

**M&IS 34060—Operations Management  
Supply Chain Management Assignment**

**ASSIGNMENT:**

- **Read the textbook chapter on supply chain management (SCM), chapt. 11, and the enclosed white paper that relates to SCM.**
- **As you read, notice how many connections between the white paper and operations management topics such as SCM (ch. 11) operations strategy (ch. 2), forecasting (ch 4), process and product design (ch. 5 and 7), etc.**
- **Use at least four concepts or discussion points from the whitepaper and show how these "imperatives" relate to these other OM issues and concerns. (Note...not all seven imperatives need to be covered.)**
  - Some of the white paper is technical in nature and other areas give accessible examples. Be sure to include in any technical discussion some form of explanation or example to illustrate what is meant.
  - Be sure to use formatting cues, such as bold or headings, so I can easily find the different points you are making.
  - This must be type-written and double-spaced and would typically be somewhere in the 3 to 5 page range. Please use paragraph form.
- **This will be part of your “Individual Investigation” that is to be turned in at the end of the semester. Note, though, the schedule has a suggested timeframe for when you may want to complete this as it relates to other course materials.**

**WHITEPAPER BEGINS ON NEXT PAGE**



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# High Performance in a Volatile World Seven Imperatives for Achieving Dynamic Supply Chains

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# Introduction

Increasing economic volatility has severely disrupted the supply chains of companies across industries. Rapid swings in the availability and price of key commodities, major currency fluctuations, upheaval in financial markets, disruptive geopolitical events and continued development of customer channels on a global basis have conspired to place unprecedented pressure on the way these companies source, manufacture and distribute products. Accenture research has found that those with very dynamic and well-synchronized supply chains can use such volatility to their advantage. Companies that want to do so face seven imperatives, which we describe and illustrate in this paper.

Large, global companies face numerous challenges in today's tumultuous economic climate. One of the biggest is creating dynamic supply chains that help a company achieve and maintain high performance—despite major fluctuations in demand and supply, significant changes in commodity availability and prices, big swings in currencies, unforeseen geopolitical events and the need to align to both mature and emerging high growth markets. Customer expectations are high and rising, and global competition has dramatically shortened the lives of products from cellular phones to automobiles. Innovations are commoditized in weeks or months rather than years. Unpredictable commodity and transport costs can render “low-cost” offshoring a high-cost alternative, continuously forcing companies to reevaluate how and where they source, manufacture and distribute products.

Research that Accenture has conducted going back to 2003 has found that supply chains have a disproportionate impact on corporate performance relative to the attention generally paid the function in most companies<sup>1</sup>. According to this research, a supply chain can account for between 50 percent and 70 percent of a manufacturer's total costs of doing business and more than 50 percent of its assets. It can also have significant impact on customer service and sales. Reflecting this prominence, a clear majority of executives (89 percent) say supply chains are core to business success and that their importance is growing. To put it bluntly, not only do more dynamic supply chains result in superior corporate performance, but it is almost impossible to overcome the negative bottom-line impact of more traditional supply chain models in today's permanently volatile environment.



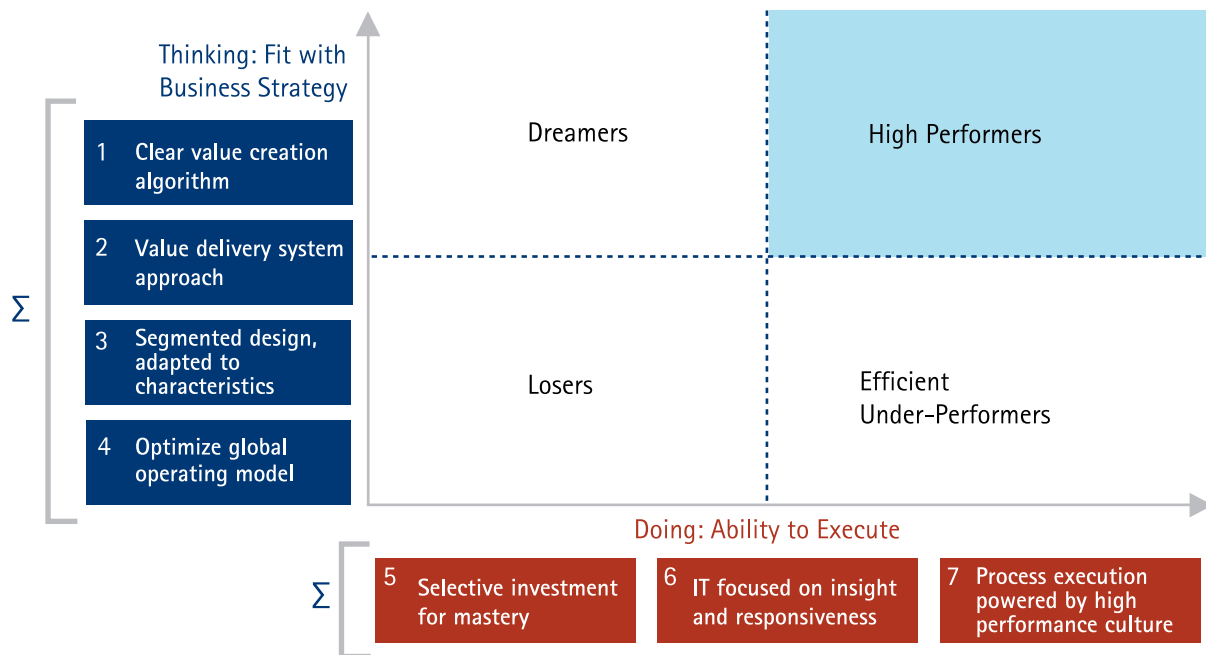


Figure 1. The seven supply chain imperatives combine to drive high performance.

Accenture further has found in our client experience that the most successful companies clearly align their supply chain operations with the value proposition of the business and invest in those operational areas that lead to highest shareholder return. In fact, we have found business practices and capabilities that are a great strategic fit with the overall focus of the business—and can execute reliably and flexibly—can play a major role in helping companies generate cash, reduce operational costs, improve asset productivity, optimize their tax liabilities, drive revenue growth and market differentiation and foster greater environmental sustainability.

In more recent research, completed at the end of 2008, Accenture interviewed 1,500 executives in North America, Europe and Asia from more than 600 companies in 10 industries. (Nearly half—48 percent—were in companies with at least \$1 billion in annual revenue.) As we studied how these organizations design and manage their supply chains for superior performance, it became

rapidly apparent that no one silver bullet could explain success. We did, however, identify seven fundamental guiding principles that effectively serve as a line of demarcation between a would-be and a true high-performance business (see Figure 1).

Four of the imperatives focus on strategic fit—the linkage between the corporate vision and strategy with the supply chain vision and strategy. These imperatives are to:

1. Articulate a clear value creation algorithm.
2. Approach the supply chain as a value delivery system.
3. Segment the supply chain and consistently adapt it to the characteristics of each segment.
4. Optimize the global operation architecture for scale, access, flexibility and risk mitigation.

The remaining three imperatives focus on execution—the ability to turn the strategy into business practices that are performed flawlessly on a daily basis. These imperatives are to:

5. Selectively invest for mastery in differentiating capability areas.
6. Deploy information systems that deliver insightful analytics, alignment and responsiveness.
7. Drive process execution discipline with the right talent powered by a culture that enables high performance.

Companies that excel in these seven areas will be better positioned to develop, source, manufacture and distribute superior products at lower relative costs; increase revenue, profit and shareholder value faster than competitors; and more effectively anticipate customer needs and meet them profitably.

In the remainder of this document, we explore these imperatives and provide examples of how leading companies have addressed them to build supply chains that help drive high performance and competitive advantage in an era of unprecedented volatility and uncertainty.

