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Business Management Framework
Business Continuity


 WS SINGAPORE
WORKFORCE SKILLS
QUALIFICATIONS



Analysing Risk and Business Impact Requirements


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What is WSQ?

The Singapore Workforce Skills Qualifications (WSQ) is a national credentialing system. It trains, develops, assesses and recognises individuals for the key competencies that companies look for in potential employees.

 WS SINGAPORE
WORKFORCE SKILLS
QUALIFICATIONS

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Benefits to Individuals



- Career path planning and assistance for entry into a new industry
- Skills upgrading and career advancement through clear progression pathways
- Present more clearly defined skill sets to potential employers via new qualifications and certifications
- Obtain portable credentials for existing skills
- Assess and benchmark individual capabilities against industry-established work standards
- Support and promote best practices in the workplace

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Benefits to Employers



- Benchmark best practices
- Improve and develop job descriptions
- Improve performance management systems and training programmes
- Establish clearly defined career paths for employees
- Guide training needs analysis
- Facilitate recruiting competent staff who are equipped with industry-specific capabilities and job-specific requirements
- Strengthen in-house training capabilities

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Business Management Framework

Enterprise Risk Management Module (Business Continuity Management)

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WSQ Competencies

WSQ comprises three skills sets to equip workers and increase their competitiveness.



Occupational Competencies
Specific skills required to perform a specific job in the industry

Industry Competencies
Industry-specific capabilities

Foundational Competencies
Range of know-how and attributes that are portable across occupations and industries

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WSQ Quality Assurance Frameworks



- There are 33 WSQ frameworks, each recognised by the respective industry
- WSQ frameworks build up skills in 2 aspects:
 - Foundational Skills
 - Industry & Occupational Skills
- Business Continuity Management falls into the Business Management Framework

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BM WSQ Framework



- The Business Management WSQ Framework aims to cultivate versatile “T-shaped Professionals” in Singapore, who possess deep skills in a specific domain area along with general knowledge of other related areas in business operations

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About BCM Institute


BCM Institute started in January 2005












Provide competency based BC, CM and DR training to all levels

More than 1500 professionals from 40 countries.

Started certification programme in April 2007


Certify BC and DR professionals globally



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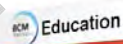

Information Slide



BCM Institute Courses

BCM Institute offers the most comprehensive BCM Best Practices

Business Continuity Courses	Foundation, BCM-100/200 Level	BC Intermediate, BCM-300 Level	BC Advanced, BCM-400/5000 Level
IT Disaster Recovery Courses	IT DRP Intermediate, DRP-300 Level	IT DRP Advanced, DRP-400/5000 Level	
BCM Audit Courses	Lead Auditor BCM-8500	Internal Auditor BCM-8000	
BCM Technical Courses	BCM -600 Level		
Specialize Courses	BCM-800 Level		
Crisis Management Courses	Foundation, CM-200 Level	CM Intermediate, CM-300 Level	CM Advanced, CM-400/ 5000 Level
In-House Courses	Customized Courses		

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About This Course

**Analyse Organisation's Dependencies That
May Impact On The Organisation And An
Individual's Work Role**

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Course Aims

To train course participants to:

- Assess the interdependencies that can affect a business unit;
- Analyse and quantify the impact of internal and external influencing factors;
- Report findings of risk factors and their impacts
- Recommend solutions and/or mitigating strategies to relevant stakeholders.

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Underpinning Knowledge



After the course, a competent individual will know and understand:

- Inter-dependencies of a business unit
- Business impact analysis
- Internal and external influencing factors that may affect the business unit
- Internal and external dependencies that a business unit may rely on

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Target Audience



- Level 3 Course
- Executes plans, policies and procedures; applies knowledge of concepts and provides feedback
- Examples of audience:
 - Department BCM coordinators
 - Risk officers
 - Audit/Compliance officers

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CHAPTER 1

Introduction to Business Continuity Management

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Learning Objectives

This chapter will help Learners:

- Understand the Fundamentals of BCM
- Understand the Business Continuity Life Cycle
- Understand the BCM Planning Methodology
- Understand Key Success Factors

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Fundamentals of BCM

Section 1.1

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Business Continuity



Capability of the organization to continue delivery of products or services at acceptable predefined levels following disruptive incident.



Aims to safeguard the interests of an organization and its key stakeholders by protecting its critical business functions against predetermined disruptions.



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Business Continuity Management



B is an organization-wide discipline, and a complete set of processes that identifies potential impacts, which threaten an organization. It provides a capability for, an effective response that safeguards the interests of its major stakeholders and reputation.



ISO 22301 is a holistic management process that identifies potential threats to an organization and the impacts to business operations those threats, if realized, might cause, and which provides a framework for building organizational resilience with the capability of an effective response that safeguards the interests of its key stakeholders, reputation, brand and value-creating activities.



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Purpose of BCM

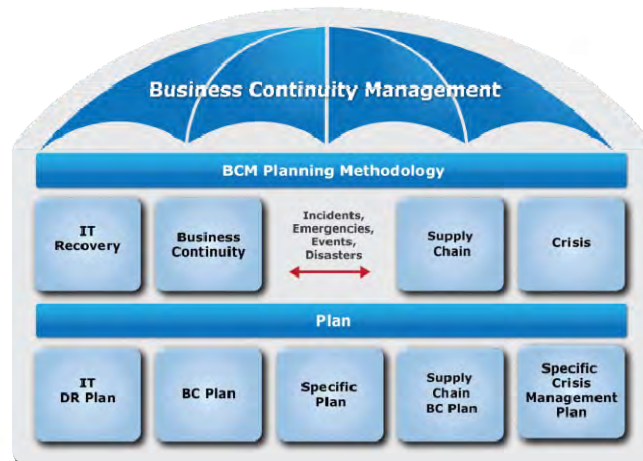


- Business survival
- Minimise financial loss and embarrassment
- Fulfill obligations to customers and shareholders
- React to a disaster/crisis with an understanding of:
 - critical business functions
 - sources of support and services could cause delays which could be fatal to the organisation

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Scope of BCM



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Incident



- An event that occurs by chance or due to a combination of unforeseen circumstances, which, if not handled in an appropriate manner, can escalate into an emergency or disaster

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Emergency



- A sudden, unexpected event requiring immediate action due to its impact to health and safety, the environment, violation of regulation or which can result in the organization being unable to provide critical business functions for some predetermined minimum period of time

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Disaster



- A sudden, unplanned catastrophic event, usually causing great damage or loss, which makes an organization unable to provide critical business functions for some predetermined minimum period of time.

