

Integrating Business Continuity Criteria into Your Supply Chain

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Introduction

Most organizations have a supply chain that is a mix of competencies, from manufacturing to professional advisory services. Developing business continuity strategies and embedding business continuity processes into an organization's procurement process can enhance the organization's ability to actively assess vendor capabilities. By creating a flexible framework for augmenting, retaining, or shedding vendor competencies in order to assure supply chain integrity, the organization can meet customer demand, customer expectations and generate consistent performance.

No one company can deliver end-to-end products and/or services in today's complex business environment. Your company, like other companies is most likely dependent on vendors of various types (manufacturing, profession services, software, transportation, etc.) to meet customer expectations. Four basic assumptions form the underlying premise for this article:

Complexity: Companies today are complex and their procurement processes are complex management systems operating within multiple networks

Touchpoints: All of a company's touchpoints (downstream & upstream) within its networks must be considered to effectively evaluate risks, threats, hazards and vulnerabilities to determine the effects and consequences of degradation on the entire system

Responsiveness: Actions at any given level within the network may be inadequate unless the entire network responds in kind

Resource Constraints: Most levels and groups within the company and the supply networks supporting the company lack the resources and specialized skills to know what to do to maximize operational resilience within the network

The integration of vendor business continuity capability as part of the procurement process is becoming an integral part of company strategy. Effective business continuity strategies, like supply chain assurance, need to be designed. Integrating business continuity principles and concepts into the a company's business portfolio planning process and at each stage of product/service life cycle can provide opportunities to enhance the procurement process, allowing your company to deliver superior products and/or services solutions to its customers.

Structure – a key element

Identifying procurement touchpoints (internally and externally) needs to be one of the first steps in the process. Developing a custom fitted questionnaire for vendors as well as internal stakeholders can provide a basis for moving forward. Applicable policies, procedures, recognized "best practices" and regulatory requirements set the benchmarks from which metrics for assessing vendor business continuity capabilities can be developed. Integration criteria should be contained in the vendor's contract; spelled out in specific terms.

Touchpoints – Internal and External

Identifying procurement touchpoints should be undertaken to assure that key continuity concerns are adequately addressed. Internal touchpoints may include any part of the organization that has direct and/or indirect interface with the procurement process. This would include customer relationship/service touchpoints, strategic planning, quality assurance, operations, human resources, legal, audit and, in some instances, the officers and board of directors of the enterprise. Identifying external procurement touchpoints may seem simple, but when you begin to identify vendors, you have to realize the components that allow the vendor to get their product or service to you are also touchpoints. Therefore, identifying external procurement touchpoints becomes more complex. In addition, due to the popularity of outsourcing today, we are finding that vendors are also outsourcing. A tiered approach to identifying external procurement touchpoints can facilitate organizing the process.

Vendor Continuity Capability Questionnaire

Developing the vendor continuity capabilities questionnaire needs to be carefully thought through. You are, in essence, creating a legal document that could contain sensitive information and must be protected. You are also creating a potential liability document for yourself.

Let me explain; the legal term, constructive knowledge is defined in Black's Law Dictionary thus, ***"If one by the exercise of reasonable care would have known a fact, he is deemed to have constructive knowledge of such fact; e.g. matters of public record."*** Constructive notice is defined in Black's Law Dictionary thus, ***"Such notice as implied or imputed by law, as in the case of notice of documents which have been recorded with the appropriate registry of deeds or probate. Notice with which a person is charged by reason of the notorious nature of thing to be noticed, as contrasted with the actual notice of such thing."*** Negligence is defined in Black's Law Dictionary thus, ***"The omission to do something which a reasonable man, guided by those ordinary considerations which ordinarily regulate human affairs, would do, or the doing of something which a reasonable and prudent man would not do."***

With the type of information that you will collect in order to assess vendor continuity capabilities, your organization could be held liable, under the concepts of negligence (foreseeability), constructive notice, and/or constructive knowledge, for NOT taking action to mitigate potential losses.

The questionnaire that we have most often utilized consists of eight parts as highlighted below.

