The past five years have seen profound change in the life sciences industries.

In the branded pharmaceutical world, $80 billion in annual sales is in jeopardy due to patent expiration, presenting the prospect of declining revenue against steady costs. Big Pharma is searching for additional revenue generating ideas and exploring new channels to reach patients. The wave of consolidation is not over either.

Generics companies are benefiting from the growing number of off-patent drugs, but they too face competition from low-cost global manufacturers.

Biopharma is growing—and even struggling to keep up with demand—but biopharma also faces great challenges with respect to logistics, regulatory compliance, product integrity and cost control.

Manufacturers of medical products and devices (a large category covering a spectrum of products from low-value wound care to high-value orthopedic items) are confronting challenges of their own, including fragmented distribution networks, higher supply chain costs relative to low-margin products, antiquated rebate systems and complex delivery requirements.

And the pace of change is set to accelerate: aging populations, especially in developed countries, will continue to drive demand higher while building pressure to contain costs. Emerging markets, particularly in India and China, intensify this trend further, offering both enormous potential demand and low-cost manufacturing competition. At the same time, there is profound uncertainty about the trajectory of health care reform in the United States and continued universal health care entitlements from cash-strapped governments around the world. Although the business dynamics and challenges faced by companies in the life sciences sector differ, all these business issues share a common theme: a profound impact on how a company structures its channel and distribution capabilities to build competitiveness and drive shareholder value.

How will life sciences companies shape their distribution and channel strategies to thrive in this environment?

1 Accenture survey of pharmaceutical pipelines, 2009
Clear trend toward outsourcing
Accenture has conducted many High Performance studies and benchmarks in the area of Life Sciences Supply Chain and Tech Ops over the last few years. Since the second half of 2008, Accenture’s Supply Chain Mastery program has been conducting an ongoing survey of 240 global fulfillment executives representing companies in nine industries with the goal of better understanding what practices distinguish supply chain masters. Combined, Accenture has been able to identify those companies whose supply chain performance is in the top quartile across industries.

Mastery findings indicate that in the life sciences area (and particularly in pharmaceuticals) companies are re-examining their distribution strategies, with many considering or implementing an outsourced model. Whereas 70 percent of distribution capabilities were local and insourced in 2008, surveyed pharmaceutical companies expected 65 percent of capabilities to be outsourced and managed globally in the future (Figure 1).²

What is driving this shift in capabilities? One factor is the increasing tactical complexity of distribution as companies struggle to match their network footprint to an increasingly global supplier and customer base while dealing with time-critical or temperature-sensitive requirements and a tangle of global regulations. The increased use of low-cost country manufacturing and revenue growth in emerging markets make this trend especially important. In addition, some life sciences companies are concluding that, from a strategic perspective, distribution is simply not a core capability that justifies investment.

So is outsourcing a strategic decision or a tactical decision?
It can be both. Some decision makers view outsourcing as a strategic move whereby low-risk, low value-added activities such as order management, warehousing and transportation management are moved to a third party, freeing up the organization’s limited resources to concentrate elsewhere. Strategic outsourcing may even serve as a means to rapidly develop distribution capabilities which would be too difficult or costly to build internally, especially for smaller players and/or those that wish to enter new markets quickly. Such arrangements might be all-encompassing, covering all channel, product and customer combinations.

2 Unlocking the Potential for High Performance through the Pharmaceutical Supply Chain, 2008
Others see outsourcing as a more tactical decision to supplement their organization’s internal capabilities with specialized expertise from a third party. This type of arrangement might come into play when launching a new product, seeking additional warehousing or transportation capacity, or dealing with a spike in demand.

**But is outsourcing just a cost play, or can it provide a competitive differentiator?**

Outsourcing is not just about cost. Whether the focus is tactical, strategic, or a mix of the two, outsourcing can be a source of competitive advantage, especially in the following areas:

**Market access**

A third-party logistics partner with an established global network can offer the possibility of expanding distribution to a larger population of patients and can provide inbound services from manufacturing to consumption sites globally. This can provide a competitive advantage versus competitors insofar as it offers readily available capabilities rather than creating one’s network and capabilities from scratch. A 3PL provider with the right footprint of physical locations and transportation modes can offer high-speed service to distributors, wholesalers, prescribers and patients; improved fill rates; and greatly improved visibility into product use over time. 3PL providers can also provide valuable knowledge on dealing with the product security and regulatory compliance burdens by geography. Using outsourcing to penetrate new markets more quickly will provide a competitive edge versus other players that are slower at gaining a foothold in the same markets.

