

Supply Chain Contingency Planning in the Face of War

Executive Summary

"What happens if...?" This question has never held more weight than now for executives facing the looming threat of military actions in Iraq. This note reviews the operational supply chain impacts of a military action and provides recommendations around the contingency planning processes that must be in place to increase an organization's odds of emerging from this situation agile, adaptable, and profitable.

Introduction

"Our cost to manufacture in China just increased 15% due to increased manufacturing fuel costs. The U.S. Homeland Security Office required U.S. Customs to increase their review and inspection of imports which has increased the total ocean transit time by 50%. While the cost of shipping container loads to Long Beach, California did not increase, our truckload costs increased 10% due to fuel surcharges that were not anticipated at the beginning of the year.

Two of our largest customers just canceled 30% of their orders due to reduced demand and one of them is invoking the price-protection clause in their contract to make good on the glut of inventory in their stores.

– Fictional Scenario

As the threat of military action moves from "something to consider" to "a matter of time," contingency planning discussions in executive suites are at a fevered pitch. These discussions center on what we call the "big four" business impacts: increased transportation (fuel) costs, inconsistent constraints on transportation systems, the threat to low-cost offshore manufacturing advantages, and increasingly skittish customers.

Contrary to previous Persian Gulf scenarios, this set of military actions is not unlike the ongoing war on terrorism and will not be a quick surgical-strike operation, but a drawn out and involved engagement (remember too, that North Korea is a compounding factor).

1: Transportation (Fuel) Costs Will Increase

The threat of war in Iraq and the sporadic supply of oil from Venezuela have contributed to increased prices. As of February 13, 2003 US crude oil reserves were at their lowest levels since 1975. Stocks of both heating oil and gasoline are low due to higher than anticipated demand. On February 8, 2003 crude oil prices increased to \$35 a barrel (up from \$20 a year earlier). Experts forecast that oil prices will continue to increase. The actual increases will be up to OPEC, the actions of Saddam Hussein, or the new government of Iraq. No one can tell if it will impact the price per gallon of gasoline dramatically (\$4.50 per gallon) or slightly (\$2.00 per gallon)¹.

Ray Ratheal, who directs energy purchases for Eastman Chemical Co. in Kingsport, Tenn., must cope with gas prices

that are triple the level of a year ago. "That's a tremendous impact on our cost of manufacturing," he said. "It's very hard to pass on price increases, particularly in this economy."ⁱⁱ

2: Offshore Manufacturing Costs Will Increase

The increase in oil prices will impact countries with a strong dependency on heavy industry for their survival. While the US is not one of those countries, companies who produce in these industrialized regions at reduced costs will experience an increase in production costs. Increasing tensions with North Korea are quietly increasing corporate concerns about doing business in the Asia-Pacific region.

Manufacturing continues to move from the United States to emerging exporters like China, India and Latin America. Textile imports increased 119% from China during the first six months of 2002, as several quotas were phased out. All quotas on apparel and textiles will be lifted among World Trade Organization members on Jan. 1, 2005, driving even more manufacturing capacity overseas.

Another industry segment that is highly dependent on imports is consumer electronics. For instance, 90% of the electronics sold by Best Buy are manufactured in Asia, according to Debbie Lang, Best Buy's director of enterprise international operations and new business. Atlanta-based Home Depot opened two purchasing offices in China in October with the intent of boosting imports from its current 7% of sales to 10%.ⁱⁱⁱ

3: Cross-Border Product Movement Will Be Delayed

A tempered "step up" of screening delays and holds on cross-border product movement in conjunction with Homeland Security should be expected on all imports. As this note goes to press, the United States is on an "Orange Alert" status.

If the situation were to go to "Red," one of the points of critical concern to companies dependent upon (inter)national distribution would be a measure to: "Monitor, redirect, or constrain transportation systems"^{iv} A review of the chaos around cross-border movement of goods after the events of September 11, 2001 still causes many companies caught unaware to shudder at a repeat of that situation.

4: Consumer Spending Will Decrease

Economists forecast that any armed conflict will reduce consumer confidence, which in turn will further reduce stock prices and roll back consumer spending on cyclical and durable goods.

