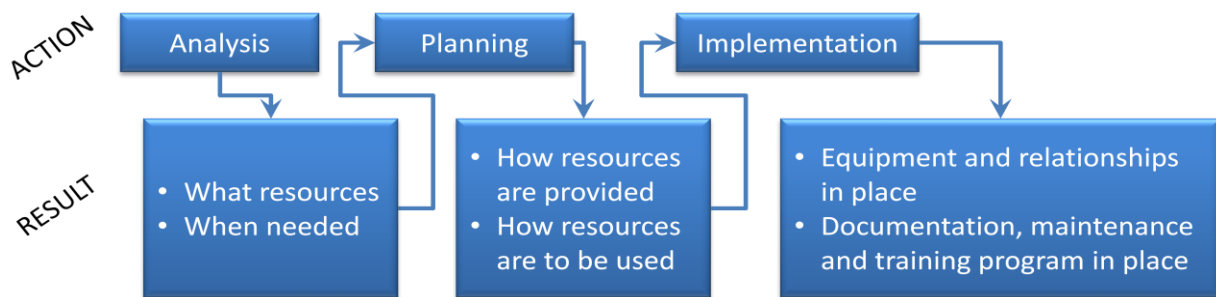


Optimal Recoverability

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Optimal recoverability is the ability to recover mission critical processes as needed post-disaster while minimizing pre-disaster resources. Achieving such optimization is more art than science, so structured but flexible methodologies that guide contingency planners are more effective than inflexible rules and strict adherence to regulations and standards, though we need to be mindful of the latter. The concepts below – not new but re-distinguished in today’s terms – may help you to choose a methodology or develop one yourself. Either way, operating with a methodology is likely to decrease costs and improve recovery preparedness.

Recovering function is about recovering resources – people, processes and tools. After *analysis* and *planning*, how much money you spend to be prepared for a disabling event depends primarily upon two things: (1) what resources you will need for recovery, and (2) how quickly you will need those resources. The *analysis*, including Business Impact Analysis, should provide the answers to both questions. *Planning* provides the details of how the resources are provided and how they are to be used. Implementation is where the big bucks are spent.



Everything done prior to implementation is in the service of ensuring maximum effectiveness for minimum implementation cost. How that objective can be achieved is the subject of this commentary.

Analysis: What Resources Will You Need and When?

Initial analysis at the enterprise level will yield how the organization works and which and when resources need to be recovered following a disaster. Probably the most common definition of “disaster” among BCP professionals is an event that forces movement of functionality to alternative location(s). In the aftermath of such an event, mission critical processes will need people, processes and tools to continue operations. Your recovery strategy should be one that postpones the need for recovery resources for as long as possible after a disaster. Your estimate of recovery resources cannot be too far over or too far under the mark. Planning for resources that are too many or too soon following the event could result in pre-disaster expenditures many times beyond what is needed. On the flip side, an estimate of recovery resources that are too few or too late could result in serious exposures for the organization.

If, for example, your analysis calls for a hundred people to be on line in the first ten minutes post-disaster and another two hundred in the first four hours, that's a whole lot more expensive than a requirement for say a tenth of that in those time frames and all three hundred within three days. However, the shorter time frame and larger numbers may be necessary in order to adequately recover critical processes. In short, the longer you can plan to delay the resource requirement post-disaster, the less the company will need to spend to be prepared to recover. So how do we get useful estimates? While such estimates are based largely upon subjective perspectives, a proper analysis can achieve consensus among Subject-Matter Experts.

This is easier said than done. Many process owners, when asked what percentage of staff would be needed in the first day following a disaster, would instinctively respond, "100 percent." The practiced contingency planner will challenge that assessment, and most process owners will reluctantly concede to a smaller percentage – but on what basis? Without a formalized approach, process owners will be forever uneasy that they haven't short-changed their process and their company with a low estimate. A formal approach to estimating Maximum Acceptable Downtimes (MAD) for a process will provide: (1) a rationale to determine an appropriate MAD; (2) a stake-in-the-ground for estimating resource needs over time following an outage; (3) a memorialization of the reasoning used by the process owner to arrive at the estimate; and (4) a justification for senior decision-makers to budget appropriately for recovery resources.

In practice today, many approaches to BIA and the analysis of recovery resource requirements do not use a formal, structured methodology that results in consensus among Subject-Matter Experts within the organization. The result is predictable. In a risk-averse environment, implementation expenses will exceed the real need. In a cost-constrained environment, the implementation will not meet recovery requirements. A conscientious analysis is best served by a formal, structured methodology.

