ASSESSING SUPPLIER RELIABILITY TO ENSURE CONTINUITY: SUPPLIER DEPENDENCY ANALYSIS

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Connections

Anyone who sells a product or service understands that the twin business objectives – **low costs plus high profits** = **good business**.

When we begin to think about supplier reliability, we run head-on into that long established equation.
A lot has changed...

Significantly lower labor costs in less developed parts of the world +
Lower transportation costs +
Ease of communications (cellular and internet)
• = supply chains that are much longer and more complex than ever before.
• = more risks + higher probability of risk occurrence
A lot has changed...

*Significantly lower labor costs in less developed parts of the world* +

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High Risks...

- Contracts may be of little use in a country with an immature commercial law structure.
- The company still owns the risk: it cannot be outsourced.
- You can suffer extremely serious consequences to your brand...
Higher Risks...

**Incidents:**

- *Lead paint in toys produced in China*
- *Melamine contamination of human and pet foods produced in China*
- *Peanut paste contamination in the US*

And many may go undiscovered for some time...
Higher Risks...

New Risks:

• Many more transit points
• Control of sub-sub-sub contractors and the supplier’s suppliers
• Potential contractual enforcement conflicts in offshore locations
• Increasing sensitivity of customers
A Standard Approach is Needed

– To qualify suppliers

– To write contracts

– To audit suppliers
Knowledge is Power

Without appropriate data, we can work only from vague impressions and gut feelings.

– In the beginning, collect the data
– Aggregate it to reveal patterns.
– Analyze it.
Collecting the Data

• Identify critical value-generating operations. See your BIA.
• Conduct additional interviews as necessary.
• Include any operation where anything more than a minor supplier incident can produce a material loss of revenue or a significant depression of stock value.
• Locate all contracts with your primary suppliers. Take note of contracts that have few protections for the buyer of products or services – your organization.
Collecting the Data

Contact each supplier for details:

- **Physical location(s)** involved for your product or service: what is the supplier’s business continuity capability?
- Listing of the **supplier’s subcontractors**. What is each subcontractor’s business continuity capability?
Locate any existing *supplier risk assessment*. Note any past measures (such as dual-sourcing) or compensatory measures (a supplemental power supply) and assess their historical benefits and costs.

Locate all *records documenting incidents* with this supplier. Calculate the cumulative financial cost of these incidents for as many years as you have data.
Collecting the Data

- Examine all insurance policies that might provide benefits to you in the event of a supplier operational interruption.
- If there is a written procedure for vetting third-party suppliers within your firm, locate it. If this procedure is not written down, talk to your purchasing and other contracting departments to find out what is the unwritten procedure.
- Prioritize all suppliers as either MEDIUM, HIGH or CRITICAL taking into account historical and potential impact to the organization.
Collecting the Data

• If supplier dependency impact analysis is a new process for your organization:
  - Prototype this process by limiting your initial analysis to one or two clearly CRITICAL suppliers.
  - Minimizes cost, but still demonstrates the process value.
  - As the process gains traction you can then apply it to other HIGH and MEDIUM risk suppliers.
Data Analysis

Analysis and aggregation of the collected information is the next step to understanding the specifics of any supplier risk profile.
Data Analysis

• **Task 1: Contract Analysis**

  ➢ Read all contracts pertaining to this supplier. Look for SLAs, penalties for interruptions / incidents (including a contract “out” for exceeding defined interruption levels, fee reimbursements for delivery failures). Note any parts of the contract where your interests are not being served.

  ➢ Design and document an “ideal” contract between your firm and this supplier.
Data Analysis

• Task 2: Insurance

- Carefully analyze your insurance coverage for a supply chain interruption or incident.

- Speak with your insurance people or agent to understand what protection is available and at what price.

- Adjust coverage as necessary,
Data Analysis

• Task 3: Analysis of Prior Interruption or Incident History
  
  ➢ Analyze historical data to identify past interruptions or incidents with this supplier.

