

Risk Management: What Could Impact Your Company's Reputation?

Cathy Herr, CPSM
Senior Director of Global Manufacturing Procurement
Eli Lilly and Company
Indianapolis, Indiana

95th ISM Annual International Supply Management Conference, April 2010

Risk...The Merriam Webster dictionary defines risk as the probability of loss or injury. This meaning has been emphasized to us since we were very young. Most of us have vivid memories of an adult warning us not to pursue an activity due to the chance that we might get hurt. As we age, we learn to assess the risk involved in activities and make our own decisions about what to pursue. While some may think they are very risk averse, chances are they do take many calculated risks, like driving over the speed limit, talking on a cell phone while walking to a meeting, or drinking too much caffeine. But we learn to manage the risks in our lives.

The same is true in Supply Chain Management. As supply chain professionals, our number one job is to assure that material is where it needs to be when it needs to be there. Whether we are in charge of final product distribution or raw material procurement, we identify and manage risks on a daily basis. We set target inventory levels and pay careful attention to lead times. Yes, supply chain risk management is a part of all of our jobs. But at what level do you pursue supply chain risk management?

Stop for a moment and think about the biggest risk you personally face as a supply chain professional for your firm. What would the consequences be if that risk were to become reality? For many firms, the reality could impact the reputation of their firm.

Working in the pharmaceutical industry, I've had the opportunity to look at risk from several angles. But allow me to start at the point when supply chain risk management became the focus of more than just my role.

Three years ago, senior executives participated in an exercise referred to as Enterprise Risk Management. In its simplest form, ERM involves the same exercise I asked you to do above. It involves asking the question, "What are the biggest risks that our business faces?". The result of this executive exercise was the identification of third-party risk as the area of most risk to our company. The executives recognized that if the materials and services we purchase are not of top quality and they manage to directly impact the products we make, people could get sick and die. This risk is just unacceptable and in direct conflict with our company mission, which is to improve the lives of individual patients.

There are many naysayers around, and they argue that managing this risk is impossible, either because the probability of a supply chain interruption or of contamination or of a service impacting our products is so remote that it is a waste of time to even attempt to manage. But I would argue that they are wrong.

Let's consider several areas of supply chain risk, including supply interruption, contamination, or service failure.

Supply interruption can occur for a large number of reasons. Human error can result in an order not being placed in time to support the production schedule, which can ultimately lead to stock outs. Anyone who has had to explain to the production manager that they don't have a product to meet the schedule knows what a difficult conversation that can be.

Worse than that is a long-term supply interruption. The reality is, unfortunately, that supplier plants can have major production problems. Over the last six years, I've personally experienced 2 major supply interruptions due to explosion at supplier manufacturing facilities. Imagine, sipping your morning coffee and listening to the news only to hear that there has been a major explosion at a plant. Your first thought probably is for the workers, hoping that no one was injured. Then we begin to listen for the name of the company and location of the facility. And when you learn that it is a supplier of a material critical to one of your best selling products, you cringe. And if that material is sole-sourced either by choice or because of intellectual property rights or any other reason, you might feel a little sick to your stomach. How much inventory do we have in-house? Do I have orders that might have been in-transit? Is there a distributor that might have material that would match my specification? What is my relationship with the supplier? Am I a large or small customer? Where will I be in their list of customers to get back and running in another plant?

It is during those tough times that the level of risk understanding and risk management you've completed can either ruin or save your company's bottom line. No one wants to be called into the CEO's office to explain how a supply interruption for a material that we spend thousands of dollars on annually may impact the lives of millions of patients who are depending on it for their health. That is just one of many reasons that our Procurement and Supply Chain Management teams take the time to actively manage our supply chain and service risks.

You may be thinking, "I don't have time for this." I would argue that you don't have time NOT to do this. Warren Buffett is quoted as saying "It takes 20 years to build a reputation and five minutes to ruin it. If you think about that, you'll do things differently." So if you've not spent time working on supply chain risk management, start today! In the following paragraphs, I'll share information about how my Procurement organization completed a risk assessment process and how we actively manage risks in our supply chain. For this example, my focus will be on the materials that go into the end products that we sell.

The first step in understanding supply chain risk is to identify everything you use to make your company's products. Create a spreadsheet and list your company end products across the top and the materials or services that go into those products down the left side. If you are like us, some of our raw materials and services are used in several of our products. Identify which raw materials/services go into which end products.