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Products of BCM



- **What** is needed to continue, resume, recover or restore business functions
- **Who** will execute recovery actions
- **When** business functions and operations must resume
- **Where** to go to resume corporate, business & operational functions
- **How** - Detailed procedures for continuity, resumption, recovery or restoration

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BCM Life Cycle

Section 1.2

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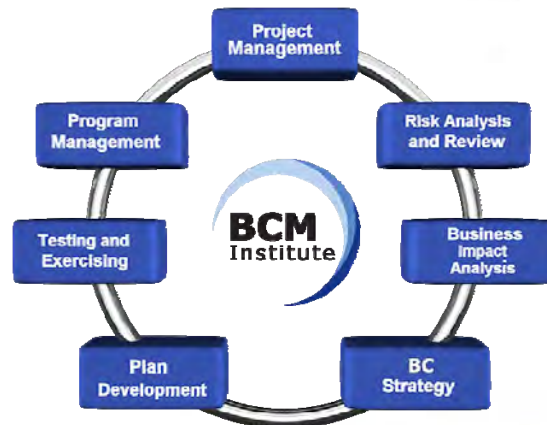
BC Planning Methodology

Section 1.3

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BCM Planning Methodology



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Key Success Factors

Section 1.4

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Key Success Factors



- Good BCM awareness
- Executive Management Commitment
- Project Manager with mandate
 - Strong project management skills;
 - To meet tight deadlines
- Appoint department representatives with appropriate authority
- Clearly defined scope and requirements
- Focussed approach

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CHAPTER 2

BCM Risk in Organisations



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Learning Objectives



This chapter will help Learners:

- Understand the principles of risk assessment
- Identify the types of internal and external threats that could cause a disruption and assess their likelihood and impact
- Understand the types of risk treatment
- Identify existing controls

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Principles of Risk Analysis

Section 2.1

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Risk Analysis and Review



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Risk Analysis and Review



- Aims to identify the existing risks and threats that the organization or business unit is exposed to, particularly in its geographical location, topology of the area, and proximity to potential natural or man-made hazards and, thereafter, to minimize their risk consequence.
- Detailed analysis of risks, vulnerabilities (exposures) and probabilities and is a major component of the risk assessment.

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Objectives



- Identify vulnerabilities
- Establish Key Planning Scenario (KPS)
- Establish reliable recommendations for:
 - Minimizing impact of identified threats
 - Immediate and effective response to potential causes of disaster

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Tasks



- Identify exposure to internal & external threats
- Assess the likelihood of these threats occurring and the impact if they occur
- Recommend preventive responses and escalation procedures in conjunction with crisis management implementation
- Evaluate findings and prepare a status report & recommendation on safety/ prevention (if needed)

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Deliverables



- Comprehensive risk and threat profile to the organization
- Recommendation for:
 - Countermeasures to be implemented to minimize the risks; for example, Security Risk Review
 - Immediate Response Procedures
 - Summary report of recommendations agreed with senior management

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Key Concepts & Definitions



- **Threat:**
An indication or warning of a probable situation that can cause disruption to an organization's operations or services
- **Likelihood:**
The probability or chance of the threat occurring
- **Impact:**
An evaluated consequence of a particular effect due to the cause
- **Risk:**
The potential loss exposure due to a threat
- **Control:**
Any action, procedure or operation undertaken by an organisation to increase the likelihood that activities, policies and procedures to reduce risk that has been identified.

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Process



- The process to identify the risks to an organization; to define the controls in place so as to reduce organization exposure; and to evaluate the cost for the controls to be implemented.

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Process



1. Identify threats and risks to organization
2. Evaluate existing controls
3. Assess risk likelihood and risk impact
4. Develop the Period of Disruption
5. Seek approval from executive management

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Threat Identification

Section 2.2

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Influencing Factors

Possible source or cause of an incident or disaster occurring:

Internal

- Equipment
- Employees
- Processes
- Technology

External

- Economy
- Environment
- Politics
- Society

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Types of Threats



- Natural
- Man-made (Social)
- Man-made (Business and Operations)
- Man-made (Information Technology)

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Natural Threats



- Tornado (wind storm)
- Thunderstorm and hail storm
- Lightning and electrical storm
- Snow and winter ice storm
- Typhoon and hurricane
- Flood and flash flood
- Earthquake
- Mudslide
- Volcanic eruption and ash fallout
- Tsunami
- Large natural fire
- Fog and haze
- Epidemic and pandemic

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Man-Made (Social) Threats



- Physical asset theft
- Physical security breaches
- Riot, civil disorder and coup
- Accidental explosion
- Fire
- Acts of terrorism (bomb threat, hijack, assassination, cyber, biological)
- Transportation accidents (aviation, rail, maritime, vehicular)

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Man-Made (Business) Threats



- Unavailability of key personnel
- Employee turnover and single point of failure
- Loss of key suppliers
- Default of key debtors
- Labor dispute
- Workplace safety
- Workplace violence
- Human error
- Fraud and embezzlement
- Sabotage
- Toxic and radioactive contamination
- Power failure
- Facilities and equipment failure (air-con, lift, transformer, HVAC, UPS, generator)
- Utilities outage (water, gas, oil, gasoline)
- Water leakage and plumbing failure

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Man-Made (IT) Threats



- Voice and data telecommunication failure
- IT equipment failure
- IT systems and applications failure
- Human error from programmers and users
- Data and software sabotage

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Risk Treatment and Controls

Section 2.3

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Type of Risk Treatments



- Risk Avoidance
- Risk Reduction
- Risk Transference
- Risk Acceptance

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Risk Avoidance



- Risk Avoidance is to make an informed decision not to become involved in or to withdraw from a risk situation.

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Risk Reduction



- Risk Reduction is to take appropriate action to lessen the probability, negative consequence or both, associated with a risk.

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Risk Transference



- Risk Transference refers to the shifting of the burden of loss for a risk to another party through legislation, contract, insurance or other means.

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Risk Acceptance



- Risk Acceptance is to make an informed decision to accept the probability and impact of a particular risk. Risk Acceptance depends on risk criteria.

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What are Controls?



- Control is any action, procedure or operation undertaken by an organization to increase the likelihood that activities, policy and procedures to contain risk that has been identified.

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Types of Controls



- **Physical**
 - Deployment of security guard
 - Installation of biometric access control
- **Procedural**
 - Enforcement of policies and procedures
- **Logical**
 - Implementation of IT Security Management

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CHAPTER 3

Risk Analysis and Evaluation



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Learning Objectives



This chapter will help Learners:

- Devise an appropriate scoring mechanism
- Assess risk likelihood and impact
- Evaluate and prioritize threats
- Evaluate Risk Minimization Options

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Risk Likelihood

Section 3.1

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Risk Likelihood



- Risk Likelihood is the probability or chance of a threat occurring.

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Risk Likelihood Descriptor



Risk Likelihood	Likelihood Rating	Description
Rare	1	
Unlikely	2	
Moderate	3	
Likely	4	
Certain	5	

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Risk Impact

Section 3.2

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Risk Impact

- Risk impact is the potential effect, generally adverse, that the occurrence of the threat will have on the organisation.