"The fear of the unknown as far as 'Are We?' or 'Are we not?' is creating real pent-up demand. People are delaying and deferring [decisions] to really try to understand where this thing is going to go." That was a statement by Robert Nardelli, Chairman and CEO of The Home Depot on February 12.

Wall Street Impacts

The financial results of poor planning in these conditions will disappoint Wall Street. In the short term, executives will be able to blame their problems on war-time issues. That excuse, however, will fall on deaf ears if poor performance continues past a "grace period." Wall Street will view continued poor performance (correctly) as a proxy for a company's inability to adapt to change.

Researchers expected investors to be more punitive if the malfunction was caused by internal problems within a company. Historically, stocks plunged 8.29 % when internal problems caused the glitch, compared with an 11.97% decrease when a supplier caused the problem and an 8.48% drop when customers caused the problem.^v Studies have shown that the six most common causes of supply chain problems which directly impact stock prices include: parts shortages, changes requested by customers, new product ramp/rollouts, production problems, development problems and quality problems.

Responding Proactively to the Threat

Tactical supply chain contingency planning is one of the easiest and most value added steps to take so that companies can emerge from this situation relatively unscathed. It is, quite simply, an opportunity for a company to create a model of its business and generate specific operational and financial outcome implications of decisions it makes about how to deploy its resources to cope with changing world environments.

Take for example Muscatine, Iowa-based office furniture maker HON Industries, Inc. Its understanding of supply chain contingency plans and technology provided it the latitude to cull its library of alternate supply chain planning scenarios to cut its delivery lead times on rush shipments from two weeks to five days immediately following the terrorist attacks.^{vi}

Relative to the cost of reacting, the cost of building a plan before it gets tough is far more feasible to the enterprise. The very exercise of considering the alternates, the costs and the implications for business will place a company's executive in a reduced risk situation.

Recommendations

1. Generate Contingency Planning Scenarios

Conduct a thorough contingency planning scenario study of your supply chain. Identify leading indicators, lock on the most likely scenarios and understand their implications.

2. Align Supply Chain Tools to your Contingency Plan

Understand the "fit" of the settings on your enterprise planning systems in the context of your current business environment. Our studies have shown that in at least 60% of companies their planning settings are in need of synchronization – potentially costing them millions in actual and opportunity costs.

3. Assess the company's ability to adapt to change.

Understand that plans are just that: "plans." They can (and must) be altered if the basic assumptions change. Don't be married to the plan; be married to the framework in which the plan was created. If the assumptions change, alter the model and see what those implications are: The goal is to not only have a contingency plan but to understand how to plan for contingencies.

Depending on the nature of a client's contingency concerns, edo consulting's tactical supply chain contingency planning offering can be deployed through its **Last Mile Business and Technology Advisory Services**, supported by the firm's **Business Process & Change** and **Post Implementation Consulting** teams.

edo consulting has worked with companies creatively developing supply chain contingency plans -- identifying significant savings as a by-product of the initial assessment.

This sort of activity can be undertaken without a company making any additional capital investment in enterprise applications. In times like this, enterprises would prefer to purchase answers, not software.

edo consulting provides its clients with the tools they need to establish and perform to expectations, even in the face of adverse supply chain impacts.

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If you are interested in talking more about a high value, low impact way to improve your odds for supply chain success, contact edo consulting (consulting@edoconsulting.com)

ⁱ "The Economic Consequences of a War with Iraq", William D. Nordhaus, November 14, 2002

ⁱⁱ "War Worries Compound Energy Woes: Rise in Oil Prices Follows Widespread Industry Slump" Washington Post, February 8, 2003, H. Josef Hebert .

ⁱⁱⁱ "U.S. Crude Oil Supply At Lowest in 27 Years", Washington Post, February 13, 2003, Peter Behr

^{iv} "Global Logistics: Of Great Import", Fairchild's Executive Technology, <http://www.executivetechnology.com/ViewCA.cfm?ID=59>, Chad White

^v "What to do if orange warning goes to red" The Atlanta Journal Constitution, February 13, 2003, Andrew Mollison

^{vi} "Supply Chain Glitches and Shareholder Value Destruction", Vinod Singhal, 2001

^{vii} "Supply chains face changes after attacks: Users may need more flexible systems," Computerworld, October 1, 2001, Marc L. Songini