# SUPPLY CHAIN ISSUES: WHAT'S KEEPING SUPPLY CHAIN MANAGERS AWAKE AT NIGHT?

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# **ABOUT THIS REPORT**

This is the third in a series of white papers reporting the results of the Beyond the Horizon supply chain research project by Michigan State University, conducted in partnership with the APICS Supply Chain Council. This aspect of the Beyond the Horizon project investigates the current business practices of more than 50 firms through surveys and interviews with executives and studies what executives identify as critical issues they are "wrestling with." The question posed to the executives was: "What keeps you awake at night?" They were asked to focus on both the new opportunities that they were evaluating and the challenges that were disrupting their sleep.

Although many of the challenges identified by participating executives are interrelated and overlapping. However, common problems were identified among the professionals. The six most common issues were:

- 1. Capacity/resource availability
- 2. Talent
- 3. Complexity
- 4. Threats/challenges
- 5. Compliance
- **6.** Cost/purchasing issues.

# CAPACITY/RESOURCE AVAILABILITY

Managing capacity issues was a priority for firms expecting market growth. Initial approaches to this challenge usually involve a broad range of activities seeking to maximize the firm's facility capacity, such as replacing old equipment with state-of-the-art higher-capacity equipment. Often the intent is to avoid outsourcing, if possible. An executive at one firm experiencing strong growth talked about an immediate plan to do "selective outsourcing" as a temporary solution until the new equipment was operational and outsourced processes could return in house. Another firm, one currently experiencing rapid growth and anticipating continued growth, was considering a reconfiguration of its network in order to sustain the growth and improve its cost structure. Similarly, participants from a company offering innovative products with skyrocketing sales talked about the demands such growth places on the supply chain. They doubted that their current infrastructure and staff could continue to support all of the firm's initiatives and were looking at the associated challenges. "We've implemented a supply chain for a point in time," one of the participants said. "However, a supply chain is a living, breathing thing, and one needs to think about it as dynamic and impermanent. Is there a point where the supply chain becomes inappropriate for where we're going and we need to build a different kind of supply chain?"

Even industries that have experienced declining sales are trying to plan for potential growth. For example, one participant said: "Industry capacity is an issue because we've all downsized, and now things are starting to grow, but everyone is conservative around adding capacity. I'd be the last person to want a supplier to put in capacity that isn't going to be fully utilized." Capacity planning and resource availability become even more challenging when entering new and emerging markets. One executive explained the resources just are not available. "I don't get a [greater] allocation, so we just keep stretching," the participant said. This leads to a challenge of needing to do more with less.

Another critically important capacity aspect for the participant was data system capacity and necessary employee skills sets. One executive worried about data accuracy and the potential for his company's in-house systems to slip over time. He noted: "One would intuitively think that, with a good system, you need fewer people. However, I still think we need to keep sufficient people in the system to maintain the basic supply and check that it's not deteriorating." He went on to say that his company was focusing on continuity planning related to information systems. It has strengthened junior-level training in an effort to ensure that its pipeline of necessary replacements will be ready to step in as needed. However, he expressed concerns regarding potential weaknesses in their approach. "So the plan is to strengthen the team through junior capacity training targeted at filling the more critical skilled positions that we can't easily replace or it would take us a long time to replace," he explained. "What if the person you're gearing up to step in leaves? It makes us question whether we are actually doing things correctly."

### **TALENT**

Talent issues, even beyond the information systems arena, were a primary concern for many of the interviewed firms. Talent competition is intense for supply chain jobs. "The competition for talent is much higher [than it's ever been]," one participant said. "You go out to the market, and it's one of those ironies. Right now, you put a job description out there and you hear about 8 percent unemployment. However, I can't find an industrial engineer worth his salt—you know, someone who can really think about strategy and think about [profit and loss statements] and drive change." Another person voiced similar concerns, noting that, "It's a different type of talent that we're going to need if we're going to keep up with the pace of change."

Even if firms have successful hiring cycles, they are still concerned about retaining new hires and properly developing and utilizing their talent. One participant, who is a member of the strategic planning team for his company's corporate human resources (HR) department, noted that he spends 25 percent of his time on the talent aspect of his position, even though he is a "business guy" and not an HR expert. He also commented that a long-term perspective is needed. "Most of the things I'm doing don't yield immediate results," he said. "I mean it takes a year for a lot of those [development programs] to start to take hold." However, he said he's willing to invest the time to earn the long-term yield in productivity.

