



Supply Chain Insight: Risk vs Resilience

Improved supply chain transparency and greater supplier awareness enable effective Business Continuity Management and maneuverability in the event of an unexpected business disruption

bsi.

...making excellence a habit.™

The need for businesses to develop, implement and expand business continuity strategies across their supply chains and global operations has never been more critical. Natural and environmental disasters, political turmoil, social unrest or simple IT mistakes have ever-increasing potential to cripple – even destroy - otherwise healthy businesses. This is especially true for companies that rely on just-in-time (JIT) inventory, lean production, and shortened product lifecycles geared to improve corporate bottom lines.

An alarming number of risk and business continuity managers are well aware of the need to make contingency plans, but are choosing to wait, often until it is too late. Yet a comprehensive business continuity plan can help management better navigate the increasing complexity of global supply chains, gain visibility into suppliers' processes, improve resiliency, and protect the business from a growing number of threats.

Effective business continuity management requires looking beyond corporate walls into the operations of each supplier down the value chain; however, verifying supplier information can often be difficult, especially for downstream Tier 2 and Tier 3 suppliers. More committed companies are thwarting potential business disruptions across their operations and the supply chain by quantifying risks and mitigating exposures prior to events occurring. Business continuity risk is predictive and firms are using a risk-based approach to identify key risk that could disrupt their global operations.

It Can Happen To Us

In today's economy, companies need to be highly focused on managing costs. Strategies such as single-source JIT, and affordable manufacturing and assembly contracts with suppliers from all corners of the globe are aimed at reducing costs and boosting the bottom line. This type of procurement strategy may increase profit margins, but it also significantly raises the threat and impact of an unexpected disruption somewhere in the supply chain, particularly when little is known about key and critical suppliers and their business continuity plans. Needless to say, increased revenues are easier to grasp and appreciate than nebulous threats that may or may not impact suppliers' ability to deliver products and services – until an unexpected disruption strikes.

Consider the cumulative costs of few specific types of supply chain disruptions as highlighted in BSI's 2013 SCREEN Global Intelligence Report:

- \$22.4 billion loss worldwide due to cargo theft according to BSI forecasts
- \$5.3 billion loss to cargo theft in Brazil, Russia, India, and China (BRIC)
- Political and labor unrest caused economic losses of at least \$100 billion in Asia alone
- There were terrorist attacks on the supply chain in 15 different countries in 2013 including Colombia, Egypt, India and Thailand
- Port strikes in Chile alone caused losses of \$6 billion

Just as improving the bottom line makes good business sense, so too does planning for and expecting the unexpected, for business partners, suppliers, distributors as well as corporate headquarters. With the right information it is possible to analyze trends in type, size, and geography of past incidents. With today's technology companies can also continuously monitor the same and help predict future disruptions. Historical analysis, incident forecasting as well as current intelligence must be included in a comprehensive business continuity plan. Understandably, it is very difficult to completely foresee the risks to the supply chain and the associated potential impact. There can be no doubt that the greater the impact of an incident on your suppliers, the more the resulting disruptions may affect your customers. This is especially true if you have not verified the viability of those suppliers' business continuity plans.

Anything from a sprawling 100-year flood or labor strike, to a power outage or even a small warehouse fire can have a ripple-effect throughout the global supply chain. According to the American Productivity and Quality Center's (APQC) 2013 whitepaper, "Supply Chain Disruption: What Your Organization Should Know About Managing Risk in the Supply Chain," 77% of organizations indicated that they had experienced at least one unexpected supply chain disruption during the past two years.

As awareness of various threats continues to grow, companies are responding by creating comprehensive

business continuity plans and insisting on greater visibility into their suppliers' operations. By improving supply chain transparency and implementing more formal, documented resiliency programs, companies are better able to identify critical suppliers and single points of failure. Companies that take a more proactive approach, including recognizing the threats downstream, verifying suppliers' business continuity plans, identifying alternative vendors, or finding safer shipping routes, are less likely to experience damage to their brands, products, and customer satisfaction in the event of an incident.

