# Unlocking the Potential for High Performance through the Pharmaceutical Supply Chain

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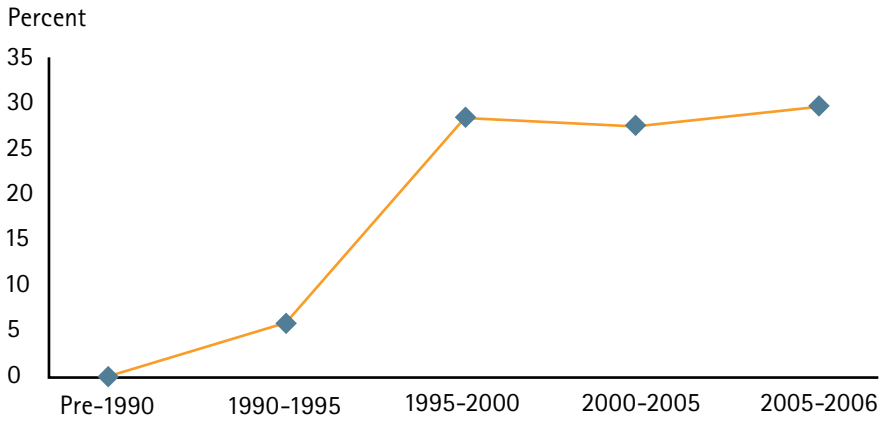
Profitable growth in today's pharmaceutical industry requires a new kind of supply chain—one that plans and executes globally, across the extended enterprise and throughout the product life cycle. By changing their global operating model, redefining core competencies and capabilities, and collaborating with effective partners, including large, strategic customers, companies can drive the true differentiation and competitive advantage that lead to high performance.

**Figure 1. Cumulative reduction of COGS between 1990 and 2006 based on 17 leading pharma companies**




Our studies show that the majority of Cost of Goods Sold (COGS) reduction opportunities had been realized by 2000. Moreover, while investments to reduce COGS have continued, the returns have dramatically fallen off.

From patent expirations, pipeline gaps and the R&D productivity crisis to a poor public image and intensifying regulatory pressures, the challenges confronting the pharmaceutical industry (including biotechnology firms) are multiple and mounting.[1] So too, of course, are the opportunities.

The steady maturation of biotechnologies, the growing emphasis on personalized, "patient-centric" health care, digital developments that promise to make data available anytime, anywhere, and new sourcing opportunities in emerging markets—all present pharmaceutical companies with exciting prospects for profitable growth.

Such growth, however, requires the right global operating model—a model facilitated by an exceptionally forward-thinking supply chain and a growth-focused global agenda.

Accenture's extensive cross-industry research clearly shows that information-rich, flexible supply chains built around customer needs enable the distinctive capabilities critical to high performance in any industry. Indeed, supply chain excellence is directly tied to a company's financial performance,[2] which is why high-performance businesses in a wide range of industries, from retail to utilities, have made superior supply chain management a strategic priority.

Right now, the pharmaceutical supply chain lags other industries in innovation, mastery and effectiveness. This is not to dismiss the substantial and significant cost-cutting and cycle time reduction measures that have contributed to a reduction of almost 30 percent in Cost of Goods Sold (COGS) over the last 16 years (**see Figure 1**). Nor does it belittle the many operational efficiency initiatives that pharmaceutical companies have undertaken. These efforts, however, are rooted in a now out-dated operating model—a model that is largely insourced, geographically localized and concerned with operational efficiency rather than growth.

[1] "Confronting the Future: Getting High Performance Back into the Biopharmaceutical Industry," Accenture 2006; "Reversing the R&D Productivity Decline," Accenture 2007

[2] "Supply Chain and the Bottom Line: A Critical Link, "*Outlook* 2004, Number 1

## Learning by example

The pharmaceutical industry was among the first to truly internationalize, taking advantage of foreign trade zones, inter-country tolling gains, and other benefits of local operations.

Yet despite this worldwide presence, pharmaceutical companies still have a long way to go before the excellence of their global supply chains matches that of Halliburton, the integrated oil field services, construction and US government contracting company, whose global operating model supports a globally distributed production capability, or sets industry standards, as Inditex, the Spanish apparel group, has done.

Many traditional pharmaceutical companies have simply failed to match the pace at which other industries, as well as newer pharmaceutical participants like smaller biotech firms, have effectively reengineered their supply chains and related infrastructure. To catch up, indeed, most of the industry must effect a truly dramatic transformation **(see Bridging the gap sidebar)**.

