The Business Impact Assessment Process and the Importance of Using Business Process Mapping

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Introduction

Without question, business continuity planning (BCP) is a business process issue, not a technical one. In fact, business continuity planning is a business process in itself. We understand that each time-critical business process and support component of the enterprise must play a part during the development, implementation, testing, and maintenance of the BCP process, and it is the results of the business impact assessment (BIA) that will be used to make a case for further action. With these thoughts in mind, the objective of this chapter is to discuss the BIA and the importance of identifying enterprise business processes and standardizing a business process naming convention to facilitate an efficient BIA process.

Not Just Information Technology Focused

In the past, business continuity planning has often been thought of as focusing simply on the recovery of computer systems, often referred to as disaster recovery planning. Evolving experience in the field of continuity planning has led us to understand that recovery of only information technology (IT) does not promise the survival of an organizational following a serious disruption or disaster. Indeed, speedy recovery of an IT function is useful only if the organizational business units themselves are able to continue to operate, even at reduced efficiencies. That is, they must be in a position to communicate with customers or clients, business partners, vendors, and the like; to receive and enter orders; to produce and deliver goods and services; and to collect and book revenue. The most efficient approach toward ensuring enterprise continuity is to anticipate and prepare continuity plans that not only include the IT infrastructure but also begin with and focus attention on the organization's time-critical business processes and the resources that support those processes.

The Importance of the Business Impact Assessment

While attempting to prepare to recover every enterprise mission-critical business process within the first few minutes or hours following a major disruption or disaster may appear to be a practical or reasonable approach to continuity planning, it quickly becomes apparent to those involved in the planning process that recovering everything quickly is simply impossible. Even if it were possible, the cost of acquiring hot backup resources to support every mission-critical process is simply an unacceptable one. This is where the BIA process plays a pivotal role. The purpose of the BIA has traditionally been twofold. This first is to provide a basis upon which to prioritize mission-critical processes, yes, but more importantly it is to prioritize a hierarchy of mission critical processes that are time critical**.** It can truly be said that, although all time-critical processes are mission critical, not all mission-critical processes are time critical.

Executive Management Support

Gaining executive management support is where to begin. This support must be clearly articulated to the organization and is critical to the success of the continuity planning infrastructure. The folks responsible for the project must have the authority and resources to undertake such a project. The ability to reach consensus with the varied organizational interests also hinges on the presence of a strong executive sponsorship.

How does the planner obtain and keep this commitment?
One of the most effective ways to gain and maintain management support is to help educate management as to the risks of not having a continuity planning process in place. If executive management does not understand the impacts that an interruption would have upon time-critical business processes, if is sometimes difficult to attract the attention and support needed to undertake continuity planning. Some suggested steps in obtaining executive management support include:

- Conducting appropriate research to understand:
  Both the mission- and time-critical business processes of the organization
  Management's strategic and tactical initiatives and vision
  The competitive environment in which the organization operates
  The people issues associated with developing a continuity planning process
- Performing a preliminary high-level risk analysis focused on availability vulnerabilities
- Identifying any relevant regulatory or legal requirements
- Building the business case for the continuity planning projects that will ensue
- Obtaining commitment for all the next step activities that will lead to a fully implemented continuity planning infrastructure

Conducting Appropriate Research

The initial step in any continuity planning project undertaking is for the planner to gain a clear idea of the organization's uniqueness, culture, competitive position, and business processes. One challenge plaguing continuity planning industry professionals over the years has been the tendency to be myopic in their view of the individual components of a company. This view has often led planners down a technical course of action that mistakenly focuses attention away from the larger business issues facing the company. The continuity planning business process itself involves more than just continuity of the technical IT and communications infrastructures of the company and therefore requires a broader vision and approach to preparing executive management for what should truly become an enterprise-wide continuity planning process.

Understanding Management's Vision

Aside from understanding the fundamental processes that the enterprise relies upon to conduct its affairs, the planner must also have a clear understanding of executive management's visions for the organization.

What are the strategic and tactical visions, mission, and guiding principles that management is fostering and focusing resources on?
By understanding management's mission, the planner can derive the critical success factors they are striving to achieve. Understanding critical success factors can help the planner appreciate the strategies, tactics, and metrics management is using to achieve and measure success. This information is extremely valuable as it allows customization of the continuity planning processes to dovetail with and support the overall strategies and tactics management is using to achieve success. Matching continuity planning initiatives with enterprise business strategies, as measured by management's own critical success factors, is probably the single best way to ensure that executive management support is obtained. The planner can use this knowledge to identify opportunities for quick-hit continuity planning activities that will be most beneficial to the organization in the short term, while also mapping a longer term approach to designing a continuity planning solution suited to the company.

Where would the planner obtain this type of information?
Clearly, interviews or discussions with executive management representatives would be a good starting point. Additionally, annual reports, strategic and tactical planning documents, and industry reports that depict the current state of the industry and project future state predictions, as well as the business process maps obtained or developed previously, would all be of vital assistance in understanding management vision.

Understand the Competitive Environment

To understand the strengths and weaknesses of the organization, the planner should have an understanding as to how it compares with the marketplace or competitive environment. Internal sources of competitive marketplace information include information that has probably already been collected by the marketing, research and development, and investment departments, for example. External sources of competitive information include *Standard and Poor's Industry Surveys*, and *Hoover's Online* has information on 14,000 public and private U.S. and non-U.S. companies, which would include competitors. There are many others, of course, including professional, industry, or trade organizations. Competitive information is available and can be had with little effort. The planner who can demonstrate an understanding of the competitive environment has already gone a long way toward helping ensure executive management attention and response when resources are needed for continuity planning purposes.

Understand the People Issues

In today's rapidly shifting business and uncertain political environments, organizations are hurrying to stay abreast of rapidly changing technology, business, and political realities. Unfortunately, many organizations focus tremendous amounts of resources and time on analysis and refinement of technology-related issues, for example, but give little attention to how best to implement or deploy the resulting strategies from a people perspective. The continuity plans may be ready for the enterprise, but is the enterprise ready for the continuity plan?