Retention also is a concern because of millennial's job-hopping habits. In order to keep them at a company, how does an employer have to challenge and motivate them? One of the interviewees said: "The thing that actually keeps me up at night more than anything is keeping my team happy. Are they engaged, are they satisfied with their work? I'm always afraid that someone is going to think, 'This just isn't moving fast enough for me. I'm going to go somewhere else where I can be more on the bleeding edge.""

Concerns regarding succession planning were also expressed by a number of the interviewees. One person explained: "We're trying to get people ready to take over leadership roles. Our entire leadership team is probably going to be turned over in the next 5–7 years. We're all hitting the same age."

#### **COMPLEXITY**

In many instances, firms face a situation in which their products are becoming more complex and the amount of stock keeping units (SKUs) is exploding. The firms must find ways to combat and manage this issue. One interview participant noted: "We've started building different types of products, completely new types of products. Whether it's low or high volume, it creates another level of complexity." The participant went on to say that growth in existing products presents a major leverage point for the firm with suppliers, such that it is well positioned to bargain for better prices and/or better service in repurchase situations. With totally new products, firms often do not have the benefit of that leverage or experience with suppliers. Another participant expressed that complexity drives "a ton of costs" and hitting product cost targets was becoming more difficult as a result.

Many firms are trying to deal with complexity by managing it. They have realized it often is not possible to reduce complexity, so they are focusing on ways to manage it more effectively. Common approaches included greater standardization and simplifying processes. One firm was looking at the potential rewards associated with having different plants "do their own thing." Manufacturing can be standardized by focusing on fewer individual products and SKUs at individual locations or by simplifying component combinations. Citing problems in acting with enough speed, another executive talked about "the need to re-invent ourselves [by] radically simplify[ing] our processes." He further noted that, by making his company's supply chain leaner and simplifying processes, it also could mitigate risks. The company now is quicker and more nimble in its operations.

Firms involved in omnichannel business (multiple-channel distribution) face complexity at every turn, and yet systems complexity seemed to be one of their primary concerns. One executive talked about staying awake at night worrying about trying to be best-in-class in the direct-to-consumer arena while still maintaining status as a top wholesaler operating in international supply chains. He pointed to system complexity because "to support both of these businesses, we've had to invest in systems for direct to consumer, which are different from what you invest in for wholesale."

# THREATS/CHALLENGES

Many of the executives expressed broad concerns regarding supply chain risks. "I worry about supply risks in general, whether it's from natural disasters or things like ... a troubled supplier or a variety of issues with the whole supply chain risk piece," one participant said. "Partly that's because that stuff is hard to control. You can try to proactively mitigate the downsides, but that's just hard to control."

Continuity planning was a theme commonly mentioned by study participants. Discussions centered on the need to build business continuity considerations into new product development, how to decide when to invest in resiliency, and the additional challenges involved with continuity planning when lean operations are involved. Planning also becomes an issue when entering new markets. One executive referred to new markets as "the ever-evolving challenge" with respect to scalability and determining what changes are necessary to accommodate the new markets.

Many of the challenges discussed by executives involved managing personnel. One executive summarized his firm's perspective: "The one thing that worries all of us is people in the organization making poor choices and having that come back and kick us. It doesn't matter where you look in the world, there is enough stuff going on that ends up having repercussions in the supply chain." These issues can also cause reputational damage, the participant noted. "Today, 5 seconds after it happens, someone will upload a video [of a company-related disaster] from their phone onto YouTube," the participant noted. "You'll have 10 million views by the end of the week. So there are risks to our reputation and our business and ethical behaviors. All are subject to a different standard today."

One of the interviewees talked about supply chain being in the middle when a difficult situation or crisis arises. "It can be an issue with a supplier, an issue with the production process, or customers," the participant said. "The supply chain network, in terms of responsibility and risk, is in the middle. So we could have many reasons to stay awake at night. If there is a recall of batches, crisis in the country, or war, we are the ones called upon to make it right."