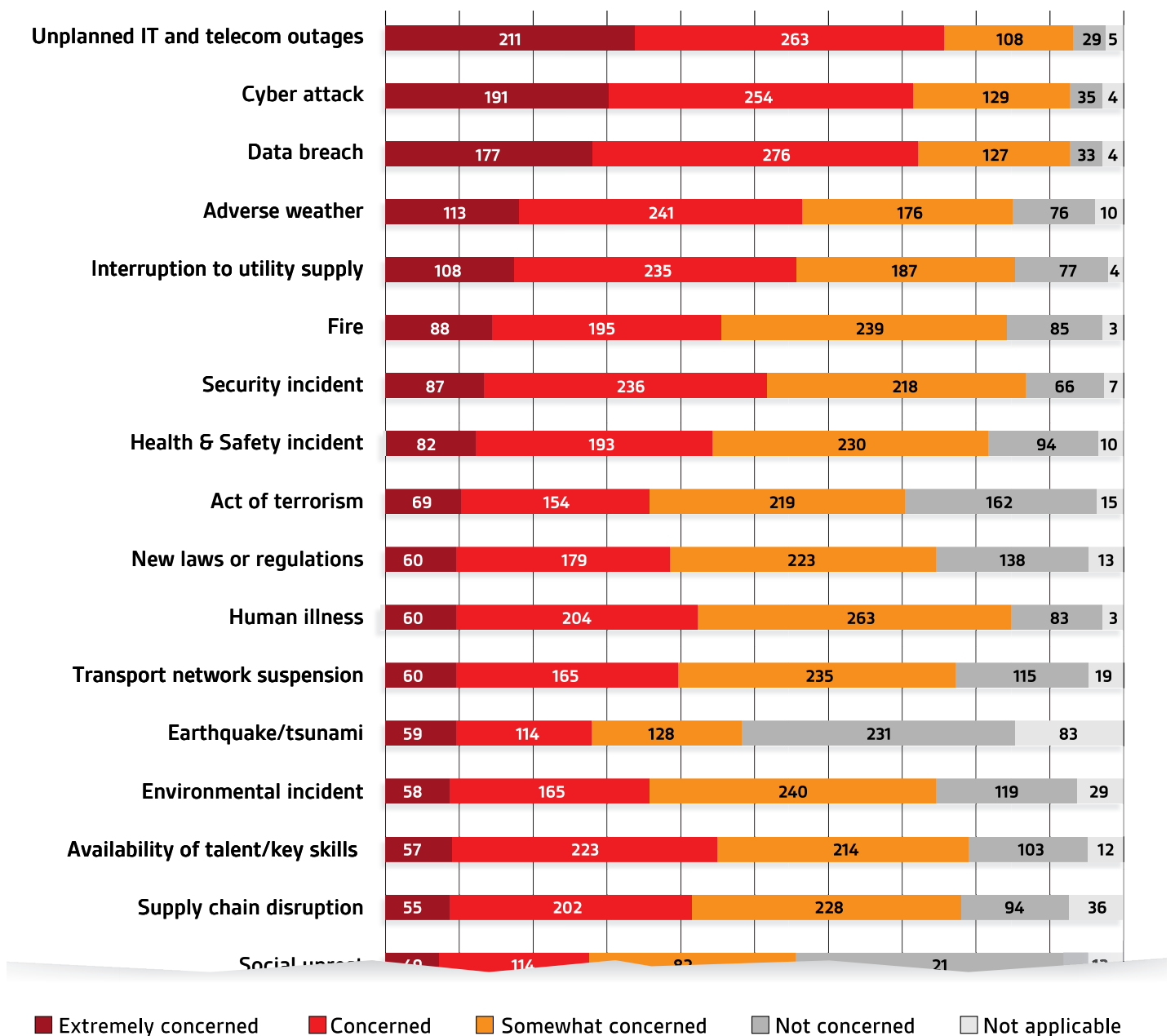


Figure 1 - Breakdown of Threats BCI Report 2014

Top Concerns

According to the APQC survey, the top potential threats to supply chains differ from industry to industry, but a majority of business leaders report that they are concerned about (APQC, 2013):

- High-Impact Natural Disasters – floods, earthquakes, tsunamis
- Extreme Weather – hurricanes, tornadoes, severe snowstorms, heat waves
- Political Turmoil – large protests, regime changes, war zones
- Unplanned IT and Telecommunication Outages
- Data Breaches
- Cyber Attacks

While these six categories are perhaps the easiest to grasp, the list of serious potential threats that organizations are concerned about is much longer as indicated in the 2014 Horizon Scan Report produced by Business Continuity Institute (BCI) in association with BSI (see Figure 1). (BCI, 2014)

Concerns that are just as ominous as the top six include labor strikes, financial instability/insolvency, loopholes in logistics contracts, utility supply interruptions, shortages of materials, mergers and changes in regulations and ethical misconduct to name just a few.