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Risk Impact Areas



- Financial
- Processes (Business Operations)
- Legal and Regulatory
- Reputation and Image
- Social Responsibility
- People
- Assets/ ICT Systems/ Information

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Risk Impact Descriptor



Risk Impact	Impact Rating	Description
Very Low	1	
Low	2	
Medium	3	
High	4	
Very High	5	

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Example: Risk Impact Descriptor



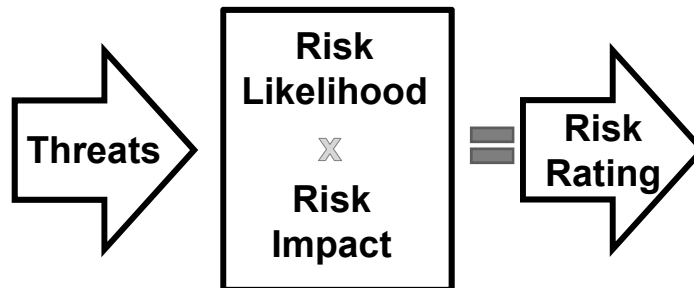
Impact Rating	Impact Areas						
	Financial	Processes	Legal and Regulatory	Reputation and Image	Social Responsibility	People	Assets/ ICT/ Information
1	Minimal financial loss; Less than _____	Critical processes (business operations) are unavailable a short time period	Negligible impact	Negligible impact	Negligible impact	No or only minor personal injury	Critical Assets / ICT Systems / Information are unavailable for a short time period
2	<<Insert range of figures>>	Critical processes (business operations) are unavailable a moderate time period	Inability to fulfil contractual obligations	Customer and key stakeholders satisfaction affected	Minor impact	Minor injury; Medical treatment & some days lost	Critical Assets / ICT Systems / Information are unavailable for a moderate period
3	<<Insert range of figures>>	Critical processes (business operations) are unavailable a longer time period	Investigation by external agencies	Customer and key stakeholders affected. Negative publicity via various forums	Significant impact	Injury; possible hospitalization & numerous days lost	Critical Assets / ICT Systems / Information are unavailable for a longer time period
4	<<Insert range of figures>>	Critical processes (business operations) are unavailable a prolonged time period	Demand for government inquiry, legal lawsuit	Adverse local media coverage only	Major impact	Single death &/or long-term illness or multiple serious injuries	Critical Assets / ICT Systems / Information are unavailable for a prolonged period
5	Above _____	Critical processes (business operations) are unavailable for an extended time period	Termination of operations	Adverse and extended international media coverage	Unacceptable impact	Fatality (ies) or permanent disability or ill-health	Critical Assets / ICT Systems / Information are unavailable for an extended time period



Risk Rating and Level

Section 3.3

Risk Rating



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Risk Level



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Risk Minimizing Options

Section 3.4

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Risk Treatment Strategies



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Risk Minimisation Options



- Once existing operations controls have been identified, assess the type of risk treatment that is appropriate.
- There will be occasions when the risks are higher than preferred but there may be nothing more that can be done to mitigate that risk i.e. they are out of the control of the business unit but the activity must still be carried out.
- In such situations, monitoring the circumstances and regular review is essential.

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CHAPTER 4

Period of Disruption and Key Planning Scenario



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Learning Objectives



This chapter will help Learners:

- Determine the Period of Disruption
- Develop Key Planning Scenario

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Period of Disruption

Section 4.1

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Period of Disruption



- The Period of Disruption is an expected period of disruption (hours or days) resulting from the exposure of the unmitigated risk of the identified threat after taking into consideration existing controls.

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Key Planning Scenario

Section 4.2

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Key Planning Scenario



- The Key Planning Scenario (KPS) reflects the perspective of the magnitude of disaster that an organization is willing to commit the resources to mitigate and is acceptable to the organization.

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Threat Scenario



- E.g. Fire
- Bomb Threat

Denial of Access

- E.g. Fog/ Haze
- Pandemic/ Infectious Diseases

Unavailability of People

- E.g. IT Failure

IT Systems

- E.g. Disruption of Supply Chain

Supply Chain

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Planning Time Horizon



- The Planning Time Horizon specifies the time period for Business Continuity (BC) planning, which can be determined by taking into consideration the maximum Period Of Disruption across all threats.

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Conducting an Organisation Risk Analysis

Group Discussion



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Assignment One

Risk Analysis and Review

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CHAPTER 5

Business Impact Analysis

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Learning Objectives



This chapter will help Learners:

- Understand the Principles of Business Impact Analysis
- Understand the BIA Process
- Select the Appropriate BIA Data Collection Method
- Analyse the BIA Information
- Report the BIA

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Principles of Business Impact Analysis

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Business Impact Analysis




Source:
Goh, Moh Heng (2008): Managing Your Business Continuity Planning Project 2nd Edition ISBN: 978-981-05-9767-2

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Business Impact Analysis



- Business Impact Analysis (BIA) is the process of analysing the effects of interruptions to business operations or processes on all business functions

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Objectives



- Establish business criticality/ impact criteria using Business Impact Analysis Questionnaires (BIAQ).
- Prioritise the importance of each business unit vis-à-vis established criteria.
- Consolidate findings and rankings.
- Present results to management committee to confirm critical classifications and priority listings.

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Tasks



- Determine impact of unavailability/failure/ disaster on business functions.
- Determine critical business needs and tolerable limits.

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Deliverables



- Detailed report on findings (approved by management) containing:
 - Tolerable limits;
 - Classification of criticality;
 - Prioritised critical business functions;
 - Critical applications and systems; and
 - Restoration priority.
- Impact analysis of unavailability of business functions (quantitative and qualitative).

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Key Concepts & Definitions



- **Business Impact Analysis (BIA)**
 - The process of analysing the effect of interruptions to business operations or processes on all business functions
- **Minimum Business Continuity Objective (MBCO)**
 - The minimum level of services and/or products that is acceptable to the organization to achieve its business objectives during an incident, emergency or disaster

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Key Concepts & Definitions



- **Critical Business Function (CBF)**
 - Business activities and information that should not be disrupted such that they impact the ability of the organization to achieve its Minimum Business Continuity Objective (MBCO)
- **Recovery Time Objective (RTO)**
 - The maximum acceptable length of time that can elapse before the lack of a business function severely impacts the organization

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Key Concepts & Definitions



- **Recovery Point Objective (RPO)**
 - The point in time to which systems and data must be recovered after a disaster

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BIA Vs. RAR



- RAR is about identifying the most probable threats external to an organization and analysing the related vulnerabilities of the organization to those threats. In addition, it involves evaluating and assessing the adequacy of controls relative to the potential threats of the organization.
- BIA involves identifying the critical business functions internally within the organization and determining the impact of not performing those business functions beyond their maximum tolerable period of disruption.

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The BIA Process

Section 6.2

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Process



- Determine information to gather
- Tailor questionnaires to internal requirements
- Conduct training on completion of questionnaire
- Collate and review questionnaires
- Conduct selective interviews
- Consolidate and analyse data
- Summarize and present findings

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BIA Data Collection Methods

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Data Collection Methods



- Questionnaire Method
- Interview Method
- Workshop Method

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Questionnaire Method



- Advantages
 - Standardized format
 - Encourages consistency
 - Reaches larger group of audience in short timeframe
- Disadvantages
 - Incomplete and/or inaccurate information provided
 - Less personal approach than workshop or interview methods
- Shortcomings can be overcome
 - Conduct workshops prior to completing information
 - Selective interviews and follow-up sessions by Organization BCM Coordinator

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Interview Method



- Advantage
 - Personalized approach
- Disadvantages
 - Time-consuming
 - Require well structure open-ended and leading questions
 - Over-reliant on the skill of the interviewers
- Maximize effectiveness
 - Use in combination with workshop and questionnaire methods
- Determine specific interviewees for clarification and data verification

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Workshop Method



- Determine appropriate level of participation from business units
- Pre-define workshop objectives
 - Approval from management
- Facilitate workshops and discussions by Organisation BCM Coordinator
- Identify issues for post-workshop resolution
- Use in combination with questionnaire and interview methods