What should the planner do to ensure that the organization is ready for the continuity planning process?
The planner must understand that the company's culture and people play a significant role in the overall success of any project implementation, including continuity planning. In the past, many well-conceived

and well-designed continuity planning process components have fallen short or have cost much more than anticipated because of a lack of appreciation for the people issues, and successful continuity planning is almost entirely people centric; that is, people must take the initiative in the first place to actually perform and develop continuity plans and arrange for the technologies and processes that must be in place to allow the continuity processes to work. Although a continuity planning process certainly has its technical components, it is the people who initiate and facilitate development and implementation of the processes and technologies that must be put into place, and it is the people who have to test, maintain, and measure the performance. Should a disaster or disruption occur, it is the people who will have to execute the recovery effort. When managers do not consider the organization's culture and people impacts, projects fail. The planner must consider the organizational change management issues associated with implementing an appropriately designed continuity planning infrastructure by involving company personnel at an early stage, by setting appropriate expectation levels, and by utilizing a teaming approach in order to minimize resistance to change. The planner should ensure that key stakeholders are identified and utilized from the planning phase forward, clearly articulate benefits and rewards of the process, and emphasize the "what's in it for me" payback.

Business Process Mapping

In preparation for beginning a continuity planning project, whether specifically focused on a limited number of components of the company or for enterprise-wide implementations, the planner must consider and understand the business issues facing the management group. This process begins by gaining a thorough understanding of the business processes of the organization. All organizations in the public and private sectors share similar business processes with other companies or organizations in a similar industry group. A thorough understanding of the enterprise business process allows the planner to see how megaprocesses, major processes, and major subprocesses operate and how they correlate one to another, map across the organization, and interrelate in terms of their availability requirements. The continuity planner can use business process definitions for BCP planning, implementation, training, testing, and measurement and for helping to facilitate the BIA process itself. The planner's ability to speak intelligently about the time-critical needs of precise business processes will enhance executive management communications and confidence in forthcoming recommendations.

Building the Business Case

Armed with this information, the recovery planner can then set out to build the business case for continuity planning. Although some organizations are mandated by regulations to establish a continuity planning process, most are not. The decision to put in place a continuity planning process is a business decision that is measured in terms of expected value-added contributions of the process relative to the commitment of resources required to achieve a successful outcome. As with any business plan, the objective is to identity benefits of having an appropriate continuity planning process. In most cases, the planner is faced with the appearance of having a non-profit-generating project with the goal of offsetting potential losses. Unfortunately, in the past it has been difficult for continuity planners to clearly demonstrate the value-added contribution an effective continuity planning process brings to the organization's people, processes, technology, and mission. In presenting the business case return on investment, it should be measured in more than simply financial information. Qualitative and quantitative measures can be applied to potential loss impacts associated with a disruption in time-critical business processes. Of course, determining the significance of these threats is the purpose of the business impact assessment, so only preliminary business case estimates can be done at this point, awaiting results of the BIA. Preliminary financial estimates can be developed, however, using an interactive and more subjective information gathering process. The planner can estimate a rough order of magnitude (ROM) baseline of resource commitment required to support the case for proceeding with the next phases of the methodology that initially begins with the BIA.

The BCP Process Development

The BIA is the key to a successful BCP implementation, and understanding and standardizing enterprise business process names is critical to the success of the BIA. By way of background, let's focus on where the BIA fits into the BCP development process. Following is a relatively generic methodology that is commonly used for the development of business unit continuity plans, crisis management plans, and technological platforms and communications network continuity plans.

- *Phase I. BCP Project Scoping and Initiation* — This phase determines the scope of the BCP project and develops the project plan. It examines business operations and information system support services to form a project plan to direct subsequent phases. Project planning must define the precise scope, organization, timing, staffing, and other issues. This enables articulation of project status and requirements throughout the organization, chiefly to those departments and personnel who will be playing the most meaningful roles during the development of the BCP.
- *Phase II. Business Impact and Risk Assessment* — This phase involves identification of time-critical business processes and determines the impact of a significant interruption or disaster. These impacts may be financial, in terms of dollar loss, or operational in nature, such as the ability to deliver and monitor quality customer service.
- *Phase III. Developing Continuity Strategies* — The information collected in phase II is employed to approximate the resources (*e.g.,* business unit or departmental space and resource requirements, technological platform services, communications networks requirements) necessary to support time-critical business processes and subprocesses. During this phase, an appraisal of recovery alternatives and associated cost estimates are prepared and presented to management.
- *Phase IV. Continuity Plan Development* — This phase develops the actual plans (*e.g.,* business unit, crisis management, technology-based plans). Explicit documentation is required for execution of an effective continuity process. The plan must include administrative inventory information and detailed continuity team action plans, among other information.
- *Phase V. Implement, Test, and Maintain the BCP* — This phase establishes a rigorous, ongoing testing and maintenance management program.
- *Phase VI. Implement Awareness and Process Measurement* — The final and probably the most crucial long-term phase establishes a framework for measuring the continuity planning processes against the value they provide the organization. In addition, this phase includes training of personnel in the execution of specific continuity activities and tasks. It is vital that they be aware of their role as members of continuity teams.

The BIA Process

As mentioned earlier, the intent of the BIA process is to help the organization's management appreciate the magnitude of the operational and financial impacts associated with a disaster or serious disruption. When they understand, management can use this knowledge to calculate the recovery time objective for time-critical support services and resources. For most organizations, these support resources include:

- Facilities
- IT infrastructure (including voice and data communications networks)
- Hardware and software
- Vital records
- Data
- Business partners

The connection is made when each of the time-critical business processes is mapped to the above supporting resources. Every place a time-critical process touches a supporting resource, that resource is a candidate for some level of BCP effort; therefore, the value of a thorough understanding of the company's business processes cannot be overemphasized.

