Don't Play it Safe When it Comes to Supply Chain Risk Management

Accenture Global Operations Megatrends Study
Focus on Risk Management

Operations challenges

- Costs
- Sustainability
- Global operations
- New product introductions
- Supply & demand volatility

NEW

2
Don't Play it Safe When it Comes to Supply Chain Risk Management

New research from Accenture reveals that, while a vast majority of executives believe supply chain risk management is a priority, only a small group of companies employ practices that enable them to generate a significant risk management ROI.

These leaders make risk management a strategic imperative, have a senior executive explicitly in charge of risk management, and invest aggressively in advanced supply chain risk management capabilities. As a result of their strong focus on supply chain risk management, these companies are positioning themselves to grow more robustly in an increasingly volatile global economy.

The supply chain operation is fundamental to the success of any organization. It is critical to a company’s ability to manage global operations, supply and demand volatility, the accelerated pace of new product and services introductions, and sustainability. Thus, risk management is now a key consideration when designing and operating supply chains and is assessed by organizations alongside other critical areas such as cost, service, inventories and sustainability.

While the approaches varied, virtually all executives reported generating a positive ROI from their supply chain risk management investments.

Accenture recently explored this important topic, looking to shed light on how companies are approaching supply chain risk in today’s volatile global economy. We surveyed more than 1,000 senior executives mostly from large global companies to get their thoughts on the impact of operations and supply chain risk on their organization, how they are managing this risk, and the benefits their supply chain risk management practices are generating. (For more on survey participants and research methodology, see “About the Research.”)

Our survey found that organizations face a wide range of supply chain risks and consider risk management a priority. In fact, more than half of executives said their company is boosting investment in risk management, within the supply chain function by up to 20 percent, and another one-quarter said they are increasing spending by 20 percent or more.

That said, there is no “one size fits all” approach to tackling risk: Industry-specific supply chain risk profiles are driving companies to take differentiated approaches to supply chain risk management. For example, retailers reported that an approach that improves collaboration and communication across the supply chain is most effective, consumer goods companies showed a strong preference for better customer management and more accurate demand forecasts, and chemical companies indicated that having pre-worked plans in place to improve reaction time worked best.

While the approaches varied, virtually all executives reported generating a positive ROI from their supply chain risk management investments. However, our research also discovered only a small group of risk management leaders have experienced a supply chain risk management ROI that exceeded 100 percent.

According to our research, the small group of companies that have generated the highest return on their supply chain risk management investments share three commonalities: They make supply chain risk management a priority, centralize responsibility for the risk management function, and invest aggressively in key operations risk management capabilities.

In the following sections, we explore our findings in more detail and discuss specific actions companies can take to improve the effectiveness of their operations risk management function.
Operations risk—and its impacts—are pervasive in today’s global economy

Operations- and supply chain-related risk can be found in many places across the typical large enterprise. Among those participating in our survey, two dynamics in particular were most commonly seen as driving supply chain risk: information technology and cost/pricing factors (Figure 1). Other significant risk drivers include the global economy, competition, supply chain complexity, regulations, and demand volatility.

In Accenture’s view, a number of factors play a role in IT’s place at the top of the list of risk drivers. In general, companies have struggled to infuse sufficient agility in their IT organizations, which compromises IT’s ability to quickly and effectively deploy the capabilities companies need to respond to marketplace changes. In addition, companies still lack operational visibility due to fragmented or insufficient data (both from inside and outside the enterprise)—a situation that’s made doubly difficult when digital channels and their direct access to customers are added to the mix. The overall result is an IT organization and infrastructure that is still ill-equipped to deal with volatility, which puts the enterprise at enormous risk.

The impact of these risks can be felt across the supply chain, with quality being the most likely area to be affected (Figure 2). However, a sizable percentage of respondents also indicated supply chain planning, supply chain talent, sourcing and procurement, services and aftermarket business, product engineering and development, and inventory and logistics are vulnerable to risk.