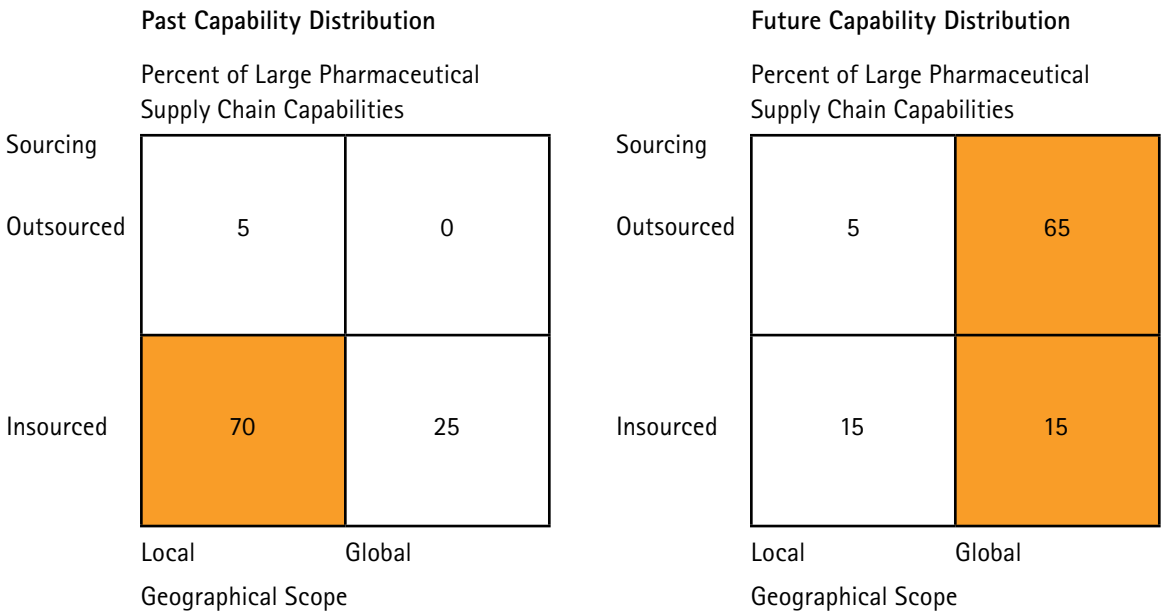
Companies in other industries have taken different approaches to optimizing the potential of their supply chains. Some have developed entirely new operating models; others have transformed their existing models to enable "virtual supply chains" that focus more on managing knowledge, data and relationships, rather than actual physical product. To guide the pharmaceutical industry as its supply chain evolves, this paper will highlight examples of how such companies unlock the potential for high performance in their supply chain operations. First, however, we will analyze and define just what it will take to achieve supply chain excellence in the pharmaceutical industry.

## Bridging the gap

**Today's pharmaceutical industry confronts an inevitable and seismic shift in the transactional processes and capabilities that comprise about 75 percent of its supply chain activities—from a largely insourced and localized operating model to a primarily outsourced and globalized operating model (see Figure 2).**

**The existing operating model limits pharmaceutical companies' ability to make dramatic capability changes. To truly achieve these changes and refocus their internal resources toward more analytic and efficient strategic tasks, the underlying operating model must be fundamentally changed (see Figure 3).**