- Part 1: Governance Provisions & Management Commitment
- Part 2: Business Continuity Strategies: Developing and Implementing BCP
- Part 3: Business Impact Analysis, Risk Evaluation & Control Mechanisms
- Part 4: Maintaining Continuity: Training, Awareness, Exercising & BCP Updates
- Part 5: Incident Response Operations
- Part 6: Crisis Communications
- Part 7: Coordination (External Entities)
- Part 8: Vendor Certification

The length of vendor questionnaires will vary with the industry group represented and the depth of initial analysis that the procurement group chooses to perform. Generally, the questionnaires that have been developed for clients have contained approximately fifty questions. The questions are designed to require the vendor to provide quantifiable answers. Should the procurement group assessing the adequacy of the answers determine that there is a need for further analysis; a formal audit team is assembled to determine how to resolve the concern over vendor continuity capability.

Vendor Continuity Capability Assessment

During the course of assessment data will be collected, analyzed and developed into assessment findings and recommendations regarding vendor continuity capabilities. The data should be organized by Essential Element of Analysis (EEA) criteria that the organization establishes and uses to conduct data collection, analysis and evaluation. Examples of typical EEA are summarized below.

- ❑ **Organization:** As defined herein refers to the current procurement process, vendor roles/responsibilities and deliverables during the procurement process life-cycle and current criteria for the organization's business continuity programs and plans.
- ❑ **Vulnerability Identification and Control:** As defined herein refers to establishing minimum acceptable criteria for vendor vulnerability identification and control methodologies as these methodologies relate to vendor business continuity programs and plans and the ability of the vendor to integrate its methodologies on a sustainable basis with the client's business continuity management strategy.
- ❑ **Continuity Strategy and Approach:** as defined herein refers to the metrics developed and used to verify vendor integration of business continuity management program and plans with the client's business continuity management strategy.
- ❑ **Documentation:** As defined herein refers to the documentation of vendor business continuity management program and plan capabilities.
- ❑ **Resource Management and Development:** As defined herein refers to the metrics for vendor validation of staffing (Business Continuity staffing) and associated vendor integration of continuity planning, resource development and awareness of continuity.
- ❑ **Continuity Maintenance:** As defined herein refers to the procedures used to assure resilience of the vendor continuity process.

Objectives

The overall objective of integrating business continuity criteria is to facilitate the ongoing development and implementation of enhancements to the procurement process including program management (normal operations and incident management operations), stakeholder communication and knowledge transfer associated with vendor business continuity management programs for vendors operating within your company's procurement system.

In developing the overall design objectives careful consideration should be given to ease of use by procurement staff, other personnel and external parties (as appropriate). Three elements associated with enterprise assurance apply:

- Strategic Element consisting of support for compliance efforts, communications to stakeholders (vendors, customers, internal groups, etc.) and strategic active analysis processes.
- Grand Tactical Element consisting of support for implementation efforts, sustaining business operations, communicating upwards (internal focus), and grand tactical active analysis processes.
- Tactical Element consisting of direct specific implementation steps, communication upwards (internal focus), external communications (vendor interface), mitigation of noncompliance/nonconformance and tactical active analysis processes (scorecards, vendor continuity questionnaire, etc.).

As with any process negotiating continuity commitments may need to be addressed on a case-by-case basis. Once the evaluation process has been completed, it must be managed, enforced and monitored to assure continuity of operations compliance.

Procurement Planning Considerations

Procurement planning considerations will generally consist of the normal day to day functioning of the procurement process. Supply Chain Business Continuity integration elements should consist of a tiered evaluation structure focused on four aspects as presented in Figure 1, Supply Chain Business Continuity Elements. These elements consist of:

- Comprehending and describing supply chain continuity requirements
- Conducting business continuity capability assessments
- Evaluating business continuity capabilities
- Identifying actions to be taken

