In today’s global business environment, supply chains are increasingly complex and the dependence being placed on them is unprecedented.

In an attempt to maximise competitiveness companies continue to implement technology and management solutions (including outsourcing) to drive costs out of their supply chains. Yet though the potential rewards are evident, companies must understand and manage the complex web of risks that such relationships and efficiency drives create.

The impacts of supply chain disruptions can be severe, resulting in prolonged financial underperformance by the firm, destruction of shareholder value, reputational damage and even insolvency. Strategies to optimise efficiency such as just-in-time logistics and inventory minimisation, single supplier sourcing, and offshore outsourcing have eliminated slack from the supply chain, but this has often come at the cost of fragility where there is now high sensitivity to disruptions. Increasingly we find that many of our clients recognise these risks in their supply chains, but struggle to put into practice workable, cost-effective risk assessment, mitigation and management solutions. This problem can be further complicated by the differing objectives and skill sets of supply chain and procurement professionals that may not be solely focused on managing risk.

Developing an approach that preserves the efficiency gains that have been embedded in the supply chain whilst reducing its fragility and sensitivity to disruption should be a core goal for all firms, and this is what Marsh Risk Consulting’s risk intelligent approach to supply chain management aims to achieve.

THE MARSH RISK CONSULTING PROCESS

Due to the immense complexity of some supply chains, consisting of hundreds or thousands of suppliers and steps spread across the world, managing the inherent and frequently interconnected risks in these chains represents a formidable challenge and one that often requires major resource commitment.

1 'An Empirical Analysis of the Effect of Supply-Chain Disruptions on Long-Run Stock Price Performance and Risk of the Firm'. Hendricks & Singhal, 2005
Meeting this challenge cost-effectively therefore requires a prioritised approach based on corporate value metrics and critical dependencies, ensuring that resources are focused on the parts of the supply chain that matter most to the business. This type of approach forms the first part of our process for risk intelligent supply chain management as outlined in Figure 1, consisting of four broad stages, though due to the diversity of our clients’ strategic focus and supply chain profile each project is ultimately bespoke.

In the initial phase we aim to determine via workshops and stakeholder interviews how the organisation defines value and, based on this definition, rate the enterprise’s activities in terms of services, products, functions and processes for their criticality using qualitative and quantitative methods. This may include scenario modelling of disruption effects on financial metrics such as revenue or profit at risk, or qualitative analysis of impacts on customer satisfaction, growth strategy and reputation.

We then work with you to map the holistic, end-to-end supply chain responsible for delivery of the activity. This builds a high level view of all potential points of failure and key dependencies in the supply chain, and may map resources such as technology, people and facilities as well as suppliers.

The output from the first phase provides us with an objective view of the businesses’ most critical activities based on structured assessment of value, and a map of the full supply chain and resource dependencies for the most valuable, prioritised parts. This knowledge is then coupled with analysis of the firm’s appetite towards risk and tolerance thresholds in order to determine appropriate, risk-adjusted next steps.

These will vary widely and could be internally focused such as adjustments to inventory management, sourcing strategy, or contingency planning and preparedness, or externally driven.

Figure 1: Overview of Marsh approach to risk-intelligent supply chain management
The information gained through our process will enable risk-intelligent decisions to be made on how risk management is structured and implemented. This may involve a range of risk treatments from the placement of specialist supply chain insurance to implementation of contingency planning and mitigation activities, taking into account the associated cost and impact on the risk profile of the supply chain for each option. For example, it may be decided that for a particular activity or component a zero tolerance to risk of disruption is preferred and full redundancy is required in terms of inventory levels or back-up providers. Alternatively, by having a more accurate understanding of the risk in the supply chain the firm may choose to reduce stock levels or increase supply from a specific provider and so realise cost savings. From a cost/benefit perspective, working with critical suppliers to improve their resiliency to business interruption and risk management capabilities may prove to be the most efficient strategy for improving overall supply chain integrity, an opportunity that is often overlooked in internally focused firms.

The final stage in our process is to implement a monitoring and control system to ensure that risk management improvements remain embedded, but flexible enough to respond to the dynamic nature of supply chain risk. In this respect Marsh Risk Consulting can additionally offer real time global threat assessment services to allow firms rapidly to identify potential issues affecting their supply chain that could lead to supply interruption and make proactive responses. We can additionally provide regular in-depth supply chain intelligence updates and reports to keep clients abreast of developments and new ideas in the field.
If you would like to discuss how Marsh Risk Consulting can help you manage supply chain risk or more information on any the services described above please contact your local client executive.

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