# Imperative No. 1: Articulate a clear value creation algorithm

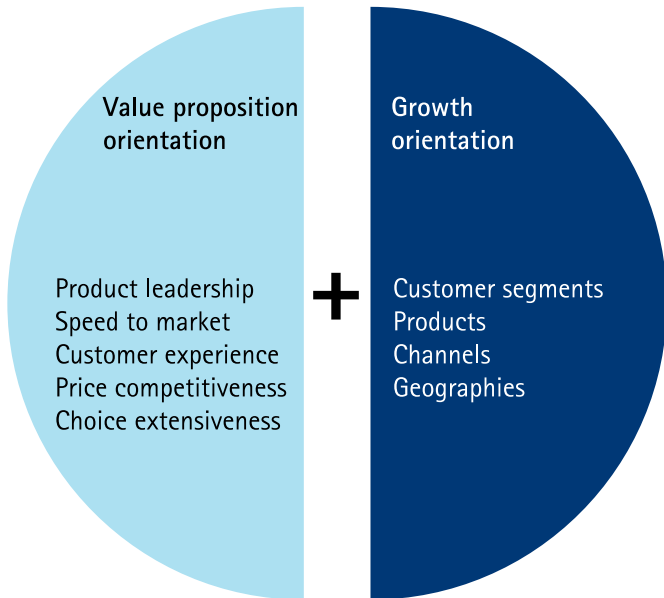


Figure 2. The two elements of a value creation algorithm.

Our research and client work have revealed that companies with superior supply chain performance have a clear understanding of how they create value for customers. In addition, these companies know what they need to do in the future to provide even greater customer value and thus fuel their own growth. We refer to this as having a "value creation algorithm," and it has two core elements (see Figure 2):

- Value proposition orientation—What a company (or business unit) is known for, its market differentiation and what that differentiation requires of its supply chain.
- Growth orientation—What the business must focus on (in terms of its customer segments, product/service offering, channels to market and geographies) to generate current and future growth.

While it may appear simple, clearly articulating a company's position on those two dimensions is not easy. Yet doing so is crucial to creating a

supply chain that contributes to high performance, and the best companies in our survey had clearly defined themselves in the two areas.

## The Value Proposition Orientation

Every organization has five fundamental ways in which it can generate customer value:

- Product leadership—unique product and service features (for example, the sound quality of Bose audio speakers, the user interfaces of Apple computers, cell phones and music players, and the attractiveness of LVMH Group's luxury apparel, perfumes, watches and other consumer products)
- Speed to market—a rapid product lifecycle turnaround (such as that exhibited by apparel maker and retailer Zara)
- Customer experience—the quality and personalization of each interaction (as demonstrated by such companies as online shoe retailer

Zappos and the personal experience of the local Starbucks shop)

- Price competitiveness—a lower relative price point for given product feature (Wal-Mart is the undisputed leader in this area)
- Choice extensiveness—the breadth of the product catalog and configurability of solutions (Amazon.com has built the world's leading online business by pursuing this avenue to value whereas WW Grainger is well known in the industrial distribution world for its broad product line)

Many executives say their company pursues all five value propositions. However, as a company approaches world-class operations in any one of the five it becomes increasingly difficult to fulfill the other competing propositions. In fact, in some situations, the operations required to fulfill the five objectives can be mutually exclusive, thus making it impossible to be world-class in all five with a single operating model. With



a clearly chosen and articulated value proposition orientation, companies can make effective operational trade-offs and build the appropriate operating models to fulfill demand for different customer segments and different value propositions.

High-performance businesses do make such choices and do so more explicitly than not. Take Apple Inc. The company's value proposition is clear: product leadership. In turn, Apple has created a supply chain that is highly tuned to deliver this value proposition. Consumer audio product manufacturer Bose is another good example. Bose looks for technical ideas that no one else has commercialized. It then makes its product look very different so that consumers will take interest long enough to understand the technical product differentiation. Forty years after its founding, Bose remains true to the principle of product leadership and drives all aspects of the business from this vision.<sup>2</sup>

## The Growth Orientation

In addition to clearly understanding what customer value they should focus on, leading manufacturers are better at determining where, how and to whom to provide that value. Masters have a much better sense of which customers to target, how to reach them (marketing messages and distribution channels) and in what regions of the world.

Clearly defining the company's value creation algorithm is a critical step in designing and operating a superior supply chain that drives high performance. High-performance businesses have a sharp understanding of how they create value for customers, where they are and the best ways to reach those customers.



## Imperative No. 2: Approach the supply chain as a value delivery system

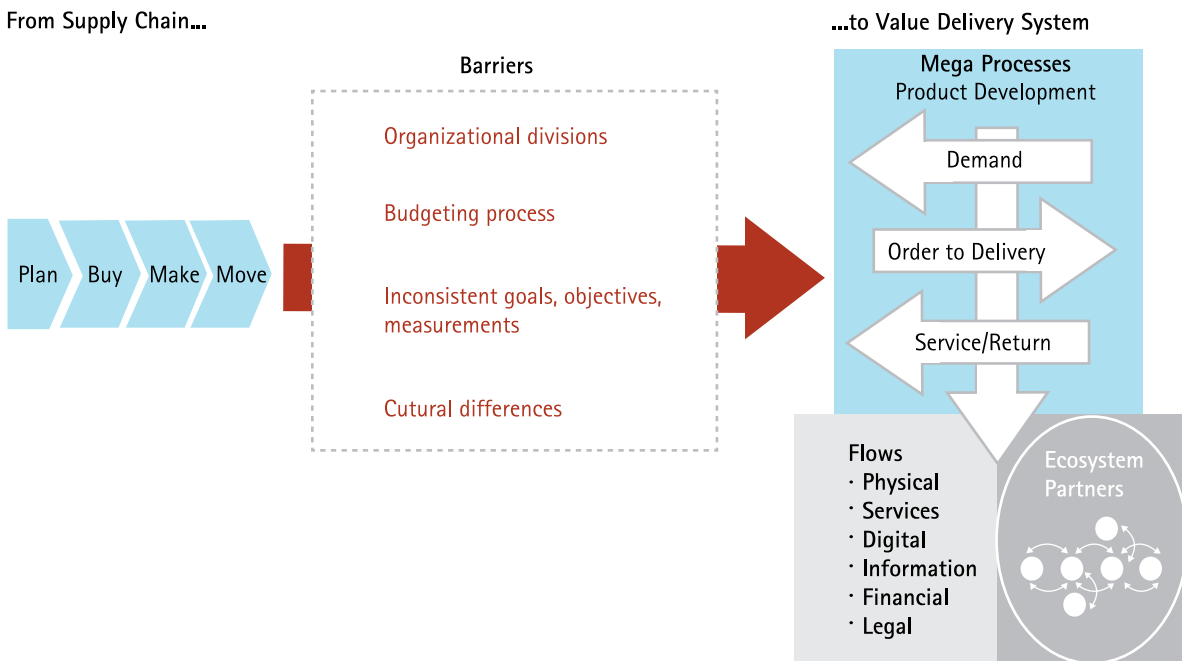


Figure 3. Redefining the supply chain as a value delivery system.

Conceiving of a supply chain as having four core elements—“plan,” “buy,” “make” and “move”—today is far too limiting. Designing and managing supply chains for high performance requires a far more comprehensive view of the supply chain (see Figure 3), one with three broad components:

- An ecosystem of partners—suppliers, suppliers' suppliers, customers, customers' customers, internal stakeholders, third-party service providers
- Three mega-processes—product development chain, order-to-delivery chain, and service and returns chain
- Six flow types—physical, services, information, financial, legal and digital

With this broader perspective, companies can identify a greater number of opportunities to innovate and improve performance. In addition, by seeing the interconnections among these elements, they are less likely to suboptimize the whole by optimizing one of the parts.