**Customer experience**

Customer experience should no longer be viewed as a term used in marketing; this is now a term as relevant in the supply chain given how distribution impacts customers. Most life science companies have or are in the process of creating multiple distribution channels to maximize revenue by client or product segments. But not all customers are equal, and manufacturers now face the challenge of managing multiple order processes, fulfillment service levels and overall customer experiences. This can be challenging, and that is why some manufacturers refer to third-party logistics companies to manage the needs of the multiple customer segments.

Further, the increase in direct to patient distribution models means that distribution performance has a direct impact on the customer experience and brand positioning associated with the manufacturer. Using outsourcing to improve service to the end patient serves the dual competitive goals of maximizing revenue while products are under patent protection and developing brand loyalty to drive sales in the face of generic competition.

**New revenue streams**

Some customers seek conventional methods to drive revenues. They wish to introduce new products more quickly to the market place to capitalize on brief patent windows or instead seek to reduce stockouts across multiple channels.

Accenture is also involved in helping companies assess and develop solutions around alternative distribution models that focus on revenue generation. Only an estimated 50 percent of patients in the United States take their medication as prescribed—costing the system an estimated $100 billion annually.3 The direct to patient model is seen as offering a means to better communicate and control patient adherence to prescriptions. The same concepts apply to medical products. Leveraging a third-party logistics partner can provide the capabilities to take the order directly—enabled by an in-house pharmacy—and to deliver the prescription in a manner that ensures patient compliance. This type of approach can both reduce revenue leakage and/or drive new revenues.

**Supply chain agility**

An effective distribution strategy is also one that changes to meet shifting market needs. Both pharma and medical product manufacturers are searching for greater supply chain agility. Whether that means penetrating emerging markets quickly, improving speed-to-market on new products, or increasing the flexibility with which they can respond to demand spikes and recalls, companies are searching for ways to react to events faster and more flexibly than the competition.

Third-party logistics partners can play a crucial role in increasing supply chain agility. Through years of servicing the high tech and retail industries, 3PL providers have developed significant expertise in dealing with high-volatility demand. They can provide both proven business processes and flexible resources (people, space, and transportation assets) required to deal much more effectively with sudden demand spikes (e.g., during flu season), label changes or recalls. The flexibility of 3PL provider networks can translate to improved delivery performance during demand spikes, faster time-to-market and smoother product introductions than either pharma or medical product companies could reasonably expect to develop on their own.

---

Supply chain masters in life sciences outsource twice as much as laggards

The value of distribution outsourcing—on both a pure-cost and improved-competitiveness basis—is sufficiently compelling that supply chain masters in the life sciences sector tend to outsource almost twice as much as laggards across four major distribution capabilities: transportation planning and management, warehouse management, network strategy and order management.4

Our research also found that masters were more likely to use third-party logistics players, which increases the flexibility of the supply chain. Eighty percent of masters indicated that their 3PL provider boosted flexibility, while 63 percent of laggards said the same. Masters were also far more likely to extensively integrate their data with supply chain partners—50 percent of them indicated that they reported extensive data integration versus only 19 percent for the laggards.5

Outsourcing sounds good, but when does it make sense?

Traditionally, a fear of losing control has driven much of the opposition to outsourcing. Companies may feel that a 3PL provider won’t adequately understand their business, or will take advantage of them by passing along only a portion of the cost savings. While these concerns are understandable, they rarely justify a decision not to outsource. A properly structured 3PL provider relationship, with open and frequent communication, and a well thought out transition plan can ensure that the 3PL provider will understand the business it’s taking on. And a service level agreement which clearly defines performance metrics and provides transparency of costs can largely eliminate worries about hidden margins.

4 Accenture Pharma Industry Supply Chain Best Practices Study and Supply Chain Mastery Research, 2009

5 Accenture Research and Insights into Fulfillment Mastery, 2009
In general, the value proposition for outsourcing is strong, but that doesn’t mean outsourcing is appropriate in every situation. However, there are a number of real constraints to consider when evaluating outsourcing and whether or not it is the solution for your needs. These considerations can affect the degree to which distribution can be outsourced, or whether outsourcing makes sense at all.

- Criticality of service: what is the impact (financially, to the business and the customer, and to the end patient’s well-being) of a stockout, or a missed delivery? Outsourcing providers can provide mission-critical delivery services, but the nature of the relationship and the financial objectives in play will depend heavily on understanding the performance requirements.

- Service levels and product delivery conditions: does it make sense to outsource if a 3PL provider cannot meet specific delivery time slots? An example is a cold chain product that is delivered the next morning and that may face temperature excursions if left outside the entire day. This may or may not end up being the case, but many customers and increasingly end patients may not want to accept a product in these conditions even though the product did remain within its temperature limits. Delivery excellence is a must.