Supply Chain Business Continuity Elements

Illustrative Example

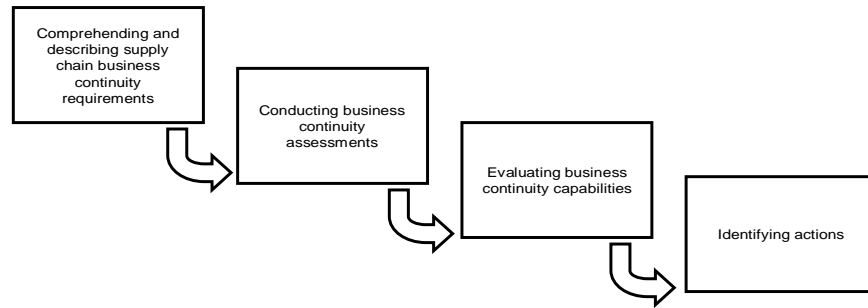


Figure 1

Each phase of the procurement process can be designated an Essential Element of Analysis (EEA), as defined previously. We recommend that each EEA incorporate in the scorecard process a tiered analysis structure consisting of Measures of Effectiveness (MOE) and Measures of Performance (MOP) to provide metrics for facilitating the scoring of vendor and potential vendor business continuity capabilities. A Measure of Effectiveness (MOE) is a metric that forms subgroups of information relating to specific areas encompassed by an Essential Element of Analysis. A Measure of Performance (MOP) is a data structure. Measures of Performance answer a specific question. Measures of Performance are grouped to form Measures of Effectiveness. Measures of Performance are measurable and observable, that is, they provide a quantitative basis for evaluation of a specific area. For example, a Measure of Performance might be, "What is the current credit rating for the Vendor under consideration?" Illustrative examples of the EEA – MOE – MOP structure are provided and discussed later in this report. Figure 2, Vendor Business Continuity Metrics, provides an illustrative example of these structural components.

Vendor Business Continuity Capabilities Metrics

Illustrative Example

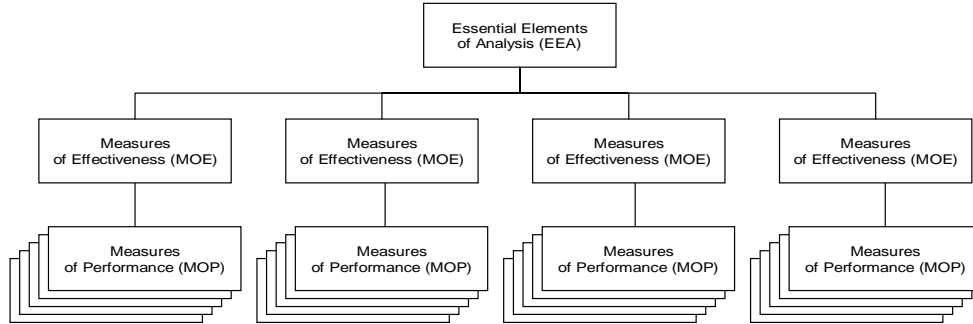


Figure 2

Your company faces a variety of risks that have a potential impact on its supply chain assurance. These can be articulated as either internal or external as depicted in Figure 3, Internal and External Vulnerability Drivers.

Internal and External Vulnerability Drivers

Illustrative Example

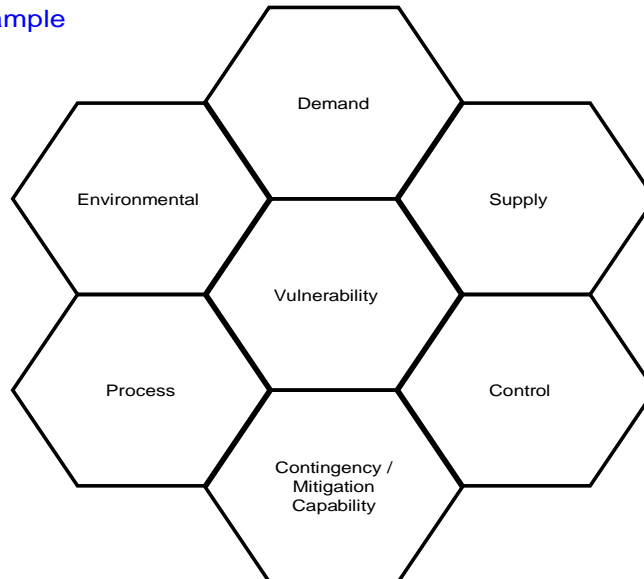


Figure 3

These drivers and the ability to manage them (put into place contingency measures) often are interconnected. Understanding this potential interconnectedness is a key factor in assessing vendor business continuity capabilities. Internal and External vulnerability drivers can materialize in a variety of ways. Making vertical, horizontal and diagonal connections between drivers can provide a conceptual understanding and potentially reduce unexpected outcomes as you identify how risk is uniquely embedded in your company’s supply chain.

Risk can be context sensitive, as risk elements interact in different ways depending on the situation. Understanding the potential interaction of risk factors facilitates the ability to measure business continuity capabilities and plan for offsets that can be implemented should a disruptive event occur.

Figure 4, entitled, “Sample Roadmap for assessing vendor capabilities” is an illustrative example of a roadmap for the process of assessing vendor capabilities. The assessment process has been designed to provide a phased approach with progressively more detail accumulated at each phase of the procurement process. This assessment process can be easily embedded into your company’s procurement scorecard system, enabling you to incorporate vendor business continuity evaluation as an integral component of the procurement process.

