Business Continuity and Disaster Recovery

Week 4 – Project Initiation





Week 4: CHAPTER 3 Outline

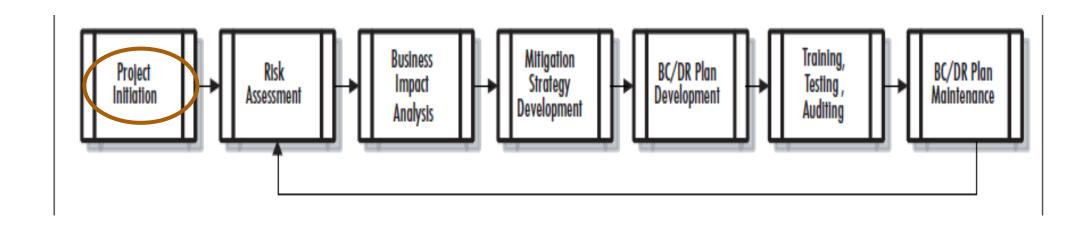
RECAP FROM WEEK 3

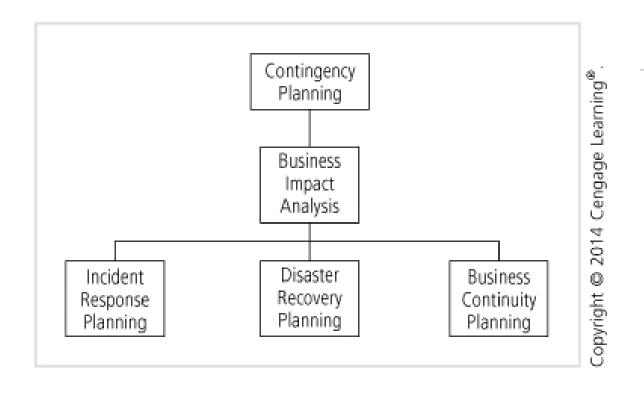
- Introduction
- Impact of Recent History
- Cyber laws in the U.S.
- Cyber laws in Malaysia
- Information Security Management
 - Required elements of a written information security plan (WISP)

WEEK 4

- Elements of project success
- Project plan components
- Key contributors and responsibilities
- Project definition
- Business continuity and disaster recovery plan

Basic Steps in BCDR Plan





Step 1: Project Initiation

Project

- defined as a set of tasks
- having a defined start and end point
- It has specific objectives, requirements, and goals

Each component (BC and DR) should be implemented as a project and should become as an on-going process.

If you're already familiar with IT project management, these steps will be familiar and should serve as a good reminder

Responsibilities **Functional Role Examples** Oversee overall "Corporate Security Posture" (Accountable to Board) Chief Executive Officer Brief board, customers, public Set security policy, procedures, program, training for Company · Respond to security breaches Chief Security Officer (investigate, mitigate, litigate) Chief Information Officer Chief Risk Officer Responsible for independent Department/Agency Head annual audit coordination Implement/audit/enforce/assess compliance Mid-Level Manager Communicate policies, program (training) · Implement policy; report security Enterprise Staff/Employees vulnerabilities and breaches

Information
Security
Governance
Responsibilities

Source: Software Engineering Institute

Elements of Project Success (1 of 8)

Executive support

User involvement

Experienced project manager

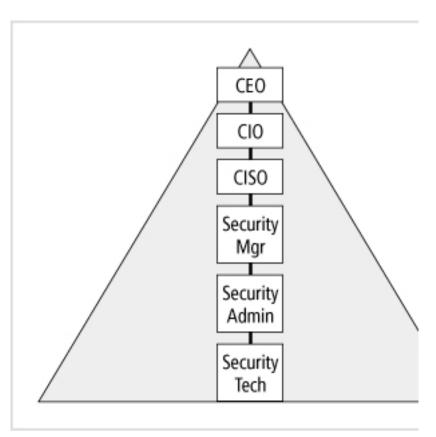
Clearly defined project objectives

Clearly defined project requirements

Clearly defined scope

Shorter schedule, multiple milestones Clearly defined project management process

Elements of Project Success (2 of 8)



Executive support

- authorization, funding, resources, staffing, politics
- In order for your plan to be successful, you must work with people from all key areas of your company.
- Question what are the common challenges in getting executive support?