## Figure 2. A shifting capability focus




## Figure 3. Internal supply chain focus and skill-set

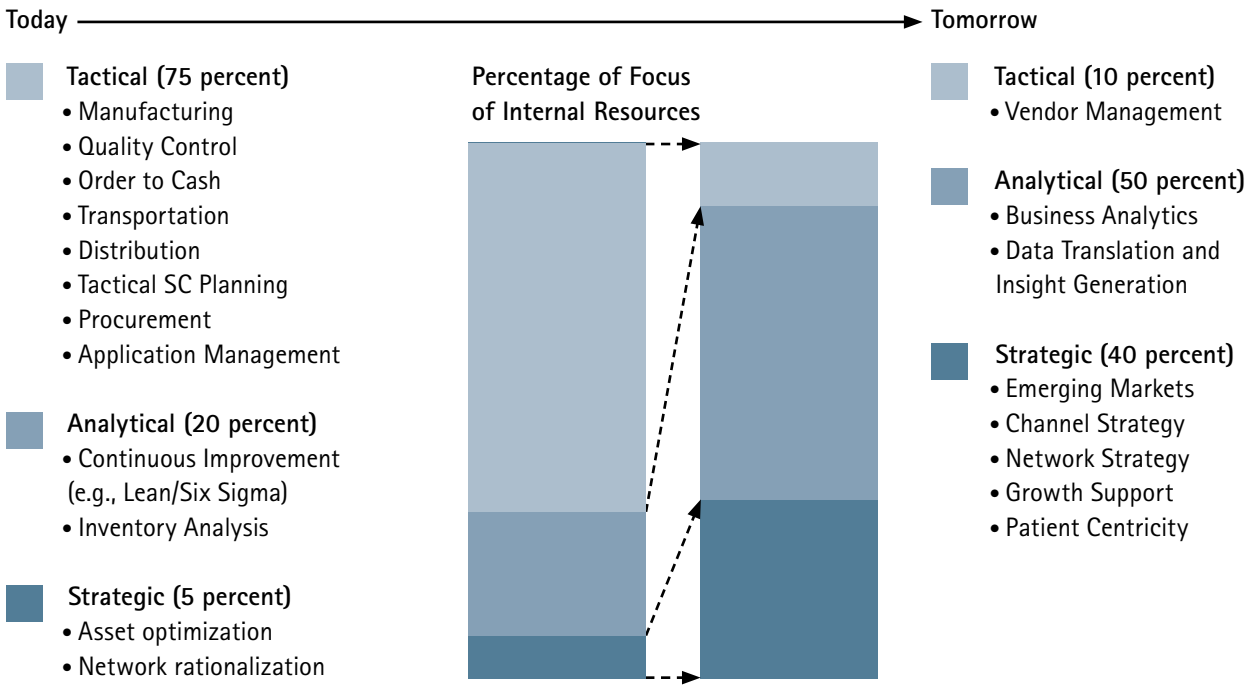
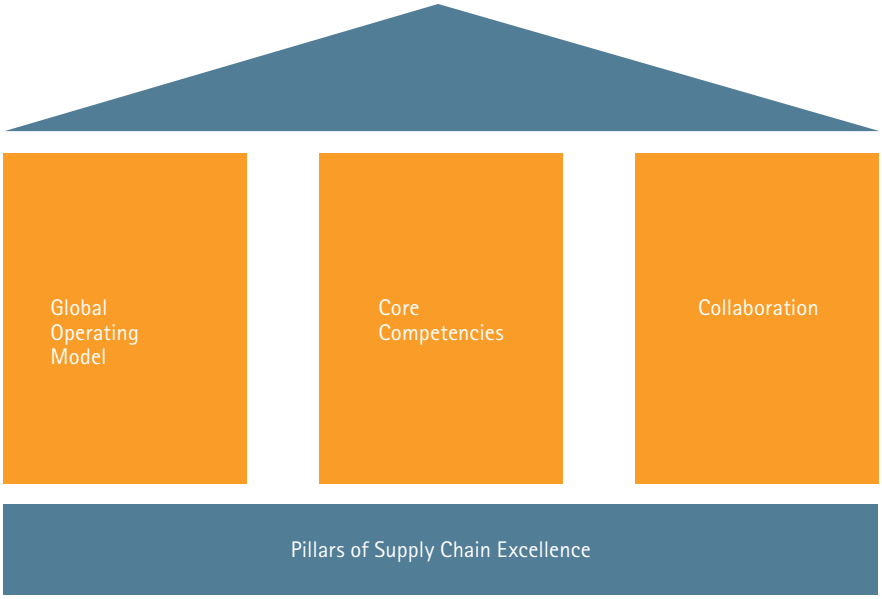


Figure 4. The pillars of supply chain excellence




## The pillars of supply chain excellence

Supply chain excellence in pharmaceuticals rests on three pillars (see Figure 4):

- Global operating model
- Core competencies
- Collaboration

## Global operating model

Accenture research reveals that a global operating model is a prerequisite for high performance in all manner of industries.[3] Pharmaceuticals are no exception. More than half of the pharmaceutical industry respondents in Accenture's most recent Global Operations Survey cited a "global supply chain network that achieves simultaneous objectives on quality, cost and time to market" as the capability most likely to help them achieve their profitability targets.[4]

It's important, though, not to confuse "global" with "centralized." While some companies may well require a centralized model, others will not. It all depends on individual circumstances. There is, however, a systematic approach to making this key decision.

