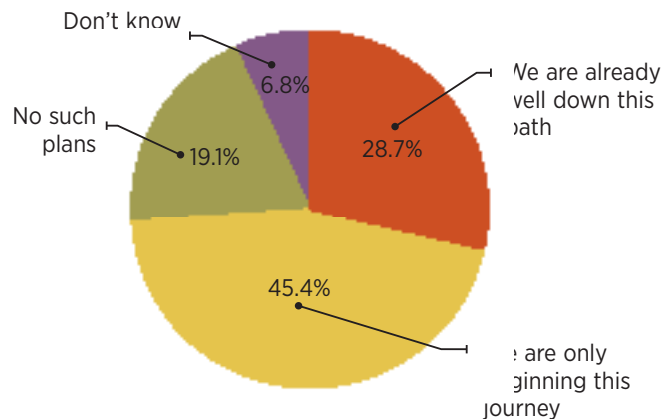
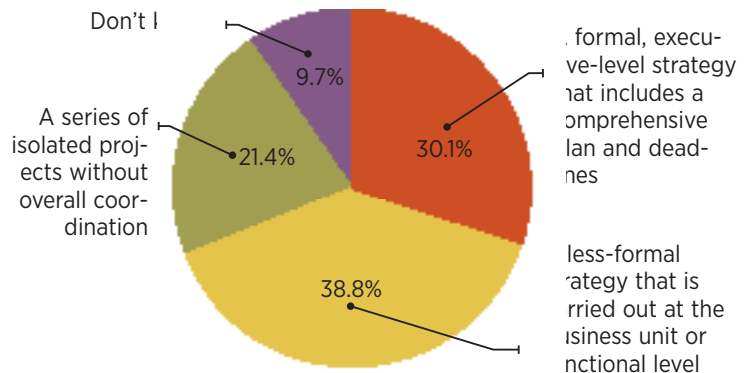


Chart: 2

### Transformation Strategies a Mixed Bag

**Q:** How would you describe your company’s strategy for achieving value chain transformation?



Research Services, 74.1% of manufacturing executives said their companies have as a goal the transformation of their traditional supply chains to integrated value chains. More than 28% of the 326 manufacturing executives responding to the survey said their companies are already well down the path toward value chain transformation (Chart 1).

And many manufacturing organizations making the value chain journey are clearly treating it as a strategic initiative. Thirty percent of respondents

Chart: 3

**Agility, Risk Control Drive Transformation**

**Q:** *What are your company's reasons for pursuing value chain transformation?*

*Average Rating (1=low importance, 5=high importance)*

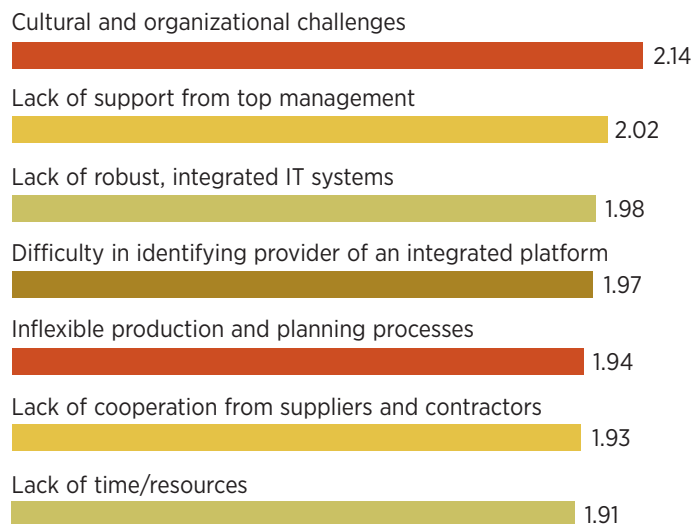


Chart: 4

**Culture Poses Biggest Challenge to Transformation**

**Q:** *What are the most significant obstacles your company faces in achieving value chain transformation?*

*Average Rating (3=most significant)*



to the exclusive survey said their approach to achieving value chain transformation is an executive-level strategy that includes a comprehensive plan and deadlines (Chart 2).