Elements of Project Success (3 of 8)

User involvement

- Users who are involved in the BCDR plan project
- Users who are going to implement the plan when the disaster strikes
- Many technology projects have failed because users were not involved, and key decisions were made that were directly counter to user needs and wishes.

Experienced project manager

- An experienced project manager is likely to be more effective at working across organizational boundaries, and
- Effective in bringing together a diverse group of people and interests



Elements of Project Success (4 of 8)

Clearly defined project objectives

- Are important because your BC/DR plan must be scaled to your organization's unique needs.
- What problem are we trying to solve? Which critical information assets?
- Develop a high-level list of functional areas of your company
- Invite all key people from those areas to define the objectives
- As an IT Professional, you need to get stakeholders together to agree on objectives because you will have to prioritize

Elements of Project Success (5 of 8)

Clearly defined project requirements

- How you will you accomplish those objectives being defined
- Unclear requirements → confusion, duplication of effort, rework and wasted work
- 3 of project requirement categories:
 - Business determine what the business needs to survive a disruption (priorities)
 - Response time
 - Availability of data
 - Tolerance for downtime
 - Functional include processes, methods and resources need to be available during and after the business disruption.
 - **Technical** includes servers, networks infrastructure, business application requirements.

Elements of Project Success (6 of 8)

Clearly defined scope

- Scope is a description of the total amount of works to be accomplished (within available resources, time and defined quality required)
- Scope typically is defined through the project's objectives.
 - Making sure payroll can be run during a disaster may be one objective
 - Making sure your company can still take, fulfill, and invoice customer orders is another objective
- Scope creep is a term refers to continuous or uncontrolled growth in a project's scope, at any point after the project begins



Elements of Project Success (7 of 8)

Shorter schedule, multiple milestones

- BC/DR planning is a comprehensive look at the business and its processes to determine critical functions and emergency procedures for those critical functions.
- You may choose to break your BC/DR planning project down into smaller projects (i.e basic, mission critical solutions)
- Milestones are, by definition, project markers that help you gauge progress. Milestones are checkpoints that can help you stay on budget, on schedule, and on scope as your project progresses.
- More milestones more likely to be successful (i.e. act as a checkpoints)



Elements of Project Success (8 of 8)

Clearly defined project management process

- A clearly defined project management process typically goes hand in hand with an experienced project manager.
- The key is to select a process and use it from start to finish, so there are no gaps in the process, which inevitably lead to gaps in the plan.
- The success of a project require a consistent approach and attention to detail

Project Plan Components (1 of 5)

The basic steps in a project are:

- Project Initiation or Project Definition
- Forming the Project Team
- Project Organization
- Project Planning
- Project Implementation
- Project Tracking
- Project Close Out

Project Plan Components (2 of 5)

1. Project initiation/project definition

- a) Problem and mission statement
 - 1. Clear problem statement \rightarrow "Our company operates in two geographical locations and generates \$25M in annual sales. We do not currently have a disaster plan for either location and the company is at risk as a result."
 - 2. Mission statement → "To create a business continuity and disaster recovery plan for both of our company's locations that will address the major risks to our company and that will provide a path to recovery of the basic, mission-critical systems including a, b and c."
- b) Potential solutions –brainstorm all the possible solutions.
- c) Requirements and constraints budget, time, resources

Project Plan Components (3 of 5)

d) Success criteria example:

- Enterprise Resource Planning (ERP) software 100% available
- ERP are available within 2 hours of any business interruption
- All data are 100% secure (maintain confidentiality, integrity, availability)

e) Project proposal

- Business case (problem and mission)
- Financial analysis
- High-level scope, timeline, budget and quality metrics
- Requirements, constraints, assumptions, exclusion
- High-level resource needs
- Phase schedule
- Success criteria
- Risks, mitigation, and alternatives (risks to the project)
- Recommendations