Manufacturing was least-frequently mentioned as an area exposed to risk. We believe this is because companies have focused considerable risk management attention and resources on manufacturing for years, and because they have outsourced many aspects of manufacturing to partners that have made risk management a core competency of their services.
**Figure 1:** Greatest drivers or sources of supply chain risk

- **Information Technology**
  - Within Top 3: 39%
  - Top 1: 14%

- **Cost/Pricing Factors**
  - Within Top 3: 39%
  - Top 1: 13%

- **Global Economy**
  - Within Top 3: 37%
  - Top 1: 14%

- **Competition**
  - Within Top 3: 32%
  - Top 1: 8%

- **Supply Chain Complexity**
  - Within Top 3: 31%
  - Top 1: 11%

- **Regulations**
  - Within Top 3: 29%
  - Top 1: 11%

- **Demand Volatility**
  - Within Top 3: 28%
  - Top 1: 8%

- **Skills**
  - Within Top 3: 25%
  - Top 1: 8%

- **Suppliers**
  - Within Top 3: 22%
  - Top 1: 6%

- **Natural Disasters or Unforeseen Events**
  - Within Top 3: 17%
  - Top 1: 6%

**Figure 2:** Areas of the supply chain that are most exposed to risk

- **Quality Function**
  - Within Top 3: 45%
  - Top 1: 17%

- **Supply Chain Planning**
  - Within Top 3: 39%
  - Top 1: 13%

- **Supply Chain Skills/Talent**
  - Within Top 3: 38%
  - Top 1: 13%

- **Sourcing and Procurement**
  - Within Top 3: 37%
  - Top 1: 12%

- **Services/After Market Business**
  - Within Top 3: 35%
  - Top 1: 11%

- **Project Engineering and Development**
  - Within Top 3: 34%
  - Top 1: 10%

- **Inventory, Warehousing and Transportation**
  - Within Top 3: 33%
  - Top 1: 11%

- **Manufacturing**
  - Within Top 3: 29%
  - Top 1: 11%
Most companies see operations risk management as important

Accenture believes supply chain risk management should be important to any company, and can (and should) cover risks that are both under a company’s direct control and outside its circle of direct influence.

With risk more pervasive, more companies are paying attention to it: A large majority of respondents—76 percent—consider operations risk management important or very important to addressing supply chain risk issues (Figure 3). This finding is consistent with that of the Accenture 2013 Global Risk Management Study, in which the vast majority of surveyed respondents reported an increase in the perceived importance of risk management at their organization.

But what about the other 24 percent? These companies did not consider operations risk management important for two primary reasons: The first is that they believe events affecting their supply chain are unpredictable or out of their control and, hence, investing in predicting and mitigating them is not beneficial. The second is that they may have limited external dependency on outside entities, which presumably would mean their risks are similarly limited and, thus, supply chain risk mitigation is not seen as a priority. Interestingly, two other reasons cited by a smaller percentage of companies are related to the perceived value of mitigating risk. Of those for whom supply chain risk management is not a priority, twenty-three percent of executives said risk management is not a priority for funding, and 22 percent indicated they do not see value in investing in it.

Accenture believes supply chain risk management should be important to any company, and can (and should) cover risks that are both under a company’s direct control and outside its circle of direct influence. For example, airlines use hedging techniques to mitigate the cost of fuel price volatility, a risk factor over which they have no influence but that can have a significant impact on profitability and, thus, cannot be ignored. The likelihood of a particular risk’s occurrence and its expected impact should dictate the type of risk mitigation strategies (and their associated costs) a company should employ.

Companies are using differentiated approaches to address operations risk

While most companies agreed on the importance of operations and supply chain risk management, there is no standardized approach to managing it.

For instance, structuring the risk management function can take multiple forms. Some companies manage risk through a combination of corporate and business unit risk management functions, while others have a centralized risk management function led by a chief risk officer or vice president-level executive. Fewer companies have a formal risk management organization that resides within a corporate supply chain function.