Start with Business Process Maps

What do we mean when we talk about business process maps? All public and private sector organizations share similar business processes with other companies or organizations in a similar industry group. These business processes can be studied and mapped for the enterprise. The BCP project team can then utilize the business process maps to analyze how mega processes, major process, and major subprocesses operate and interrelate with one another's availability requirements. The continuity planner can use these maps for planning, implementation, training, testing, and measurement. The planner can use the process maps to view the entire organization from the top down and then is able to drill down to identify specific time-critical processes and their supporting resources, to determine single points of failure, and to visualize how the continuity planning process should be constructed to best fit the circumstances. Business process maps help the planner to visualize how the company or organization conducts business; they are essentially a roadmap to the business. They provide a common naming convention for business processes as they interrelate and cross the organizational structure depicted in the company's organization charts. By obtaining or developing process maps, the planner has taken a huge step forward in understanding the true business processes of the enterprise that will be helpful during discussions with executive management regarding continuity planning requirements and investments. As mentioned earlier, the continuity planner's ability to speak intelligently about the time-critical needs of precise business processes will enhance executive management communications and their confidence in forthcoming recommendations.

Business Process Mapping: How To

Caveat: It should be noted from the beginning that business process mapping can and is done differently depending on the mapping purposes. No standard methodology for mapping exists, as many components of the enterprise need to look at the organization differently, thus leaving them to best define their own leading practices for business process mapping. The mapping methods described here have been proven to work best when applied to conducting a BCP business impact assessment. Figure 39.1 is a generic representation of a typical mega business process map that can be used by the planner to standardize business processes among and within individual business units of the enterprise.

Business Process Mapping for the BIA

It is important to limit the population of business processes identified to a workable number. Identification methods should be customized so mega business processes, major business processes, and sub-business processes number anywhere from eight to twelve each. The purpose of breaking up huge business processes into workable and understandable bundles supports efficiency in mapping each across the enterprise. One business process that describes the entire enterprise is not enough, but documenting hundreds of business processes is too many. For purposes of discussion, Figure 39.1 illustrates a typical mega process map. The executive, research and development, sales and marketing, procurement, production, distribution, finance, and accounting mega business processes (notice eight mega processes) is a great starting point. By limiting the number of mega processes, the planner has ensured a workable number of business processes that then can be broken down into another eight to twelve major business processes. And, likewise, each of the major business processes that make up each mega process will have eight to twelve subprocesses. Notice that, although the facilities, IT, and compliance business processes are included in the illustration above, these types of business processes are normally classified as supporting processes required by each of the primary mega processes as support resources and are not considered, in and of themselves, true mega or major business processes.

Business Process Breakdown

Figure 39.2 illustrates a typical detailed map that results as the continuity planners identify each individual business process and then break that process down into its constituent parts. This type of map will be replicated many times across a sizeable enterprise but is extremely valuable for continuity planners when attempting to identify and the prioritize time-critical business processes.

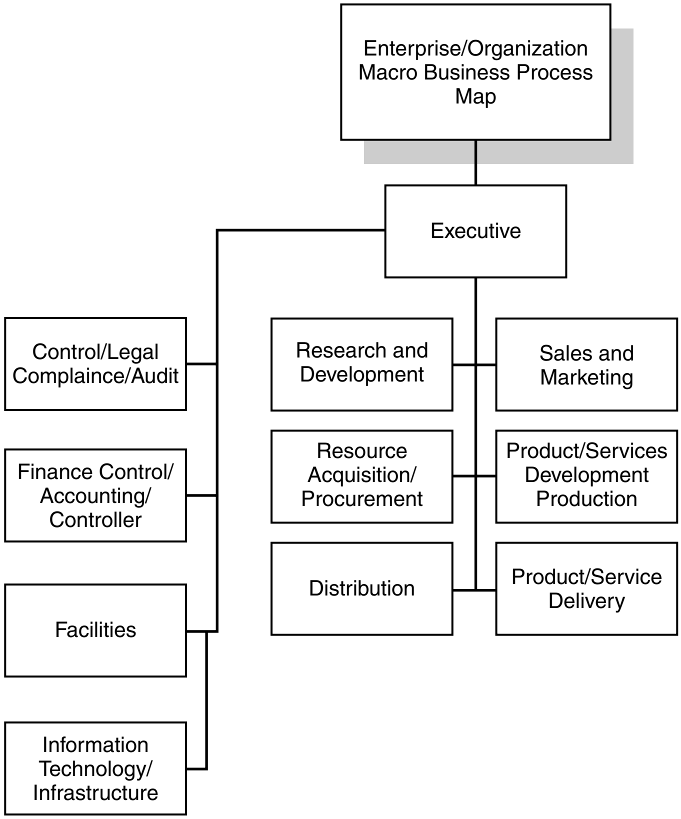

FIGURE 39.1 Typical mega business process map.

Conducting the BIA

When actually explaining the intent of the BIA to those being interviewed, the following approaches should be observed and topics discussed with the participants:

- *Ask intelligent questions of knowledgeable people.* These questions are based loosely on the concept that, if you ask enough reasonably intelligent people a consistent set of measurable questions, then you will eventually reach a conclusion that is more or less the correct one — very qualitative, in other words. The BIA questions serve to elicit qualitative results from a number of knowledgeable people. The precise number of people interviewed obviously depends on the scope of the BCP activity and the size of the organization; however, when consistently directing a well-developed number of questions to an informed audience, the results will reflect a high degree of reliability.
- *Ask to be directed to the correct people.* As the interview unfolds, it may become evident that the interviewee is the wrong person to be answering the questions. Ask who else within this area would be better suited to address these issues. They might be invited into the room at that point, or it may be necessary to schedule a meeting with them at another time.
- *Assure them that their contribution is valuable.* A very important way to build the esteem of interviewees is to mention that their input to the process is considered valuable, as it will be used to formulate strategies necessary to recover the organization following a disruption or disaster. Explaining that the purpose of the interview is to obtain their business unit's relevant information for input to planning a continuity strategy can sometimes change the tone of the interview positively.