Nokia shows the benefits that can result when a supply chain is an integral part of a broader value-delivery system. With approximately 112,000 employees worldwide, Nokia is the largest mobile phone maker in the world and consistently delivers higher profitability than peers. Nokia is able to sustain a highly efficient supply chain while quickly adapting to fast-changing consumer cell phone preferences by using innovative and interlinked design, supply, production and logistics strategies. For example, Nokia designs handsets to not only share parts but also to have fewer parts than competing models. This enables the company to help reduce design and production complexity, as well as reduce procurement costs due to volume discounts on parts and the need to stock fewer types of components.

Nokia's value delivery system is also able to react quickly to overcome obstacles, adjust to changing market conditions and capitalize on emerging growth opportunities. The company made a focused push into emerging markets in 2003 and is now No. 1 in the world's fastest-growing markets.

Nokia teams live in emerging markets to know the customers and how they are different from customers in established markets. Such knowledge enables Nokia to make adjustments in products, pricing and distribution channels that are closely tuned to the local markets' needs. For instance, Nokia grew its handset market share in India to 55 percent in part because it discovered that in that country a flashlight on the handset was a desired feature among consumers and quickly incorporated one in the handset's design. Nokia also demonstrated its ecosystem adaptability after a factory fire at one of its component suppliers. The company made changes to a chip design, launched a production-boosting project and worked intensively with supplier networks to help reduce disturbances in sales.

## Imperative No. 3: Segment the supply chain and consistently adapt it to the characteristics of each segment

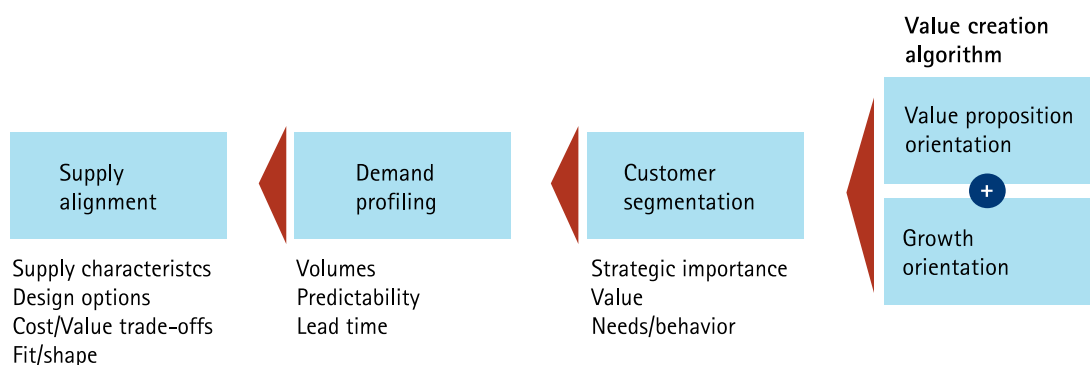


Figure 4. Designing the supply chain from the outside in.

To be sure, not all customers are created equal. In most companies, the minority of customers are the source of the majority of the profits. Yet most companies' supply chains tend to treat all customers the same. Such a one-size-fits-all approach prevents a company from differentiating itself, and it leads to over-investing in areas with little added value.

High-performance businesses, however, do not treat all customers and products the same, and their supply chains reflect that reality. They segment their customer base and products within markets and channels. And they use such segmentation to configure their supply chain responses and operations. Their supply chain design starts from the outside in (see Figure 4):

1. Segmenting the customer base. Having determined in which markets they want to win, high-performance businesses focus on the customer and customer's customers within that market and channel. They conduct research to determine their relative importance/value,

what they really value (known and unknown) and the supply chain implications of the company's value proposition orientation. And, they have implemented ongoing demand sensing capabilities that allow them to modify their approaches as demand characteristics change.

2. Profiling demand. High-performance businesses profile the demand of their customer segments, using such variables as volume, degree of predictability and relative lead time. They then use detailed analytics to segment demand signals at an individual SKU level. For example, one-off promotions with a specific retailer may have a different demand profile than promotions across multiple retailers with different SKU or product types (see Figure 5).

Cisco is one company that excels in profiling demand. The company sells to large and medium-sized telecommunications and cable companies globally. Its products are highly specialized, often custom-configured, highly complex and very

expensive. But Cisco also sells products to consumers such as Internet routers through retailers. In addition, the company sells to many value-added resellers and distributors. To add to the complexity, Cisco outsources 90 percent of production. Because of this massive diversity in products, channels and customers, Cisco historically has found demand planning to be extremely difficult, especially with Internet service providers such as telcos and cable TV companies. To better assess demand, the company has extensively used collaboration and Web 2.0 technologies. The result: a dramatic improvement in on-time delivery performance, from 65 percent to the high 90th percentile.<sup>3</sup>

3. Aligning the supply chain with demand profiles. Many companies stop after profiling customer demand for their products. But high-performance businesses take one more step: using demand profiles to segment their supply chains. As they extend their operational footprint around the world, manufacturers must intimately understand their supply chain environment and maturity across geographies.

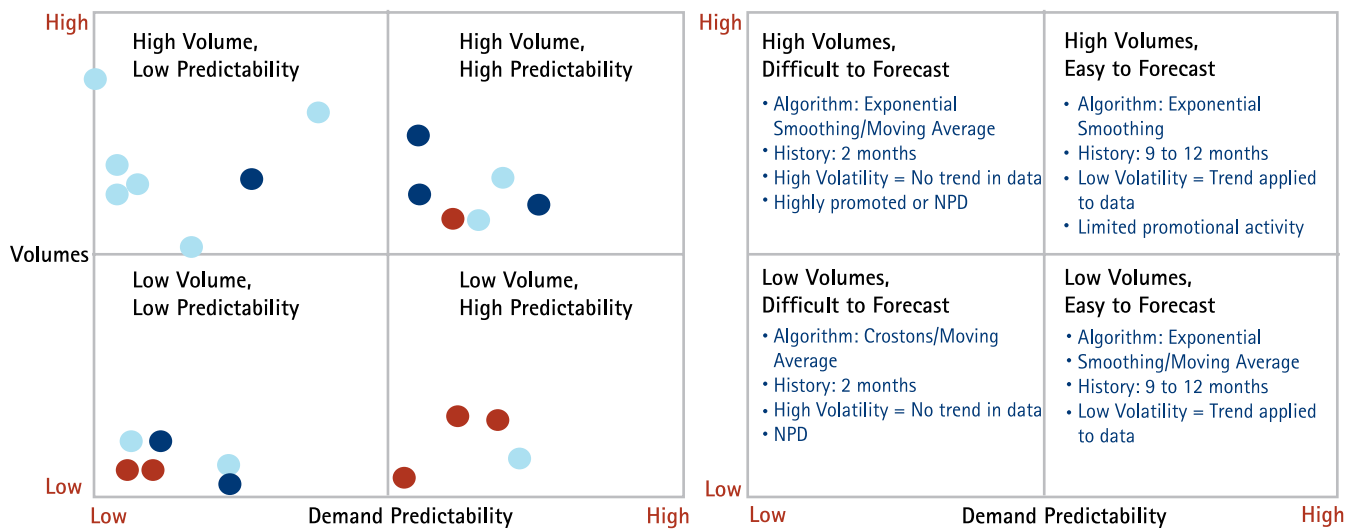


Figure 5. Demand profiles can vary substantially across customer segments.

High-performance businesses identify a number of supply chain designs to deliver their value proposition across the range of targeted and prioritized demand/supply segments. The case of Procter & Gamble's (P&G) consumer-driven supply network (CDSN) is illustrative. P&G's supply chain design starts at the store shelf and works its way back through the supply network. For some large retailers, P&G manufactures and replenishes based on real demand (scanned at the store check out). Some manufacturing plants run on a six- to eight-hour response time based on aggregated sales data. The CDSN becomes especially critical when P&G launches new products, as it helps P&G to correct course quickly when real demand varies from forecast.