- Network scope: can a potential partner play a role in both inbound and outbound logistics? What is the breadth of their service offerings? Can they operate on a global scale, or just for a specific geography? Global partnerships are becoming especially attractive for companies looking to control diversion and product security in emerging markets, but more localized arrangements may be important for mature markets with specific needs.

- High transition costs: What is the current level of performance? Are operations in a state that the transitions costs are so high that shifting to a 3PL provider makes sense overall but at a high transitional cost—usually the result of high fixed capital costs (warehouses) or high labor separation costs.

- Readiness for change: what kind of partnership is the organization ready for? While outsourcing can provide substantial efficiencies, the process works more smoothly when the outsourcing partner is taking over processes that are well-defined. Many organizations may need to take a stepwise approach to outsourcing in order to achieve the desired results.

- Business continuity planning: does the business maintain detailed plans and procedures to minimize the impacts of potential disruptions to normal business functions? Are redundant systems in place, and are safety stock levels optimized? Working together with an outsourced distribution partner can ensure contingency planning across the product line and customer base.

- Data availability and measuring performance: is the technology in place to measure performance across customers’ key performance indicators (KPIs)? Outsourcing usually requires greater data collection and integration to enable efficiencies and visibility.

When all these factors are taken into consideration, outsourcing will not make sense for every distribution need or every company. But the value can be significant; consider the examples on the next page:
Case study: Orthopedic division of a medical device company

As part of restructuring, the company decided to pursue outsourcing of warehousing and distribution in order to cut costs and reduce excess inventory across the ecosystem. However, the company also faced a need to deliver orthopedic parts inside the hospital within a specific one- to two-hour window prior to surgery (and to handle unused part returns). After evaluating several large 3PL providers and niche distributors, the company concluded that while there were some niche players who were able to meet the required service levels, the potential cost of a service failure (endangering a relationship with a surgeon whose overall lifetime revenue could average $20 million) dwarfed the benefits third parties could provide. As a result, the company pursued an outsourcing strategy for warehousing and portions of transportation, but chose to manage the ‘last mile’ logistics internally.

Case study: Medical equipment division of a global conglomerate

The company was faced with a challenge in managing fulfillment of spare parts for its scanning equipment. The logistics requirements were theoretically straightforward: parts were delivered from the warehouse to a physician’s office in units, with no need for the packaging to be opened or broken down; parts were left at the physician’s location until needed, with the same packaging used to return defective parts if necessary. However, the company maintained an inventory of over 25,000 unique SKUs, and lacked the process controls and IT infrastructure to manage this volume effectively. Rather than develop these capabilities in-house, the company turned to a 3PL partner to manage the spare parts supply chain in its entirety: from order management and network configuration to warehousing and transportation. As a result, the company was able to avoid significant IT upgrade costs and free up substantial working capital.
How do you maximize value from outsourcing?
Our experience helping companies globally assess new distribution models that often involve a 3PL provider and outsourcing tells us that companies do not always get the anticipated benefits from outsourcing. There are generally four areas of value leakage:

- Companies suboptimize benefits by limiting scope.
- Companies do not remove internal costs adequately once they outsource.
- Companies underestimate or face unexpected transition costs.
- Companies let costs creep back up as time progresses.

Based on our experience with life sciences clients, there are a number of ways to maximize the benefits from outsourcing distribution capabilities:

Get internal alignment before taking the plunge
Organization structure and responsibility can significantly impact the effectiveness of using a 3PL provider to achieve financial benefits. The greatest benefits in outsourcing, for example, can often depend on bundling inbound and outbound traffic. But many pharma and medical product companies consider the sweet spot of 3PL providers to lie in outbound warehousing and transportation activities, with the result that quite often, responsibility for outsourcing falls into the outbound distribution area of the organization.

Because the metrics and priorities of global manufacturing and inbound logistics organizations can conflict with those of in-country distribution, it is often difficult to build consensus behind a bundled inbound and outbound approach, which can diminish the financial value of outsourcing. Other cases that impact the benefits of outsourcing are when transportation belongs to one stakeholder and inventory belongs to another or where the supply chain is fragmented across profits and losses.
Get your house in order before outsourcing

Similarly, while outsourcing can dramatically improve performance measurement and data integration with trading partners, companies with highly fragmented systems landscapes often find that the outsourcing relationship fails to deliver fully on its potential unless issues with the internal infrastructure are dealt with up front.

Companies that face organizational or IT challenges in structuring an outsourcing relationship may find it necessary to engage a consulting partner that can help to map a path around internal obstacles and manage the 3PL provider relationship to ensure that the outsourcing arrangement delivers the expected value. Integration and interfaces will be key.