Project Plan Components (4 of 5)

f) Estimates

- Parametric estimate –based on past experience of similar projects
- Top-down fastest but least accurate
- Bottom-up after developed work breakdown structures (WBS)

g) Project sponsor

- Someone in the organization who has the authority both organizational and political
- Understand the importance of a BCDR project

Project Plan Components (5 of 5)

2. Forming the project team

Consider these elements:

- a) Organizational
 - Look at the organizational chart, how many branch managers?
- b) Technical
 - Which technical specialists should be included?
- c) Logistical
 - Disaster recovery aimed to stop the impact
 - Business continuity how to resume the business after the disruptions?
- d) Political a spokesperson who will communicate with the public, customers or other stakeholders

Project Organization (1 of 5)

How will you organize and run your project.

a) Project objectives

- Business continuity plan
- Continuity of operations plan
- Disaster recovery plan
- Crisis communication plan
- Cyber incident response plan
- Occupant emergency plan

Project Organization (2 of 5)

b) Project stakeholders

Government, various regulatory agencies, financial markets, public shareholders, private shareholders, employees, vendors, suppliers, contractors and the community at large.

c) Project requirements

Poorly defined project requirements can cause project failure, so it's important to take affirmative steps to develop better project requirements.

Well-defined project requirements will help you ensure that your project works once it's implemented.

For e.g. "E-commerce functionality must remain up to 99% of the time, enabling customers to place and manage orders and to receive order status. Functionality includes product presentation, price and product information presentation, search, shopping cart, payment, order processing, credit card processing, customer order notification, customer shipment tracking notification, and inventory management."

Project Organization (3 of 5)

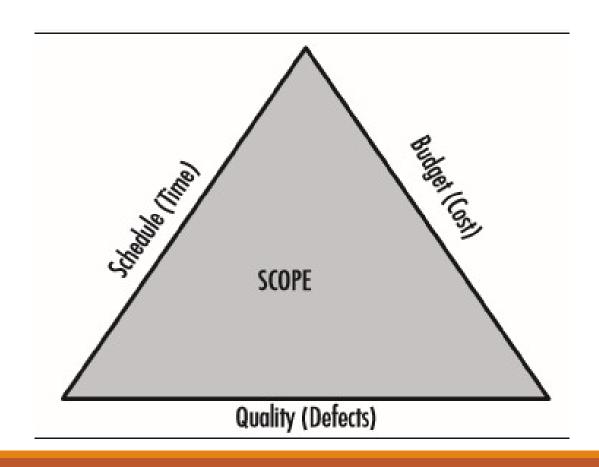
d) Project parameters

- Scope total amount of work to be accomplished
- Budget total cost
- Schedule total duration of the project
- Quality the number of defects that you are willing to accept (i.e. total hours of downtime per incident)

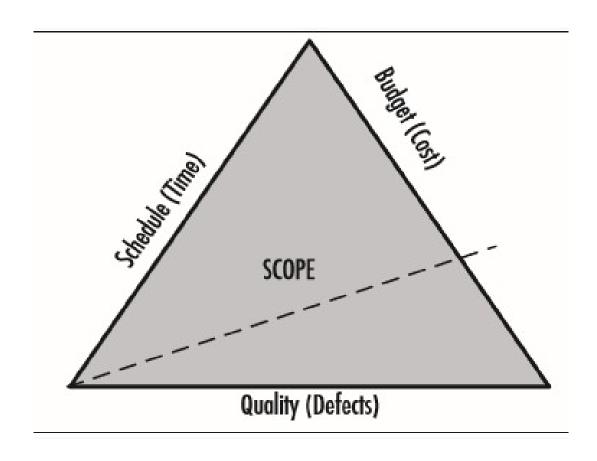
Rank your project parameters. For example, least flexible to most flexible.