P&G's dynamic supply network also enables it to customize product for specific customers or promotions.

And, on a more basic level, P&G is customizing pallet assortments of different SKUs for customers. It is designing smaller and larger package sizes for specific customers, as well as special packaging and product presentations. To provide such product customization, P&G is reconfiguring manufacturing, including adding more slow lines in certain plants to create greater flexibility.<sup>4</sup>

# Imperative No. 4: Optimize the global operation architecture for scale, access, flexibility, and risk mitigation

	<b>Core</b> Contributes to competitive advantage to the company	<b>Contextual</b> Does not contribute to competitive advantage to the company
<b>Mission critical</b> If performed poorly would pose an immediate threat to the company	In-house	Out-task and control
<b>Non-mission critical</b> If performed poorly would not pose an immediate threat to the company	Out-task and maintain some control	Outsource and give up control

Figure 6: Understanding the differences between resources and capabilities makes for better sourcing decisions.

By segmenting its supply chain, a manufacturer determines what each customer segment needs to maximize revenue. However, that manufacturer then must create the resources<sup>5</sup> and capabilities<sup>6</sup> necessary to deliver customized products and tailored distribution. We refer to the design of those supply chain resources and capabilities as its operations architecture.

Designing the operations architecture is neither straightforward nor simple. In exploring a number of supply chain configurations, managers must balance cost, service, risk, flexibility and increasingly other outcomes (such as their supply chain's carbon footprint). High-performance businesses develop their resources and capabilities in four ways:

**They design an operating model that is simple on the inside and differentiated on the outside.**

Providing tailored products, packaging, distribution and other services to

customers gives manufacturers an edge. However, unless such complexities are managed, they also can give a manufacturer an unwieldy cost structure. The best supply chains give a manufacturer the differentiation it needs but ensures that its operations architecture is simple and cost effective. Most companies optimize supply chains at the tactical level, using Lean Six Sigma and other operational improvement techniques to improve assets such as factories, warehouses or transportation routes. High-performance businesses go one step further. They take a holistic view of their operations architecture and rigorously determine where they can share capabilities or resources across supply chains or business units.

**They focus on value, not assets.**

In optimizing their operations architecture, high-performance businesses shift away from managing assets to controlling the processes that ensure quality, service, market access and cost efficiency. Coca-Cola

Company is a great example. In 2006, after working on a series of small projects to improve the company's and its independent bottlers' operations, Coke and a team of bottlers launched a major initiative to move to common processes and data standards. The team discovered that 90 percent of more than 400 business processes bottlers used were common to them all. It also learned that many bottlers were planning software upgrades in the near future. Coke and the bottlers detailed more than 650 business processes, from procuring raw materials to selecting and pricing products, managing retail relationships, paying suppliers and invoicing customers. Through this collaborative and common platform, Coke hopes that by sharing its technology expertise, it can drive greater sales for both itself and its bottlers.<sup>7</sup>

Implementing such a "value, not assets" approach requires companies to understand which core resources or capabilities create its competitive advantage and which do not (in other

Levers	Example	Illustrative Outcomes
Adapt to local specificities	<ul style="list-style-type: none"> <li>Local distribution alliance group to tailor distribution strategy to specific market context</li> </ul>	<ul style="list-style-type: none"> <li>Improve reach and customer relevance in local markets</li> <li>Neutralize local competitors</li> </ul>
Build global economies of scale	<ul style="list-style-type: none"> <li>Centralized manufacturing of a specific line of product</li> </ul>	<ul style="list-style-type: none"> <li>Spread fixed costs over larger volumes</li> <li>Reduce capital/operating costs per unit</li> <li>Consolidate purchasing power</li> </ul>
Build global economies of scope	<ul style="list-style-type: none"> <li>Supply chain analytics global Center of Excellence</li> </ul>	<ul style="list-style-type: none"> <li>Better serve global customers</li> <li>Build critical mass in select activities</li> <li>Leverage broader knowledge base</li> </ul>
Optimize the configuration of the value chain	<ul style="list-style-type: none"> <li>Optimally spread manufacturing capabilities globally</li> </ul>	<ul style="list-style-type: none"> <li>Reduce costs</li> <li>Improve performance</li> <li>Mitigate risks</li> </ul>

Figure 7: Striking the right balance among key levers.

words, which are “core” or “context”). It also requires determining what resources would pose an immediate threat to the company if they were performed poorly.

Armed with such a framework, high-performance businesses gain a structured perspective of their operations architecture and effectively push the traditional boundaries of insourcing and outsourcing (see Figure 6).

### They convert their global footprint to a competitive advantage.

Supply chains that drive high performance are increasingly global in nature. They force a multinational corporation to shift from focusing on what to buy and sell in different countries (the transaction-oriented world of imports and exports) to determining where to locate business functions such as design, sourcing, manufacturing, distributing, selling, marketing and product support globally. In the past, such companies

managed their operations locally, with cross-country coordination occurring largely in consolidating finances. As their geographically dispersed operations become more interdependent, companies need to find the right balance in market access (or local adaptation), economies of scale, economies of scope and optimized global value chain configuration (see Figure 7).

To be sure, there is no silver bullet for reaching the right balance (and tension) among local, regional and global priorities and decision-making authorities. However, recent Accenture research found the most successful companies globalize the value chain of a product or product line rather than a specific function. They also tend to choose those products or product lines that are most amenable to globalization and are more likely to develop hemispheric rather than global supply chains to mitigate cost and service issues. Finally, global leaders typically defined the strategy from the top down to paint the “big picture” but implemented it from the bottom up in small, manageable pieces.

Capacity is vital because it can be flexed to respond

... and allows a supply chain to manage the unexpected

### Types of supply chains

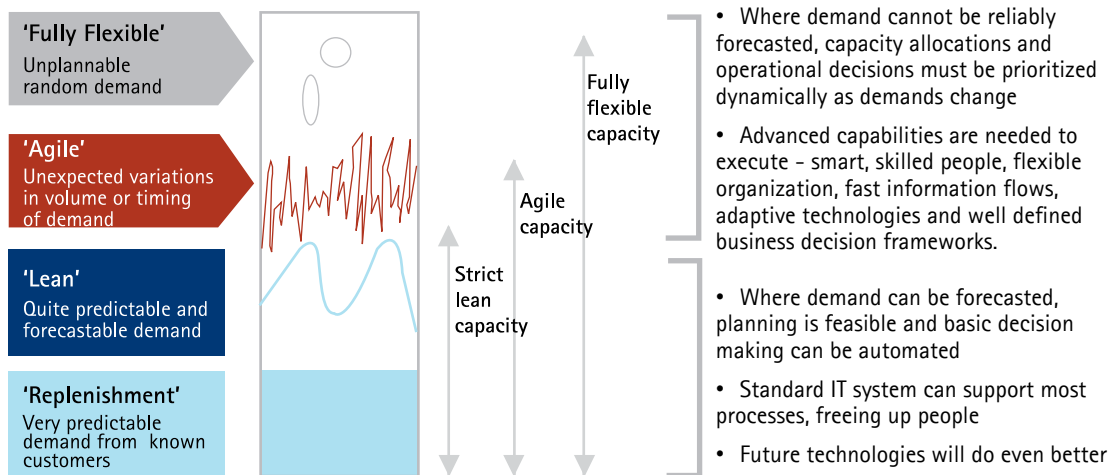


Figure 8. Flexibility enables a company to respond more quickly and cost effectively.