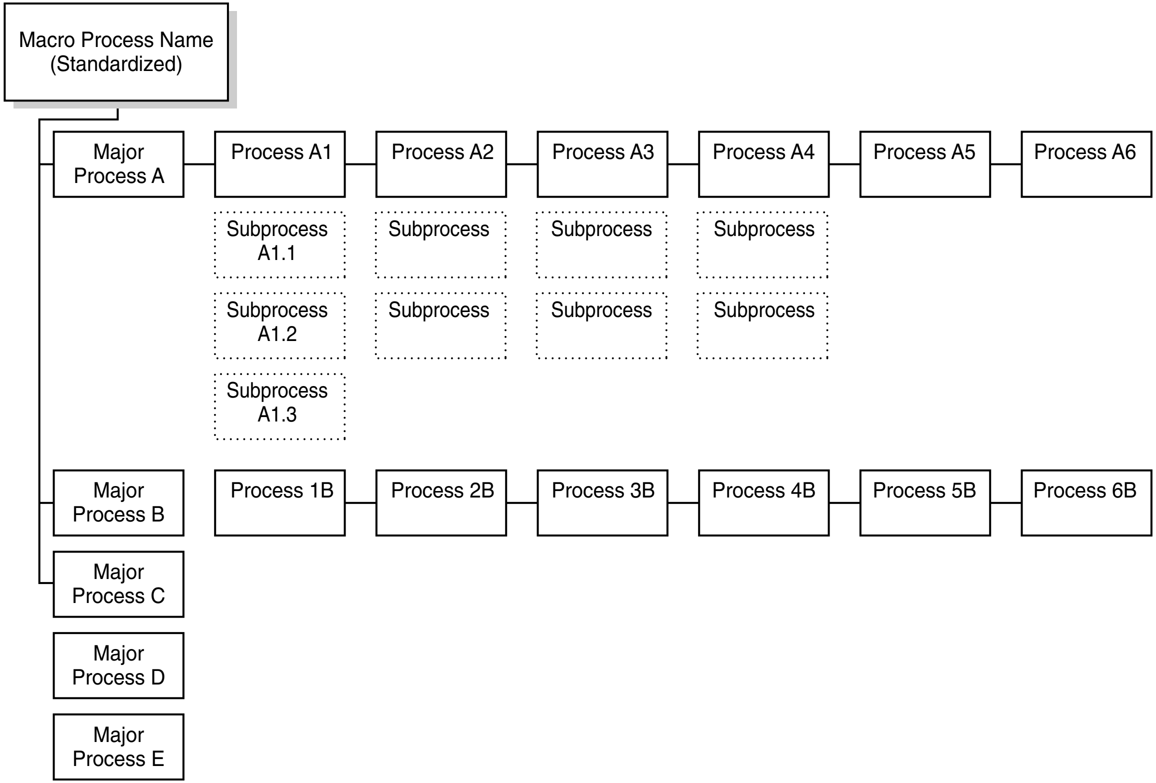

FIGURE 39.2 Typical detailed map.

- *Explain that the plan is not strictly an IT plan*. Even if the purpose of the BIA is for IT continuity, when interviewing business unit management to prepare a technological platform recovery plan, it is sometimes useful to couch the discussion in terms of: "A good IT continuity plan, although helping IT to recover, is really a business unit plan." Why? Because the IT plan will recover the business functionality of the interviewee's business unit as well, and that is the purpose of the interview.
- *Focus on who will really be exercising the plan*. Another technique is to mention that the continuity plan that will eventually be developed can be used by the interviewees but is not necessarily developed for them. Why? Because the people being interviewed probably already understand what to do following a disaster, without referring to extensive written recovery procedures, but the fact of the matter is that following the disruption these people may not be available. It may well be the responsibility of the next generation of management to recover, and it will be the issues identified by this interviewee that will serve as the continuity route map.
- *Focus on time-critical business processes and support resources*. As the BIA interview progresses, it is important to fall back from time to time to reinforce the idea that identifying time-critical functions and processes is the purpose of the interview. Remember to differentiate "mission critical" from "time critical."
- *Assume worst-case disaster*. When faced with the question "When will the disruption occur?" the answer should be "It will occur at the worst possible time for your business unit. If you close your books on December 31, and you need the computer system the most on December 30 and 31, then the disaster will occur on December 29." Only when measuring the impacts of a disruption at the worst time can the interviewer get an idea as to the full impact of the disaster, which allows the impact information to be more meaningfully compared from one business unit to the next.
- *Assume that no continuity capability exists*. To obtain results that are comparable, it is essential that interviewees assume that no continuity capability will exist when they answer the impact questions. The reason for this is that, when they attempt to quantify or qualify the impact potential, they may confuse a preexisting continuity plan or capability with no impact, and that is incorrect. No matter the existing continuity capability, the impact of a loss of services must be measured in raw terms so when the results of the interviews from business unit to business unit are compared, the results are comparable (apples to apples, if you will).
- *Gather order of magnitude numbers and estimates*. Financial impact information is needed in orders of magnitude estimates only. Do not get bogged down in minutia, as it is easy to get lost in the detail. The BIA process is not a quantitative risk assessment! It is not meant to be. It is qualitative in nature, and, as such, orders of magnitude impacts are completely appropriate and even desirable. Why? Because preciseness in estimation of the loss impact almost always will result in arguments about the numbers. When this occurs, the true goal of the BIA is lost, because it turns the discussion into a numbers game, not a balanced discussion concerning financial and operational impact potentials. Because of the unlimited and unknown numbers of varieties of disasters that could possibly befall an organization, the true numbers can never ever be precisely known, at least until after the disaster. The financial impact numbers are merely estimates intended to illustrate degrees of impacts. So, skip the numbers exercise and get to the point.
- *Stay focused on the BCP scope*. Whether the BIA process is for development of technological platforms, end-user facilities continuity, voice network, etc., it is very important not to allow scope creep in the minds of the interviewees. The discussion can become very unwieldy if the focus of the loss impact discussions wanders from the precise scope of the BCP project.
- *Remember that there are no incorrect answers*. Because all the results will be compared with one another before the BIA report is forwarded, it is important to emphasize that interviewees should not worry about wrong numbers. As the BIA process evolves, each business unit's financial and operational impacts will be compared with the others, and any impact estimates that are out of line with the rest will be challenged and adjusted accordingly.

