Is Your Supply Chain Putting Your Job at Risk?
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Survival Strategies for a New Era of Risky Business

Supply chain risk is now one of the top three concerns among global supply chain executives, according to recent surveys by IBM, McKinsey, AMR Research, and PricewaterhouseCoopers. Along with being a hot topic at conferences, in chat rooms and on Twitter, mitigating risk has become a real-world, career-affecting priority among supply chain professionals.

When it comes to supply chain risk, what you don’t know CAN hurt you, now more than ever. Executive management expects supply chain professionals to mitigate risks well beyond late carrier deliveries, mis-picked shipments or logistics cost overruns.

Do you understand how the health of your suppliers and vendors can impact business performance? Can you predict how internal decisions taken to improve operations will translate into new supply chain requirements? Can you anticipate new customer needs successfully, given the consequences if business is lost?

We will investigate why supply chain risk has become such an urgent topic, how ignoring risk has cost some very smart people their jobs, and what you can do to identify key risks in your supply chain before they turn catastrophic.

We’ll present some practical, field-proven survival strategies that can help prevent poor risk management from costing you a promotion, or a position.
Welcome to the New Norm, and Meet Your New Risks

We are moving toward a “new norm” in the world economy, and it looks like this: Consumer pocketbooks are going to be tight for years to come. Oil prices threaten every long distance supply chain developed over the last decade. Geopolitical conflict will continue to escalate among the haves and have-nots of the world. Trade and industry regulations will multiply. Vendors and suppliers will continue to go out of business, perhaps in even greater numbers.

Business and supply chain risks will multiply as new economic realities play out on the global stage.

Who’s ready for risk? Nobody. In a 2006 McKinsey & Company survey of supply chain risk, executives rated their company’s ability to mitigate supply chain risks as “fairly poor.” Forty-one percent said their company does not devote enough time or resources to mitigating risk.

In a 2009 survey of chief supply chain officers, IBM found that supply chain risk had jumped to number two on the list of their concerns, from near the bottom only a few years ago. Executives cited now-familiar factors for the change—supply chains have become more global, complex, interconnected and interdependent. That makes them more vulnerable to disruptions caused by everything from the weather to financial perils and political turmoil.

The most savvy executives surveyed say it is critically important to identify, characterize and quantify the various types of risk they may be exposed to and devise adequate risk contingency plans.

–2009 IBM Survey

So most companies have been preparing to manage supply chain risks, right? No. In a 2008 Marsh survey of over 100 risk managers, not one described their company as “highly effective” in risk management, in spite of the fact that almost three-quarters of the respondents indicated supply chain risk levels had risen in the past few years.

Two years of suffering. A recent PricewaterhouseCoopers study analyzed 600 firms whose supply chains experienced serious disruptions. The study found that the company’s financial performance suffered for two years after the disruption, with share prices declining an average of nine percent the day after the event.

Thus, the impacts of ignoring supply chain risks can be enormous and, as we will see, can cost definitely cost people their jobs.
Case Study: Boeing
Taking the Risks and Paying the Price

Unfortunately for Boeing’s supply chain managers, the 787 “Dreamliner” production problems made Supply Chain Digest’s 2009 list of Greatest Supply Chain Disasters of All Time.

Instead of contracting out thousands of parts and systems to a myriad of small and large suppliers, and then assembling the plane into a finished product, Boeing decided the Dreamliner’s supply chain needed a radical overhaul. Major suppliers were tasked with designing and building complex sub assemblies, such as the entire wing, and shipping them to Boeing for final assembly. It was a wonderful plan on paper, but ended up creating huge supply chain risks for Boeing—most importantly a probable two year delay in initial 787 deliveries. Let’s not berate Boeing for trying to be an innovator. Instead, let’s learn from their experience to help avoid similar risks in our own supply chains.

Make sure the bolts line up with the bolt holes. Sub assemblies developed by different manufacturers did not fit together. While the issues were much more complex than just bolts, the results were the same. Supply chain professionals must understand where the key failures may occur and rigorously monitor those “interaction points’. Clearly, Boeing’s engineers understand this rule, but somehow the suppliers were unable to make it happen.

**Lesson #1:** Establish an interaction point process with suppliers to ask and re-ask basic questions around product compatibility, delivery estimates and production problems.

Communicate status with customers. Many of today’s supply contracts contain huge financial penalties for non-performance. Doubly so in the commercial airline industry, where delays can seriously impact passenger revenues due to inadequate capacity availability.

**Lesson #2:** Make sure that customers understand what is going on and how you plan to mitigate risks going forward, including ways to renegotiate onerous penalties due to late deliveries.