### They build in flexibility to extract risk.

As supply chains globalize, they face many more potential sources of disruption and, therefore, risks. Building in operational flexibility to withstand such disruptions is crucial. Consider Dow Chemical. It recently was confronted with an energy crisis in Argentina. During one of the country's coldest winters on record, consumer demand skyrocketed for natural gas to heat homes. The government cut business consumption of gas and redirected it to consumers. Dow was forced to reduce capacity at its Argentina plants to 25 percent of planned output. However, the company was able to quickly shift production to plants on the Gulf Coast of the United States. It moved all production and shipping in 30 to 45 days. Its production only fell 3 percent for the region served by its Argentina operations.<sup>9</sup>

How does one build such flexibility into the supply chain? High-performance businesses draw on a portfolio of measures, ranging

from creating a global supply chain that mutes the uncertainty of international markets, producing a number of products at the same plants, building capacity redundancy, designing products on modular product architectures and delaying decisions about which products to make till the last possible moment, and striking flexible contracts and dual-sourcing strategies with vendors.

# Imperative No. 5: Selectively invest for mastery in differentiating capability areas

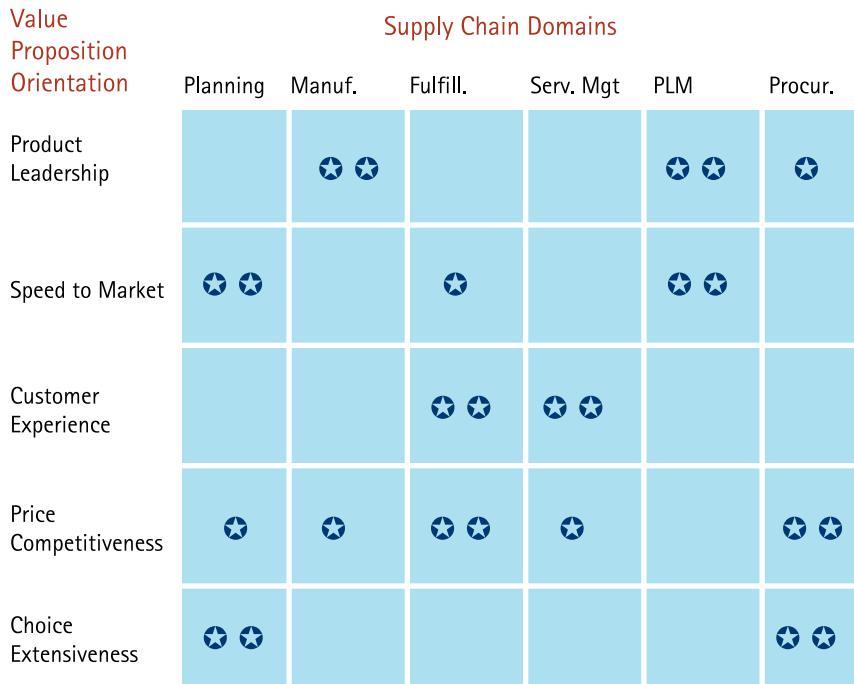


Figure 9. Supply chain domains in which mastery is correlated with high performance.

Accenture's research on the supply chains of more than 600 companies in 10 industries around the world shows that domain mastery can generate substantial business value. We found masters' median performance on all 68 measured metrics is about 17 percent higher than that of non-masters. In fact, the masters' median performance was 50 percent higher on 22 metrics.

Do companies need to master all supply chain dimensions? The answer is no. Our initial waves of research on high performance clearly showed that high-performance businesses outperform peers on a limited number of, but highly critical, aspects of their operations. From a supply chain perspective, this means excelling in one or two key domains—fulfillment and planning, for instance—while performing at or near industry averages in the rest. In doing so, they avoid investing more money than necessary in low-return, low-impact areas.

As noted in Figure 9, a company's value proposition orientation largely determines the domains in which the enterprise must excel and those in which it must maintain average performance.

# Imperative No. 6: Deploy information systems that deliver insightful analytics, alignment and responsiveness

## Enterprise Analytic System

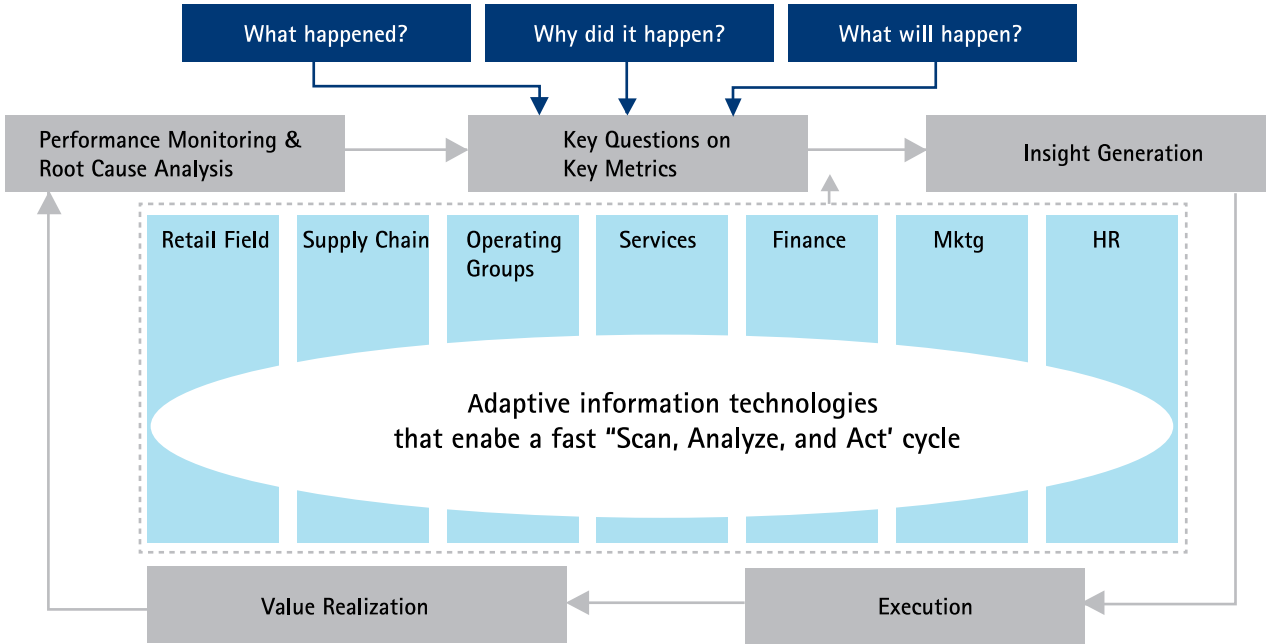


Figure 10. Using metrics to answer key questions about the business.

The supply chains of high-performance businesses require unprecedented levels of coordination and alignment. They must push down decision making throughout the network but make sure those decisions are not in conflict. Performance expectations must be in sync, and manufacturing, sourcing, warehousing and distribution managers must share accountability to meet those goals. This is a critical success factor, indeed, but one that is difficult to achieve.

A powerful supply chain analytics capability makes addressing this challenge possible. To begin, high-performance businesses establish key metrics and performance levels. Understanding which metrics are most important and actionable by role clarifies how people can more logically participate. It makes tradeoffs more visible.

Dow Chemical, for instance, has created a key metric and methodology for assigning risk to each of its raw materials. The metric—Purchasing Risk and Mitigation (PRAM)—is based on the belief that supplier problems account for the large majority of plant shutdowns.

Dow supply chain managers assign an initial and a final score to each raw material. The initial score is based on the drivers of supply of that good, namely the number of suppliers and plants that make the material. The managers then determine how to reduce the risk and the cost of doing so to arrive at a potential final score. Since launching the PRAM program, half of Dow's PRAM assessments have resulted in risk mitigation actions.<sup>10</sup>

Having a single source of facts enables managers to stop arguing about performance deficiencies and instead concentrate on how to fix them (see Figure 10). It helps them tap the creativity and competitive spirit of their people to improve those outcomes.