- *Do not insist upon getting the financial information on the spot*. Sometimes the compilation of financial loss impact information requires a little time to accomplish. The author often tells interviewees that we will return within a few days to collect the information, so additional care can be taken in preparation, making sure that we do actually return and pick up the information later.
- *Understand the value of push back*. Do not underestimate the value of push back when conducting BIA interviews. Industry experience has taught us that anywhere from one third to one half of an organization's business processes turn out to be time critical. Business process personnel will, most times, tend to view their activities as extremely time critical, with little or no downtime acceptable. In reality, their operations will be arranged in some priority order with the other business processes of the organization for recovery priority. Realistic recovery time objectives (RTOs) must be reached, and sometimes the interviewer must push back and challenge what may be considered unrealistic recovery requirements. Be realistic in challenging, and request that the interviewee be realistic in estimating their business unit's RTOs. Common ground will eventually be found that will be more meaningful to those who will read the BIA findings and recommendations — the executive management group.

BIA Information-Gathering Techniques

Various schools of thought exist with regard to gathering BIA information. Conducting individual one-on-one BIA interviews is popular, but organizational size and location issues sometimes make conducting one-on-one interviews impossible. Other popular techniques include group sessions or the use of an electronic medium (*i.e.*, data or voice network), or a combination of all of these. The following points highlight the pros and cons of these interviewing techniques:

- *One-on-one BIA interviews* — One-on-one interviews with organizational representatives are the most effective way to gather BIA information. The advantages of this method are the ability to discuss the issues face to face and observe the person. This one-on-one discussion will give the interviewer a great deal of both verbal and visual information concerning the topic at hand. In addition, personal rapport can be built between the interviewee and the BIA team, with the potential for additional assistance and support to follow. This rapport can be very beneficial during later stages of the BCP development effort if those being interviewed understand that the BCP process was undertaken to help them get their jobs done in times of emergency or disaster. The disadvantages of this approach are that it can become very time consuming, and can add time to the critical path of the BIA process.
- *Group BIA interview sessions or exercises* — This type of information gathering activity can be very efficient in ensuring that a lot of data is gathered in a short period of time and can speed the BIA process tremendously. The drawback to this approach is that, if not conducted properly, it can result in a meeting of a number of people without very much useful information being obtained.
- *Executive management mandate* — Although not always recommended, in certain circumstances conducting only selected interviews with very high-level executive management will suffice for BIA purposes. Such situations might include development of continuous operations and strategies where extremely short recovery timeframes are already obvious or where time for development of appropriate strategies for recovery is severely shortened. The level of confidence is not as high in comparison to performing many more exhaustive sets of interviews (at various levels of the organization, not just with the executive management group), but it does speed up the process.
- *Electronic medium* — Use of voice and data communications technologies, video conferencing, and Web-based technologies and media are becoming increasingly accepted and popular. Many times, the physical or geographical size and diversity as well as the structural complexity of the organization lend itself to this type of information gathering technique. The pros are that distances

can be diminished and travel expenses reduced. The use of automated questionnaires and other data gathering methods can facilitate the capture of tabular data and ease consolidation of this information. Less attractive, however, is the fact that this type of communication lacks the human touch and sometimes ignores the importance of the ability of the interviewer to read the verbal and visual communications of the interviewee. *Note:* Especially worrisome is the universal broadcast of BIA-related questionnaires. Uninformed groups of users on a network may supply answers to qualitative and quantitative BIA questions without regard to the point or nuance of the question or the intent of the use of the result. Such practices almost always lend themselves to misleading and downright wrong results. This type of unsupported data gathering technique for purposes of formulating a thoughtful strategy for recovery should be avoided.

Most likely, an organization will need to use a mix of these suggested methods or use others as suited to the situation and culture of the enterprise.

The Use of BIA Questionnaires

Without question, the people-to-people contact of the BIA process is the most important component in understanding the potential impact a disaster will have on an organization. People run the organization, and people can best describe business functionality and their business units' degree of reliance on support services. The issue here, however, is deciding what is the best and most practical technique for gathering information from these people. There are differing schools of thought regarding the use of questionnaires during the BIA process. The author's opinion is that a well-crafted and customized BIA questionnaire will provide the structure necessary to guide the BIA and project teams. This consistent interview structure requires that the same questions be asked of each BIA interviewee. Reliance can then be placed on the results because answers to questions can be compared to one another with assurance that the comparisons are based on the same criterion. Although the questionnaire can be a valuable tool, the structure of the questions is subject to a great deal of customization. This customization of the questions depends largely on the reason why the BIA is being conducted in the first place.