Similarly, companies employ a wide range of approaches to operations risk management (Figure 4). For those who prioritize supply chain risk management, the two most common are having a risk management organization that monitors risk across the supply chain and deploys mitigating actions, and relying on alternative supply chains (e.g., suppliers or partners) that can fill in during times of crises.
Figure 3: Companies consider operational risk management important to supply chain risk issues

Figure 4: Companies employ a wide range of approaches to risk management

- A risk management organization that monitors risks across the Supply Chain and deploys mitigating actions: 58%
- Defined alternative Supply Chains/suppliers/partners that have capabilities to fill gaps during time of crisis: 53%
- Technology and/or organization that provides visibility within and/or across the Supply Chain that highlights trends and potential risks: 48%
- Deployment of a highly flexible and agile Supply Chain that can react quickly to changes: 47%
- Excess capacity built into the Supply Chain to allow for higher volatility: 46%
- Supply Chain control tower operation that monitors and coordinates activities across the Supply Chain: 42%
- 'Playbooks' that outline actions to be taken by various parts of the organization in times of crisis or high volatility/change: 29%

For companies that prioritize Supply Chain management, percentage using this approach.
Virtually all companies in our survey reported generating at least some return on their operations and supply chain risk management investment.
Three key practices can enhance the effectiveness of risk management initiatives

Clearly, managing operations and supply chain risk is important for most companies in our survey. When asked about the future, more than half of executives report plans to boost investment in risk management, within the supply chain organization by up to 20 percent, and 25 percent of executives say they are increasing spending by 20 percent or more. But the key question is, what should companies do to make their risk management investments most effective? The data, and Accenture’s experience, suggests some answers.

Virtually all companies in our survey reported generating at least some return on their operations and supply chain risk management investment. Nearly three in 10 have experienced a return of at least 50 percent from their investment in supply chain risk management capabilities, while one-third have generated an ROI of 26 percent to 50 percent to date. Such healthy returns indicate risk management does pay dividends.

But even more impressive are the returns generated by a smaller group of risk management leaders, the 7 percent that said their supply chain risk management ROI exceeded 100 percent. Why did these companies get such outsized returns, compared with the rest of the companies in our survey? We found three key practices that distinguished these leading companies from the others—and likely played a strong role in the results these companies generated.

Leaders make operations risk management a higher priority (Figure 5).

Excelling in any pursuit requires concerted attention to it, and the leaders in our study focus on supply chain risk management much more than other companies. Sixty-one percent of leaders (compared with 37 percent of others) consider supply chain risk management very important—a strategic imperative for their supply chain organization—and recognize the importance of capabilities that can enable them to gain greater visibility and predictability across their supply chains. At the other end of the spectrum, non-leaders are twice as likely as leaders to view supply chain risk management as only somewhat important.

In Accenture’s experience, several actions can be instrumental to embed operations risk management as a top priority in the company:

- Formalize risk management as a specific topic for discussion in relevant management meetings
- Install a risk management officer as part of the senior-level organization hierarchy
- Establish and propagate a “culture of risk management” throughout the supply chain organization
- Develop and nurture supply chain risk management skills as part of employees’ standard job descriptions
- Build and deploy the analytical tools that will help the organization respond to risks.

Figure 5: Leaders make operations and supply chain risk management a priority

Leaders are companies that generated an ROI of 101% or more on improved SCRM capabilities in the past two years.

<table>
<thead>
<tr>
<th>Level</th>
<th>Leaders (%)</th>
<th>Others (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Important</td>
<td>37%</td>
<td>61%</td>
</tr>
<tr>
<td>Important</td>
<td>23%</td>
<td>39%</td>
</tr>
<tr>
<td>Somewhat Important</td>
<td>11%</td>
<td>12%</td>
</tr>
<tr>
<td>Not Important</td>
<td>22%</td>
<td>5%</td>
</tr>
<tr>
<td>Not Relevant</td>
<td>5%</td>
<td>2%</td>
</tr>
</tbody>
</table>
Leaders have greater centralization of responsibility for supply chain risk management (Figure 6).