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BIA Information Analysis

Section 6.4

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Purpose

- Identify critical business functions and their RTO
- Prioritize recovery by RTO and inter-dependencies
- Analyze impact of not recovering function
- Conduct selective interview
 - Business unit representative
 - Business unit head
 - Supervisors and staff doing daily operations

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Minimum Business Continuity Objective (MBCO)



- Is the minimum level of services and/or products that is acceptable to the organization to achieve its business objectives during an incident, emergency or disaster.
- Is set by the Executive Management of the organization and can be influenced, dictated and/or changed by current regulatory requirements or industry practices.
- The definition provided here rephrases the operational perspective into an objective - the mission objective for BCM

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Recovery Time Objective (RTO)



- Recovery Time Objective (RTO) is the maximum tolerable time within which Critical Business Functions must be restored to its MBCO

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Prioritisation



Example:

- P1 : Within 4 hours from time of disruption
- P2 : Between 4 and 24 hours
- P3 : Between 24 and 36 hours
- P4 : Between 36 hours and 7 days
- P5 : Between 7 and 14 days
- P6 : Between 14 days and 1 month
- P7 : More than 1 month



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BIA Reporting

Section 6.5

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Activities



- Prepare draft BIA report
- Issue draft report to participating BU
- Specify deadline and format for feedback submission
- Schedule meetings for clarification and verification of feedback
- Update initial report with changes following clarifications
- Prepare final BIA report
- Prepare summary presentation of BIA findings and report
- Present to Executive Management
- Secure approval to proceed with next stage
- Develop Recovery Strategy

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Report Contents



- BIA report format may vary according to organization
- Information should consists of business needs during recovery and resumption stages; namely:
 - List of prioritized CBFs
 - Associated quantitative and/or qualitative impacts
 - Recovery timescales and peak-processing periods
 - Minimum acceptable level of resources needed
 - List of vital records needed
 - Internal and external dependencies

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CHAPTER 6

Gathering BIA Information

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Learning Objectives

This chapter will help Learners:

- Identify critical business functions
- Determine the impacts of a disruption
- Quantify timescales
- Determine organisational interdependencies
- Identify vital records

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Critical Business Functions



Business Function	Business Function Code	Description	Business Unit MBCO
(a)	(b)	(c)	(d)

- (a) Business Function
- (b) Business Function Code
- (c) Description
- (d) Business Unit MBCO

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Impact Due to Unavailability of Business Function



- Impact to the organisation due to the unavailability of the function in the following areas:
 - Financial
 - Non-financial
 - Processes (Business Operations)
 - Legal and Regulatory
 - Reputation and Image
 - Social Responsibility
 - People
 - Assets/ ICT Systems/ Information

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Impact Due to Unavailability of Business Function



Business Function	Business Function Code	Impact Area	Monetary Loss	Calculation of Monetary Loss	Legal and Regulatory Impact	Remarks (for other non-financial impact)
(a)	(b)	(c)	(d)	(e)	(f)	(g)

- (a) Business Function
- (b) Business Function Code
- (c) Impact Area
- (d) Monetary Loss
- (e) Calculation of Monetary Loss
- (f) Legal and Regulatory Impact
- (g) Remarks (Other non-financial impact)

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Monetary Loss Impact



- Provide monetary value for financial impact ONLY IF it is a financial impact.
- Specify the calculation or formula used to derive the value of the financial impact in Part (d).
 - Based on local currency and covers the same time period as the organization's planning time horizon for Key Planning Scenario (KPS).

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Legal and Regulatory Impact



- Indicate the applicable legal and regulatory requirements that has to be compiled upon by the business function, ONLY IF it is a legal and regulatory impact.
- For example,
 - Employment Act
 - Workplace Safety and Health Act
 - Singapore Civil Defence Force (SCDF)

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Legal and Regulatory Impact



- Describe the relevant clauses to be fulfilled
 - E.g. Part III of MOM Employment Act states that we need to pay salaries within 7 days after the end of the salary period.

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Remarks



- Explanation of other non-financial areas
- For example,
 - Damage to business reputation and image
 - Loss of business license
 - Loss of customer trust
 - Fails to deliver products and services on time
 - Adverse impact on outsource partners
 - Causing casualty on personnel (e.g. employees, part-time staff and agency staff)

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Impact Over Time



Business Function	Business Function Code	Impact Over Time												RTO	MTPD	Vulnerable Period
		4 hrs	8 hrs	12 hrs	1 day	2 day s	3 day s	5 day s	7 day s	10 day s	14 day s	21 day s	30 day s			
(a)	(b)	(c)												(d)	(e)	(f)

- (a) Business Function
 (b) Business Function Code
 (c) Impact Over Time
 (d) Recovery Time Objective (RTO)
 (e) Maximum Period of Disruption

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RTO, MTPD



- Recovery Time Objectives (RTO)
 - The period of time within which functions must be recovered after a disruption has occurred.
- The Maximum Tolerable Period of Disruption (MTPD)
 - The time it would take for adverse impacts, which might arise as a result of not providing a product/service or performing a function, to become unacceptable.

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Example: RTO, MTPD



CBF #	Highest Impact Category	Impact Over Time													RTO (Days)	MTPD (Days)
		2 hrs	4 hrs	8 hrs	12 hrs	1 day	1.5 days	2 days	3 days	5 days	7 days	10 days	14 days	21 days		
#1	3	1	1	1	1	1	2	2	3	3	4	4	5	5	3 days	14 days

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Interdependencies



Business Function	Function Code	Type of Dependency 1. BU depends on X (X is BU's Upstream) 2. BU is depended upon by X (X is BU's Downstream) 3. Mutual Dependency with (BU and X are mutually dependent on each other)	Target Business Unit / Vendor (X)	Description on Nature of Dependency
(a)	(b)	(c)	(d)	(e)

- (a) Business Function
- (b) Business Function Code
- (c) Type of Dependency
- (d) Target Business Unit/Vendor
- (e) Description of Dependency

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Supporting Resources



Business Function	Function Code	Supporting IT Systems and Applications	RPO	System Recovery Requirement	Special Equipment or Resources
(a)	(b)	(c)	(d)	(e)	(f)

- (a) Business Function
- (b) Business Function Code
- (c) Supporting IT Systems and Applications
- (d) RPO
- (e) System Recovery Requirement
- (f) Special Equipment or Resources

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RPO, Systems Recovery Requirement



- Supporting IT Systems and Applications
 - For example, SAP, CRM, Shared Point
- Recovery Point Objective (RPO)
 - The point in time before a disaster to which system and data must be covered.
- Systems Recovery Requirement:
 - The period of time within which systems and applications must be recovered after a disruption has occurred in order to carry out recovery of business functions.