- i.e. Budget → least flexible
- The most flexible parameter is the one that will change when things go wrong

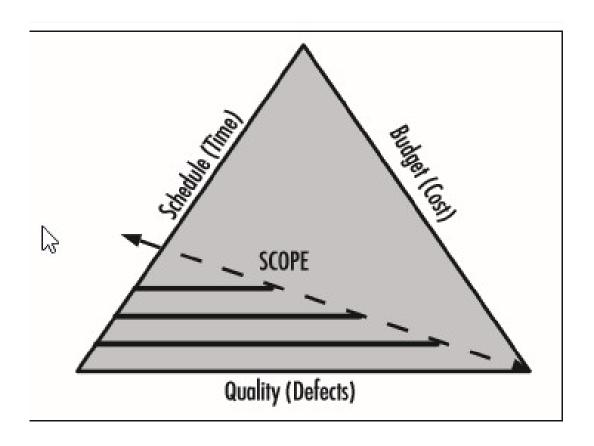
Relationship of scope, budget, schedule and quality



Impact of reducing budget on project plan



Impact of reducing project schedule



Project Organization (4 of 5)

e) Project infrastructure

• Tools and resources – computer, software application, testing labs, communications equipment

f) Project processes

- Team meetings place, methods, frequencies
- Reporting report to a project manager and project sponsor
- Escalation procedures, when to notify project sponsor? Who is going to notify? (i.e. If a needed item is not received within 14 days of purchase, a team member can escalate directly to the purchasing department for resolution. If a needed item is not received within 21 days of purchase, a team member must escalate to the Project manager.)
- Project progress team reporting, websites or other tools
- Change control define change request process so that the needed changes must be formally requested
- Quality control

Project Organization (5 of 5)

g) Project communication plan

- How are you going to communicate across the departments/geographic boundaries/positional?
- How can you be sure you are communicating to the right people with the right language in the right frequency and the right medium?

Project Planning

Work breakdown structure (WBS)

- risk assessment; business impact analysis; risk mitigation strategy development; plan development; emergency preparation; training, testing, auditing and maintenance.
- the completed WBS should describe the total amount of work to be accomplished

Critical path in BCDR

- Describe exactly how long the project will take and which tasks will delay the project if you run into problems on those tasks.
- Tasks that is not on the critical path are the tasks that provide you and the project team with a bit of flexibility.
- Float the time flexibility of a task

Project Implementation (1 of 2)

IT is always changing. From reconfigurations to new security threats to moving a data center, etc.

You will need to build in a process for monitoring change in the IT department and assessing what should be incorporated into your BC/DR plan.

Managing progress

- Make sure the current IT changes and initiatives are evaluated in your BCDR planning.
- Use a consistent methods to monitor and measure project progress (i.e. dashboard/ reporting)

Project Implementation (2 of 2)

Managing change

- Define a simple, easy to use change management process
- Require that all requested changes go through the change management process
- Evaluate each requested change as to how it will impact the current project plan
- Evaluate the risk of each requested change and determine if it increases/decreases risk in the plan
- If approved, incorporate the requested change into the plan and update all parts of the plan impacted by the change.
- When possible, incorporate one change at a time, so each can be properly evaluated
- Do not allow random or informal change requests to become incorporated into the plan
- Communicate with those requesting change as to the status of their request.
- If a change is rejected, communicate the rationale for rejecting that change and be willing to listen.
- Keep track all requested changes and how they are ultimately handled (accepted, rejected, postponed) and why

Project tracking



Create multiple milestones as your checkpoints.

At minimum, create milestones for each phase of work



Project Close Out

Involves a hand-off to some other team within your organization. (i.e, if you hand over a project to the ITD IT staff to become the new owner.)

Once you have completed the BCDR plan, it must be kept up to date through some maintenance procedures (i.e. annual review of the plan/testing BCDR procedures)

Make sure your project close out activities include handing off the BCDR plan in such a way as it will be maintained

It a great idea to have a post-project review session to review what worked, what went wrong, and how project processes could be improved in the future

Key Contributors and Responsibilities

Key Contributors

- Information technology
- Human resources
- Facilities/Security
- Finance/Legal
- Warehouse/Inventory/Manufacturing/Research
- Purchasing/Logistics
- Marketing and Sales
- Public Relations
- Operations

What are their responsibilities?



