

Chapter 1.2

Disasters causes and recovery



Aim

To familiarize the students with the causes and effects of various types of disasters and also to prepare a set of processes and procedures to recover and protect a business infrastructure in the incident of a disaster.



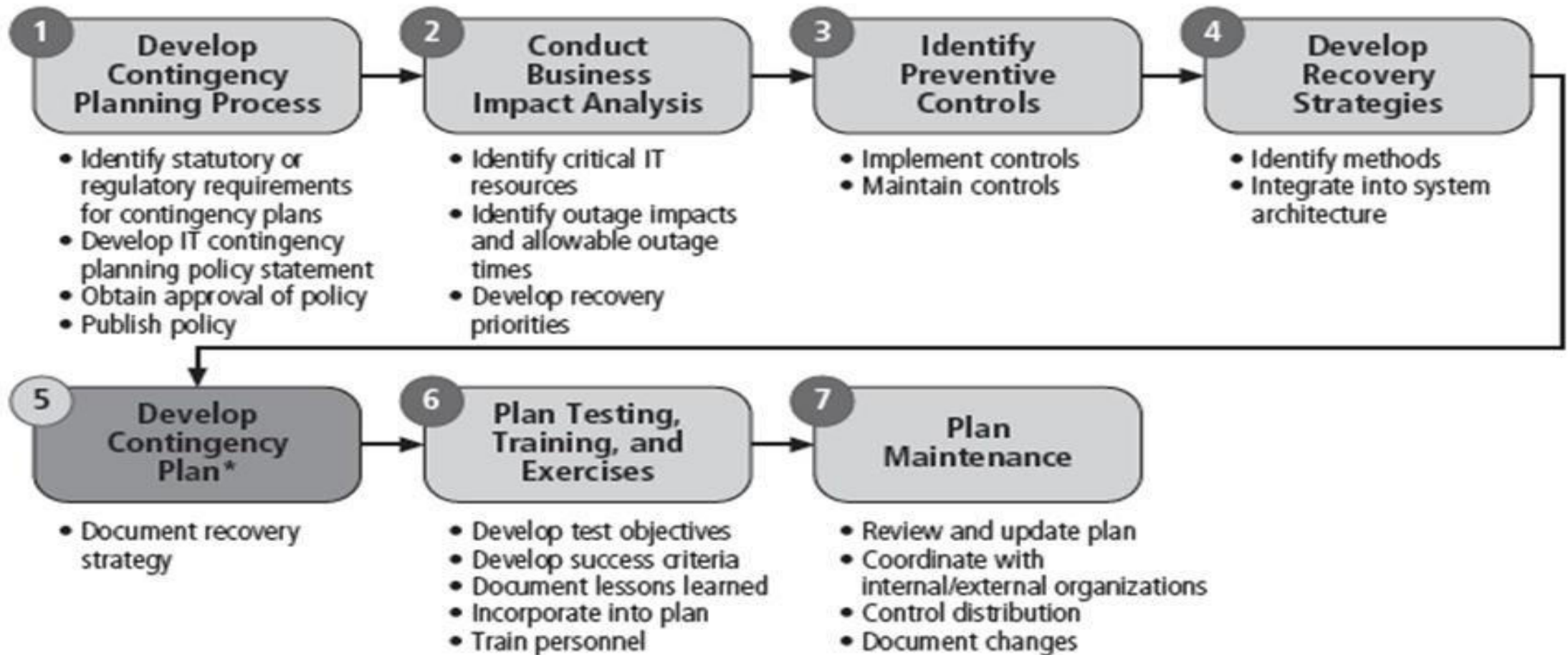
Instructional Objectives

Objectives of this chapter are:

- Explain the steps involved in NIST SP800-34 while developing contingency planning
- Demonstrate different strategies used to protect business environment, operational resources, and business critical functionalities while developing a business continuity plan
- Analyze various causes of disaster which may harm the business system and destroy the business environment

Explain the Steps Involved in NIST SP800-34 While Developing Contingency Planning