Now that you have this listing, identify the critical factors for each raw material. For example, how many sources do you have for that raw material? Where is the material manufactured? If it comes through a distributor, where is the distributor's storage facility and how is it

transported to your plant? Calibrate the level of risk associated with several factors, like quality, lead time for production, transportation difficulty, geographic location. For example, we purchase a key material through a local distributor, but the manufacturer is located deep in Louisiana. When Hurricane Katrina devastated New Orleans and buried much of Louisiana in water, my team used our risk spreadsheet to quickly identify the raw materials being supplied from that region and begin a current state assessment of inventory, manufacturing plant status, and potential risk to production. Similarly, our energy commodity manager watches weather forecasts closely during hurricane season. A hurricane approaching the Gulf of Mexico can cause energy prices to rise swiftly, dealing a blow to the cost of production. And because over 80% of our raw materials are impacted by the cost of crude oil (i.e., chemicals, resins, etc.), swift increases in the price per barrel can impact the cost of raw materials for months.

The next step for our team is to identify the risk management strategy for each item. We compile a cross-functional team of key stakeholders to review, discuss, and agree to the risk management strategy, as well as to identify the method of tracking compliance to the strategy over time. There are many options for risk management strategies. One approach is to approve multiple sources for the material. This approach can be the least costly risk management strategy, but beware of qualifying too many sources as you may not hold a deep enough relationship with any one to gain access to the quantity or quality of material you need in a market-wide shortage. Another approach is to hold strategic inventory to offset the risk of stock-outs. Adoption of this strategy obviously is dependent on many factors, not the least of which is material pricing, warehouse capacity, and material shelf life. The key here is for the team to discuss the options and identify, document, and implement the best approach for each material. It is also key to develop a tracking mechanism that is monitored regularly by management of the group responsible for strategy implementation to assure the approach is maintained. Many times these strategies can lose priority once the crisis is past. Inventory metrics or supplier consolidation projects can put a strain on maintenance of the risk management strategy. By tracking implementation over time on a regular basis, these traps can be avoided.

From the listing, you may want to identify the materials most at risk and go a step or two further in your risk assessment activities. For my team, that next step involves creation of a one-page category overview and strategy. The simple one-pager highlights the key facts about the material: What end products is it used in? Who is(are) the manufacturer(s)? Which of these are qualified as suppliers to our company? What is the negotiated price? What has happened to pricing historically and how is the price expected to fluctuate over the next x-y months? How much inventory do we hold? Does the supply contract require the supplier to also hold x months of inventory on-site for us? For the most critical items, we recommend regular meetings to review these strategies with the key business owners and financial representatives of the business unit. During these meetings, we discuss our strategy and the risks associated with the strategy, and discuss options and the cost of each option in order to gain buy-in from the key management members. In the unfortunate case where there is a problem with one of these material, having these management members aware of and involved in the risk management strategy can reduce time wasted on finger pointing and get everyone focused on solving the issue.

Procurement or supply chain organizations who follow a philosophy of category management

are typically best at risk assessment and management. By having a professional whose job it is to understand a category of materials inside and out, your organization can stay abreast of potential risks before they hit. A real example occurred on my team last year. We use a chemical by-product in production that is typically very available in the market. But the category owner noticed that prices of the main chemical were rising much more than usual. A bit of investigation helped him understand why. You see the main chemical whose by-product which we purchased was used primarily in the home building industry to treat lumber. With the economy in recession, new home sales were down significantly, and likewise lumber sales were also down. The chemical manufacturer who made the product to treat the lumber did not have to produce as much material, and thus the by-product was coming into short supply. My category owner acted quickly to contact the manufacturer and identify every bit of by-product still in the supply chain anywhere. He spent days on the phone tracking down each chain and was able to locate 2 tank trucks of the by-product that were headed to a distributor but not committed to a specific customer. By purchasing the material then and there, he was able to avert a crisis in our production of a key pharmaceutical product. Coincidentally, his phone rang for weeks afterward, with calls from colleagues at other pharmaceutical and chemical companies looking for any extra stock of this by-product that we might have to sell at a premium price. This was clearly the case of a professional who understood the market factors to watch and who reacted quickly to changes in those factors. Who would have imagined the chain of impact the economy would have on that particular supply chain?

Unfortunately, most supply chain professionals who have been in the business for years can share stories for hours of instances where an unconsidered factor impacted their supply chain. In most cases, the crises are averted....but why depend on luck or chance. By investing a little time in risk assessment and management of your supply chain, you can reduce the probability of injury to your company....in other words, reduce the risk.

Warren Buffett is also quoted for saying, "Risk comes from not knowing what you're doing." Don't let risk to your company's supply chain impact your company's reputation. Know what you are doing And exercise responsible supply chain risk management!