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Vital Records



Business Function	Function Code	Description of Vital Records	Media Type	Location (onsite/ backup storage)	In Whose Care
(a)	(b)	(c)	(d)	(e)	(f)

- (a) Business Function
- (b) Business Function Code
- (c) Description of Vital Records
- (d) Media Type
- (e) Location
- (f) In Whose Care

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Gather BIA Information

Group Discussion

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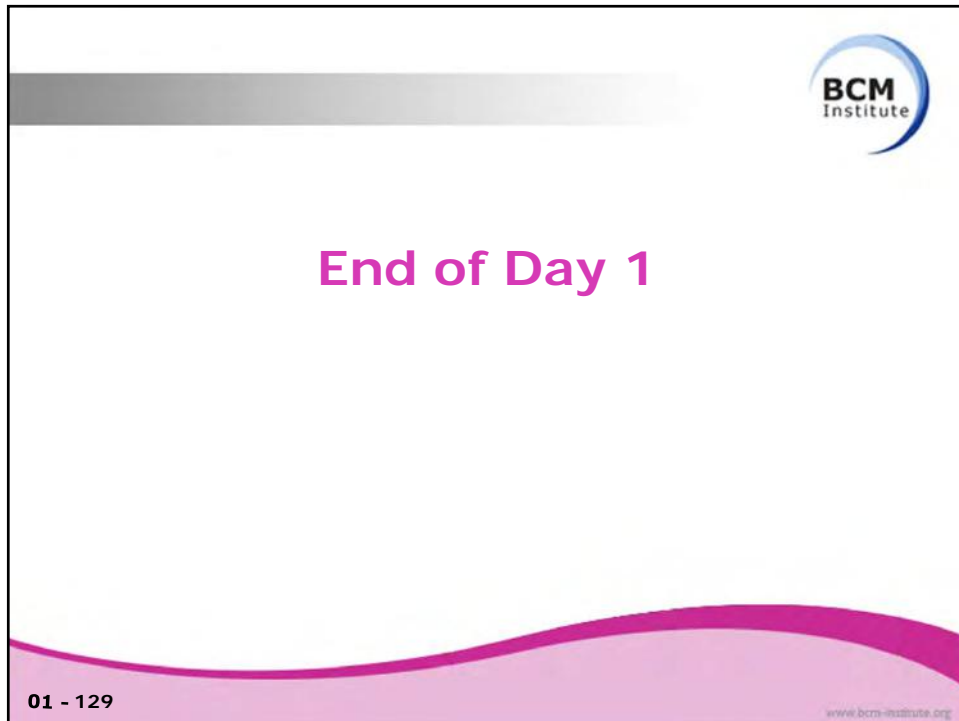


Assignment Two

BIA Questionnaire

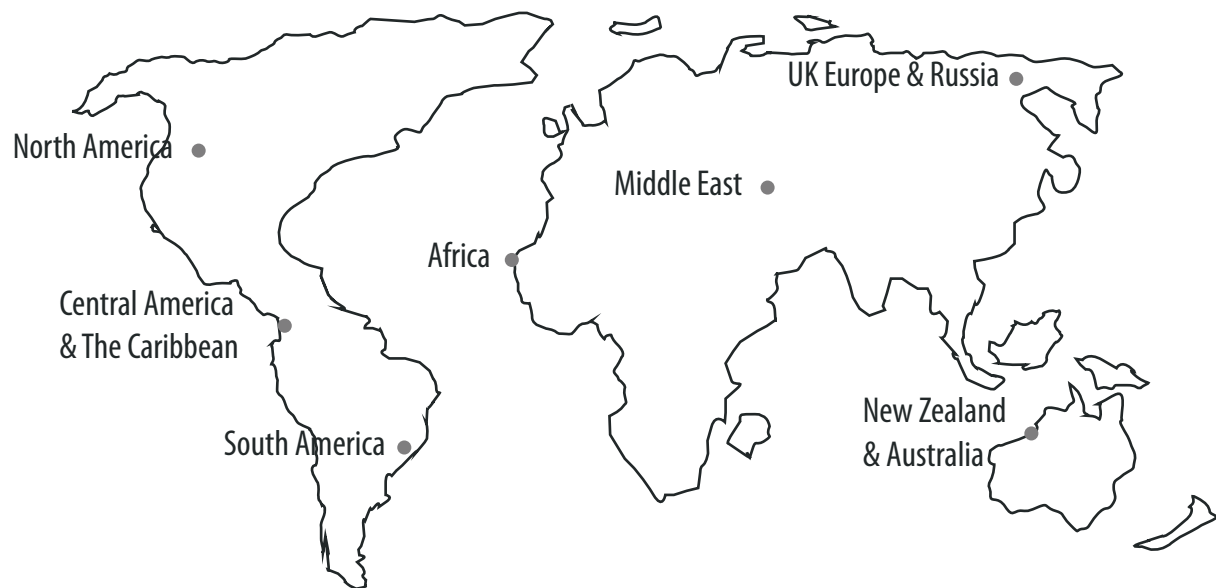
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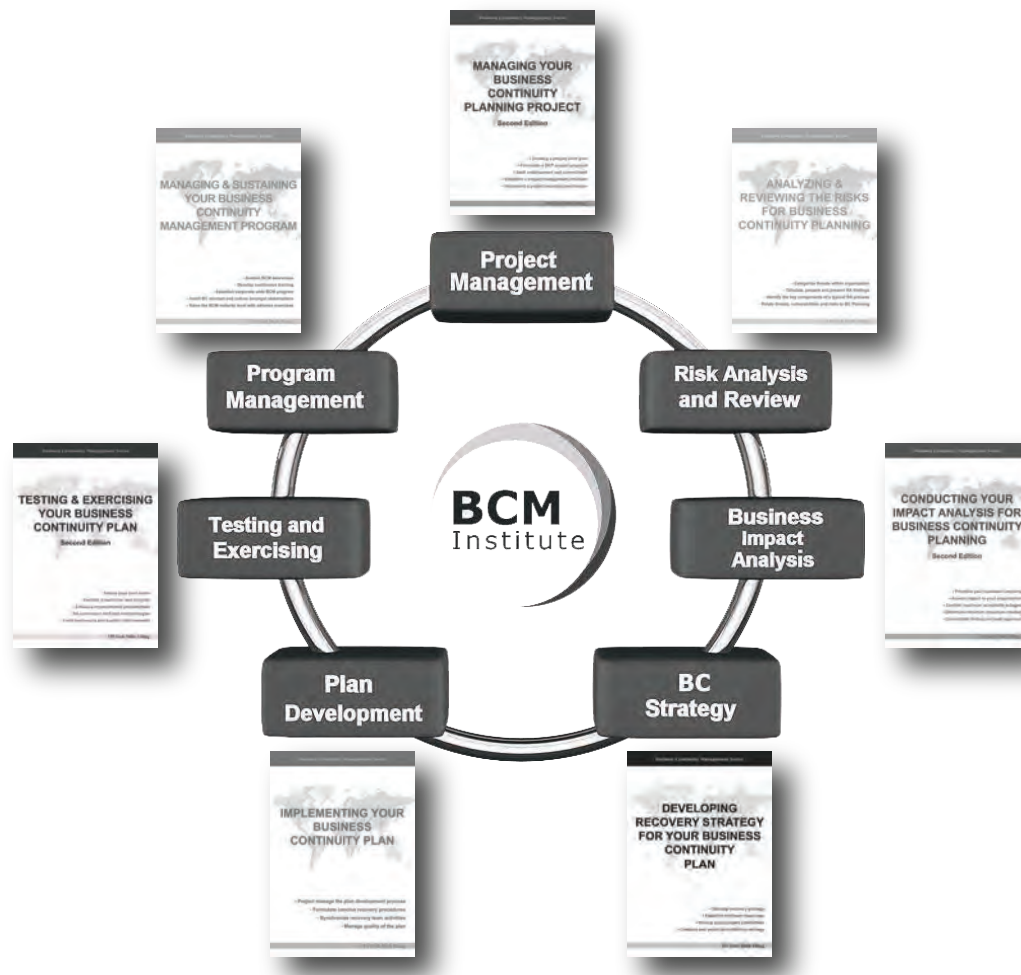
ABOUT BCM INSTITUTE



Countries with professionals certified by BCM Institute

- We are a global convergence of thought leadership in ISO 22301 BCMS Audit, Business Continuity, Crisis Management, Crisis Communication and IT Disaster Recovery.
- Global Professional Development and Qualification developed by Technical Experts and Thought Leaders
- Largest Continuity Training and Certification Organization in Asia Pacific
- Governed by Education, Examination and Certification Committees
- Delivered by Industry Practitioners, Professionals and Peers
- Attended by Professionals, Practitioners, Consultants, Auditors, Officials from all industry sectors of over 1000 Organizations and Multi-National Corporations (MNC)

Education	Professional Development	Thought Leadership
Conducting and administering courses and examinations	Provide a career path and a common body of knowledge for business continuity and disaster recovery professional	Organizing conferences and seminar events. Publishing technical and research papers.