Despite their awareness and admitted concerns, management teams actually have very little visibility into their supply chains past their Tier 1 suppliers. APQC's survey indicates 65% of respondents agree that there is a need to identify and eliminate obstacles that undermine the ability to better manage supply chain risks. Nevertheless, 47% report a lack of the resources required to assess those risks properly. An eye-opening 64% confess to having poor visibility into risk factors among their Tier 2 and Tier 3 suppliers. In fact, the Horizon Scan Report revealed that 77% of respondents, who experienced at least one supply chain disruption during the previous year, stated nearly half of these disruptions originated below the immediate Tier 1 supplier.

In a similar survey carried out by the BCI entitled "Supply Chain Resilience 2013," (BCI 2013) almost 50% of survey respondents stated that half or less of their key suppliers had any business continuity arrangements in place even

for their own needs. It is a fair assumption that such suppliers are more vulnerable to disruption than better prepared counterparts, and the consequences will have a domino effect, hitting both client organization and supplier.

The effect of one incident down the supply chain could be devastating to an organization and management probably won't see it coming. While this is true for large organizations with multiple tiers of suppliers, for smaller businesses, even a disruption to a Tier 2 supplier can bring operations to a grinding halt as Figure 2 illustrates.

PA 12 Resin Example Diamond Risk Analysis

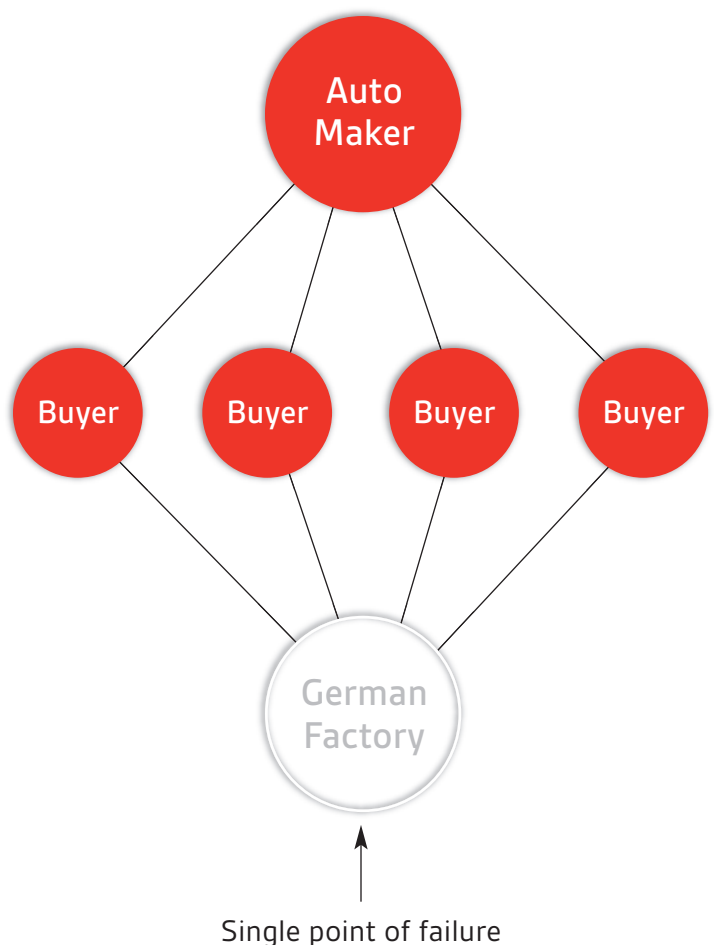


Figure 2 - Example Supply Chain Incident Scenario

Minding the Gap

It takes a considerable amount of people, resources, time, and money to monitor the supply chain in a meaningful manner. Unfortunately, the resources that are being appropriated to this important issue are negligible. According to the APQC survey, more than 80% of respondents rely only on informal site inspections, conversations with suppliers, or the judgment of their procurement professionals to assess potential threats to the resiliency of their supply chains. (APQC 2013) Any verification of the suppliers' business continuity plans also would be anecdotal at best. While BCI's survey revealed that half of their respondents said their companies have allocated nominal budget to the issue – 35% are spending \$50,000 or less per year on the issue, while 22% are spending nothing at all.