As depicted in Figure 5, “Typical Procurement Process” the integration of recommended business continuity metrics in the procurement process should be related to the key elements of the procurement process. Incorporating the recommended business continuity capability assessment at each phase of the procurement process can help identify vulnerabilities, develop consequence management strategies, plans and implement mitigation strategies.

Illustrative Example

Sample Roadmap for assessing vendor capabilities

A simple test for organizational maturity might be determining whether the organization has a blueprint outlining the necessary business continuity, operational support processes and transition plans that need to be developed.

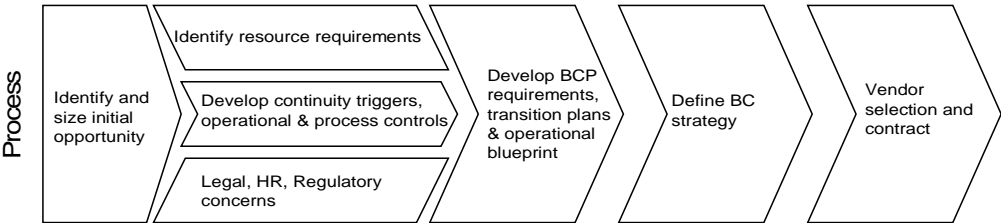


Figure 4

Upon conclusion of assessment at each phase of the procurement process you can evaluate vendor business continuity capabilities allowing a “go/no go” decision based on measurable

criteria. Prior to proceeding to the next stage in the procurement process the vendor will have been vetted and the next stage evaluation can allow you to continue to refine the vetting requirements and gather more detail on vendor continuity capabilities. Having an in-depth understanding of vendor capabilities at each phase of the procurement process can allow critical decision-making at earlier stages of procurement and can thus enhance communications between you and your vendors regarding business continuity issues.

Typical Procurement Process

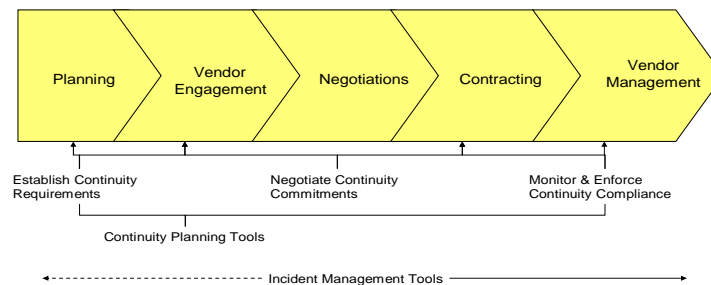


Figure 5

Embedding into the procurement process specific business continuity objectives, guidelines and assessment metrics can enhance decision-making, communications (vertical/horizontal) and resource management. In addition to the Vendor Continuity Questionnaire, you can develop worksheets that can be incorporated into each phase of the procurement process to further facilitate the assessment of vendor business continuity capabilities. The benefit of having vendor continuity capabilities catalogued and indexed is threefold. First, the company can begin to assess and quantify the risk impact of an event. Second, a determination of how long the risk exposure will last before the event is mitigated and/or the exposure is rectified. Third, a determination of potential recovery costs in terms of emergency actions can be estimated.

Early assessment and quantification of vendor, supplier, etc. business continuity capabilities is essential. In addition to the Vendor Continuity Questionnaire we have developed a set of nine Risk Analysis Worksheets. These worksheets are structured to build on the evaluation criteria in the form of Essential Elements of Analysis, Measures of Effectiveness and Measures of Performance. They are listed below.

- Worksheet 1: Describe the Supplier
- Worksheet 2: Determine Demand Risk
- Worksheet 3: Determine Supply Risk
- Worksheet 4: Determine Process Risk
- Worksheet 5: Determine Control Risk
- Worksheet 6: Determine Environmental Risk
- Worksheet 7: Evaluate Implications
- Worksheet 8: Identify Actions
- Worksheet 9: *LMSCARVER*[™] Supply Chain Risk Analysis

We recommend that your company and its vendors negotiate periodic assessments of sub-tier vendors (vendor's suppliers) to further assure business continuity capabilities. This can be accomplished through contractual requirements executed at the initial stages of vendor

engagement. Your company can utilize the Vendor Continuity Questionnaire and Risk Analysis Worksheets to facilitate consistency of the vendor's depth analysis. Figures 6, 7 and 8 provide illustrative examples of depth analysis determination criteria.