All this requires access to information and technology to process that information. The following are some of the foundational IT capabilities and master data structures our research and client work have found to be most vital:

- More integrated enterprise systems — Integrated operating models require new levels of integration in enterprise and supply chain systems.

- Global visibility and execution— Global operations necessitate global, Web-enabled visibility (to demand, sourcing and spending, working capital and asset management and/or operations) and global enterprise planning/execution capabilities.

- Dynamic response—Rapid changes in market conditions require adaptive systems for product innovation, pricing, costing, scale efficiencies, and operational resilience.

- New organizational hierarchies— New business and operating models must be mapped to new organizational data structures for effective planning and execution.

- Robust collaboration tools—Joint planning and execution with upstream suppliers and downstream customers drives increased use of collaboration tools to balance supply and demand across the value chain.

- Rationalized master data—Leveraged product, vendor and customer portfolios can only be preserved by rationalizing associated master data and utilizing robust data governance practices to control change.



## Imperative No. 7: Drive process execution discipline with the right talent powered by a culture that enables high performance

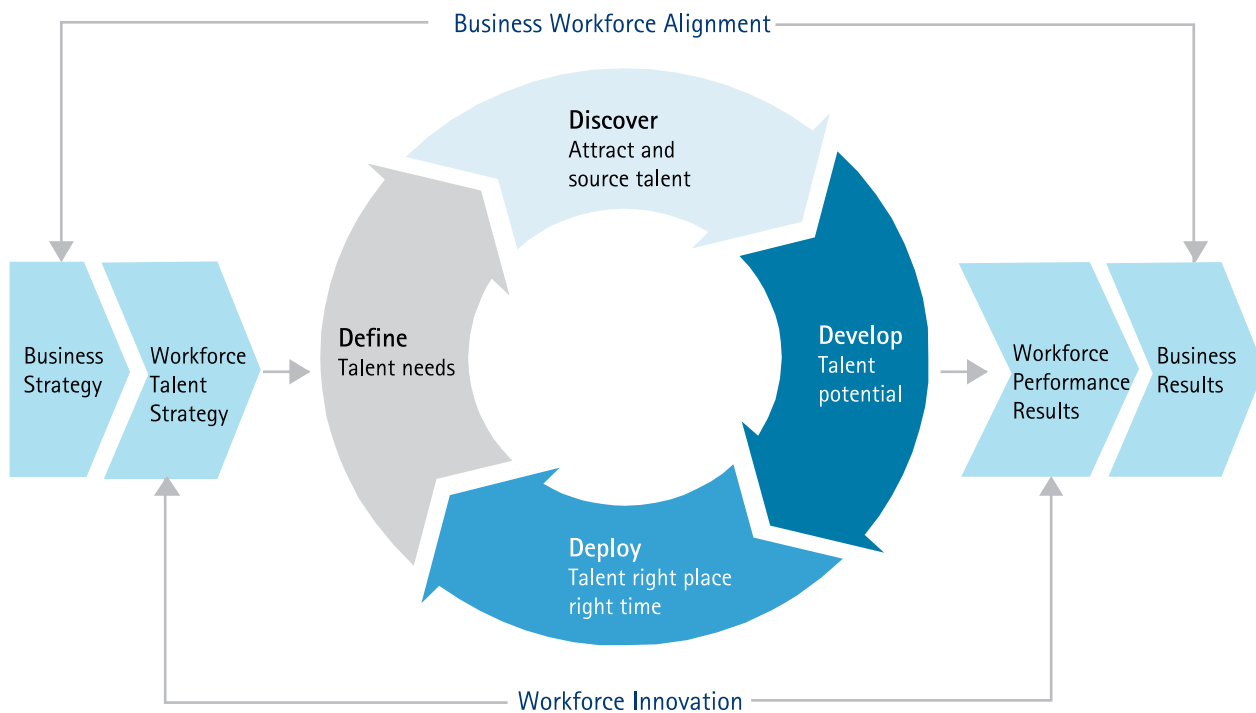


Figure 11. An integrated approach to talent management.

High-performance businesses have another powerful trait that we call "execution discipline." It has two components: the right talent and the right culture that drives the performance of that talent.

High-performance businesses know that running a superb supply chain requires new skills and capabilities. That, in turn, demands training and tools. These companies devote disproportionately more time and energy than their competitors do to developing talent. They create a "talent mindset" across the organization while constantly measuring and aligning talent to changing strategies, objectives and demands. While such a focus could have been viewed as unimportant five years ago as companies invested primarily in big enterprise resource planning (ERP) systems and process design, global workforce trends (impending retirements, shrinking labor pools, emergence of new

talent sources, availability of virtual methods of working and growing divisions in workforce culture whether because of generations or geographical diversity) make it increasingly an imperative.

Given the immense challenges of managing talent across an organization, especially global supply chains, forecasting what skills a company needs to grow the organization has become critical. Organizations that integrate their business strategies with talent strategies—and proactively manage talent the same way they manage their operations—will benefit substantially in the long run (see Figure 11).

Texas-based oil refining giant Valero Energy in 2002 created one of the first global talent supply chains, which has cut its time to fill positions nearly 70 percent (from 120 days to 40 days) and reduced cost per hire from \$12,000 to

\$2,300 during a time of phenomenal growth. Valero grew from 2,000 to 22,000 employees and \$75 billion in revenue in six years. Valero designed a labor supply chain system to monitor talent needs, sources and acquisitions to place the right people in the right place at the right time with the right skills. Projected talent needs are determined through analyses of past experience. Valero can now forecast its demand for talent three years out at the division and title level.<sup>11</sup>

Another example is a branded, global consumer products giant that has clearly articulated its supply chain talent vision and developed ongoing learning capabilities. This company has specifically utilized highly advanced supply chain e-learning courses to develop the competencies and skills of its global workforce.

The other element key to execution discipline is culture. In contrast to



those who view culture as intangible, high-performance businesses believe culture can be measured and shaped to meet their business objectives. In fact, with the appropriate process, performance measurement system and development models, leading companies excel in creating the cultural traits that unleash high performance.

How do they do it? Based on our experience and assessments of hundreds of companies, we found the following 10 elements to be the most important influencers of corporate culture:

1. Behavior modeled by management
2. What leaders pay attention to, measure and control
3. Performance and promotion systems (reward systems)
4. Criteria used for recruitment, selection and termination
5. Leaders' reactions to critical

incidents and crises that threaten survival and test the values of the organization

6. The organization's formal and informal design and structure
7. Systems, policies and procedures that determine how work is done
8. Stories and legends about key people that are told throughout the organization
9. Ceremonies (company celebrations, awards, rites of passage or advancement)
10. Formal statements of philosophy, principles and values

The most successful supply chain organizations create distinctive capabilities others cannot match as they drive execution through a talent-powered organization.