Forty-three percent of leaders, versus 32 percent of others, said they have a central risk management function, led by a C-level or vice president-level executive, that oversees all risk management activities. In Accenture’s experience, such a centralized risk management function can be a major asset: It enables a company to plan and react to risks in a more coordinated and efficient manner.

However, that doesn’t suggest there’s a "blanket" approach to supply chain risk management. Accenture has found it’s important to establish some corporate-level guidelines for risk management to provide a base level of consistency in how the enterprise as a whole approaches it. But once the overall risk management approach and methodology are defined at the corporate level, a company should design execution in light of its supply chain structure and risk profile. Doing so enables a company to strike the most appropriate balance between centralized control and ownership close to the relevant organizational functions—a major factor in being able to quickly and effectively identify and respond to risks.

For instance, at one Japanese car manufacturer, corporate decision makers determined that the most effective approach to risk management was to defer responsibility for addressing risk to the regional level because that’s how its operations were organized. This philosophy served the carmaker well during the Japan tsunami event in 2011. It allowed the company to efficiently focus its response on the area of the enterprise most affected by the disaster—its Asian operations. A more global approach to risk management taken by other Japanese car manufacturers actually made it more difficult for those companies to take appropriate steps to mitigate the impact of the tsunami on their supply chains.

Accenture also has found that many risk types are not best addressed at the corporate level but, rather, require very function-specific mitigation strategies.

For example one global consumer health company with a local/regional distribution footprint manages transport risk within its logistics functions on a regional level to involve the right specialists that are close to the company’s carriers. By thus enabling local and regional leaders “on the ground” to more effectively monitor conditions across the distribution network, this structure positions the company to spot signs of trouble more quickly and react accordingly.

Accenture believes that when structuring the supply chain risk management function, companies should be sure to consider the skills of the people involved. These individuals should be capable of addressing current risks, but also have the ability to identify future risks and help foster a true risk management culture across the entire enterprise, not just in their own function.

---

**Figure 6: Leaders centralize responsibility for risk management**

- Centralized risk management with a chief risk officer or VP-level executive overseeing the risk management function
  - Leaders: 43%
  - Others: 32%

- Combination of corporate and business unit risk management functions
  - Leaders: 27%
  - Others: 37%

- Risk management organization within a corporate supply chain function
  - Leaders: 19%
  - Others: 21%

- Distributed to respective business units or functional units to manage their respective risks
  - Leaders: 8%
  - Others: 8%

- Risk Management function is handled on an ad hoc basis of does not exist at all
  - Leaders: 3%
  - Others: 2%
Leaders invest aggressively in supply chain risk management capabilities with a specific focus on end-to-end supply chain visibility and analytics (Figure 7).

Our survey also suggests leaders intend to support their risk management organization with significant investments in key capabilities, which is especially critical as they continue to expand globally. Leaders are nearly three times as likely as other companies to plan to boost their investment in supply chain risk management by 20 percent or more in the next two years, while a majority of non-leaders are targeting an increase of less than 20 percent over their current investment. Furthermore, leaders are far more likely to expect to duplicate that track record. Nearly seven in 10 leaders, compared with just 4 percent of others, believe they will generate a return of at least 100 percent on their supply chain risk management investment in the next two years.

Accenture has found that some of the most important risk management capabilities in which companies can invest are those that can provide greater visibility into operations. Such capabilities—which include supply chain control towers or demand forecasting factories—enable companies to collect and analyze rich data across the supply chain so they can identify developments that could affect their operations and mobilize to respond when necessary. One European car manufacturer, for example, recently implemented a cloud-based control tower that provides detailed, end-to-end visibility into intercontinental shipments so the company can avoid being surprised by events that could interrupt the supply of key raw materials. Another company in the chemicals industry is implementing a dedicated control tower organization to improve supply chain visibility, professionalize forecasting, and increase overall responsiveness to external volatility.

These findings are consistent with the ones from another recent Accenture research study on Dynamic Operations, which found that companies considered as leaders in managing volatility and risks in their supply chains master four key capabilities: ability to capture data across the supply chain and develop actionable insights from it, building an adaptable structure to respond to changes in the environment, developing innovative products and services with flexible approaches, and being able to respond to last-minute changes with agility in execution.