Determine The Seven Steps of Planning



Plan, Purpose, Scope And Plant Relationship

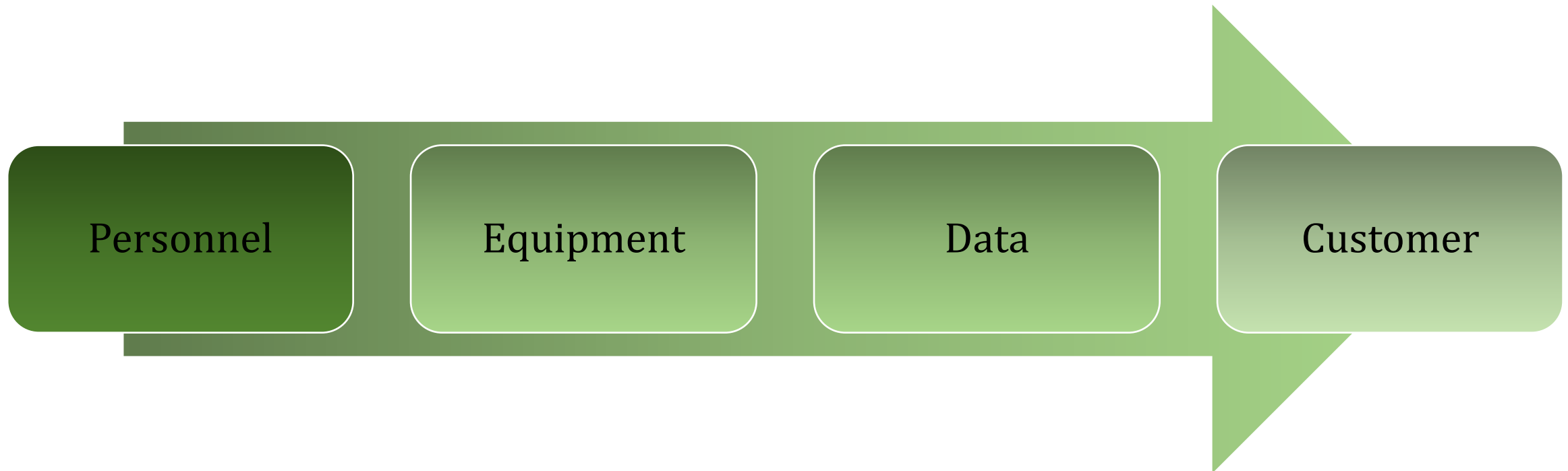
Plan	Purpose	Scope	Plan Relationship
Business Continuity Plan (BCP)	Implement methods	Take the business processes at an expanded level	business process focused plan
Continuity of Operations (COOP) Plan	Implement guidelines and processes	Critical essential functions.	Implement plan
Crisis Communications Plan	Implement methods to perform internal or external communication	Address on communication might be personal or public	Activate incident-based plan with a COOP or BCP.
Critical Infrastructure Protection (CIP) Plan	Implement methods and policies	Essential national infrastructure	Risk management plan

Purpose, Scope, Plan relationship

Plan	Purpose	Scope	Plan Relationship
Cyber Incident Response Plan	Implement methods and policies	Focus on affected systems,	Focused on Information system plan
Disaster Recovery Plan (DRP)	Implement various techniques.	Activated after the event of disaster	Activating ISCPs for recovery
Information System Contingency Plan (ISCP)	Implement strategies to recover information system.	Addresses on recovering information.	Activate Information system plan independently
Occupant Emergency Plan (OEP)	Implement procedure for minimizing	Focuses on the property specific to a particular facility	Initiated incident-based plan

The Recovery Phase of A Business Continuity Plan

Business continuity plan involves processes that helps in resuming the business operations after any disaster.





Quiz / Assessment

- 1) Contingency planning management team helps in_____
 - a) Continuity Planning and Execution
 - b) Plan Maintenance
 - c) Business Management
 - d) Risk Assessment