**AGILITY IS THE DRIVER**

Why are so many manufacturing organizations taking on the value chain transformation challenge? Simply put, they see it as a way to stimulate innovation, growth, and profitability in what, for many, continues to be a difficult competitive environment fraught with rapid change and increasing complexity. The number-one reason for pursuing value chain transformation cited by respondents to the Manufacturing Executive survey was the “need to respond with more agility to changing business conditions.” (Chart 3).

Survey respondents specifically called out the expectation that a value chain approach would help them better cope with supply chain risk. That’s not surprising, because an organization focused on delivering customer value would naturally be more concerned with customer service disruptions than one that primarily targets inventory cost reductions.

Survey respondents also see value chain transformation as helping them accelerate innovation, deliver customized products, decrease time-to-market, and even grow margins. In fact, Gartner has estimated that by delivering greater value to customers and achieving other improvements such as cutting cash-to-cash cycle times, manufacturers that have achieved value chain transformation have been able to generate 60% higher profit margins, 65% better earnings per share, and two to three times better return on assets.

One organization that is beginning to see the benefits of value chain

transformation is Toshiba America Business Solutions (TABS), an Irvine, CA-based maker of multifunction printer/fax/scanner products. The company launched its value chain transformation initiative two years ago, driven by major competitive shifts in its market. An aggressive growth-through-acquisition strategy forced TABS to reevaluate and rationalize its entire distribution network. But perhaps more importantly, the company needed to be able to respond to growing customer demand for solutions that combine commodity printer products—from Toshiba and others—with services that, for example, allow customers to pay by the printed page.

TABS responded by analyzing each piece of its supply chain to understand where the company was adding value and where value could be increased, with a focus on improving customer satisfaction by cutting cycle times and implementing more solutions composed of products and services.

“We wanted to map out an integrated supply chain and take out pieces that we determined had not been adding value, and improve customer support and service while also improving cost and asset management and lowering risk,” says R. Steven Tungate, Vice President and General Manager for Supply Chain Management and Innovation at TABS.<sup>2</sup>

The company then redesigned its supply networks, emphasizing opportunities to deliver new service-based value to customers. TABS also standardized on an Oracle ERP platform and rolled out an integrated, company-wide demand planning process.

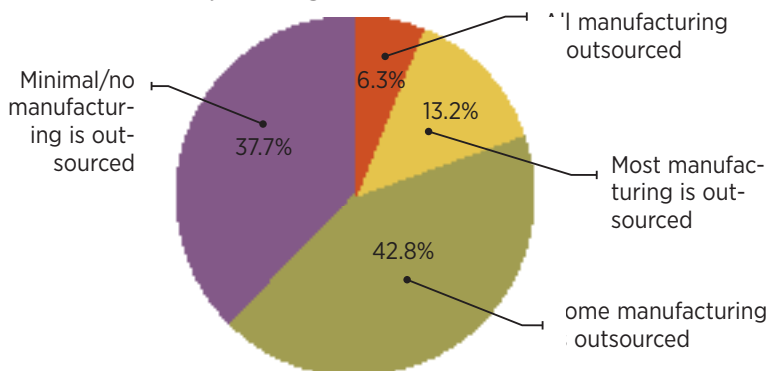
Results have been impressive. TABS has been able to reduce days-on-hand inventory by more than 50% while cutting field support costs and significantly driving up customer satisfaction ratings.

TABS’ value chain transformation efforts have produced what Tungate

Chart: 5

## Outsourcing Still a Reality in the Supply Chain

**Q:** Characterize the extent to which your company currently outsources manufacturing.



calls “a trifecta of good things: fewer assets, better customer service, and lower expenses.”