Importantly, a company should ensure visibility extends beyond its direct network of partners, as one high-tech firm has recognized. When it recently invested in supply chain planning tools, the company made a conscious decision to extend the tools to some critical Tier-2 suppliers. In doing so, the company has gained greater insight across its extended supply chain, which in turn enables it to model potential supply constraints at Tier-1 suppliers caused by Tier-2 suppliers, and proactively develop alternative sourcing plans to avoid costly interruptions.

Accenture has found that while progress in digital technologies and analytics has boosted companies’ ability to sense and respond to volatility, there are tradeoffs involved. As with any investment, companies should prioritize these capabilities in light of the value they deliver—which in this case, means balancing the additional visibility and speed of reaction to risk they make possible with the cost, complexity and length of their implementation.

---

**Figure 7: Leaders invest aggressively in supply chain risk management capabilities**

<table>
<thead>
<tr>
<th></th>
<th>Leaders</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Significant increase: 20% or higher than current investment</td>
<td>60%</td>
<td>23%</td>
</tr>
<tr>
<td>Moderate Increase: &lt;20% than current investment</td>
<td>25%</td>
<td>53%</td>
</tr>
<tr>
<td>No Change: Plan to keep risk management investment the same</td>
<td>10%</td>
<td>23%</td>
</tr>
<tr>
<td>Decrease: Plan to decrease investment in risk management</td>
<td>5%</td>
<td>1%</td>
</tr>
</tbody>
</table>
Volatility and risk is all around and, if not properly addressed, can pose a major threat to the stability and viability of virtually any business. Participants in Accenture’s survey concur: The vast majority of them consider operations and supply chain risk management a major concern, regardless of the size or industry of the company they represent.

With risk being such a significant concern, companies need to identify the approach to operations risk management that is most appropriate to their business. In Accenture’s view, that typically means first defining, at the corporate level, the overall strategy for managing risk; and then determining the degree to which the company should centralize or decentralize risk management execution based on the structure, risk profile, and needs of the business. Regardless of the approach taken, visibility is vital: Companies should invest in capabilities that enable them to effectively monitor their end-to-end supply chain in real time so they can identify potential threats and proactively respond before they become problems.

While no company can completely eliminate risk, a strong commitment to operations and supply chain risk management can help organizations protect against the adverse impacts of business disruption and increased level of demand and supply volatility—and, in the process, increase stakeholder confidence and gain higher economic returns.
Companies represented a wide range of industries. The headquarters location of participating companies was evenly split across North America, Europe, and Asia Pacific.
Focus on Risk Management

The Accenture Global Operations Megatrends research study is designed to explore key trends in the operations function. The research focused on three areas: emerging-market growth, supply chain risk management, and big data analytics. These were named as the top priorities and areas of concern among supply chain leaders globally. The intent of the research is to understand the specifics of what companies are executing and planning in these areas and the effectiveness of those strategies and tactics.

The research involved a web-based survey of 1,014 senior executives at large global companies headquartered in the respondents’ locations. Fifty-six percent of respondents held C-level titles, including Chief Supply Chain Officer, Chief Procurement Officer, Chief Sourcing Officer, Chief Operations Officer and Chief Operating Officer (Figure 8). The remaining 44 percent were senior-level supply chain, procurement or operations executives.

Just under half (48 percent) of participating companies had revenues of greater than US$5 billion, with 18 percent reporting more than $10 billion in revenue (Figure 9). Companies represented a wide range of industries (Figure 10). The headquarters location of participating companies was evenly split across North America, Europe, and Asia Pacific.