The BIA process can be approached differently depending on the needs of the organization. Each BIA situation should be evaluated in order to properly design the scope and approach of the BIA process. BIAs may be desired for several reasons, including:

- Initiating a BCP process where no BIA has been done before, as part of the phased implementation methodology
- Reinitiating a BCP process where a BIA was performed in the past but now must be brought up to date
- Conducting a BIA in order to incorporate the impacts of a loss of E-commerce-related supply-chain technologies into the overall continuity strategies of the organization
- Conducting a BIA in order to justify BCP activities that have already been undertaken (*e.g.*, acquisition of a hot site or other recovery alternative)
- Simply updating the results of a previous BIA effort to identify changes in the environment and as a basis to plan additional activities
- Initiating a BIA as a prelude to beginning a full BCP process for understanding or as a vehicle to sell management on the need to develop a BCP

Customizing the BIA Questionnaire

A questionnaire can be constructed or customized to serve as an efficient tool for accurately gathering BIA information. The number of BIA questionnaires in use by organizations is nearly unlimited. It should go without saying that any questionnaire, BIA or otherwise, can be constructed so as to elicit the response one would like. It is important that the goal of the BIA be in the mind of the questionnaire developers so the questions asked and the responses collected will meet the objective of the BIA process.

TABLE 39-1 Sample BIA Questionnaire

Introduction

Business unit name:

Date of interview:

Contact name(s):

Identify business process or business unit (BU) function:

Briefly describe the overall business functions of the BU (with a focus on time-critical functions/processes), link each time-critical function or process to the IT application or network, and describe the interrelationships of the business processes and applications or networks:

Financial Impacts

Estimate impact of lost revenue (*e.g.*, revenue or sales loss, lost trade discounts, interest paid on borrowed money, interest lost on float, penalties for late payment to vendors or lost discounts, contractual fines or penalties, unavailability of funds, canceled orders due to late delivery):

Estimate impact of extraordinary expenses (*e.g.*, acquisition of outside services, temporary employees, emergency purchases, rental/lease equipment, wages paid to idle staff, temporary relocation of employees):

Operational Impacts

Estimate impact of business interruption (*e.g.*, loss of customer service capabilities, inability to serve internal customers/ management):

Estimate loss of confidence (*e.g.*, by customers, shareholders, regulatory agencies, employees):

Technological Dependence

Describe reliance on systems, business functions, and applications (attempt to identify specific automated systems, processes, and applications that support BU operations):

Describe system interdependencies:

Describe state of existing BCP measures:

Other BIA Related Discussion Issues

"What else should I have asked you that I did not, relative to this process?"

Other questions should be customized to the environment of the organization, as needed.

BIA Questionnaire Construction

Table 39.1 is an example of a BIA questionnaire. Basically, the BIA questionnaire is made up of the following types of questions:

- *Quantitative questions* — These questions ask the interviewee to consider and describe the economic or financial impacts of a potential disruption. Measured in monetary terms, an estimation of these impacts will aid the organization in understanding loss potential, in terms of lost income as well as an increase in extraordinary expense. The typical qualitative impact categories might include revenue or sales loss, lost trade discounts, interest paid on borrowed money, interest lost on float, penalties for late payment to vendors or lost discounts, contractual fines or penalties, unavailability of funds, or canceled orders due to late delivery. Extraordinary expense categories might include acquisition of outside services, temporary employees, emergency purchases, rental/ lease equipment, wages paid to idle staff, and temporary relocation of employees.
- *Qualitative questions* — Although the economic impacts can be stated in terms of dollar loss, the qualitative questions ask the participants to estimate potential loss impact in terms of their emotional understanding or feelings. It is surprising how often the qualitative measurements are used to put forth a convincing argument for a shorter recovery window. The typical qualitative impact categories might include loss of customer services capability or loss of confidence.
- *Specialized questions* — Make sure that the questionnaire is customized to the organization. It is especially important to make sure that both the economic and operational impact categories (*e.g.*, lost sales, interest paid on borrowed funds, business interruption, customer inconvenience) are stated in such a way that each interviewee will understand the intent of the measurement. Simple is better here.

Using an automated tool? If an automated tool is being used to collect and correlate the BIA interview information, then make sure that the questions in the database and questions of the questionnaire are synchronized to avoid duplication of effort or going back to interviewees with questions that could have been handled initially.

A word of warning here, however. The author has seen people pick up a BIA questionnaire off the Internet or from a book or periodical (like this one) and use it without regard for the culture and practices of their own organizations. Never, ever use a noncustomized BIA questionnaire. The qualitative and quantitative questions must be structured to the environment and style of the organization. A real opportunity for failure arises if this point is dismissed.

A recent trend in BCP development, by the way, is that organizations seem to be moving away from prepackaged specialized software to the use of a combination of internal technologies that enterprise personnel already know and understand. This cuts down on the training curve and takes a little of the mystery out of the process, in addition to cutting down on front-end purchase and maintenance costs, not to mention technical support from another vendor, etc.

BIA Interview Logistics and Coordination

This portion of the report will address the logistics and coordination of performing BIA interviews. Having scoped the BIA process, the next step is to determine who and how many people will be interviewed. The following are some techniques that might be used to do so:

- *Methods for identifying appropriate BIA interviewees* — Interviewing everyone in the enterprise is obviously out of the question. A sample of those management and staff personnel who will provide the best information in the shortest period should be chosen. To do that, it is necessary to have a precise feel for the scope of the project (*e.g.*, technological platform continuity, business unit continuity, communications continuity, crisis management plans).
- *Organizational process models* — As was mentioned previously, identification of organizational mega and major business processes is the first place to start. Enterprises that are organized along process lines lend themselves to development of continuity planning strategies that will eventually result in the most efficient continuity infrastructure. Use of or development of models that reflect organizational processes will go a long way toward assisting BIA team members in identifying those personnel crucial to determining time-critical process requirements.
- *Organizational chart reviews* — The use of formal, or sometimes even informal organization charts is a good place to start. This method includes examining the organizational chart of the enterprise to understand those functional positions that should be included. Review the organizational chart to determine which organizational structures will be directly involved in the overall effort and those that will be the recipients of the benefits of the finished continuity plan.
- *Overlaying systems technology* — Overlaying systems technology (*e.g.*, applications, networks) configuration information over the organization chart will reveal components of the organization that may be affected by an outage of the systems. Mapping applications, systems, and networks to the organization's business functions will aid tremendously when attempting to identify the appropriate names and numbers of people to interview.
- *Executive management interviews* — This method includes conducting introductory interviews with selected executive management representatives to identify critical personnel to be included in the BIA interview process as well as to receive high-level guidance and to raise overall executive level management awareness and support.
- *Coordination with the IT organization* — If the scope of the BIA process is continuity of technological platforms or communications systems, then conducting interviews with a number of IT personnel could help shorten the data gathering effort. Although IT users will certainly need to be interviewed, IT personnel can often provide much valuable information but should not be relied on solely as the primary source of business impact outage information (*e.g.*, revenue loss, extra expense).