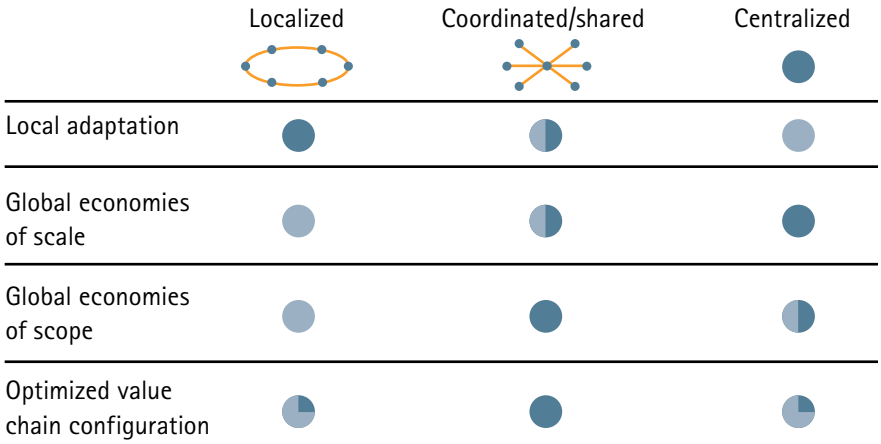
In our experience of working with companies across many different industries, three distinctive operating models—localized, coordinated/shared and centralized—convert a global presence into competitive advantage and a platform for profitable growth by enabling four different levers—local adaptation, global economies of scale, global economies of scope and optimized value chain configuration (see Figure 5).

If your goal is to improve reach and customer relevance in local markets—or local adaptation—a localized model will be optimal. If, however, your principal aim is to spread your fixed costs over larger volumes, reducing your capital/operating cost per unit and consolidating your purchasing power—in other words, to achieve global economies of scale—the centralized model may be best for you. A coordinated/shared model, by contrast, will improve your ability to serve global customers and help to build critical mass in selected activities by leveraging a broader knowledge base—global economies of scope. It will also help reduce costs, improve performance and mitigate risks—optimized value chain configuration.

[3] "Industrial Equipment in the Global Century," Accenture 2007

[4] Accenture Global Operations Survey, 2006

**Figure 5. Different operating models enable different layers of profitable growth**




The whole dark blue circles indicate optimal competitive advantage.

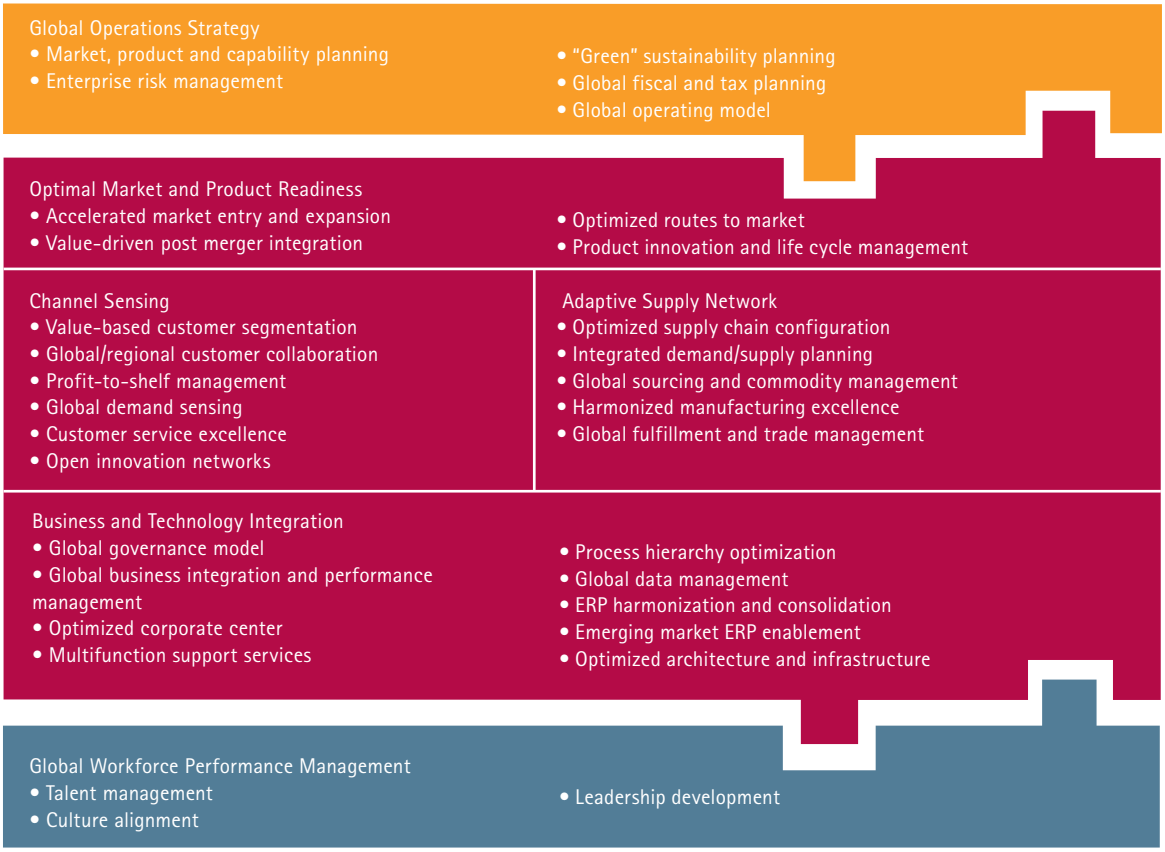
As **Figure 5** shows, the coordinated/shared approach touches more levers. But it may not suit everyone. Strategic and cultural fit must guide your choice. Moreover, your operational capabilities must be aligned to enable the chosen mix—and flexible enough to support its evolution. Consideration of the product portfolio is also a must. A very diverse portfolio with very large volumes may even necessitate more than one supply chain.