Much of the analysis is subjective and requires a good deal of guidance. It is a misconception that a simple questionnaire or piece of software will produce valid BIA results without a knowledgeable facilitator directing the thought process and educating business process owners and executives, i.e., those accountable at time of disaster.

Furthermore, process owners and executives need to be confident that their plans will work, and they need to understand the plan and why it was set up the way it was, so that decisions during recovery are mindful of a known strategy. At some critical time, a situation will arise wherein an executive needs to decide whether or not to declare a disaster. An informed decision must consider acceptable downtimes, loss consequences, the likelihood of a quick recovery, declaration costs, and opportunity costs of re-allocating resources for the recovery effort. Involving process owners and executives in a meaningful way is more than just a matter of efficiently collecting data.

Planning: Resource Provisioning, Allocation, and Use

Once you know which recovery resources are needed and how soon they will be needed following a disaster, you'll need a strategy to provide and allocate those resources within the appropriate time-frames. For example, you may need to accommodate 50 people over the entire organization with workspace and tools in the first four hours and 100 more within the first 24 hours. Consider the chart of workspace resources to the right. You will need space with walls, equipment, networking, and power all set up for 50 people. For 100 people, you'll need all but equipment, which could be quick-shipped or moved from a company-owned depot. The chart was developed over a number of years in consultation with Facilities Managers.

Pre-Disaster Recovery Resources	Recovery Time Frame
Everything, incl. equipment	0-4 hours
Everything but equipment	4-24 hours
Space, walls, most wiring	1-3 days
Space with basic walls	3-7 days
Shell and layout plan	1-4 weeks

How you provide the space, equipment, walls and wiring is a matter of available services and existing facilities. You will need to involve the company's experts in facilities, IT, and real estate, and it may be necessary to conduct research regarding shared and dedicated space available by subscription. Use data gathered in the analysis phase to consider personnel who can work multiple shifts and the ability for people to work from home. Then, balance that against existing technical ability to accommodate people working from home.

Results of the analysis should have shown what resources are needed by which Business Units and functional work units. You'll need this to develop or engage a recovery-resource information system that will serve to allocate resources as they become available at time of disaster. Software systems often serve this requirement conveniently, especially for non-technical personnel. However, with minimal technical knowledge, a simple spreadsheet that can be sorted by facility, Business Unit, or equipment type may serve the purpose. Keep it simple.

In the end, planning needs to provide effective strategies for managing resources pre- and post-disaster – at the enterprise level and for each of the Business Units. It is usually beneficial to provide resources centrally, i.e., at the enterprise level. Doing so begets economies of scale, enhanced vendor management, and central organization and control. As a result, the enterprise Business Continuity strategy provides for the bulk of recovery resources as well as protocols for their disbursement and use. Therefore, Business Unit strategies are founded upon and tied together by the enterprise strategy. Business Unit strategies are concerned with how each Business Unit will use the resources provided. For example, given recovery workspace for 25 people in the first 4 hours and another 18 within 3 days, it is up to the Business Unit to determine who will be sent to the recovery site and what they will do upon arrival.

Implementation: Setup that has the Strategy Work

Implementation activities result in the materialization of the strategy:

- Recovery strategies are developed into actionable and documented recovery plans.
- Recovery sites are subscribed to or built out where necessary, and infrastructure is enhanced as needed.
- Maintenance procedures are established and documented.
- A training program is conceived and documented so that personnel are ready to execute the plans, operating as a fully integrated team.

Full implementation is a non-trivial effort that engages the entire planning team as well as all of those who could be involved in a recovery effort. Usually, because it depends upon the strategies chosen, a project plan is developed separately for this phase of the Business Continuity Planning effort. Most of the BC program development expense is allocated to this phase, and many of the costs are recurring. Management needs to be aware that over time the implementation phase could cost many times more than the cost of the other phases. However, the cost of implementation cannot be known until recovery strategies are chosen, so how can management plan to minimize implementation costs at project initiation?

The cost of implementation is indeed difficult to predict but can be minimized. Minimizing cost of implementation is the major factor in Optimal Recoverability. The way to minimize implementation costs is by utilizing effective analytical and planning methodologies in the hands of reliable contingency planners. Business Continuity Planners who are tempted to skimp on the first two phases may be jeopardizing cost-effective implementation – penny wise and dollar foolish. The bottom line... make sure your analysis and planning effort is in competent hands.