- *Sending questionnaire out in advance* — It can be useful to distribute the questionnaire to the interviewees in advance. Whether it is a hardcopy or in an electronic media format, the person being interviewed should have a chance to review the questions, to be able to invite others into the interview or redirect the interview to others, and to begin to develop the responses. Emphasize to the people who receive the questionnaires in advance not to fill them out but simply review them as a way to be prepared to address the questions later.
- *Scheduling interviews* — Ideally, the BIA interview should last from 45 minutes to 1 hour and 15 minutes. The author has found that it sometimes can be advantageous to go longer than this, but if many of the interviews are lasting longer than 1 hour and 15 minutes, then perhaps a BIA scoping issue should be addressed, necessitating the need to schedule and conduct a larger number of additional interviews.
- *Limiting number of interviewees* — It is important to limit the number of interviewees in the session to one, two, or three, but no more. Given the amount and quality of information to be elicited from this group, more than three people can deliver a tremendous amount of good information that unfortunately can be missed when too many people are delivering the message at the same time.
- *Scheduling two interviewers* — When setting up the BIA interview schedule, try to ensure that at least two interviewers can attend and take notes. This will help eliminate the possibility that good information may be missed. Every additional trip back to an interviewee for confirmation of details will add overhead to the process.
- *Validating financial impact thresholds* — An often-overlooked component of the process includes discussing with executive management the thresholds of pain that could be associated with a disaster. Asking the question as to whether a $5 million loss or a $50 million loss would have a significant impact on the long-term bottom line of the organization can lead to interesting results. An understanding on the part of the BIA team as to what financial impacts are acceptable or, conversely, unacceptable is crucial to framing BIA financial loss questions and the final findings and recommendations that the BIA report will reflect.

The Importance of Documenting a Formal RTO Decision

The BIA process concludes when executive management makes a formalized decision as to the RTO they are willing to live with after analyzing the impacts to the business processes due to outages of vital support services. This includes the decision to communicate these RTO decisions to each business unit and support service manager involved.

Why is it so important that a formalized decision be made?
A formalized decision must be clearly communicated by executive management because the failure to document and communicate precise RTO information leaves each manager with imprecise direction on: (1) selection of an appropriate recovery alternative method, and (2) the depth of detail that will be required when developing recovery procedures, including their scope and content. The author has seen many well-executed BIAs with excellent results wasted because executive management failed to articulate their acceptance of the results and communicate to each affected manager that the time requirements had been defined for continuity processes.

Interpreting and Documenting the Results

As the BIA interview information is gathered, considerable tabular and written information will begin to quickly accumulate. This information must be correlated and analyzed. Many issues will arise here which may result in some follow-up interviews or information gathering requirements. The focus at this point in the BIA process should be as follows:

- *Begin documentation of the results immediately.* Even as the initial BIA interviews are being scheduled and completed, it is a good idea to begin preparation of the BIA findings and recommendations and actually begin entering preliminary information. The reason is twofold. The first is that waiting until the end of the process to begin formally documenting the results makes it more difficult to recall details that should be included. Second, as the report begins to evolve, issues will be identified that require immediate additional investigation.
- *Develop individual business unit BIA summary sheets.* Another practical technique is to document each and every BIA interview with its own BIA summary sheet. This information can eventually be used directly by importing it into the BIA findings and recommendations, which can also be distributed back to each particular interviewee to authenticate the results of the interview. The BIA summary sheet contains a summation of all the verbal information that was documented during the interview. This information will be of great value later as the BIA process evolves.
- *Send early results back to interviewees for confirmation.* Returning BIA summary sheets to the interviewees can continue to build consensus for the BCP project and begin to ensure that any future misunderstandings regarding the results can be avoided. Sometimes it may be desirable to get a formal sign-off, but other times the process is simply informal.
- *Make it clear that you are not trying to surprise anyone.* The purpose for diligently pursuing the formalization of the BIA interviews and returning summary sheets to confirm the understandings from the interview process is to prevent any surprises later. This is especially important in large BCP projects where the BIA process takes a substantial amount of time. It is always possible that someone might forget what was said.
- *Define time-critical business functions/processes.* As has been emphasized in this report, all issues should focus back to the true time-critical business processes of the organization. Allowing the attention to be shifted to specific recovery scenarios too early in the BIA phase will result in confusion and lack of attention to what is really important.
- *Tabulate financial impact information.* A tremendous amount of tabular information can be generated through the BIA process. It should be boiled down to its essence and presented in such a way as to support the eventual conclusions of the BIA project team. It is easy to overdo it with numbers. Just be sure that the numbers do not overwhelm the reader and fairly represent the impacts.
- *Understand the implications of the operational impact information.* Often, the weight of evidence and the basis for the recovery alternative decision are based on operational rather than financial information. Why? Usually the financial impacts are more difficult to accurately quantify, because the precise disaster situation and the recovery circumstances are difficult to visualize. The customer service impact of a fire, for example, is readily apparent, but it would be difficult to determine with any degree of confidence what the revenue loss impact would be for a fire that affects one particular location of the organization. Because the BIA process should provide a qualitative estimate (orders of magnitude), the basis for making the hard decisions regarding acquisition of recovery resources are, in many cases, based on the operational impact estimates rather than hard financial impact information.