## Core competencies

Excelling at the right core competencies will differentiate any company from its competitors. And pharmaceutical companies are pretty clear about which competencies are most important to them.

Almost 67 percent of respondents in our Global Operations Survey identified "tight links with customers and suppliers to obtain supply/demand visibility" as the biggest single challenge they confront in effectively managing their global operations. A similar proportion sought "effective coordination of external and internal activities in support of a new product launch" as key to achieving their profitability targets. And almost 69 percent named "integration of local market needs with global designs, research and development functions" as the characteristic of a global operating model most likely to ensure innovation and speed to market.

## Figure 6. The Accenture Global Operations Solution




These and several other desired competencies align with those of the Accenture Global Operations Solution, a holistic, six-component approach to global operational mastery that works across strategy, supply chain and other business functions key to staying competitive in today's rapidly evolving global economy (**see Figure 6**).

A global operations strategy is essential. It starts with the market, product and capability planning key to recognizing, tracking and responding to market opportunities as they shift and change. It must also encompass capabilities to monitor, manage and mitigate risks, as well as the management of a multitude of tax and fiscal regimes. And, of course, it is increasingly concerned with making environmental sustainability a sound business proposition.

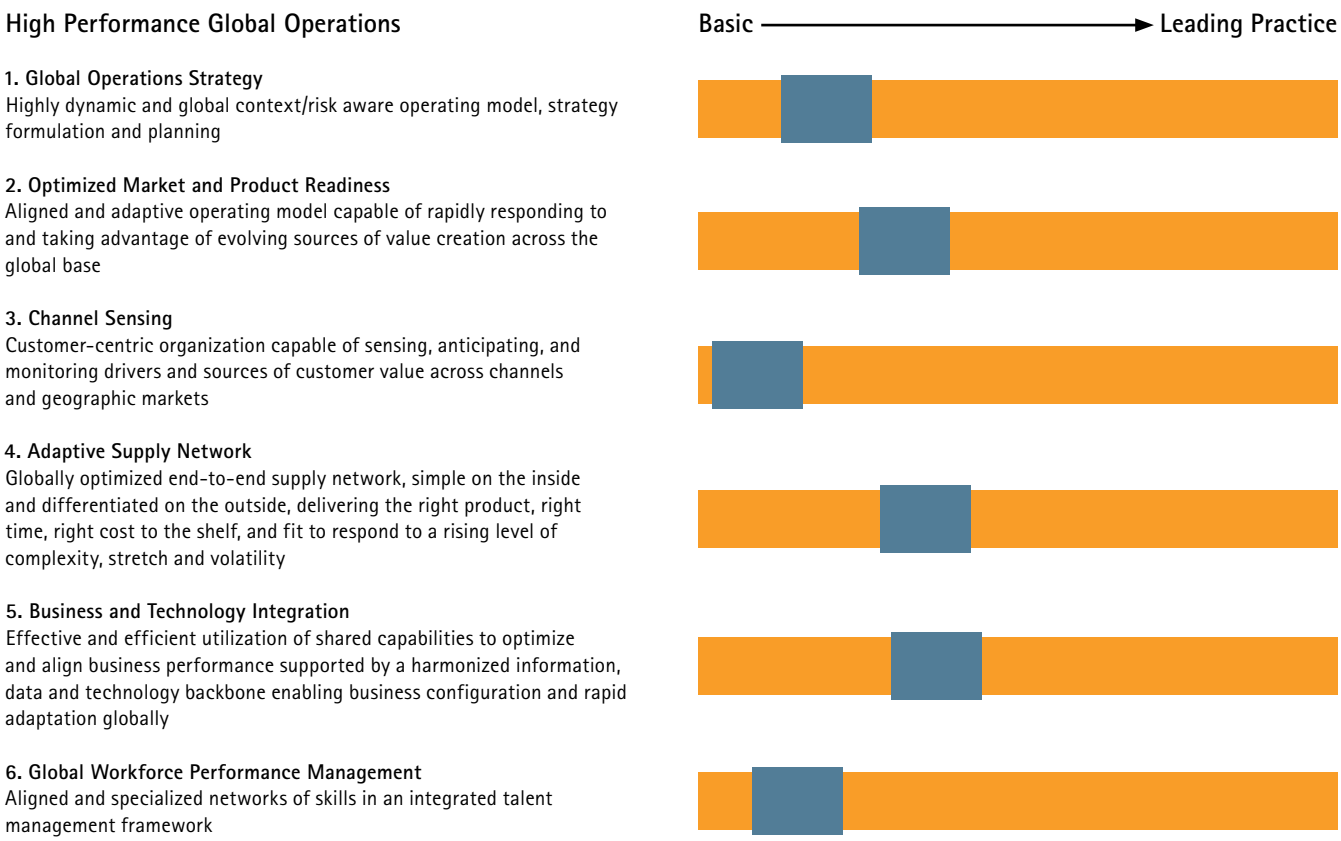
Without a global operations strategy, a global operating model would not work. Nor would the optimal market and product readiness and adaptive supply network that so distinguish the supply chains of companies like Halliburton and Inditex.