Illustrative Example

Determining Tier I, II, III depth of analysis – key questions

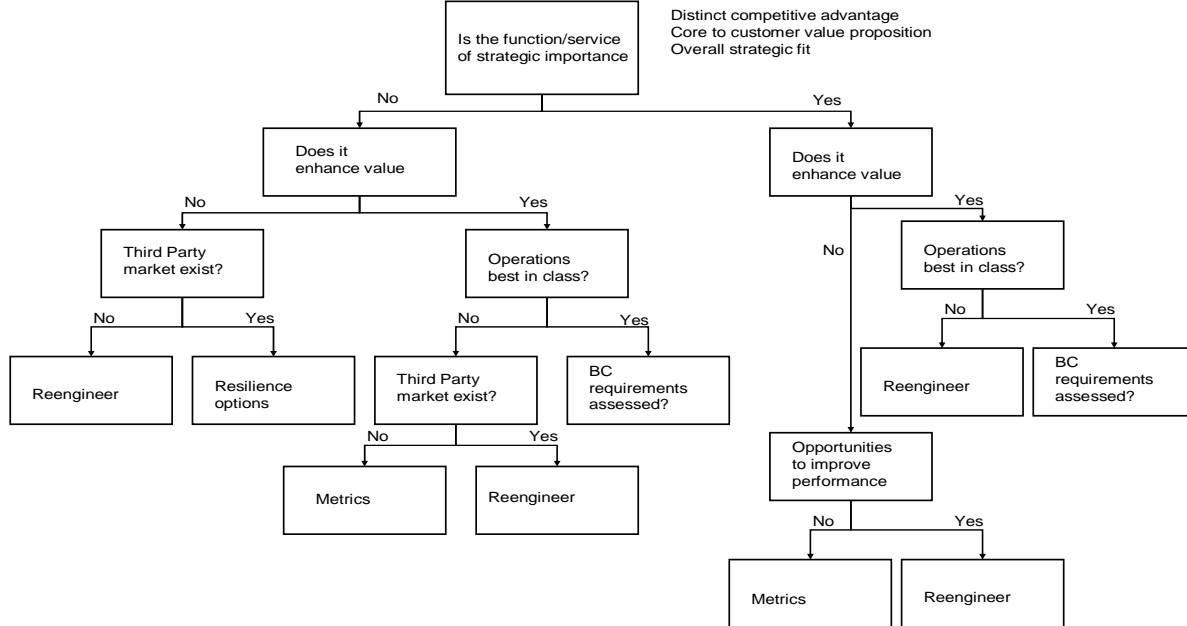


Figure 6

Illustrative Example

Risk Mitigation Framework Elements

<p>1. Service Levels Performance credits Reporting Rectification obligations</p> <p>2. Governance Regular meetings Escalation procedures Service ramifications</p> <p>3. Audit Rights Internal/External Auditors Performance review Regulatory access Pre-billing meetings</p> <p>4. Operating Principles for Utility Internal/External Auditors Performance review Regulatory access Pre-billing meetings</p> <p>Regular Operation</p>	<p>5. Management Review Expert Performance Report Supplier implementation of recommendations</p> <p>6. Step-in Rights Material breach Failure to implement Expert's recommendations Step-in at suppliers cost</p> <p>Significant Operational Problems</p>	<p>7. Termination Failure to implement Material breach Critical Service Level Insolvency Change of control (including parent) Material degradation of financial situation</p> <p>8. Disengagement Expert report Buy equipment, take leases Employ personnel Take premises Use software</p> <p>Ending the relationship</p>	<p>9. Parent Guarantee If appropriate</p> <p>10. Financial Bond/LC Cover migration costs and other direct expenses if Client needs to migrate system Secure technology evolution obligations (could be separate amount)</p> <p>11. Security Structure Protect Client if supplier is likely to become bankrupt (pre-bankruptcy)</p> <p>Financial Protection</p>
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Figure 7

Illustrative Example

Risk Mitigation Factoring in Counterparty Risk

Your company can optimize its supplier portfolio risks using sophisticated solvency analysis. Most business units in large organizations neglect the counterparty risk in their supplier partnerships. Service degradation risks run high when the supplier's financial health erodes and there are potentially huge risks and replacement costs if the supplier defaults. Avaya must ensure it is insulated or compensated for those risks.