BCM Planning Methodology

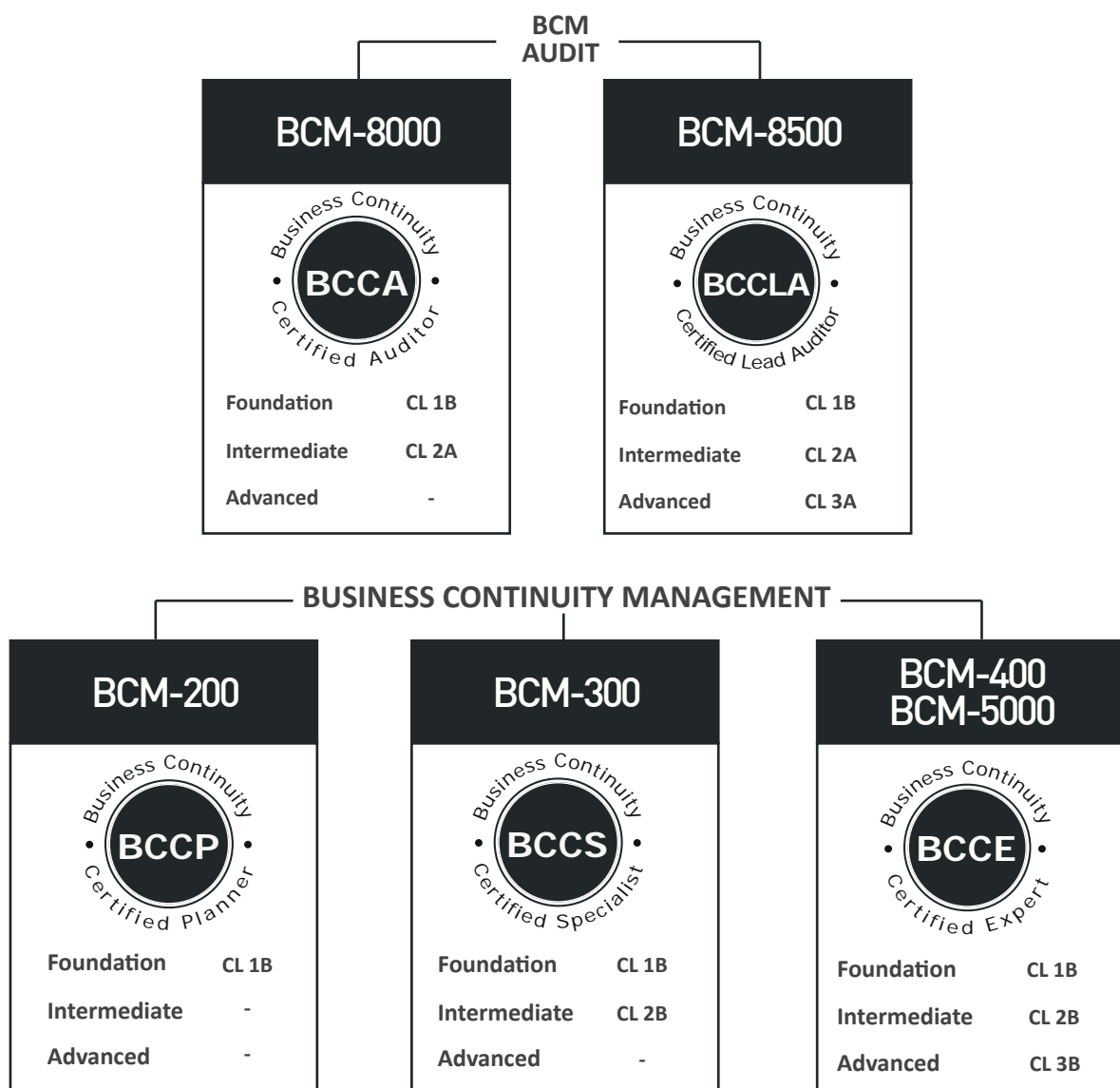
BCM Institute's planning methodology's strength lies in its practical and proven usage by professionals and practitioners worldwide. First developed by technical experts, the methodology today can be seen throughout international standards. One key aspect of BCM Institute's implementation methodology is that it has been modulated for ease of transference and multiple standards implementation within a single core framework. This methodology is based on 7 areas of the Body of Knowledge, also known as, BOKs. To support the learning and development of our methodology, each BOK is learned through various Competency Levels.