Inditex's mastery of these components or competencies is key to understanding its near-legendary supply-chain efficiency. The Spanish apparel maker, which owns the highly successful fashion chain, Zara, and is the world's second-largest clothing retailer, can turn something seen on a catwalk into an item in its stores in a fraction of the time it takes competitors. Its designers receive real-time information about customer buying trends directly, via hand-held computers, from individual managers of its more than 3,000 stores worldwide. The designers then send specifications from a centralized design and production center to all points in the production process—including outsourced manufacturers. Individual pieces are tracked by bar code through the garment assembly production and shipping process, right through to the store.

Despite evidence from our Global Operations Survey and elsewhere that the pharmaceutical industry recognizes the benefits of these capabilities, it clearly has some way to go in developing them fully.

Indeed, when asked: "How effectively are you implementing the following capabilities?" the answers were not encouraging, as **Figure 7** makes clear.

## Figure 7. Global operations mastery remains elusive



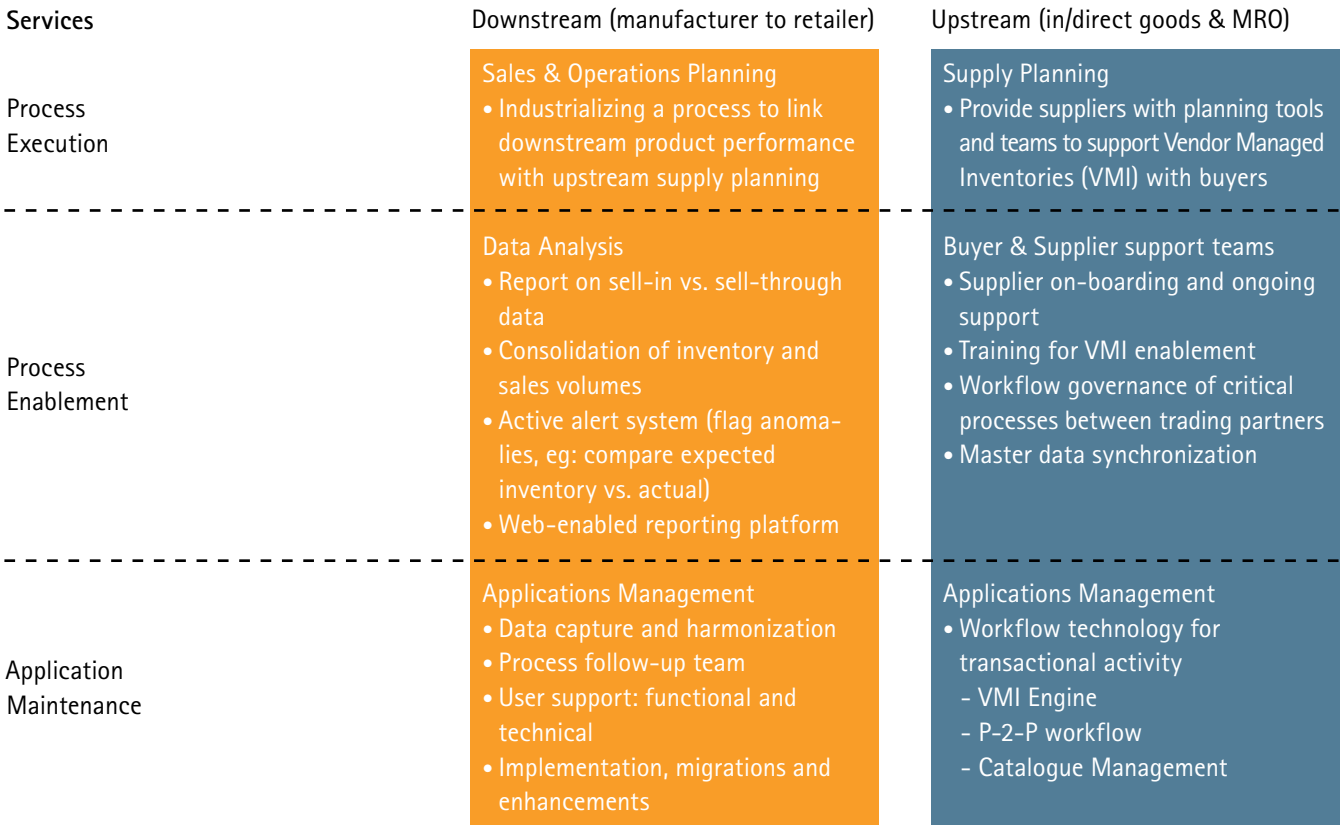

## Collaboration

In an era of constant and complex change, pharmaceutical companies must seek to develop much more collaborative relationships with their partners and customers, as well as within their organizations. No fewer than 75 percent of our survey respondents recognized this necessity. And as examples from other industries clearly show, the right kind of collaborative partnership can deliver significant supply chain benefits.

These benefits are especially noticeable in consumer goods, where collaboration between manufacturers and customers (dealers, distributors and retailers) has decreased inventory by as much as 40 percent, boosted sales by up to 45 percent and led to an 11 to 12 percent rise in in-stock availability, as well as a substantial decline in lead time and rush orders.