Counterparty Risk Assessment

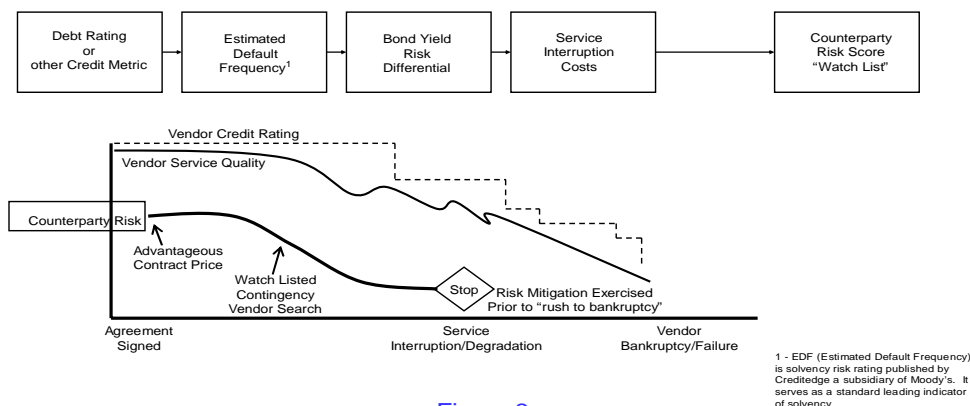


Figure 8

Procurement Incident Management Considerations

The second part of the procurement process relating to vendor continuity should address incident management considerations. A vendor can complete the vetting process (Vendor Continuity Questionnaire, Risk Analysis Worksheets, Scorecard, etc.) and still experience a disruption that could affect your company's ability to meet customer requirements (i.e., Philips, Ericsson, Nokia). Having an incident management system as a component of the procurement process can allow your company to respond, recover and restore supply chain operations with less potential for massive disruption. Incident management can range from assessing and classification of a vendor incident to implementation of response actions, such as sending your personnel to vendor facilities to assist in incident mitigation processes.

Contingency alternatives can range from having backup response plans to alternative sources of supply. Once the connected risk themes are identified and evaluated, actions to address consistent themes throughout the procurement process can be taken. Identification of consistent risk themes across a number of risk dimensions can help to determine where your company should place significant effort to mitigate the risk exposure.

Disruptive events (figure 9) as they occur need to be classified by their level of severity in order to determine the potential impact they may have. A classification system can provide a consistent framework for evaluation; enhance the communication process allowing ease of communication between internal and external groups and facilitate response, management, recovery and restoration efforts.

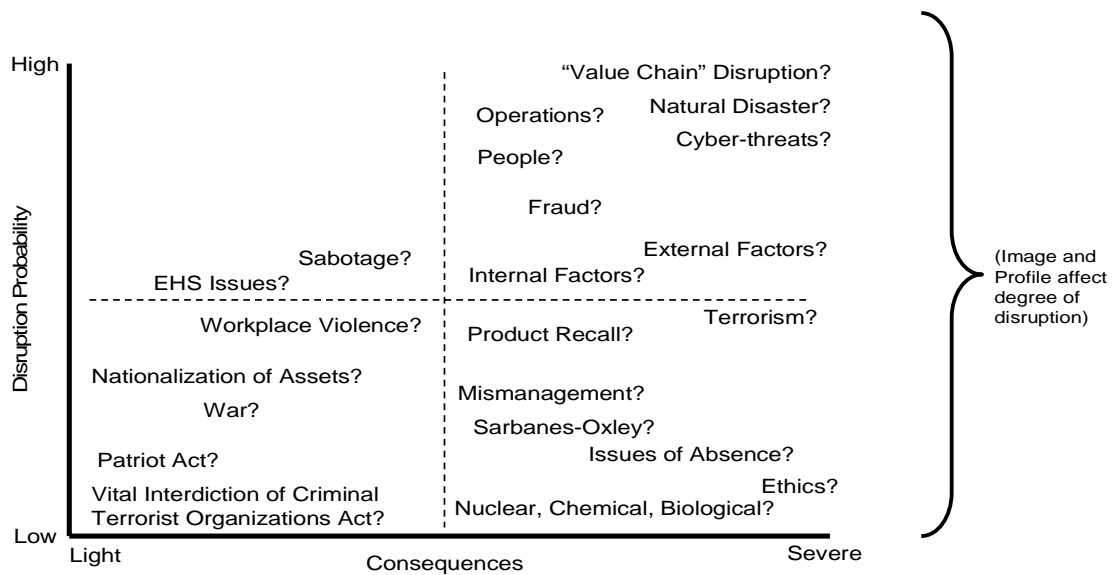


Figure 9

In addition to the event classification system the incorporation of an event assessment form that would be used in conjunction with the Event Classification System for determining the event classification level and for facilitating discussion within your company and with the affected vendor(s). As depicted in figure 10, the degree of degradation of service minus the level of preparedness equals the time for recovery. The less prepared an organization is for service disruption the longer it takes the organization to recover its operations and restore service levels. Having a classification system can enhance the ability to identify potentially disruptive situations early and determine how to respond effectively to minimize the level of service impacts.