Certification Types and Levels

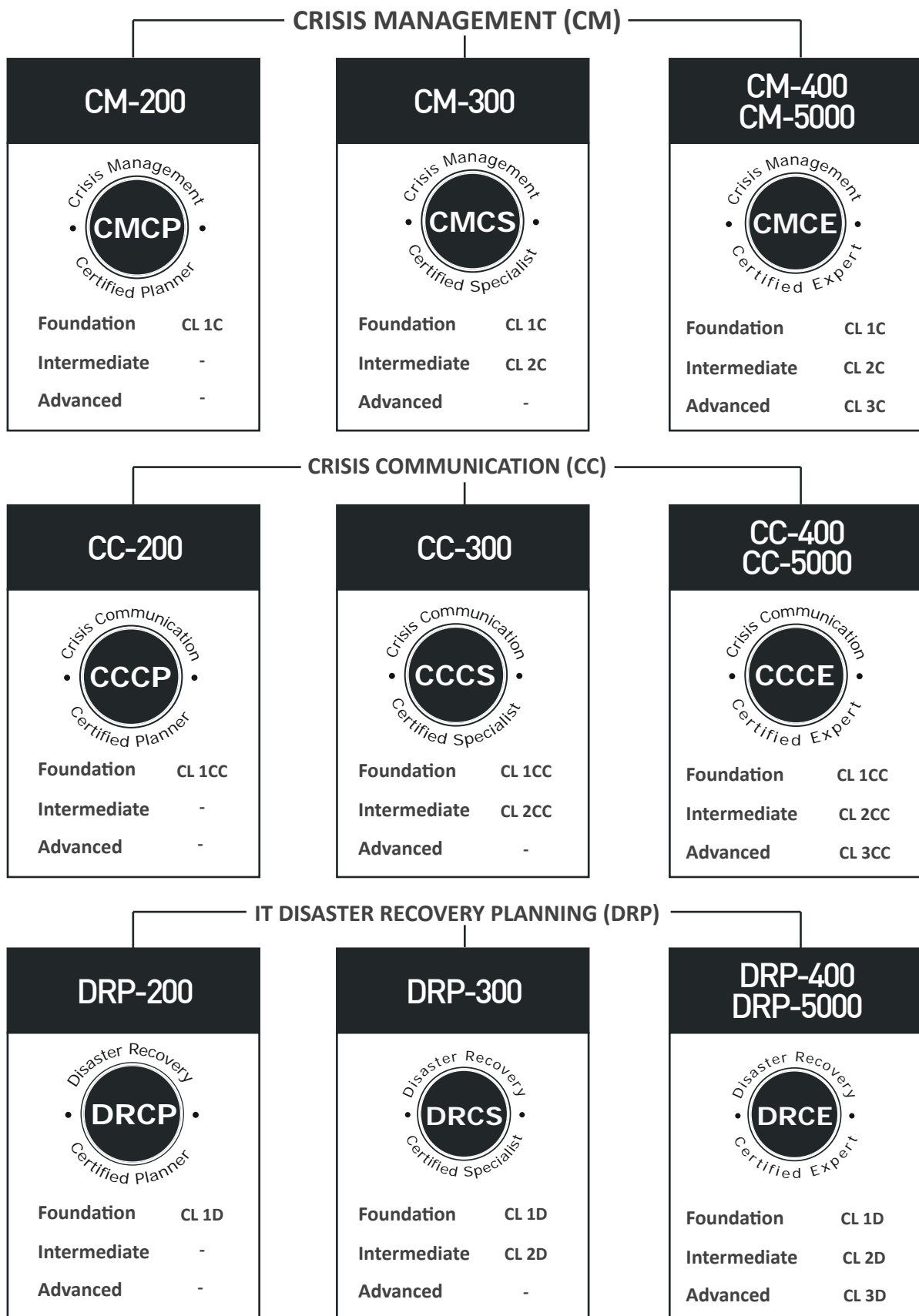


The BCM Institute's Certification programs support the community in BCM Audit, Business Continuity Management (BCM), Crisis Management (CM), Crisis Communication (CC), IT Disaster Recovery (IT DR) and are designed to ensure a consistency high standard of professional practice and recognize individuals' competencies in the BCM sphere. The certification program requirements and eligibility standards are applied fairly, impartially, and consistently. The certification program may grant certification independently of a candidate's membership or non-membership in any organization, association or other groups.

Participants are expected to be competent in the respective competency level (CL) upon completion of the preparatory course.



Certification Types and Levels



Criteria	Candidate Must :
Education	Complete the prescribed preparatory courses
Examination	Meet and successfully pass the prescribed examinations in accordance to the preparatory course level or desired certification levels
Experience	Possess the necessary assessable experience in accordance to the desired certification levels
Continuing Education Hours	Continue to develop the skills and knowledge to maintain the credentials of the certification

The Institute is governed by independent committees, supported by its published set of BCM Body of Knowledge (BCMBoK). The BCMBoK serves as the basis for the competency program for the assessment and qualification of professionals in BCM Audit, Business Continuity Management (BCM), Crisis Management (CM), Crisis Communication (CC) and IT Disaster Recovery (IT DR).

As part of the requirements for certification, professionals are required to demonstrate their knowledge through examinations at levels prescribed by BCM Institute's Education and Examination Committees. Skills and capabilities are assessed through verifiable experience presented in the application for certification form.

Qualified candidates are presented certification credentials at the discretion of the BCM Institute's Certification Committee. Candidates are advised to enrol in the BCM Institute's preparatory courses prior to undertaking the prescribed examination. To maintain the use of credentials, certified members must demonstrate active involvement in BCM through annual declaration of continuing education hours.



Building Blocks

The Competency Level, or CL, forms a framework and becomes a set of building blocks for BCM Institute's training and certification requirement.

It consists of three levels: Foundation (CL 1), Intermediate (CL 2) and Advanced (CL 3).

Knowledge Domain

The education and certification for BCM are:

- A** BCM Audit
- B** Business Continuity Management
- C** Crisis Management
- CC** Crisis Communication
- D** IT Disaster Recovery

The arrangement of the tiers represents the increasing level (CL 1, CL 2 and CL 3) of specificity and specialization of the BCM Audit skills, BCM skills, CM skills, CC skills, IT DR skills and their knowledge content. This content is mainly applicable to participants attending the Institute's education and certification program.

A AUDIT

The domains for the BCM Audit courses are:

- CL 2A: Intermediate is taught in the BCM-8000 or related course (preparing for the BCCA certification examination).
- CL 3A: Advanced is in BCM-8500 or related course (preparing for the BCCLA certification examination).

For more information please visit <http://bcmpedia.org>

CL 2A, [http://www.bcmperia.org/wiki/CL_2A:_Intermediate_\(Audit\)](http://www.bcmperia.org/wiki/CL_2A:_Intermediate_(Audit))

CL 3A, [http://www.bcmperia.org/wiki/CL_3A:_Advanced_\(Audit\)](http://www.bcmperia.org/wiki/CL_3A:_Advanced_(Audit))



B BUSINESS CONTINUITY MANAGEMENT

- The domains for the BCM courses are:
CL 1B: Foundation will be taught in the foundation course (BCM-200 course preparing for the BCCP certification exam).
- CL 2B: Intermediate (BCM-300 preparing for the BCCS certification examination).
- CL 3B: Advanced (BCM-400/ BCM-5000 preparing for the BCCE certification examination).

For more information please visit <http://bcmpedia.org>

CL 1B, [http://www.bcmperia.org/wiki/CL_1B:_Foundation_\(BC\)](http://www.bcmperia.org/wiki/CL_1B:_Foundation_(BC))

CL 2B, [http://www.bcmperia.org/wiki/CL_2B:_Intermediate_\(BC\)](http://www.bcmperia.org/wiki/CL_2B:_Intermediate_(BC))

CL 3B, [http://www.bcmperia.org/wiki/CL_3B:_Advanced_\(BC\)](http://www.bcmperia.org/wiki/CL_3B:_Advanced_(BC))



CRISIS MANAGEMENT

- The domains for the CM courses are:
CL 1C: Foundation will be taught in the foundation course (CM-200 course preparing for the CMCP certification exam).
- CL 2C: Intermediate (CM-300 preparing for the CMCS certification examination).
- CL 3C: Advanced (CM-400/ CM-5000 preparing for the CMCE certification examination).

For more information please visit <http://bcmpedia.org>
CL 1C, [http://www.bcmpedia.org/wiki/CL_1C:_Foundation_\(CM\)](http://www.bcmpedia.org/wiki/CL_1C:_Foundation_(CM))
CL 2C, [http://www.bcmpedia.org/wiki/CL_2C:_Intermediate_\(CM\)](http://www.bcmpedia.org/wiki/CL_2C:_Intermediate_(CM))
CL 3C, [http://www.bcmpedia.org/wiki/CL_3C:_Advanced_\(CM\)](http://www.bcmpedia.org/wiki/CL_3C:_Advanced_(CM))



CRISIS COMMUNICATION

- The domains for the CC courses are:
CL 1CC: Foundation will be taught in the foundation course (CC-200 course preparing for the CCCP certification exam).
- CL 2CC: Intermediate (CC-300 preparing for the CCCS certification examination).
- CL 3CC: Advanced (CC-400/CC-5000 preparing for the CCCE certification examination).