The consumer electronics company, Sony, tackled the process inefficiencies that once seriously hampered its inventory control by implementing an enterprise resource planning system that allowed the company to collaborate with key retailers in forecasting and replenishment planning. The collaboration has helped shrink Selling, General and Administrative expenses to less than 10 percent of sales and has reduced committed assets by halving inventory.

## Figure 8. Supply chain collaboration in pharmaceuticals




The pharmaceutical industry, similarly, has to refocus its efforts and manage its relationships for key, growth-driving capabilities like product launches. The industry has much to learn from companies in other industries that have expanded the concept of outsourcing to handing over external responsibility for an entire supply chain process—or even the entire supply chain—instead of struggling to manage myriad tactical supply chain relationships in-house. But a heavy focus on collaboration across the extended enterprise is also required (**see Figure 8**).

Leading companies in other industries demonstrate more integration, communication and collaboration externally as well as internally. While a strategic relationship with every pharmaceutical client is clearly unnecessary, collaborative arrangements with key customers, like large retailers, could greatly enhance supply chain efficiency. Currently, however, the pharmaceutical industry is just not collaborating well enough with its external partners, globally or regionally.

## Lessons for the pharmaceutical industry

According to Accenture research, the pharmaceutical industry is foregoing the potential for revenue increases of 1 to 2 percent a year and annual cost savings of between US $12 and US $32 billion by failing to make adoption of the three pillars of supply chain excellence an urgent priority (**see Figure 9**).