The procurement process represents the first line of direct contact with vendors, suppliers, etc. Detection by procurement personnel at any stage of the procurement cycle of potential disruption and classification of severity can allow your company to implement its BCP plan and coordinate with the affected vendor to assure continuity of operations and to mitigate the disruptive event.

Degradation of Service – Degree of Preparedness = Time for Recovery

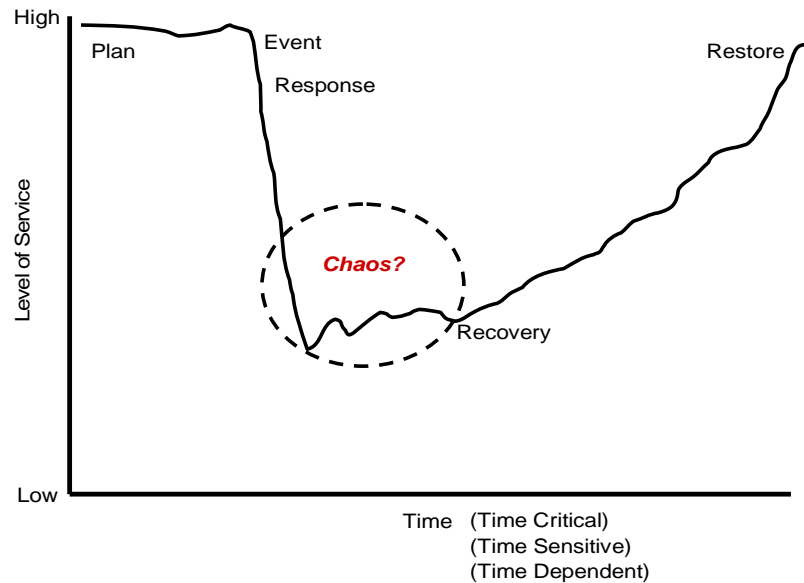


Figure 10

Early detection, classification and response can lead to less of a drop in service; a potential reduction in the chaos associated with a disruptive event and shorter recovery and restoration timeframes. Figure 11, depicts the typical functions performed at various levels within an organization as it moves from response to restoration. This figure also depicts the focus for an organization at the tactical, grand tactical and strategic levels. At the tactical level the focus is generally on event response and mitigation. The focus at the tactical level should be on response and mitigation while the need at the tactical level is for support from the next level (grand tactical). At the grand tactical level the focus should be on support for the tactical response.

Additionally, at the grand tactical level the focus should be on the prevention of cascade and containment of cascade effects on the organization. At the strategic level the focus should be on management oversight, coordination and facilitation of restoration of services. It is important to note that a key element in this vertical and horizontal process of detection, classification, response, management, recovery and restoration is seamless communications. Seamless communication is based on the adoption of common terminology and in the functions represented at each level, as shown in figure 11.