Meanwhile, potential risks and the damage disruptions can cause are growing exponentially. For example, 74% of APQC's survey respondents reported that they now outsource goods and services to suppliers that are physically distant from their own facilities. While the pricing may be favorable, the location makes it more difficult to understand and monitor the potential risks that key suppliers face on an ongoing basis. Even if they can be monitored effectively, 63% of those surveyed acknowledge that they are working with supply chain partners located in areas of the world that are known for high-impact natural disasters, extreme weather, or political turmoil. (APQC 2013)

Obtaining Vital Visibility

Governments and regulators have long recognized the role that business continuity management can play in mitigating the effects of disruptive events on society. No agency can tell when or where the next catastrophic event will occur, or its severity. However, acceptance that the worst can, and will, happen enables measures to be taken to predict the needs, prevent potential problems, and prepare the proper response quickly and comprehensively. For example, when a hurricane is churning offshore, the federal government and large aid organizations like the American Red Cross pre-position supplies closer to the area of potential impact. This cuts down on the time it will take to meet the needs of those directly impacted.

It is critical that businesses and other organizations that depend on suppliers of goods and services adopt a similar approach. In addition, the harm that potential disruptions pose to daily operations must be equaled by the allocation of sufficient resources to assess threats, take preventive measures, and mitigate the resulting damage. Failure to work with suppliers to mitigate threats, prepare, and verify an effective response can lead to huge financial losses, irreparable damage to an organization, or even its untimely demise.

Company executives and managers are well aware that their operations are becoming increasingly complex as dependency on distant suppliers grows. (APQC, 2013) While some of these relationships do improve the bottom line, it is just as important to acknowledge the downside. The exponential increase in supply chain threats must be met with a renewed commitment to thoroughly assess new suppliers and verify their contingency plans. Companies can begin to understand their risks by getting a firm grasp on key suppliers and their criticality to the final product. Consider the following when analyzing the role suppliers play in getting the product to the customer:

- Single or sole source of vital product or service
- Critical supplier identification and classification
- Availability of products and services
- Redundancy of critical suppliers
- Level of priority to supplier
- Proximity and geographic distribution of supplier operations
- Sudden changes in quality of service
- History or reputation
- Availability of alternative suppliers
- Third-party validation of supplier's financial well-being (Kildow, 2011)

While logistics contracts will continue to remain an important part of ensuring that suppliers meet their service level agreements, it is important to remember that while such contracts assume stability, they are not a guarantee of stability. Simon Pidgen, a partner in the commercial law firm of Gately wrote in August, 2013 that "Crisis management and business continuity go hand in

hand and contracts which address the need to manage through a calamity are needed.” Depending on the crisis that causes a business disruption, penalties built into logistics contracts with Tier 1 or Tier 2 suppliers are likely to fall well short of covering the significant financial losses endured by end customers. There is a new trend emerging, according to Pidgen, with “risk allocation ... slowly gravitating toward risk sharing, so long as the outcome is business continuity.”

Working Together

In addition to guarding against trouble, businesses that adopt comprehensive business continuity management strategies are more likely to conduct business with companies that have taken similar measures. Working in tandem has the potential to prevent problems or mitigate the impact of any disruptions that do occur. Supply chain partners that understand and acknowledge the potential for unexpected disruptions are more likely to cooperate with customers that are interested in improved supplier transparency.

