Managing Supply Chain Disruption Risk

Issue 19

The tragedy in Japan has had a dramatic impact on the supply chains of many companies, including those in the steel, automotive, electronics and chemical industries. The resulting slowdowns and cessation of operations by so many companies have raised questions regarding supply chain disruption risk and how to manage it.

Key Considerations

Supply strategies are complex by nature. There are many instances where a single-source supply strategy is the right business decision even when alternative options exist. Management’s decisions to decrease inventory levels, rely on a single-source strategic supplier, and adopt just-in-time manufacturing and delivery techniques involve trade-offs wherein quality, time and cost considerations often win out over business continuity considerations. Supply chain disruptions are a reminder that these trade-offs are not without risk. If the focus on lean manufacturing leads to minimal buffers and tightly interconnected systems, disruption risk is further increased.

In today’s highly connected world, an end-to-end enterprise-wide view of the value chain is vital to understanding and managing operational risk. This view requires consideration of upstream supplier relationships, including the various tiers of suppliers that strategic suppliers use, not to mention the logistics in linking these vital elements of the supply base together with the company’s operations. The enterprise’s supplier relationships are just as important as its internal processes, personnel and systems because they are inextricably linked to what makes the business model work, albeit with less visibility. Therefore, any assessment of operational risk should be directed to understanding the risk of loss of any critical link in the supply chain.

As the speed of business continues to increase, the risk of business interruption will become more of an issue. As we’ve learned over the last decade, massive physical phenomena, terrorism or other catastrophic events can literally wipe out a region or area. When assessing supply chain disruption risk, ask appropriate questions regarding what could happen to the organization’s business model if any key component of the supply chain were taken away through either failure or an unexpected catastrophe. For example:

- Which suppliers do we depend on for essential raw materials and component parts? What would happen if we were to lose one of them for any reason? How long would we be able to operate? Are there other qualified sources of supply that can be readily available?
- What if there were:
  - Temporary shortages in raw materials?
  - Serious defects in supplier raw materials and component parts?
  - Significant disruptions in transportation?
  - Material price volatility due to any of the above?
- Do our key suppliers assess their risks? Do they have effective plans for responding in times of disaster? How do we know? Is there a formalized understanding and agreement in place?
BOARD PERSPECTIVES: RISK OVERSIGHT

When assessing the potential impact of a disruption, consider the following:

- **Velocity of the disruption** – How quickly would we feel the initial impact?
- **Persistence of the disruption** – How long would we be affected if the supplier disruption continued?
- **Response readiness** – How resilient would we be in reacting to the loss of any significant supply source?

When these additional factors are considered, risk management begins to intersect with crisis management.

During business continuity planning, consider all scenarios stemming from the impact of losing strategic sources of supply for an indeterminate period of time. The objective is to assess the immediate impact to the supply chain (e.g., specific suppliers, products and markets) in terms of both supply outage and financial impact, determine the expected recovery time following a severe supply or logistics disruption, and implement predefined and tested response plans to minimize the impact. Strategies to expedite the recovery process include identifying alternate suppliers or contract manufacturers that can assist following a no-notice manufacturing or logistics disruption. Contingency planning might also point to the merits of inventory buffers to protect against the uncertainties of supply and demand, maintain customer service levels, as well as prepare for the unexpected.

If the company is reliant on a single-source supplier, finding alternative suppliers may require changing product specifications or working closely with other key suppliers to develop alternatives. Moving to an alternative supplier may carry risks of quality issues and must be managed carefully. It may be even more challenging in heavily regulated industries where suppliers must be qualified. Supplier relationships honed over a period of years cannot be replaced overnight with an expectation of comparable performance levels.

**Questions for Boards**

Following are some suggested questions that boards of directors may consider, based on the risks inherent in the entity’s operations:

- Does management take an end-to-end view of the enterprise’s supply chain when evaluating disruption risks, from second- or third-tier suppliers through customer fulfillment? For critical suppliers, does management consider all relevant scenarios that could lead to supply disruption?
- When evaluating operational risks, does management assess the organization’s resiliency in responding to supply chain disruptions? Is there a response plan for the loss of the most critical sole-source and/or single-source suppliers?

**How Protiviti Can Help**

We leverage a proven methodology to help organizations understand their supply chain risks; assess current monitoring and response capabilities; and design and implement sustainable strategies, processes and reporting to enhance performance, reliability and control in a cost-effective manner.

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