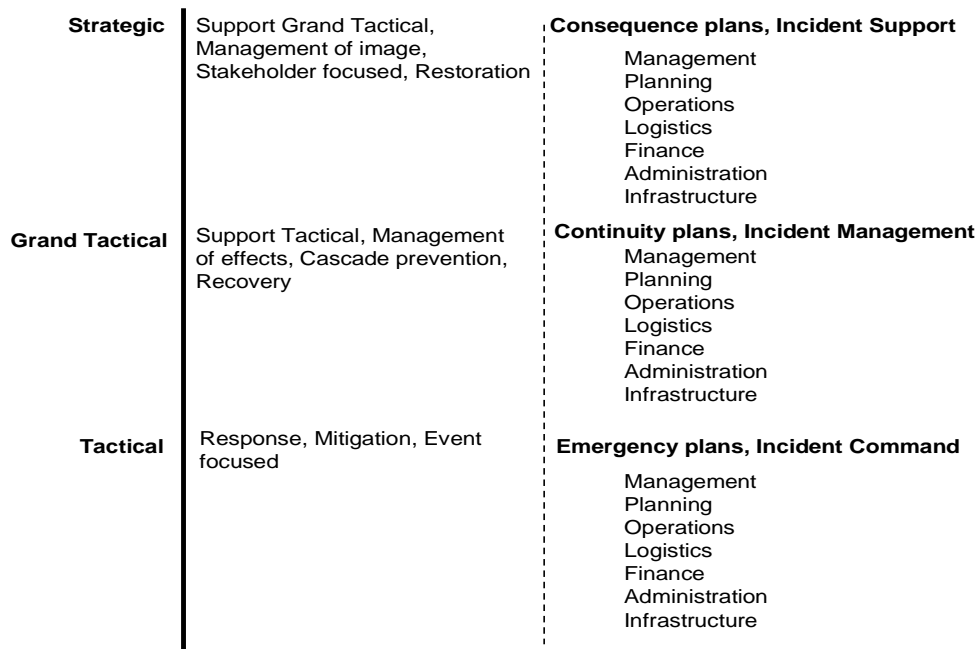


Figure 11

Phased Development and Integration

With any large scale project, such as the integration of vendor business continuity criteria into the procurement process, attempting to implement on a grand scale can lead to chaotic results. A phased approach to implementation and integration would generally consist of five phases:

- ❑ **Phase 1:** Assessment & Vendor Continuity Questionnaire – deliverable: letter report with executive summary that will include discussion and recommendations based on the results of the review of Essential Elements of Analysis (Report).
- ❑ **Phase 2:** Procurement Integration (vertical/horizontal) – deliverables: Procurement Management System Vendor Business Continuity Management Program and Plan Integration Criteria Guide (Tools) and Procurement Management System Vendor Business Continuity Management Program and Plan Integration Criteria Guide training program materials (Knowledge Transfer).
- ❑ **Phase 3:** Monitoring & Enforcement – deliverable: Procurement Management System Vendor Business Continuity Management Program and Continuity Plan Integration Criteria Guide maintenance criteria (Sustainability).
- ❑ **Phase 4:** Sustainability – deliverable: periodic metrics, event response reports.
- ❑ **Phase 5:** Maturity Model Evaluation – deliverable: metrics for maintaining the process, change management procedures.

Conclusion

Assuring supplier continuity capabilities are of paramount concern today. Realizing that most business processes today extend beyond the boundaries of a single entity, awareness of critical supply chain interdependencies has risen sharply. Simply having profiles of potential high risk suppliers, while extremely important, is by itself not enough. Developing capabilities to assess and monitor vendors to facilitate the active analysis process, providing predictive metrics to supplement the initial assessment process performed during the early stages of the procurement process. Active Analysis is a process that utilizes predictive metrics to identify potential problems before they occur.

Today business leaders have the responsibility to protect their organizations by facilitating continuity planning and preparedness efforts. Using their status as "leaders," senior management and board members can and must deliver the message that survivability depends on being able to find the opportunity within the crisis.

Many people feel that the world has changed as a result of the events that took place on September 11, 2001; that we need to rethink our concepts of continuity and crisis management. Today we cannot merely think about the plannable or plan for the unthinkable, but we must learn to think about the unplannable.

Market research indicates that only a small portion (5%) of businesses today have a viable plan, but virtually 100% now realize they are at risk. Seizing the initiative and getting involved in all the phases of crisis management can mitigate or prevent major losses. Just being able to identify the legal pitfalls for the organization of conducting a crisis management audit: can have positive results.

About the Author

Geary W. Sikich is the author of "*It Can't Happen Here: All Hazards Crisis Management Planning*" (Tulsa, Oklahoma: PennWell Books, 1993). His second book, "*Emergency Management Planning Handbook*" (New York: McGraw-Hill, 1995) is available in English and Spanish-language versions. His third book, "*Integrated Business Continuity: Maintaining Resilience in Uncertain Times*," (PennWell 2003) is available on www.Amazon.com. Mr. Sikich is the founder and a principal with Logical Management Systems, Corp. (www.logicalmanagement.com), based in Munster, IN. He has extensive experience in management consulting in a variety of fields. Sikich consults on a regular basis with companies worldwide on business-continuity and crisis management issues. He has a Bachelor of Science degree in criminology from Indiana State University and Master of Education in counseling and guidance from the University of Texas, El Paso.

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