Companies across the supply chain that commit to best of breed business continuity management practices are proactively diminishing risk and creating plans that will get them back on their feet sooner rather than later. Trusted business partners can shine light onto blind spots with the hope of decreasing risks. While it would be a security risk for a company to reveal the nuts, bolts and confidential details of its business continuity plans, business partners can share meaningful portions of their plans with their important customers. (Kildow, 2011)

The data from research and surveys make it clear that although a disruption’s relative impact on an organization can vary widely, supply chain disruptions are not a matter of “if” but “when”. It is advisable for organizations to review critical products and services and look at the profit impact of related supplier failure on said organization. According to BCI, implementing a formal Business Impact Analysis can be a valuable technique to identify key suppliers and operational impacts. (BCI, 2013)

Many companies that would like to openly share their commitment to business continuity management are implementing internationally accepted best practices, including independently verifying the business continuity plans of their multi-tiered suppliers. Third-party verification demonstrates to employees, partners, investors, customers, prospective customers, auditors, and other interested parties that a company has recognized the importance of business continuity management and is adhering to proper practices and procedures.

As the stakes are getting higher and the potential for the next disaster looms large, there are steps that companies can take to ensure they are moving in a cost-effective, yet meaningful direction.

Countermeasures and risk mitigation strategies are evolving and it is important to utilize the business continuity solutions of an organization that is globally recognized as offering experience, expertise, and authority in risk mitigation.

The Solution

BSI has proprietary Risk Methodologies that classify business continuity risk including natural disasters, man-made disruptions, geopolitical stability and twenty-three other indicator sets. BSI is the only organization that provides risk intelligence specific to the supply chain. By using our proprietary intelligence and best practice methodologies, we are able to provide the increased transparency and decision-ready analysis effective business continuity planning requires. Our intelligence tools and on-the-ground expertise allow us to stay ahead of the trends and bring new and innovative solutions to meet the needs of a global client base.

At the core of BSI Supply Chain Solutions is our exclusive and unmatched supply chain risk modeling capabilities. BSI has developed and patented the most comprehensive, scientifically rigorous and user-focused supply chain risk algorithm commercially available today. Our Supply Chain Risk Exposure Evaluation Network (SCREEN) provides organizations with the risk data and analysis they need to source responsibly, increase transparency, establish robust risk mitigation strategies and create comprehensive business continuity management. BSI's Supplier Compliance Manager® (SCM) is our web-based audit compliance and risk management tool that links our supply chain intelligence directly to your global and supplier operations. SCM facilitates supplier self-assessments, internal audits and BSI Verification audits, which allow companies to easily analyze and track business continuity program compliance and risk among various assessment methods.

BSI's eyes-on expertise includes an in-country auditor network of trained personnel who can validate supplier information and verify compliance. Audit reports uploaded into SCREEN foster a greater understanding of supply chain weaknesses and provide the intelligence needed to effectively anticipate and mitigate risk.

BSI Supply Chain Solutions offers a holistic approach to business continuity management. Our cutting-edge risk-based approach provides on-the-ground supplier verification, up-to-date area intelligence, and comprehensive risk modeling technology generating the most effective business continuity planning and management capabilities available on the market today.

As supply chains become more complex corresponding threats begin to expand exponentially, deepening the need for a comprehensive strategy to increase transparency and improve supplier accountability. Only through a holistic approach involving verifiable on-the-ground supplier-specific information, coupled with trend analysis and incident intelligence can risk management and business continuity planning be effective.

“At a time when changing climatic, social, political and economic situations are forcing organizations to be nimble in adapting to novel threats, it is essential to learn from others experience and best practice. By putting in place a framework based on risk standards, you will be able to identify, prioritize and manage the range of threats to your business more effectively and keep your stakeholders reassured.”

Howard Kerr, Chief Executive, BSI

Bibliography

APQC. (2013, April). Managing the Risk of Supply Chain Disruption.

BCI. (2014). *Horizan Scan 2014 Survey Report*.

Kildow, B. A. (2011). *A Supply Chain Management Guide to Business Continuity*.

Lee Glendon, L. B. (2013). *5th Annual Survey Supply Chain Resilience*. BCI.

Pidgen, S. (2013). *Hurricanes, supply chains and continuity*.

BSI 2013 SCREEN Global Intelligence Report



For more information, please contact:

BSI America Professional Services Inc.
4250 Drinkwater Boulevard, Ste 210
Scottsdale, AZ 85251
Tel: +1 480 421 5099

BSI Group - UK
389 Chiswick High Road,
London, W4 4AL
Tel: +44 0845 080 9000

BSI Group – Asia Pacific
23rd Floor, Cambridge House, Taikoo Place,
979 King's Road, Island East, Hong Kong
Tel: +852 3149 3300