



BEST PRACTICES IN CYBER SUPPLY CHAIN RISK MANAGEMENT

Procter & Gamble Excellence in Supply Chain Risk Management

INTERVIEW

Craig Babcock Business Continuity Planning Manager for Product Supply

The Next New Things in Supply Chain Risk Management

- Re-localization of distribution hubs and customers into geographic clusters a partial return to former days when manufacturing was done locally
- Corporate sponsored and resourced "Center of Excellence" to advocate for supply chain risk management and support the business units

Company Overview

A household name throughout the world, Procter & Gamble (P&G) is a global leader in consumer goods. It has more than 20 billion-dollar product lines and manages more than 100 supply chains. Approximately 70,000 employees power a supply network that includes more than 100 manufacturing sites and more than 200 distribution centers.

Established in 1837, P&G has almost 200 years of experience managing risks to the company and its supply chain. While supply chain risk management may be a relatively new concept for many organizations, it has been a board-driven initiative at P&G since 2000. It was firmly embedded into their corporate risk management approach by the time Hurricane Katrina devastated many local businesses in 2005. In fact, one of the most dramatic and well-documented business recovery stories from the storm is that of P&G's Folgers coffee plant.¹ Due to fast action and well-documented and rehearsed business continuity and crisis response plans, the plant was back to full production within two months.

1 http://www.supplychainbrain.com/content/research-analysis/supply-chain-innovation-awards/singlearticle-page/article/pg-after-devastation-of-hurricane-katrina-shows-the-value-of-best-laid-plans-1/ **Supply Chain Restructuring:** P&G is currently undergoing one of the biggest supply chain redesigns in the company's history. The company will be consolidating roughly 180 product brands—ranging from multimillion to multibillion dollar brands—into 70 or 80 major brands.

Two major initiatives in North America, where the restructure is being launched, illustrate the supply chain impact. First, P&G is moving from primarily single category production sites to fewer multi-category production plants — simplifying, standardizing and upgrading manufacturing platforms for faster innovation, qualification and expansion, and improved product quality.

Second, as part of its focus on customer responsiveness, P&G has set a distribution goal of being within one day's transit to most of the retailers. To meet that goal, the company is moving from shipping products to retail customers from many different points to consolidating into a small number of mega-distribution centers strategically located near key population centers. Increasing localization of the supply chain is expected to improve network resiliency, as well as drive savings in transportation and warehousing costs.²

Organizational Approach to Risk

According to Craig Babcock, Business Continuity Planning Manager, Product Supply: "We have a very distributed model of risk management. We don't have risk teams with a lot of people, but we have a lot of people with risk management built into their jobs."

At the top tier, P&G has a traditional Enterprise Risk Management (ERM) program that assesses top risks annually and reports them to the board and senior management. A second tier of risk management is the Corporate Business Continuity Program Center of Excellence (COE) that own the governance model, policies, tools and risk management processes for sites and functions. Four key pillars make up the company structure, which implements and executes risk management procedures and practices: Global Business Units, Global Business Services, Sales and Marketing, and Corporate Functions.

The Business Continuity COE sits within in the Corporate Functions pillar and assists the functions and sites by developing risk management processes for them to follow. Corporate Engineering oversees the supply chain risk management (SCRM) efforts and works with the Product Supply teams within the Global Business Units to promote SCRM best practices and processes. The company expects different functions to bring their expertise to a specific risk topic, such as developing a Business Continuity Plan for a new manufacturing site. At the same time, each function still is responsible for managing its own risks on a day-to-day basis.

2 http://www.pginvestor.com/GenPage.aspx?IID=4004124&GKP=1073748359

National Institute of Standards and Technology

Figure 1. Organizational Approach to Risk



SCRM efforts and progress are reported annually to the board and CEO as part of the ERM report. Product supply and supply chain risks show up often enough in the high-risk quadrant for continuous visibility. These risks, coupled with numerous actual incidents with direct impact on P&G's factories and suppliers, such as Hurricane Katrina, keep the board's attention. In addition to the ERM report, there is a risk dashboard that is present at the operating level with more detailed SCRM metrics, such as BCP compliance.

Business Case for Supply Chain Risk Management

For P&G, the business continuity efforts are seen as "insurance" for the business. The program enables them to protect their critical assets and systems in a cost effective way.