# Toward high performance: Where does your supply chain stand?

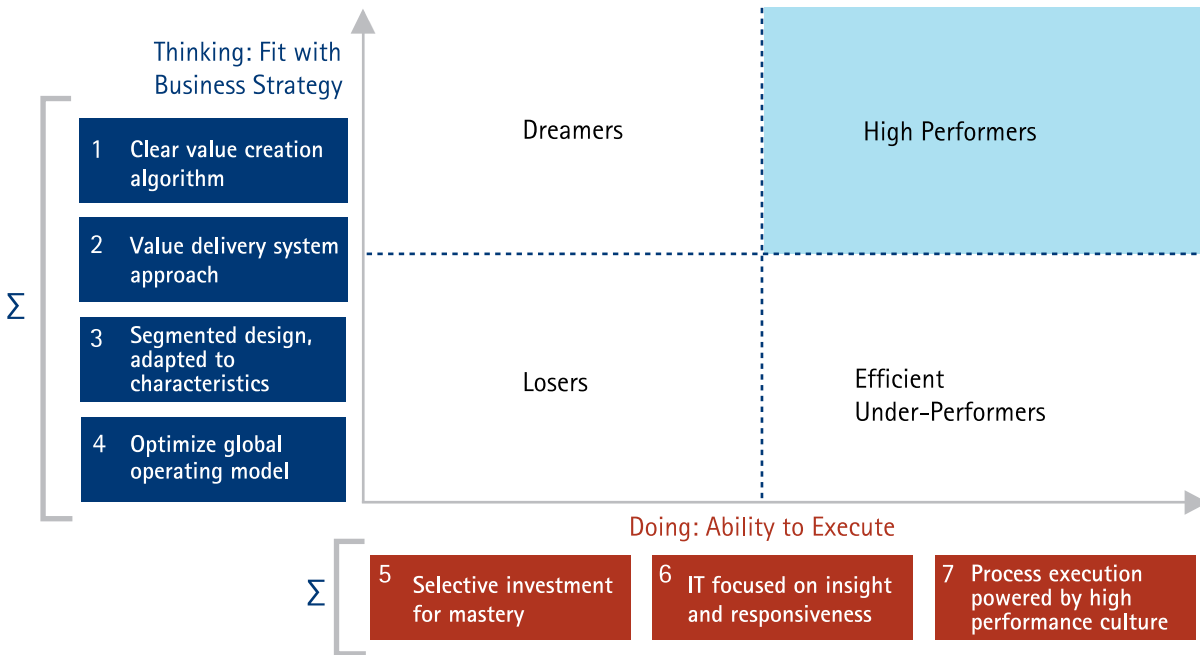


Figure 12. Plotting your position.

For many companies, these seven supply chain imperatives will be a paradigm shift and, in fact, will require new capabilities and practices. The question for most executives will be “Where do I start?” Indeed, determining the areas in which to invest to build the new capabilities required to address the seven imperatives can be a daunting challenge.

For some initial guidance, executives could consider using the questions in the “Driving towards a Dynamic Supply Chain” section. Considering these questions will provide an initial understanding of where their company currently stands and will help executives determine their organization’s progress in addressing the seven imperatives. Using the responses to the questions in each of the seven imperative areas, executives then can summarize their overall supply chain standing on both strategic fit and execution (see Figure 12).

By completing this self-assessment, executives can get a high-level view of whether their supply chains possess the characteristics that are essential for high performance—and illustrate the shortcomings they must address.

There is no question that we live in a starkly different world from that of even five years ago. Nothing, it seems, can be counted on with any degree of certainty—whether it be customer demand, currency valuation or commodity availability and pricing. Such unpredictability makes it difficult for even the best-run companies to plan for the future while operating in the present. However, in our experience, organizations that have highly dynamic and well synchronized supply chains will be better positioned to mitigate risk, respond quickly and effectively to market developments and, ultimately, achieve high performance in our volatile and uncertain multi-polar world.

# Driving towards a Dynamic Supply Chain

How much opportunity is there for your company to develop a more dynamic supply chain? There may be more opportunity than you think. Your answers to the following questions will help provide a quick self-assessment.

## Articulate a clear value creation algorithm.

- Are specific financial performance objectives (not just operational) quantified and well known?
- Is your Supply Chain Management financial model specifically tied to the relevant levers of shareholder/owner value?
- Is scenario planning an integral part of your finance, sales, & operations planning process across varying time horizons?
- Do you know on a monthly/weekly/daily basis the operational opportunities for/limits of various supply chain operations to contribute to current period (typically quarterly) financial targets?
- Are your financial and operational target-setting and performance tracking risk-adjusted?

- Is it clear how your business is choosing to compete uniquely in the market – product innovation, customer experience, low cost, choice of offering, or speed to market?
- Do you clearly understand how your business will drive its future growth (geographic expansion, product line extension or new channels)?

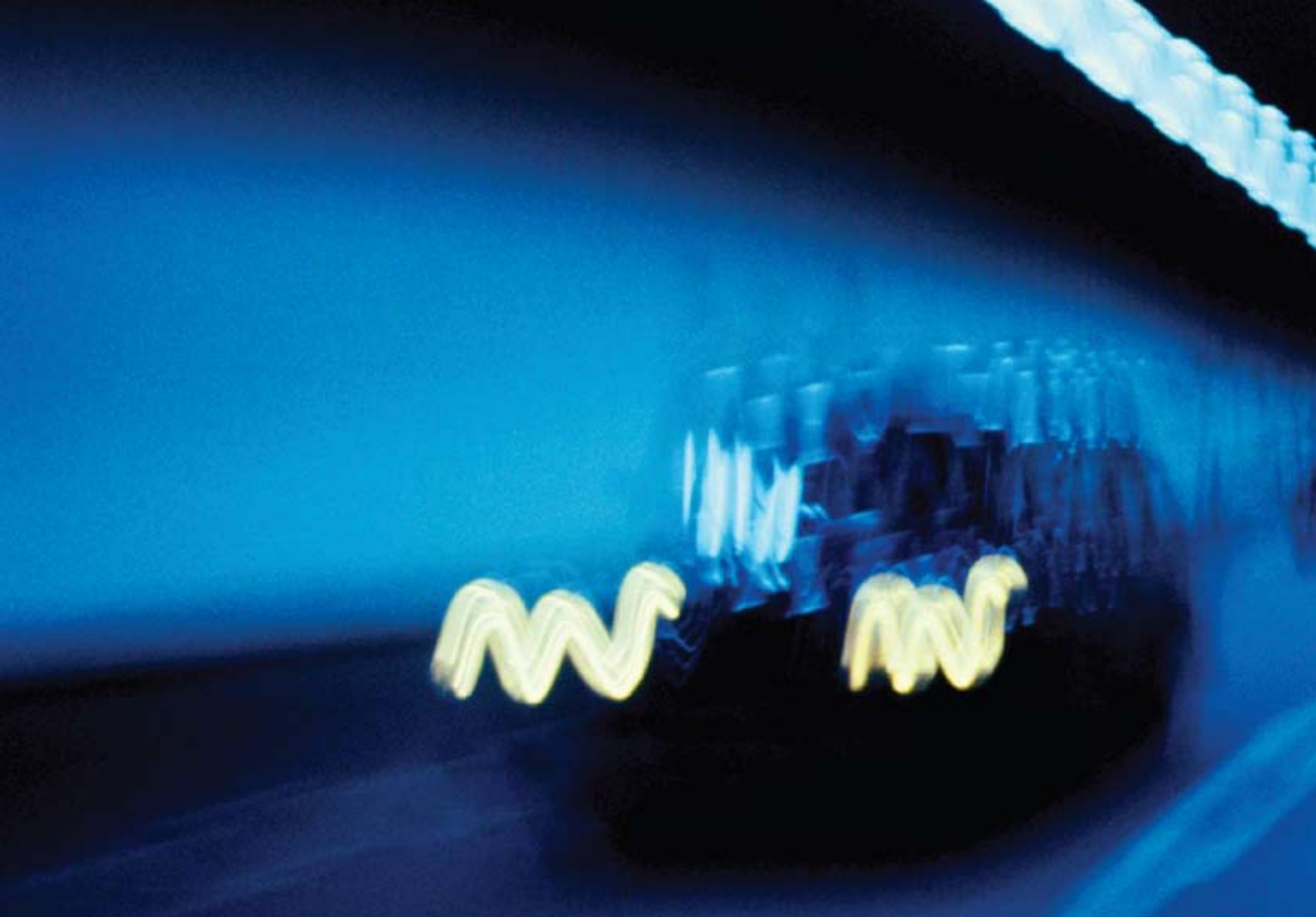
## Approach the supply chain as a value delivery system.