Ensure senior management visibility. Supply chain managers are tempted to hide bad news from senior executives. Why is that? Because they fear the consequences, of course. But senior executives are often in the best position to solve problems. If they can’t see it, they can’t fix it…and then it’s too late.

**Lesson #3:** Communicate early and often with senior management to make sure that they are not the last to know about problems.
Quick, List All of Your Supply Chain’s Failure Points...

Every supply chain has multiple points of potential failure, many of which can probably put you and your job at risk on a moment’s notice.

Who has not received the irate call from the Senior Vice President of Sales because your company’s biggest customer didn’t get its shipment(s) on time? And who hasn’t blamed these failures on:

- Lack of technologies to monitor supply chain performance
- Minimal cooperation by supply chain partners
- Another functional area within the company (you finger-pointer!)

Maybe one or another of those excuses used to work, but that was then and this is now. Such excuses don’t cut it in a world where supply chain professionals are expected to be on top of possible risks and have plans to mitigate failure.

Here are three areas where supply chain failure points often originate:

**Supplier problems are your problem.** Your worry-scape stretches beyond your logistics providers to include material and product vendor performance. Typical risks to be monitored include business failures, natural catastrophes, lack of upstream product flow visibility, security of origin (traceability), and insufficient capacity as economies, and demand, recover.

Before you say “that’s not in my job description,” are you sure that procurement and sourcing have enough checks and balances in place to prevent production failure and vendor-caused shipping errors? If not, make sure you’re working to prevent these issues before you wind up sharing the blame for them.

**Hey, who changed the customer needs?** Customers change their requirements all the time. Your customers show no signs of altering that behavior in the future. Supply chains are pummeled whenever customers:

- Reduce SKU counts on store shelves
- Alter shipping requirements
- Escalate product delivery chargeback issues
- Initiate recalls that require tracking
- Request vendor managed inventory
- Produce unreliable forecasts
• Change their demand patterns
• Open a store or close a store
• Etc. Etc...

Yes, others in your organization bear the responsibility for monitoring many of these factors, but you can still be blamed for supply chain failures that occur as the result of them. You need to be as aware as the other supply chain stakeholders. There is a new sheriff in town (the “new normal” economy), and ignorance of the law will not keep you from becoming a scapegoat.

**See all, know all, tell all.** Probably the most fundamental underlying failure point is lack of visibility and communication between you and other functions, external vendors and suppliers, and customers. Now, we are talking about a lot more than phone or email conversations about what might or might not be happening in your supply chain environment.

We are talking about establishing visibility and data links into critical systems to access and analyze immediate information about what’s going on in production, at suppliers, at customers and within sales & marketing. The more you can see—in real-time, 24/7, from anywhere in the world—the better able you are to determine what events could impact supply chain operations.

Take the responsibility to identify key risk areas that can impact supply chain operations, and make senior executives aware of these issues. You may not mitigate these risks yourself, but you can get other supply chain stakeholders to take action.

**Case Study: Lockheed Martin Aeronautics**

**Keeping the Joint Strike Fighter's Supply Chain an Asset, not a Liability**

How would you like to be in charge of a supply chain with three separate production partners, picky customers in nine top industrial countries, sourcing 40,000 custom parts from over 2,000 suppliers? And, by the way, have to produce the most advanced combat aircraft in the world at the rate of one per day by 2013? This is the challenge faced daily by the supply chain professionals behind the construction of the F-35 Joint Strike Fighter (JSF), according to a recent Strategy note published by AMR Research.

In reality, managing the supply chain is almost as complex as designing and building the aircraft. To ensure that the supply chain is an asset to the program going forward, supply chain professionals at Lockheed and its partners have developed some simple, but critical management rules:

• **Create an accurate EBOM before the JSF reaches full production.** Fixing errors can be disastrous and very expensive when identified late in the engineering cycle.
• **Work with suppliers to ensure long-term capacity availability.** Suppliers are provided with multi-year forecasts, improving their capacity planning, or, if material needs exceed available capacity, signal to Lockheed that additional suppliers may be required.

• **Avoid “EBOM degradation”.**

EBOM degradation happens when required materials become less defined over the production cycle. Lockheed beat this problem by establishing a “baseline” aircraft—the most current plane scheduled to be built, but not yet delivered. Suppliers can adjust their production to the correct future demand instead of churning out obsolete parts.

Besides the obvious cost savings and service level benefits from diligently following these rules, supply chain risks are reduced through ensuring data, forecast and feedback uniformity throughout the multi-layered supply chain. As Mike Jones, head of information systems and technology at Lockheed puts it, such collaboration breaks the old paradigm of “trying to determine where you’re going, when all the information you have is where you have been”.