When outsourcing, the first step is usually an intensive review of the business and the supply chain. This short yet intensive period of ‘due diligence’ between the life science company and the 3PL provider usually highlights many of those issues mentioned in the previous paragraphs. By addressing these gaps ahead of time, life science companies will end up saving in the long run or at the very least be able to account for these costs in their business case.

Move fast to remove redundant activities internally

Some companies are slow to adjust existing processes and practices internally once the outsourcing has occurred. This may be an insurance policy in case things don’t work out, but we usually find that this leads to higher costs internally for an indefinite period of time. When outsourcing, adjust your support and cost structure accordingly. Be sure to include back-up systems only where absolutely necessary. Identify these in advance.

Separate operations from oversight

There are some capabilities that naturally fit with 3PL providers’ core capabilities, but there are other activities that should be kept in-house or provided to a separate third party to enhance the collaboration with other internal functions or to remove any conflict of interest and drive long-term savings. These activities may include sales and operations planning, demand planning and forecasting, contract negotiation and management, freight audit and payment, and all performance management and control.
Ultimately, even the best 3PL provider will be only as effective as the upstream planning processes which create the stock levels and customer service targets they have to work with. However, planning in general—and sales and operations planning (S&OP) in particular—is not a strong area for the life sciences industries. Building effective S&OP capabilities was cited as a top priority by Mastery participants, but more than two-thirds indicated that their current performance in this area was unsatisfactory.

Less than one-third of pharma companies have clearly defined rules in place to drive decisions on cost, service levels, scheduling or allocation. Instead, informal coordination (or no coordination) between functional silos is the rule. In addition, more than half of the participants said that there was no integration of planning between business units or product lines—yet it is precisely this type of integrated planning which is demonstrated by masters in other industries. Without strong S&OP and forecasting capabilities, warehousing and transportation spend with a 3PL provider can’t be fully optimized.

**Implement good SRM practices**
Implementing good supplier relationship management (SRM) practices is arguably the most critical advice we can give to manufacturers thinking of outsourcing. This will help mitigate the risk of possible increases in costs over time. This can be summarized in the need to build relationships on trust and on collaboration. This means establishing multiple channels of communication between the manufacturer and the chosen 3PL provider. Open communication will help identify and resolve most issues that come up during the long-term relationship between the two parties.

In addition, manufacturers should also demand clear performance metrics that are reviewed on a regular basis. Life sciences companies should also embed continuous improvements as part of the agreement with the 3PL provider. While the reasons to leverage a 3PL provider may go beyond cost as illustrated previously, cost management is important.

---

7 Accenture Supply Chain Mastery, 2009
The complexity of the distribution challenges facing the life sciences industries offers an exciting opportunity: by leveraging the experience and expertise built up by Masters in other industries, life sciences companies which engage seriously with the challenges can make a quantum leap in cost-effectiveness and customer service, and position themselves to thrive, not just survive, in the highly competitive global marketplace.

The keys to success: first, understand the scope—the product/patient mix, service levels, and channels in play—then get alignment from internal stakeholders. Second, make sure that your own house is in order before outsourcing, particularly from an IT and business process perspective. Third, once the relationship with the 3PL provider is in motion with a partner you trust, move quickly to eliminate redundant activities internally. Finally, make sure that good supplier management practices are in place and keep oversight of the relationship separate from day-to-day operations.

Don’t underestimate the transition costs and capabilities required to move to a 3PL partner model (including IT and system costs, labor termination, asset disposal and possibly the financial impact of shifting away from wholesalers). But the benefits in terms of efficiencies, cost savings, collaboration and flexibility can more than justify the investment.
About Accenture

Accenture is a global management consulting, technology services and outsourcing company, with more than 181,000 people serving clients in more than 120 countries. 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. The company generated net revenues of US $21.58 billion for the fiscal year ended August 31, 2009. Its home page is www.accenture.com.

For more information, please contact:

Eugene Jones
Florham Park, United States
+1 973 301 3088
eugene.m.jones@accenture.com

Andre Pharand
Miami, United States
+1 703 421 6873
andre.pharand@accenture.com

Erwin Hermans
Florham Park, United States
+1 973 301 3339
erwin.hermans@accenture.com

About Life Sciences

Our Life Sciences industry group works with pharmaceuticals, biotechnology, consumer health, medical products, wholesalers and other companies, providing services across the entire life sciences value chain ranging from large-scale business and technology transformation to post-merger integration. Our key offerings include: research and development, including pharmacovigilance and regulatory outsourcing; supply chain and manufacturing optimization; marketing and sales, including commercial services; and value-driven ERP. Additionally, we are focused on providing life sciences-specific business process outsourcing services—as well as systems integration and IT outsourcing—across all functions and geographies.