#### COMPLIANCE

Although the executives mentioned a range of compliance components during the interviews, primary compliance issues included product regulation, trade controls, and continually changing regulations. Keeping up with the evolving regulations—a moving target—seemed to be a major issue. One person noted, the changes "are really causing us to spend a lot of money and a lot of our time. It is sucking up a huge amount of our information technology dollars and resources to be able to be compliant with those regulations." The governmental interpretation and implementation regarding trade regulations and compliance requirements was also an issue. Another participant explained: "Various countries we do business in give customs workers a lot of power. One day they agree with a classification, another day they won't and shut you down."

According to study participants, the sheer number of regulatory actions and compliance requirements they are required to deal with has become staggering. The researchers were told that governmental actions in general "haven't just doubled, it's more like five-fold." One executive noted, "The increase in activity, regulatory pressures, regulatory involvement, compliance-related requirements, and responsibilities have exponentially increased the amount of time I spend as an executive on compliance and regulatory issues." He acknowledged that his company has always had to deal with trade compliance, anti-dumping, customs, etc., and it has built up expertise around those issues. "However, now it's the US Environmental Protection Agency, it's the US Food and Drug Administration, it's the US Department of Agriculture, it's the US Occupational and Health Administration.," he lists. "Every one of them has a mandate now. In this facility, almost every day we have one of those regulatory bodies here. ... it's part of everything we do now; everything we do goes through a regulatory filter before we do it to make sure that we have captured all of the regulatorycompliance requirements." To handle this, his firm created a chief compliance officer (CCO) position. The CCO is in charge of compliance training and responsible for understanding the different policies and regulations as they apply to different divisions. Further, the company has compliance officers in every one of its divisions.

# COST/PRICING ISSUES

Although price pressures hit virtually all types of industries, they are definitely at the top of the agenda for healthcare and pharmaceutical firms. These types of firms have been impacted by the Affordable Care Act as well as Medicare and Medicaid restrictions. One executive explained how the burden had been shifted to him: "Everything in healthcare is submitted through insurance for reimbursement. The government won't pay you any more to treat your patients, so you better get [the payout from] your suppliers. Well, we're the supplier they're coming after." He noted that the price erosion his company has experienced is typical for the entire industry.

An executive at another firm operating in a commodity business talked about the "need to be ruthlessly efficient if you're going to survive." To achieve what he termed "cutting edge efficiency," his company is looking at reconfiguring its supplier network to improve the cost structure.

However, one executive offered a much different point about cost/pricing issues. He advocated that supply chain performance should not be purely cost driven, and that other factors, such as service and quality, should be considered as well. At the time, his firm was working to change its "mindset from unit-cost accounting to incremental margin costing" to get a broader perspective.

# **SUMMARY**

Although some of the themes presented in this paper may not be surprising, it is valuable to note that the executives interviewed, who represented more than 50 different firms, shared a common perspective about issues disrupting their businesses. Knowledge of the common challenges identified in this study can provide insight and awareness for others evaluating their own firms' problem areas. Future reports from the Beyond the Horizon study will address in more detail the range of practices utilized by firms to overcome these challenges.

#### ABOUT ELI BROAD COLLEGE OF BUSINESS

Michigan State University's Eli Broad College of Business prepares students to make business happen through an innovative curriculum and collaborative culture, guided by a distinguished faculty. The hardworking, team-oriented students of Eli Broad College acquire deep knowledge of their chosen disciplines and a broad understanding of how global businesses work, enhanced by study abroad and real-world projects in research centers and experiential labs. The college, consistently ranked among the top business schools, offers undergraduate, graduate, and executive development programs. Broad graduates are ready to tackle business challenges around the world, part of an unparalleled peer and alumni network.

# ABOUT APICS SUPPLY CHAIN COUNCIL

APICS Supply Chain Council (APICS SCC) is a nonprofit organization that advances supply chains through unbiased research, benchmarking and publications. APICS SCC maintains the Supply Chain Operations Reference (SCOR) model, the supply chain management community's most widely accepted framework for evaluating and comparing supply chain activities and performance. APICS SCC enables corporations, academic institutions and public sector organizations to address the ever-changing challenges of managing a global supply chain to elevate supply chain performance. APICS SCC is part of APICS, the premier professional association for supply chain and operations management. Visit apicsscc.org to learn more.

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