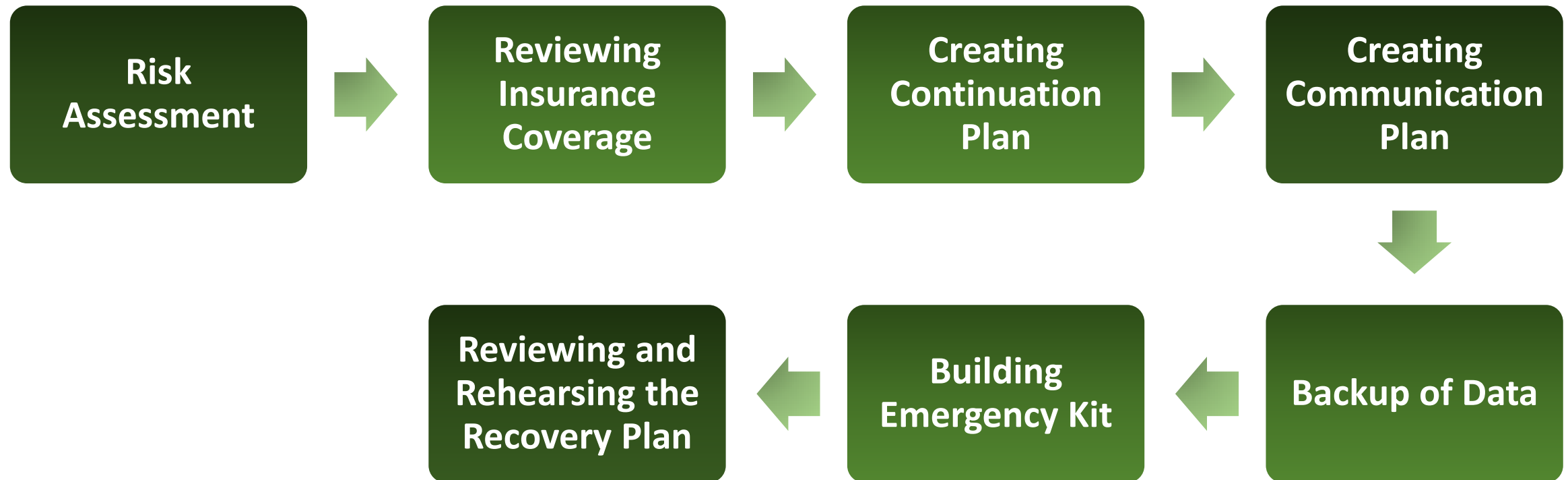
- 2) Disaster recovery plan implements various techniques to move the information systems to alternate location.
 - a) True
 - b) False

- 3) Business Impact Analysis is conducted to_____
 - a) Identify critical IT resources
 - b) Develop IT contingency planning policy statement
 - c) Obtain approval of policy
 - d) Develop test objective

Demonstrate Different Strategies used to Protect Business Environment, Operational Resources, and Business Critical Functionalities While Developing a Business Continuity Plan

Protect And Sustain

Ways for Protecting Business from any Disaster





Quiz / Assessment

- 1) One of the critical areas that businesses need to focus is to_____ and are stored with all security measures
 - a) ensure that the data is backed up
 - b) have an emergency kit available
 - c) Data Validation
 - d) Data recovery

- 2) Risk Assessment Identifies the kinds of emergencies that are most likely to affect the company and then evaluate the preparedness level.
 - a) True
 - b) False



Quiz / Assessment

3) Once when the level of preparations is evaluated, it is necessary for creating an _____

- a) Operations continuation plan
- b) Contingency plan
- c) Communication plan
- d) Recovery plan

Causes of Disaster

Disaster come in three basic categories

Natural Disaster



```
graph TD; A[Natural Disaster] --> B[Man-Made Disaster]; B --> C[Technological disaster];
```

Man-Made Disaster

Technological disaster

Natural Disaster

The Impact of Disaster

Capital

Assets

Personnel

Considerations



Man Made Disaster



Deep Water Horizon (BP) Explosion

Technological Disaster



The Hyatt Regency walkway collapse



Summary

- National Institute of Standards and Technology (NIST) Special Publication 800-34, Rev. 1, provides seven steps of planning, which will protect the organisation from disaster.
- The Business Continuity Plan involves processes which helps in implementing strategies, policies, methods , guidelines, techniques to protect the organisation from any disaster.
- The recovery phase of business continuity plan helps in resuming the business after disaster, it involves four phases personnel, equipment, data, customers.
- There are seven ways of protecting and sustaining a business from disaster.
- There are three main causes of disaster.
- Natural disaster are the natural calamities such as earthquake, tsunami, flood etc
- Man made disaster are those which is occurred due to negligence of human being that leads to suffering and environmental damage.
- Technological damage is catastrophic event that is caused by either human error in controlling technology or a malfunction of a technology system.



Quiz / Assessment

- 1) Disasters frequently result in all of the following EXCEPT
 - a) Damage to the ecological environment
 - b) Displacement of populations
 - c) Destruction of a population's homeland
 - d) Sustained public attention during the recovery phase

- 2) A disaster may be caused by nature or have human origins
 - a) True
 - b) False

- 3) Which of the following is not a natural disaster?
 - a) Tsunami
 - b) Hurricane
 - c) Terrorism
 - d) Earthquake



e-References

- Contingency planning. Retrieved on 30th June, 2017 from nvlpubs.nist.gov/nistpubs/Legacy/SP/nistspecialpublication800-34r1.pdf
- 7 ways to protect a business from disaster. Retrieved on 3rd July, 2017 from www.foxbusiness.com
- Man made disaster. Retrieved on 3rd July, 2017 from <http://www.disaster-survival-resources.com/man-made-disasters.html>
- Technological disaster. Retrieved on 3rd July, 2017 from <https://www.technologyreview.com/s/401465/10-technology-disasters/>