Guiding Principles of SCRM

Craig Babcock notes:

"Our principles of supply chain risk management are demonstrated in the way we've systemized the process of risk management. For major risk areas, we have company-wide risk management systems that are based on experience, engineering best practices and rigorous compliance verification. We use these systems to scorecard and audit ourselves and our suppliers. We also have experts in each of those areas, who provide foundational expertise to our risk management program." Each risk is evaluated from a "risk versus reward perspective" by front line management, and then pushed up the management chain for decision. For example, if a new product with a tight time-to-market deadline requires a certain single or sole sourced ingredient, the materials team will determine the time and cost required to qualify a second supplier and communicate the risk to management. In the case of the Folgers' coffee plant in New Orleans, the company had made the decision to invest in hardening it to withstand a Category 3, not a Category 5, hurricane. The highly analytical and process-oriented approach to risk assessment can be found throughout the company.

Top Supply Chain Risks: Craig Babcock described P&G's top five supply chain risks over the past 10 years in terms of cost and impact.

- 1. Natural Catastrophes: Events like Hurricane Katrina, Fukashima and direct tornado hits on different sites have created costs and sales risks.
- 2. Supplier Risks: Continuity issues with critical materials directly impact production. Some of the key supplier risks that are tracked include:
 - Product availability
 - Product quality
 - Financial health
 - Supplier innovation
 - Second-tier supplier BCPs
- 3. Quality: Recalls are the worst case scenario, and fortunately have been few and far between.
- 4. Major IT Failures: Has the potential to impact internal and external communication and production.
- 5. Transportation Failures: Consumer goods markets are very competitive, so customers may switch to other products when P&G brands are delayed getting to market, such as the recent West Coast port slowdown.

Over the next five to 10 years, Babcock believes that supply chain cyber security is very likely to be recognized as one of the top five risks.

Practical Applications of SCRM

The distributed risk management model means that risk management policies and procedures are developed centrally, but risks are managed by the businesses and functions at a local level. Literally every function in the company is involved in risk management. A few key efforts in the SCRM are highlighted below.

Sourcing: On critical materials, several groups within the company weigh in on risk:

- Purchasing: Purchasing assesses whether the commercial risk is high.
- Material Management Resources: This process is tied to the plant sites and determines the level of criticality of the material to the business.
- Material Product Development: This group helps with materials selection and alternate materials that will still meet consumer requirements.

Supplier Risks: Supplier risks are assessed from multiple angles. Each risk function weighs in on the potential impact of product changes or supply chain process changes.

The company conducts a variety of audits and reviews with their tier one suppliers, ranging from rigorous multi-day onsite audits to periodic reviews. Quality Assurance performs physical audits. Materials Supply Management also does onsite reviews of suppliers' facilities and systems. Business continuity plans are collected from select suppliers and subject to audit.

P&G's vendor risk management program has faced obstacles in getting information on tier two and tier three suppliers. Tier one suppliers are sometimes reluctant to provide information about their own suppliers, fearing that they might lose their competitive edge. They may also be concerned that P&G will interfere in their own vendor selection process, or potentially use the information to put downward pressure on costs.

Business Continuity: The BC program takes both a risk agnostic and risk specific approach. Risk assessments will highlight specific risks critical enough that they will develop specific plans to address those issues. Generic "all hazards" plans are used to address the remaining risks.

The standard BC process steps include:

- 1. Identify the Business Interruption Limit
- 2. Risk Analysis and Critical Program Review
- 3. IT Disaster Recovery Review
- 4. Loss of IT, Site, People Contingency Plans
- 5. Crisis Management Plan
- 6. Document and Approve BCP Plan
- 7. Test / Exercise BCP
- 8. Maintenance

BC coordinators at each site follow corporate governance processes to work with local teams to develop their BCPs. There are systems in place to help P&G react to developing issues — actual crises as well as continuity trends reflected by the metrics.

For example, every site has a trained BC coordinator to work with the businesses to assess the resilience impacts of planned changes or workarounds from disruptions. BCPs for P&G sites start with a risk assessment for that site, but are written as all-hazard plans.

The BCP COE maintains a scorecard that tracks progress on a quarterly basis and looks at:

- Plans maintained and up to date
- Tested once/year
- Leadership review

Like most multinationals, P&G has a crisis command center, run by security and open 24-7, with situational awareness tools. Events worldwide are tracked and mapped to assess impact to sites and suppliers. Other functions, like quality, may make their own impact assessments. Global Internal Audit provides audit oversight of the BCP program, which includes having all sites complete a Control Self Assessment of their adherence to the process.

Conclusion

There are a few aspects of P&G's business that set them apart from some other companies that manage global supply chains. They rely on a global network of suppliers for their ingredients, but final products are typically shipped locally from their plants. As a result, they are susceptible to global risks to the supply chain for their inputs, but a more limited set of local risks for production and delivery to the retailers. In contrast, many other large corporations must manage risks for their inbound shipments to factories and outbound shipments to the customers over larger distances.