- Has your supply chain been designed to have the optimal balance of fixed and variable costs?
- Do you know the direct contribution to corporate profit of every single link in the enterprise supply chain?
- Are the tradeoffs between service level and cost well-understood, not just at the aggregate level, but by differing segments (see section 3 below) of the business?
- Are the proper metrics across organizational "silos" in place to ensure that all links in the chain are collaborating to deliver the target end-customer value?

- Are the roles, capabilities, and limitations of supply chain partners (suppliers, customers, wholesalers/distributors, third party service providers) well understood and similarly aligned in delivering end-customer value?

## Segment the supply chain and consistently adapt it to the characteristics of each segment.

- Are products and channels segmented in a meaningful manner that includes not only design traits and market relevance, but logistically-distinct handling and service characteristics?
- Are customers segmented based on behavioral characteristics, not just simplistic metrics such as industry category and size and is this segmentation tightly aligned across both the supply chain and commercial/sales and marketing communities across the organization?



- Are the specific value proposition characteristics (i.e., innovation, customization, efficiency, etc.) within individual customers' organizations well understood and consistently monitored/refreshed?
- Are these value propositions and segmentation taken into consideration in terms of developing the appropriate leadership style and behaviors across the supply chain organization as part of the associated SC response(s)?
- Are pre-, during, and post-sales service needs taken into account when considering optimal supply chain segmentation?
- Is the "closed loop" with pricing/promotion integrated into both decision-making and operational execution?

### **Optimize the global operation architecture for scale, access, flexibility, and risk mitigation.**

- Are the trade-offs between scale efficiency and maximum flexibility understood at each link in the chain in terms of capacity and capability?

- Is the right operating model in place to leverage the benefits of a multi-national presence without compromising brand expectations within end markets?
- Is risk-mitigation and contingency planning in place to address the predictable (yet specifically unforecastable) and relatively uncontrollable (e.g., supplier disruptions, transport variability, external factors, etc.)?
- Is flexibility optimal at each point to deal with the unpredictable and uncontrollable (e.g., natural disasters, commodity swings, etc) in managing overall risks in the end to end supply chain?
- Have you achieved the optimal balance between centrally led efficiency and effectiveness ("shared services") and localized customization ("high touch") to achieve balanced 'super global and super local' execution capability?

### **Selectively invest for mastery in differentiating capability areas.**

- Do you understand which of your Supply Chain Management operational functions make an explicit difference in your competitive capability vs. those that are necessary, but not differentiating?
- Do those operational areas receive the lion's share of management attention and corporate investment?
- Has the proper balance between your operations and those of your vendor(s) been struck and operationalized?
- Do you know if there are customer/wholesaler/distributor operations you could leverage to increase total system value, or vice versa?
- Is the proper mix of third party operations being leveraged where internal ownership would require over-investment to achieve world-class capability?



**Deploy information systems that deliver insightful analytics, alignment, and responsiveness.**

- Are your Supply Chain Management systems operated under a consistent architecture which allows for both current environment success and a platform for future growth?
- Is your existing architecture on a path toward more "plug and play" interactions with trading partners, allowing rapid addition or removal of suppliers and/or customers while also enabling rapid integration and value realization of mergers and acquisitions?
- Are the reams of information produced on a frequent basis (daily, weekly) by your and your partners' systems being analyzed to yield insight and converted into more rapid and tailored actions?
- Have your execution tools progressed beyond the goal of "visibility" to the capability of exception-handling and, ideally, more informed and automated decision making?

- Beyond core ERP, have you begun to deploy the "adaptive" layer of information technology which increases your flexibility and reduces your exposure to volatility/risk?

**Drive process execution discipline with the right talent powered by a culture that enables high performance.**

- Are your supporting processes designed to reduce unnecessary variability and be tolerant of varying levels of human performance?
- Do your people understand the difference between the important and the urgent, and are processes and metrics designed to focus their attention where it matters most?
- Do you know which people in your operations have the deepest, most important expertise and contribute the most value to the company, and are your retention and development plans designed around these critical resources accordingly?
- Is decision-making logic and expertise captured regularly for others

to leverage and to protect against unintended attrition?

- Are metrics and incentives designed to insure that those who contribute the most value to the extended enterprise are rewarded commensurately?
- Do you understand the competency levels of your current supply chain staff?
- Are you purposefully identifying and developing SCM skills to meet both your stated supply chain and business strategies as well as your performance gaps in the near to medium term?

If you answered "no" more than once in each of the seven imperatives, then there's a good chance that your supply chain has opportunity for improvement. If only a handful of your answers were negative, congratulations. But before you move on to other priorities, it might be prudent to ask why you recorded any "no's" at all.

## Notes

<sup>1</sup> Accenture's groundbreaking research with INSEAD in 2003 revealed companies that exhibited strong supply chain performance were rewarded with a market capitalization Compounded Average Growth Rate (CAGR) premium of seven to 26 percentage points above the industry average.

<sup>2</sup> "Sherwin Greenblatt Conversation with Glenn Mangurian," *Pioneers of Innovation Series*, University of Massachusetts, January 31, 2007.

<sup>3</sup> "Collaboration Helps Cisco Systems Fight Growing Complexity," Jean V. Murphy, *Global Logistics & Supply Chain Strategies*, April 24, 2008.

<sup>4</sup> "Procter & Gamble Uses Consumer Demand Info to Drive Supply Network", *Global Logistics & Supply Chains Strategies*, February 01, 2006.

<sup>5</sup> By resources, we mean tangible assets such as manufacturing sites, distribution centers, process technology and other equipment, and inventory; and intangible assets such as licensing agreements and intellectual property.

<sup>6</sup> By capabilities, we mean processes, activities, or functions performed within the supply chain and reflect the ability of an organization to perform a coordinated set of tasks utilizing organizational resources. In the supply chain, capabilities include such processes as forecasting and replenishment, cross docking, preventative maintenance, product lifecycle management, order management and the like.

<sup>7</sup> "Collaboration And The New Product Imperative -- By opening up product development and smoothing supply chain processes, Coke's technology group is helping the company deal with a fickle consumer market," Weier, Mary Hayes, *Information Week*, July 21, 2008.

<sup>8</sup> In 2006 and 2007, Accenture conducted a global survey of 300 senior corporate executives, backed by interviews with numerous global supply chain experts, to assess how companies implement highly effective global operations.

<sup>9</sup> "Globalization Comes Home," AMR Research, Weston, Randy, May 29, 2008

<sup>10</sup> "Snake Eyes!!! The Failure to Manage Risk in Supply Chain Can Be Catastrophic," Robert J. Bowman, *Global Logistics & Supply Chain Strategies*, August 01, 2007.

<sup>11</sup> Cheese, Peter, Thomas, Robert and Craig, Elizabeth, *The Talent Powered Organization*, 2008, pg. 68.

## Contacts

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## About Accenture

Accenture is a global management consulting, technology services and outsourcing company. Combining unparalleled experience, comprehensive capabilities across all industries and business functions, and extensive research on the world's most successful companies, Accenture collaborates with clients to help them become high-performance businesses and governments. With more than 181,000 people serving clients in over 120 countries, the company generated net revenues of US\$23.39 billion for the fiscal year ended Aug. 31, 2008. Its home page is [www.accenture.com](http://www.accenture.com).

## About Accenture Supply Chain Management

The Accenture Supply Chain Management service line works with clients across a broad range of industries to develop and execute operational strategies that enable profitable growth in new and existing markets. Committed to helping clients achieve high performance through supply chain mastery, we combine global industry expertise and skills in supply chain strategy, sourcing and procurement, supply chain planning, manufacturing and design, fulfillment, and service management to help organizations transform their supply chain capabilities.

We collaborate with clients to implement innovative consulting and outsourcing solutions that align operating models to support business strategies, optimize global operations, enable profitable product launches, and enhance the skills and capabilities of the supply chain workforce. For more information, visit [www.accenture.com/supplychain](http://www.accenture.com/supplychain).

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