## BENEFITS AND OBSTACLES

The potential benefits of value chain transformation are indeed compelling, but many manufacturing organizations find that the path to transformation can be studded with obstacles. Value chain transformation requires increased—in some cases unprecedented—levels of collaboration both inside and outside the enterprise. But cultural and organizational challenges related to that increased collaboration were cited by respondents to the Manufacturing Executive survey as the number-one obstacle to value chain transformation (Chart 4).

Survey respondents also pointed to a lack of top management support and the absence of robust, integrated IT systems as other factors that can undermine value chain transformation.

“Executive commitment is key,” says Maha Muzumdar, Vice President of Supply Chain Marketing at Oracle, which recently went through its own value chain transformation following the acquisition of computer hardware manufacturer Sun Microsystems. “At the end of the day, it’s all about people.

*Traditional supply chains are optimized to enable the efficient flow of supplies and products; value chains emphasize customer and enterprise value.*

It can be a big change management issue, but with a lot of training, sponsorship, and communication, it's possible to drive this type of transformation."<sup>3</sup>

Manufacturers responding to the survey also pointed to another reality that can stand in the way of value chain transformation: complexity brought on by global outsourcing. If successful value chain transformation is all about streamlining the connections and collaboration between the supply chain team and other important enterprise functions, outsourcing production to an outside—and often far-flung—party can make value chain transformation even more challenging.

Yet that is just what most manufacturers are continuing to do. A considerable majority (62.3%) of manufacturers surveyed said they outsource some production today. And 72.5% said the level of outsourcing in which they engage will stay the same or increase over the next five years. Only 12.5% predicted that the level of outsourcing they do will decrease in five years (Charts 5 and 6).

## THE ROAD TO VALUE CHAIN TRANSFORMATION

On their way to becoming more value chain-oriented, organizations typically pass through four stages of maturity, Muzumdar says. The beginning stage is

*Value chain transformation requires increased—in some cases unprecedented—levels of collaboration both inside and outside the enterprise.*