Preparing the Management Presentation

Presentation of the results of the BIA to concerned management should result in no surprises for them. If the BIA findings are communicated and adjusted as the process has unfolded, then the management review process should really become more of a formality in most cases. The final presentation meeting with the executive management group is not the time to surface new issues and make public startling results for the first time. To achieve the best results in the management presentation, the following suggestions are offered:

- *Draft report for review internally first*. Begin drafting the report following the initial interviews to capture fresh information. This information will be used to build the tables, graphs, and other visual demonstrations of the results, and it will be used to record the interpretations of the results in the verbiage of the final BIA findings and recommendations report. One method for developing a well-constructed BIA findings and recommendations report from the very beginning is, at the completion of each interview, to record the tabular information into the BIA database or manual filing system. Second, the verbal information should be transcribed into a BIA summary sheet for each interview. This BIA summary sheet should be completed for each interviewee and contain the highlights of the interview in summarized form. As the BIA process continues, the BIA tabular information and the transcribed verbal information can be combined into the draft BIA findings and recommendations report. The table of contents for a BIA report may look like the one in Table 39.2.
- *Schedule individual executive management meetings as necessary*. As the time for the final BIA presentation nears, it is sometimes a good idea to conduct a series of one-on-one meetings with selected executive management representatives to brief them on the results and gather their feedback for inclusion in the final deliverables. In addition, this is a good time to begin building grassroots support for the final recommendations that will come out of the BIA process; at the same time, it provides an opportunity to practice making your points and discussing the pros and cons of the recommendations.
- *Prepare executive management presentation (bullet point)*. The author's experience says that most often executive management level presentations are better prepared in a brief and focused manner. It will undoubtedly become necessary to present much of the background information used to make the decisions and recommendations, but the formal presentation should be in a bullet-point format, crisp and to the point. Of course every organization has its own culture, so be sure to understand and comply with the traditional means of making presentations within the organization's own environment. Copies of the report, which have been thoroughly reviewed, corrected, bound, and bundled for delivery, can be distributed at the beginning or the end of the presentation, depending on circumstances. In addition, copies of the bullet-point handouts can be supplied so attendees can make notes and use them for reference at a later time. Remember, the BIA process should end with a formalized agreement as to management's intentions with regard to RTOs, so business unit and support services managers can be guided accordingly. It is here that that formalized agreement should be discussed and the mechanism for acquiring and communicating it determined.
- *Distribute report*. When the management team has had an opportunity to review the contents of the BIA report and have made appropriate decisions or given other input, the final report should be distributed within the organization to the appropriate numbers of interested individuals.

TABLE 39.2 BIA Report Table of Contents

Executive Summary
Background
Current State Assessment
Threats and Vulnerabilities
Time-Critical Business Functions
Business Impacts (Operational)
Business Impacts (Financial)
Recovery Approach
Next Steps/Recommendations
Conclusion
Appendices (as needed)

Next Steps

The BIA is truly completed when formalized executive management decisions have been made regarding: (1) RTOs, (2) priorities for business process and support services continuity, and (3) recovery resource funding sources. The next step is the selection of the most effective recovery alternative. The work gets a little easier here. We know what our recovery windows are, and we understand what our recovery priorities are. We now have to investigate and select recovery alternative solutions that fit the recovery window and recovery priority expectations of the organization. When the alternatives have been agreed upon, the actual continuity plans can be developed and tested, with organization personnel organized and trained to execute the continuity plans when needed.

Final

The goal of the BIA is to assist the management group in identification of time-critical processes and to determine their degree of reliance upon support services. Business process mapping methods, like those described in this chapter, will go a long way toward making the BIA effort more efficient and will significantly enhance the credibility of the results. When they have been identified, time-critical processes should in turn be mapped to their supporting IT, voice and data networks, facilities, human resources, etc. Time-critical business processes are prioritized in terms of their RTOs, so executive management can make reasonable decisions as to the recovery costs and time frames that they are willing to fund and support. The process of business continuity planning has matured substantially since the 1980s. BCP is no longer viewed as just a technological question. A practical and cost-effective approach toward planning for disruptions or disasters begins with the business impact assessment. Only when executive management formalizes their decisions regarding continuity time frames and priorities can each business unit and support service manager formulate acceptable and efficient plans for recovery of operations in the event of disruption or disaster. It is for this reason that the BIA process is so important when developing efficient and cost-effective business continuity plans and strategies.

BIA To-Do Checklist

BIA To Do's

- Customize the BIA information gathering tools to suit the organization's customs or culture.
- Focus on time-critical business processes and support resources (*e.g.*, systems, applications, voice and date networks, facilities, people)
- Assume worst-case disaster (*e.g.*, day of week, month of year).
- Assume no recovery capability exists.
- Obtain raw numbers in orders of magnitude.
- Return for financial information.
- Validate BIA data with BIA participants.
- Formalize decisions from executive management (*e.g.*, RTO time frames, scope and depth of recovery procedures) so lower level managers can make precise plans.

Conducting BIA Interviews

- When interviewing business unit personnel, explain that you are here to get the information you need to help IT build their recover plan. Emphasize that the resulting IT recovery is really theirs, but the recovery plan is really yours. We are obtaining their input as an aid to ensuring that information services constructs the proper recovery planning strategy.
- Interviews should last no longer that 45 minutes to 1 hour and 15 minutes.

- The number of interviewees at one session should be at best one and at most two to three. More than that and the ability of the individual to take notes is questionable.
- If possible, at least two BIA representatives should be in attendance at the interview. Each should have a blank copy of the questionnaire on which to take notes.
- One person should probably not perform more than four interviews per day due to the requirement to document the results of each interview as soon as possible and because of fatigue factors.
- Never become confrontational with the interviewees. Interviewees should not be defensive when answering the questions unless they do not properly understand the purpose of the BIA interview.
- Relate to interviewees that their comments will be taken into consideration and documented with the others gathered and that they will be requested to review, at a later date, the output from the process for accuracy and provide their concurrence.