# Business Continuity and Disaster Recovery (BC/DR) Study Notes

## Core Concepts & Relationships

**Business Continuity vs Disaster Recovery**

Business Continuity (BC) focuses on maintaining business operations, while Disaster Recovery (DR) specifically handles IT recovery. Think of BC as the umbrella, with DR as a critical component underneath it.

**Key Metrics and Their Relationship**

RTO (Recovery Time Objective): Maximum acceptable downtime RPO (Recovery Point Objective): Maximum acceptable data loss

* Example: An e-commerce system might have RTO = 2 hours (can't lose sales) but RPO = 24 hours (daily backups sufficient)

## Critical Planning Components

**Business Impact Analysis (BIA) and Recovery Objectives**

Process Flow:

1. BIA identifies critical business processes and their impacts
2. Impact analysis determines acceptable downtime (shapes RTO)
3. Data loss assessment defines backup needs (shapes RPO)
4. These metrics guide solution selection and investment

Example: Payment Processing System

* BIA shows $100k revenue loss per hour of downtime
* Leads to RTO of 1 hour (maximum acceptable downtime)
* Data loss analysis shows need for up-to-the-minute data
* Results in RPO of 5 minutes (requiring near-real-time replication)

**Recovery Solutions and Selection Criteria**

Recovery Solution Selection Framework:

1. Map RTO requirements to site strategy:
   * RTO < 4 hours typically requires hot sites
   * RTO 4-24 hours suits warm sites
   * RTO > 24 hours may allow cold sites
2. Match RPO requirements to backup strategy:
   * RPO < 1 hour needs real-time replication
   * RPO 1-24 hours suits incremental backups
   * RPO > 24 hours might allow full daily backups
3. Consider cost-effectiveness:
   * Hot sites: Highest cost, fastest recovery
   * Warm sites: Balanced approach
   * Cold sites: Budget-friendly, slower recovery

**Implementation Framework**

1. Assess: BIA + Risk Assessment
2. Plan: Strategy Selection + Resource Allocation
3. Build: Documentation + Team Assignment
4. Maintain: Testing + Updates

Remember: Plans fail more often from lack of testing than from technical issues.

**Quick Reference: Common Pitfalls**

1. Overlooking dependencies between systems
2. Insufficient testing
3. Outdated contact information
4. Assumptions about resource availability

**Success Checklist**

✓ Executive support secured

✓ Critical processes identified

✓ Recovery priorities established

✓ Resources allocated

✓ Testing schedule maintained

✓ Documentation current