Chart: 6

### Outsourcing Will Continue to Impact Value Chain Transformation

**Q:** In five years, will your company's use of manufacturing outsourcing be:

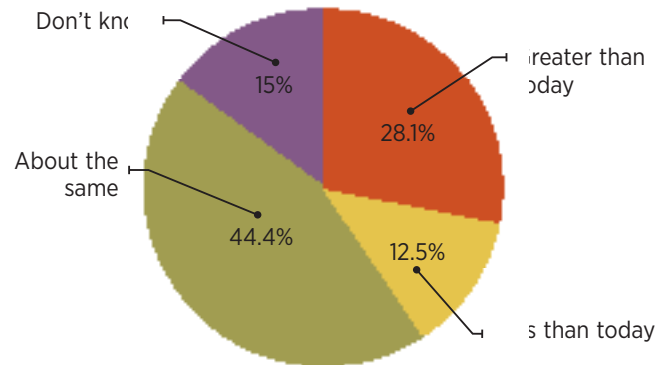


Chart: 7

### Road to Integrated Systems Still a Work in Progress

**Q:** To what extent has your company integrated R&D/design systems with supply chain/manufacturing systems?

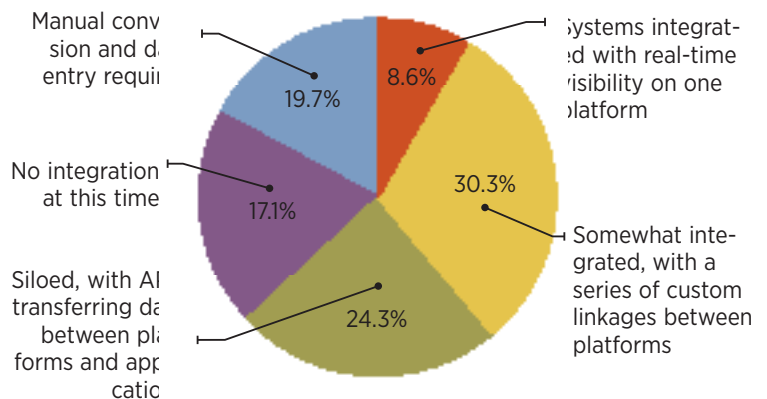
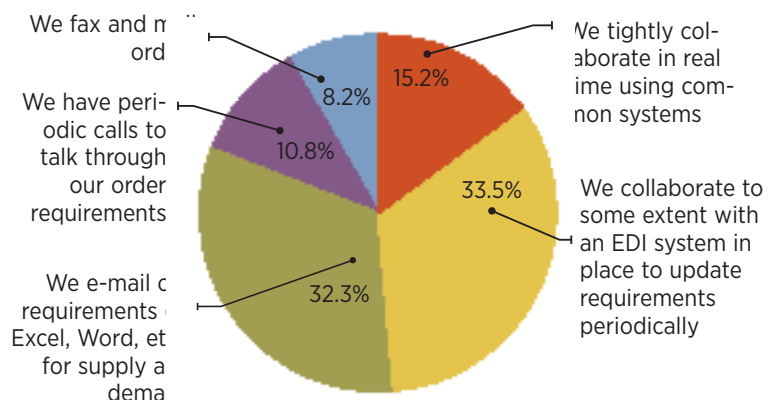


Chart: 8

### Collaboration Still Rudimentary for Most

**Q:** To what extent do you collaborate on supply, demand, and product needs with your customers, suppliers, partners, and distributors?





characterized by fragmented, silo-based processes and limited collaboration. The next phase is marked by improved internal processes and better data integration. Companies next mature by improving point capabilities such as sales and operations planning. And finally, some achieve value chain transformation best practices characterized by multi-enterprise collaboration and orchestration.

To navigate this path toward value chain transformation, manufacturers must take on and master four sets of capabilities aimed at increasing agility and, ultimately, creating more value for themselves and their customers. First, Muzumdar says, manufacturers must become more demand-driven, able to not only accurately predict demand but also shape it.

Other key capabilities, according to Muzumdar, include fulfillment excellence enabled by tightly integrated manufacturing and logistics processes; the ability to achieve profitable innovation through quicker time-to-market, and improved quality and compliance; and the ability to align supply, demand, and product management with overall corporate goals.

Underpinning all of those capabilities—from fulfillment excellence to supply, demand, and product alignment—is the ability to effectively collaborate, both across internal functions and with external suppliers, partners, and customers.

Unfortunately, the Manufacturing Executive Value Chain Transformation survey shows that many manufacturers still use relatively rudimentary tools, particularly for external collaboration. Only 15.2% of respondents said they currently collaborate using common, real-time systems. The largest group, 33.5%,

Chart: 9

Organizational Integration Lags

**Q:** To what extent is your company seeking more integration and cooperation among internal functions such as supply chain, innovation, service, and support in pursuit of value chain transformation?

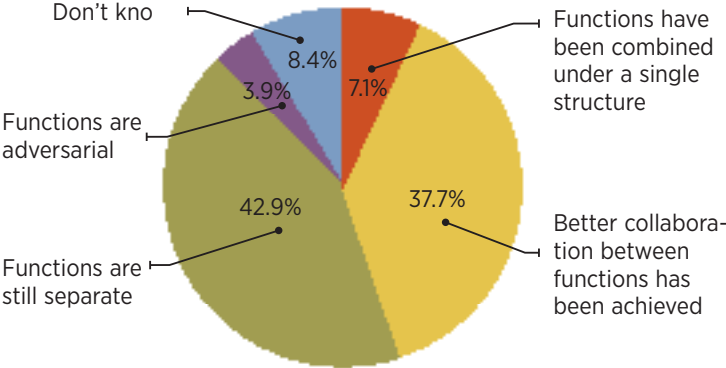


Chart: 10

Demand Management, S&OP Key to Value Chain Transformation

**Q:** Rate the importance of these technologies and systems to achieving value chain transformation. Average Rating (1=low importance, 5=high importance)