About the Research
### Figure 8: Participants’ job title

<table>
<thead>
<tr>
<th>Job Title</th>
<th>Count</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managing Director, Senior Director or Director of Supply Chain,</td>
<td>273</td>
<td>26%</td>
</tr>
<tr>
<td>Procurement, Operations or Sourcing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chief Supply Chain Officer</td>
<td>202</td>
<td>20%</td>
</tr>
<tr>
<td>Executive Vice President, Senior Vice President or Vice President</td>
<td>169</td>
<td>17%</td>
</tr>
<tr>
<td>of Supply Chain, Procurement, Operations or Sourcing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chief Operating Officer</td>
<td>140</td>
<td>14%</td>
</tr>
<tr>
<td>Chief Procurement Officer</td>
<td>111</td>
<td>11%</td>
</tr>
<tr>
<td>Chief Operations Officer</td>
<td>103</td>
<td>10%</td>
</tr>
<tr>
<td>Chief Sourcing Officer</td>
<td>16</td>
<td>2%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1014</td>
<td>100%</td>
</tr>
</tbody>
</table>

### Figure 9: Participating companies’ annual revenue (USD)

<table>
<thead>
<tr>
<th>Annual Revenue (USD)</th>
<th>Count</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>More than $10 billion</td>
<td>183</td>
<td>18%</td>
</tr>
<tr>
<td>$5–$10 billion</td>
<td>308</td>
<td>30%</td>
</tr>
<tr>
<td>$1–$5 billion</td>
<td>363</td>
<td>36%</td>
</tr>
<tr>
<td>$500–$999 million</td>
<td>160</td>
<td>16%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1014</td>
<td>100%</td>
</tr>
</tbody>
</table>

### Figure 10: Participating companies’ industry

<table>
<thead>
<tr>
<th>Industry</th>
<th>Count</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronics &amp; High Tech</td>
<td>130</td>
<td>13%</td>
</tr>
<tr>
<td>Consumer Goods &amp; Services</td>
<td>129</td>
<td>13%</td>
</tr>
<tr>
<td>Industrial Equipment</td>
<td>126</td>
<td>12%</td>
</tr>
<tr>
<td>Banking</td>
<td>125</td>
<td>12%</td>
</tr>
<tr>
<td>Retail</td>
<td>123</td>
<td>12%</td>
</tr>
<tr>
<td>Communications</td>
<td>104</td>
<td>10%</td>
</tr>
<tr>
<td>Health Providers (Hospitals, Clinics,</td>
<td>82</td>
<td>8%</td>
</tr>
<tr>
<td>Government Health Facilities)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Energy</td>
<td>76</td>
<td>7%</td>
</tr>
<tr>
<td>Chemicals</td>
<td>65</td>
<td>6%</td>
</tr>
<tr>
<td>Utilities</td>
<td>51</td>
<td>5%</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1014</td>
<td>100%</td>
</tr>
</tbody>
</table>
About Accenture

Accenture is a global management consulting, technology services and outsourcing company, with approximately 289,000 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$28.6 billion for the fiscal year ended Aug. 31, 2013. Its home page is www.accenture.com.

For more information

Additional information and materials from this research initiative are available at www.accenture.com/megatrends. To learn more about how Accenture can help you implement an Operations Strategy that responds to market volatility and improves business outcomes go to www.accenture.com/strategy, or contact:

Mark Pearson
Munich, Germany
mark.h.pearson@accenture.com

Olaf Schatteman
Sydney, Australia
olaf.schatteman@accenture.com

Stephane Crosnier
Paris, France
s.crosnier@accenture.com

Gary Hanifan
Seattle, Washington, USA
gary.l.hanifan@accenture.com

Pierre Kaltenbach
Paris, France
pierre.f.kaltenbach@accenture.com

This document is produced by consultants at Accenture as general guidance. It is not intended to provide specific advice on your circumstances. If you require advice or further details on any matters referred to, please contact your Accenture representative.

This report makes descriptive reference to trademarks that may be owned by others. The use of such trademarks herein is not an assertion of ownership of such trademarks by Accenture and is not intended to represent or imply the existence of an association between Accenture and the lawful owners of such trademarks.

Copyright © 2014 Accenture
All rights reserved.

Accenture, its logo, and High Performance Delivered are trademarks of Accenture.