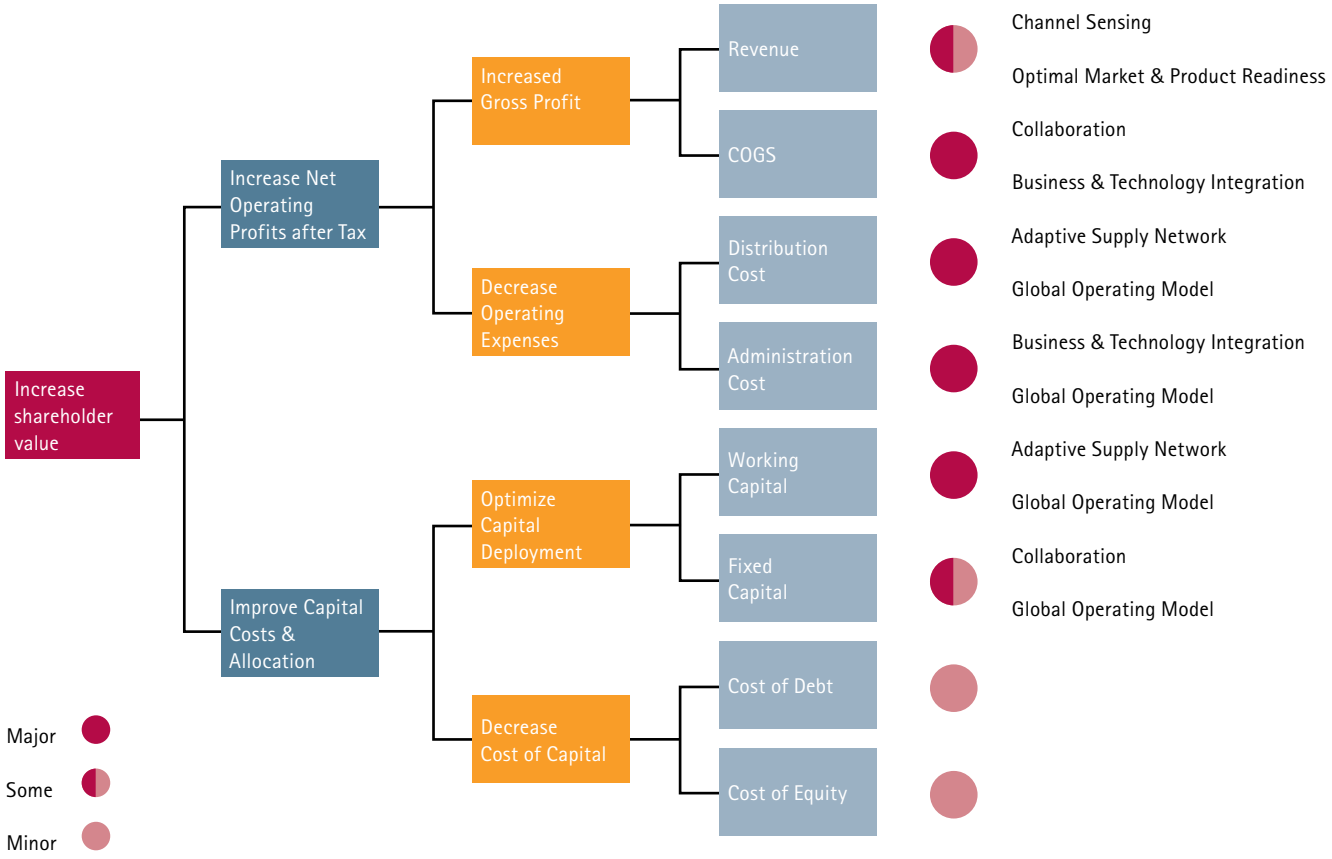
By adopting the three pillars, pharmaceutical companies will be able to trigger several value levers, in particular those that will boost profit, which then ultimately increases shareholder value.

Value levers include reduction of time to market, product innovation, new market penetration, customer segmentation, customer service and value-add supply chain services, and life cycle optimization.

Pharmaceutical companies should thoroughly assess their supply chain realities and ask:

- What is the operating model that best positions the organization for success?
- Can the organization start to redefine its core competencies to truly differentiate it from the competition, focusing on developing the core skills to sustain those core competencies?

## Figure 9. Value tree impacts of mastering the three pillars




• Can the organization take steps now to develop more collaborative relationships with its partners, sharing information, systems, opportunities and risks so that these partners have an equal stake in the success of outsourcing initiatives?

Individual companies are starting from different positions in terms of scale, challenges, capabilities and geographies. And each will take a different path to unlocking the potential for high performance in its supply chain. All, however, should recognize that a supply chain focused on innovation and growth is key to future value creation in today's pharmaceutical industry.

By radically reconsidering your business paradigm, choosing an operating model that supports differentiation, focusing on competencies that drive differentiation and outsourcing the rest, and by developing the skills, systems, tools, processes and partnerships to sustain that differentiation, you will establish a head start on the path to high performance. Now is the time to act.

## About Accenture's Health & Life Sciences Group

Accenture's Health & Life Sciences professionals deliver innovation and insight to both the private and public sectors of the marketplace, which includes integrated health care providers, health insurers, managed care organizations, public health organizations and pharmaceutical, biotechnology and medical products companies. With more than 8,000 professionals dedicated to serving the global Health & Life Sciences industry, Accenture is committed to working with clients across the industry to help them achieve and sustain high performance. Accenture works with companies of all sizes, including 25 of the 27 health care and pharmaceutical companies in the *Fortune* Global 500. Our home page is www.accenture.com/h&ls.

## 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 180,000 people in 49 countries, the company generated net revenues of US $19.70 billion for the fiscal year ended August 31, 2007. Its home page is www.accenture.com.

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