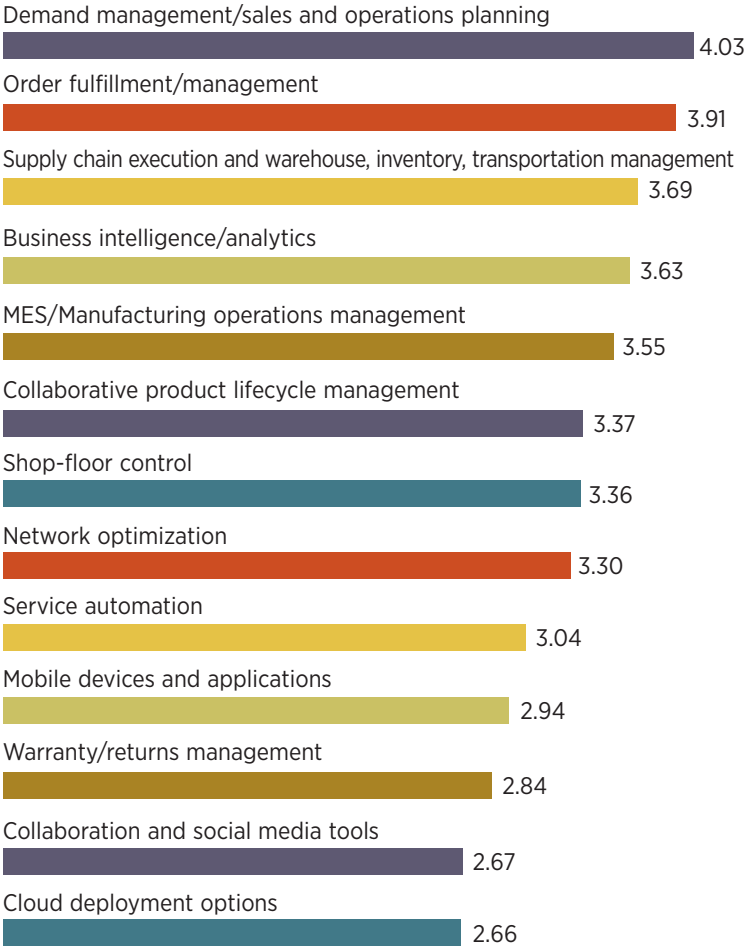


Chart: 11 

### PLM, Network Optimization, Analytics High on the Wish List

**Q:** Which of these technologies or systems does your company use or plan to use?

	Use	Plan to use	No Plans
Collaborative Product Lifecycle Management	24.8%	42.%	32.4%
Demand Management/Sales and Operations Planning	55.%	31.5%	12.8%
Order/Fulfillment Management	65.1%	24.8%	10.1%
MES/Manufacturing Operations Management	45.9%	30.8%	23.3%
Shop-Floor Data Control	53.4%	24.3%	22.3%
Supply Chain Execution/Warehousing/Inventory/Transportation	57.9%	29.7%	12.4%
Network optimization	34.7%	42.9%	22.4%
Mobile devices and applications	37.8%	37.2%	25%
Warranty/returns management	43.5%	25.9%	30.6%
Collaboration and social media tools	33.6%	24%	42.5%
Business Intelligence/analytics	46.6%	41.2%	12.2%
Service automation	19.3%	46.2%	34.5%
Cloud deployment options	16.4%	41.1%	42.5%

*Survey respondents identified improved operational efficiency and increased customer satisfaction as the most significant benefits of their value chain transformation efforts.*

uses EDI to collaborate with external parties, while 8.2% still fax and mail orders (Chart 8).

Nor have most made significant organizational changes or deployed integrated systems that could support cross-functional collaboration and value chain transformation. The largest group of survey respondents, 42.9%, indicated that their internal supply chain, innovation, service, and support functions are still organizationally separate. While 37.7% said better collaboration between these functions has been achieved, only 7.1% said these functions have been combined under a single organizational structure. Almost 4%

admitted that these functions are not only separate but adversarial (Chart 9).