For more information please visit <http://bcmpedia.org>
CL 1CC, [http://www.bcmpedia.org/wiki/CL_1CC:_Foundation_\(CC\)](http://www.bcmpedia.org/wiki/CL_1CC:_Foundation_(CC))
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CL 3CC, [http://www.bcmpedia.org/wiki/CL_3CC:_Advanced_\(CC\)](http://www.bcmpedia.org/wiki/CL_3CC:_Advanced_(CC))



IT DISASTER RECOVERY

- The domains for the disaster recovery courses are:
CL 1D: Foundation will be taught in the foundation course (DRP-200 course preparing for the DRCP certification exam).
- CL 2D: Intermediate is taught in the DRP-300 course (preparing for the DRCS certification examination).
- CL 3D: Advanced is in DRP-400/5000 course (preparing for the DRCE certification examination).

For more information please visit <http://bcmpedia.org>











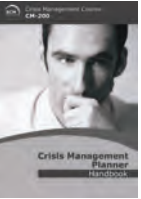

















CL 1D, [http://www.bcmpedia.org/wiki/CL_1D:_Foundation_\(DR\)](http://www.bcmpedia.org/wiki/CL_1D:_Foundation_(DR))

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CL 3D, [http://www.bcmpedia.org/wiki/CL_3D:_Advanced_\(DR\)](http://www.bcmpedia.org/wiki/CL_3D:_Advanced_(DR))



Certification

	Fundamental	Intermediate	Advance
ISO22301 Auditor		 <p>Course Code: BCM-8000</p> 	 <p>Course Code: BCM-8500</p> 
ISO22301 BCMS	 <p>Course Code: BCM-200</p> 	 <p>Course Code: BCM-300</p> 	 <p>Course Code: BCM-400 BCM-5000</p> 
Crisis Management	 <p>Course Code: CM-200</p> 	 <p>Course Code: CM-300</p> 	 <p>Course Code: CM-400 CM-5000</p> 
Crisis Communication	 <p>Course Code: CC-200</p> 	 <p>Course Code: CC-300</p> 	 <p>Course Code: CC-400 CC-5000</p> 
IT Disaster Recovery	 <p>Course Code: DRP-200</p> 	 <p>Course Code: DRP-300</p> 	 <p>Course Code: DRP-400 DRP-5000</p> 

Competency-Based

INITIATING BCM PROGRAM



Course Code:
BCM-410

IMPLEMENTING BCM MANUAL



Course Code:
BCM-420

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Course Code:
BCM-310

DEVELOPING BUSINESS CONTINUITY STRATEGIES AND PLANS



Course Code:
BCM-320

TESTING AND EXERCISING BUSINESS CONTINUITY PLAN



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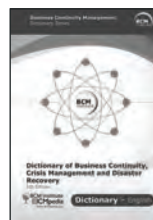
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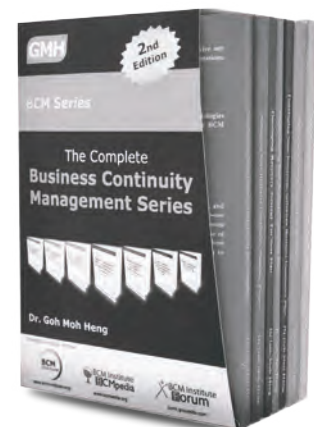


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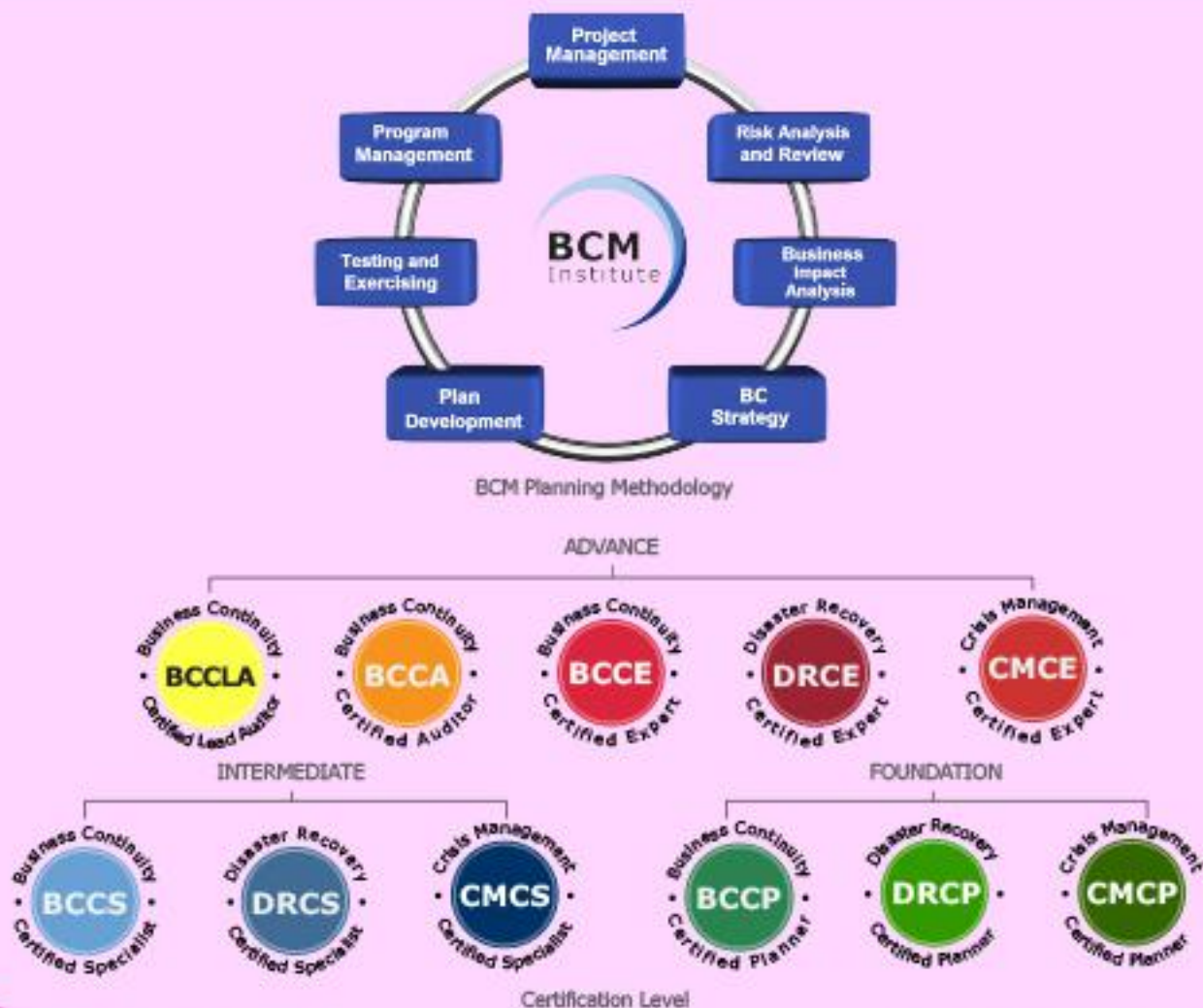


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