### Four Survival Strategies for Avoiding Risk-Associated Career Interruptions

Let’s break it down: what can we begin doing today to best assure pleasant, ongoing, uninterrupted supply chain employment?

1. **Launch a Risk Mitigation Team.** You absolutely must do this. Set up a cross-functional team of supply chain stakeholders to assess supply chain risks from activities in sourcing, manufacturing, sales, marketing and other groups. You’ll want a senior executive to sponsor the group (C-level would be great). This exec will be impressed by your initiative. Meet frequently and distribute short, substantial reports on findings and actions. Carry out CCRs (Critical Change Reviews) when making organizational and process changes as they may introduce new risks.

2. **Set Top Risk Priorities.** Don’t sweat the small stuff, at least initially. Accept that you cannot possibly anticipate every issue, and instead focus on the top problems. Define a mitigation strategy for each. Evaluate which problems need the most attention. Resist complex risk modeling technologies as your initial foray into the world of risk management. For example, if supplier financial stability is a big risk, identify the primary players; work with team members to generate mitigation ideas, including dual sourcing and enhanced information monitoring.

3. **Automate the Risk Monitoring Process.** Approach your information technology guys about using existing or new software to analyze supply chain and related data for anomalies that could create risk. Work to implement systems to “catch & prevent” risks; use alerts to warn and predict; and reward personnel for risk identification and mitigation. Evaluate using more sophisticated
monitoring tools, such as the “Altman Z-Score”, a finance analysis model developed by NYU Professor Edward Altman to predict corporate bankruptcies.

4. **Collaborate with Your Supply Chain Partners.** You can’t mitigate risk all on your own, nor by focusing only inside your company. Get your trusted supply chain partners on board with the plan. Share crucial data. Be an active part of all risk mitigation plans. Honestly communicate in advance of problems wherever possible. These key strategies help you cover all contingencies. Try to define “win-win” solutions wherein all partners share the benefits of risk mitigation by negotiating away any contract penalties that could result from certain actions (e.g. early shipping to avoid typhoons).

Case Study: Cisco Systems
Ready for Any and All Supply Chain Risks

In 2000, Cisco had a rather well-publicized unfortunate experience with basing production forecasts on “real-time demand data.”

Cisco’s customers, anxious to get needed Cisco product in order to join the internet boom, doubled and tripled their orders of scarce networking gear. Then, when the economy turned sour, they cancelled them...by the millions. By driving their supply chain according to “real-time demand data,” Cisco executed an epic overbuild and was left with huge excess inventory and big-time write-offs.

Cisco learned a lot from that experience, including the importance of managing supply chain risks. In fact, many analysts view Cisco’s supply chain operations today as the poster child for how to effectively manage risk in global supply chains.

Cisco has lots of reasons to be concerned about supply chain risk. Ninety-five percent of its production is outsourced, mostly overseas. The company has more than 8,000 suppliers, and their customers expect high levels of service and top-quality products from the leader in networking technology. To ensure that Cisco’s supply chain can adapt to “surprises”, they have developed a sophisticated program for identifying and managing risk:

- **You can’t manage what you can’t measure.** Cisco supply chain risk managers rely on incident monitoring technology to send e-mail alerts on any event that could disrupt the flow of product and materials from key suppliers. Managers can then determine potential revenue impact from delays, estimate when production will resume, or whether they need to shift production to an alternative site.

- **Ensure financial viability of suppliers.** With suppliers going out of business in record numbers, Cisco has begun screening the financial health of its major suppliers, calculating the probability of
supplier default using a combination of underlying financial measures to determine problems. They monitor watch-lists of companies that may be approaching trouble.

- **Minimizing risk and staying lean.** The real trick is to manage down risk levels, but not by increasing supply chain costs. Cisco has not abandoned lean supply chain management processes, but keeps really close tabs on critical supply links and does have alternative sources ready to step in if a supplier runs into trouble. Tradeoffs between being lean and being resilient always exist, but Cisco’s risk management approach allows them to buffer supplier shortfalls and make sound business decisions about their sourcing strategies.

### Less Risk, More Reward

Don’t put off addressing this critical area! It is not going to go away when the economy gets better. As noted above, there are ways you can take the lead in mitigating risk without breaking the proverbial piggy bank. In fact, you may be rewarded with a promotion, instead of possibly losing your job.

> “Nobody can really guarantee the future. The best we can do is size up the chances, calculate the risks involved, estimate our ability to deal with them and make our plans with confidence.”

> –Henry Ford II

For more information on how to implement a powerful and practical VMI methodology across a global network of suppliers, OEMs, distributors, and others, learn about the easy-to-implement, web-based solutions available from Waer Systems.

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