And most organizations are still rolling out common systems equipped to support better cross-functional collaboration and value chain transformation. Only 8.6% of respondents said they have implemented common, integrated cross-functional systems that deliver real-time visibility.

The largest group, 30.3%, said they have built custom linkages between systems to support processes that span R&D/design and supply chain/manufacturing. Almost 20% still engage in manual data reentry to support cross-functional processes (Chart 7).

But many manufacturers have big plans when it comes to deploying new systems that can support cross-functional collaboration and value chain transformation. Manufacturers responding to the Manufacturing Executive Value Chain Transformation survey identified demand management/sales and operations planning, order fulfillment, supply chain execution/inventory/transportation management, and business analytics as the systems that are the most important for enabling value chain transformation. And looking forward, many are targeting service automation, collaborative product lifecycle management, and network optimization tools for deployment (Charts 10 and 11).

As manufacturers continue to make the investments and gain the core capabilities necessary to traverse value chain transformation, they are being drawn by what they expect will, in the end, be significant benefits. Respondents to the Manufacturing Executive survey identified improved operational efficiency and increased customer satisfaction and



retention as by far the most significant benefits they expect to realize from their value chain transformation efforts (Chart 12).

“It’s all about generating revenues, keeping your competitive posture up, and improving customer service,” says Lawrence Lapide, Research Affiliate at the MIT Center for Transportation & Logistics and a member of the Manufacturing Leadership Board of Governors. “Value chain transformation is about moving from push manufacturing to a posture of serving customers better.”<sup>4</sup>

That’s also how TABS’ Tungate sees it. As an outgrowth of his company’s efforts to integrate its supply chain and focus on solutions and value creation, TABS is now making a new business out of running its distribution partners’ supply chains as a value-added service.

“We are adding more value by actually creating a business out of our distribution,” Tungate says.

KEY TAKEAWAYS

The exclusive Manufacturing Executive Value Chain Transformation survey shows that nearly 30% of organizations are already well on their way toward value chain transformation, while another 45% are beginning the process. Here are some specific steps that companies can take to enable the value chain reinvention process:

- *Create winning products*—Capture and leverage the best ideas in real time, to ensure product quality and rapidly build, launch, and commercialize new products.
- *Plan for profit*—Align the value chain delivery process by synchronizing your operational and financial plans. Then capture growth by predicting and shaping demand and effectively segmenting your customer base.
- *Orchestrate agile operations*—Build adaptive value networks that are ca-

pable of responding quickly to changing events by leveraging value-driven procurement and intelligent, digital manufacturing.

➤ *Accelerate value chain transformation*—Adopt the right transformation strategy (“big bang,” phased, or hybrid) based on business complexity, risk profile, and associated costs. Utilize industry benchmarks, integrated training, and change management to ensure successful transformation. Leverage best-in-class, scalable technology enablers to deliver superior performance through optimized processes.

In order to compete today, organizations must embrace a complete solution that enables results and supports innovation and sustainability. Linking your supply chain with your demand, product, and design chains will allow you to achieve world-class operations. **M**

FOOTNOTES

- 1. “How Do I Drive Value Through a Value Network?” Gartner/AMR Research, November 2007. <http://api.ning.com/files/bWUdj8VfPJcuK9DX5jJ-KmYWroHlFTWAYJtHS-1gT7WpwoJV5XOEN-rQDILBf79SEvblka-pUojonbkopSOB9BM-poJJ84n9Zocs/CasestudyDemandDriven-ValueNetworkDDVN.pdf>
- 2. Value Chain Transformation, Manufacturing Executive Webinar, May 2012. [http://www.manufacturing-executive.com/community/value\\_chain\\_transformation](http://www.manufacturing-executive.com/community/value_chain_transformation)
- 3. Ibid.
- 4. Ibid.

Chart: 12

Lower Costs, Higher Customer Sat Lead Transformation Benefits

**Q:** How would you assess the following potential benefits associated with your company’s value chain transformation efforts?  
Average Rating (1=least significant, 3=most significant)



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