

## Experts Suggest How to Slash Supply Chain Risk Properly

Developing supply chain risk mitigation strategy can be a time consuming task. To tackle risks timely, we invite experts to explain what strategy really works.

### 1. Christopher Tang, Distinguished Professor, UCLA Anderson School and Editor-in-Chief of the INFORMS journal Manufacturing and Service Operations Management (M&SOM)

As supply chains become more complex, companies find their supply chains more vulnerable to both foreseeable uncertainty risks and unforeseeable disruption risks. Knowing supply chain risks affect a firm's capability to make supply meet demand, what should a firm do to mitigate these risks? Clearly, redundancy (extra inventory, more suppliers, etc.) can help, but it is costly. Instead, "robust strategies" are both effective and cost efficient. Two commonly used robust strategies are:

- Use two or three suppliers located in different countries to develop flexible supply capability. This is how Western digital managed to restore its operations after the flood in Thailand much sooner than its competitors.
- Use dynamic pricing to manage demand of similar products. This is how Dell managed to make limited supply of different products to meet demand after the Taiwan earthquake.

Essentially, robust strategies are plans that can enable a firm to manage regular fluctuations efficiently under normal circumstances regardless of the occurrence of major disruptions. At the same time, these robust strategies will help a firm to sustain its operations during or restore its operations quickly after a major disruption and.

### 2. Christopher Craighead, Professor of Supply Chain Management, University of Tennessee

The easiest and, in many cases, the most cost effective mitigation technique is analyzing partner (e.g., supplier, carrier) performance. The key to this is to discover the "red flags" that serve as a catalyst for further investigation and perhaps corrective action. For example, a partner that has been a stellar performer that experiences a decline, whether a sharp drop or a repeated gradual erosion, is a source of potential disruption that has yet to be realized. This early warning can drastically reduce the potential and cost of mitigating the risk by giving contingency plans more time. In turn, this typically reduces the negative repercussions of the disruption. The appeal of using partner performance monitoring as a risk mitigation approach is two-fold. First, the data is normally captured and available (or should be!). Second, this approach allows for management by exception, which allows companies to focus on the riskier portions of the supply chain.

### 3. William Pegg, Director, Synthesis Group

Crisis management: Every business has insurance policies yet few think about how they would respond in the face of an unexpected but significant disruptive event. Would business operations continue? Can customer orders still be satisfied? If these events are not managed, they will impact operations and the ability to fulfil orders – spiralling costs and lost sales into the millions can easily result. A crisis management plan is the answer.

### 4. Michael Gravier, Associate Professor, Bryant University

Supply chains evolve—or at least they should. The problem is that so much of a supply chain resides outside the sphere of influence for any single company. Companies take for granted the existence of a pool of motivated and informed suppliers (and customers), and then complain about limited or sub-optimal options. The best way to create a healthy pool of suppliers and customers? Transparency! Traditionally mandated for public procurement, it offers many of the same benefits to corporations. A transparent supplier management process forces you to articulate a supply chain doctrine (most companies don't have one) and standardize processes on merit-based priorities, actions that inform current and potential bidders to know how to innovate better offerings, empowers employees, keeps your company informed about leading edge capabilities, and guides investment decisions across the supply chain.

## **5. Walt Murray, Director of Quality & Compliance Consulting Services, MasterControl Inc**

The nature of control and the importance of the outsourcing process is independent of supplier selection. The risk involved, and the competence of the supplier to meet the process requirements, is the strategy. Mitigation planning is the reactive component of the strategy and not the premise for control. In any scenario, business dynamics dictate the relationship necessary for control. Preventive control measures are the actionable conditions under which the strategy should work. This makes mitigation a secondary path of control in the supply chain risk strategy.

Aggressive critical thinking in risk-based decision making is the key to success. Planning analysis for critical points that introduce risk is the other process skill. As mentioned, scenario analysis must be thorough and the reality of the circumstances must be evaluated for risk, making visible both sides of the condition or criteria being scrutinized for a control strategy that is both proactive and reactive.

## **6. Patrick Ross, Audit and Business Advisory Partner at Haskell & White**

Our clients have identified sourcing additional suppliers as their most actionable mitigation strategy. Best practice is to have a "source tree" of all critical components before you need it, that way the lead time can be reduced to an acceptable level. For most manufacturers of unique, specific products, this is more involved than looking up replacement vendors through Google searches. Such vendors need to be vetted in advance for quality, including letting them know any testing protocols in advance to make sure their parts can pass any testing criteria. You should also inquire about capacity to deliver necessary order levels. They too can be at risk for their critical components.