  ➢ You may need to speak with representatives of each business function affected by this event.
Data Analysis

• Task 4: Cost of Prior Incidents

- Calculate the cumulative financial impact of incidents with this supplier over the term of the relationship (insofar as data are available).
Data Analysis

• Task 5: Analysis of Prior Supplier Preparedness

- Audit the supplier’s capability to withstand interruptions in its supply chain and at its premises, maintaining its capability to deliver what is promised in the contract.

- Consider the following tools: site visits, audit reviews (especially SAS 70 certifications), assessment of recovery program maturity, and a review of incident history.
Data Analysis

• Task 6: Existing Countermeasures

➢ List in-place countermeasures (risk-mitigating and compensatory).

➢ Assess their effectiveness and calculate their ongoing costs.
Data Analysis

• Task 7: Map Dependency Chains
  
  ➢ Identify your supplier’s chain of critical subcontractors for your products/services.
  ➢ Include physical locations and means of transport, if applicable.
  ➢ Determine all single points of failure (location and process).
  ➢ You may need to audit transport mechanisms or other supplier vendors.
  ➢ You may need to audit supplier subcontractors.
  ➢ These audits may need to be on-site.
Presenting Your Results to Management

• All of your work on data collection and analysis will be of little value if you don’t present it in terms that senior management can understand. Take the time to carefully craft your results presentation.
Analysis Presentation Components

• **Summarize Results**
  - In financial and verbal terms, describe the vulnerabilities associated with the use of this supplier.
  - Describe the cumulative historical costs incurred with this supplier related to interruptions or incidents.
  - Describe the vulnerabilities and single points of failure within this supplier’s dependency chain.
Analysis Presentation Components

- Propose effective countermeasures - these are likely to include at least some of the following:

  - Re-negotiation of contracts with more favorable contract terms, including clarified escalation procedures and penalties for supply interruption, late delivery or poor quality, to include conditions for contract termination.
  - Contractual control over subcontractors to suppliers, if possible.
  - Two or more suppliers for the same product/service in different geographic areas.
  - Tested and reliable crisis management plans and processes.
  - Continuous active monitoring of suppliers, to include all single points of failure in the third-party dependency chains.
  - Continuous data collection of financial and operational impacts from each operational interruption or incident resulting from this supplier or its internal dependency chain.
Analysis Presentation Components

• Define the proposed process:

  ➢ Recommend the design, documentation, and implementation of a process that includes risk mitigation prior to negotiating and signing a contract with any critical supplier.

  ➢ Recommend a list of other CRITICAL suppliers for which you believe the same kind of analysis would be useful.
Special Challenges with Offshore Suppliers

Cultural differences at offshore suppliers may cause problems:

- Immature civil law structures and jurisprudence may prevent the application of contractual terms.
- The more complex the supply chain, the more uncontrolled single points of failure.
- The greater the number of offshore transport pathways subject to sabotage, strike, or civil disturbance, the greater the risk of disruption.
- Culturally endemic corruption in an offshore location is extremely difficult to counter. May have serious impacts on product quality. Such incidents are likely to have both immediate and long-term serious financial consequences, and they are difficult and expensive to prevent.
- It is more expensive to audit suppliers in distant countries: they may not respect audits or contracts as much as your own country does.
Special Challenges with Offshore Suppliers (2)

✓ Design and execute a universally applied supplier risk governance process.

✓ That process must decrease the probability of an incident and minimize its potential impact without significantly affecting the cost of the product or service.

✓ Ideally, governance of supply chain risk becomes an embedded part of proactive management and protects the long-term competitiveness and value of the organization.
Special Challenges with Offshore Suppliers

The clash of cultures between the contracting firm and its offshore suppliers will continue to engender quality control risks, as recent cases so vividly indicate.

Firms should factor those risks into the competitiveness equation: low costs plus high profits plus supplier reliability equals sustainable business.
Questions ??

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