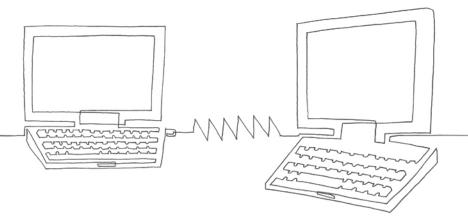
Basics of Business Continuity Planning

For Financial Institutions

December 4, 2019





Beazley Breach Response (BBR) Services workshop program

- Basics of Business Continuity Planning
- Eligibility for other workshops
- To learn more
 - o Visit the Workshops page by clicking on Services on beazleybreachsolutions.com
 - o Email bbrservices@beazley.com



BUSINESS CONTINUITY PLANNING FOR FINANCIAL INSTITUTIONS

December 4, 2019



Today's Presenter



Troy HarrisSenior Director, Risk Consulting

- 16 years in RSM's national Business Continuity Planning consulting practice
- Over 20 years of BCP experience
 - Experienced in both information technology (IT) disaster recovery planning and operations/business resumption planning
 - Served as both an internal recovery coordinator and an external BCP consultant
 - Experienced working with a wide variety of industries in both the public and private sectors
- Certified Business Continuity Professional (CBCP)
- Regular presenter at both local and national seminars and conferences



Agenda

- BCP Overview
- FFIEC BCP Guidance
- RSM's 5-Phase BCP Methodology
- Questions & Answers/Open Discussion
- Conclusions/Wrap-up



BCP OVERVIEW



Business Continuity Plan (BCP) Definition

- Documented and formal arrangements for resuming critical business operations in a timely manner following a disaster or other disruption
 - "Timely" may equal "Immediate"
 - Degraded operations may suffice temporarily
 - Focus is on sustaining the business
 - Business operations require essential resources
 - Recovery process must be efficient and organized



BCP vs. Broader Risk Management*

- Business Continuity
 Planning Elements:
 - Crisis ManagementPlans/CrisisCommunication Plans
 - IT Disaster Recovery (DR) Plans
 - Business ResumptionPlans
 - Pandemic ResponsePlans

- Other Risk Management Initiatives:
 - Emergency ResponsePlans
 - Incident Response
 Plans/Incident Action Plans
 - Information SecurityPrograms
 - Physical Security Programs
 - Compliance Programs
 - Insurance Programs
 - Staff Succession Plans

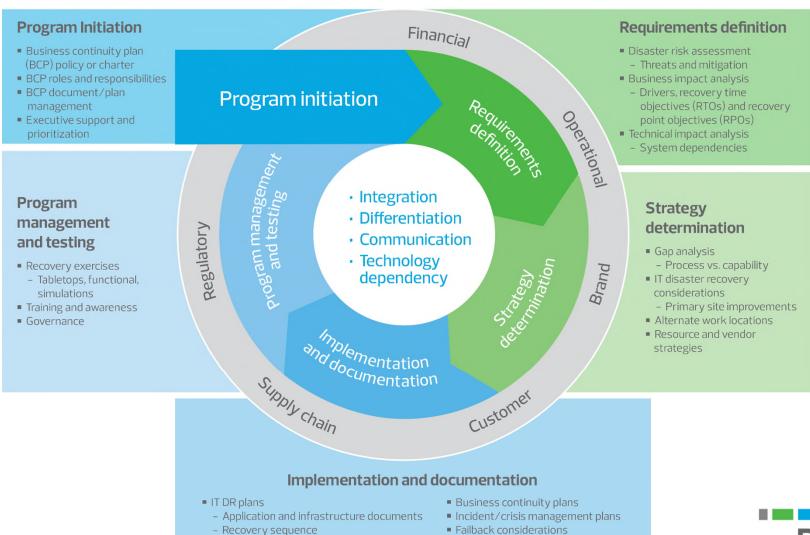


Basic BCP Concepts

- Functions and systems must be inventoried and prioritized for recovery
- BCPs should primarily address your aggregate risks and scenarios
- Recovery processes should leverage pre-established strategies for key requirements
- The organization's BCP is a collection of multiple "recovery playbooks"
 - Individual teams/departments have their own "recovery playbooks" for reference following a disaster
 - Recovery coordinated from department level to the organization level
 - Designated teams for recovery coordination, IT restoration, etc.



RSM's Business Continuity Planning Methodology



Ongoing BCP Program

- Should encompass all facets of the BCP Program, including:
 - BCP Policy and Program Charter
 - Business Impact Analysis (BIA)
 - Disaster Risk Assessment (DRA)
 - Recovery strategies
 - BCP
 - Testing Schedule and Procedures
 - Training Schedule and Procedures



Ongoing BCP Program continued

- Activities should be performed according to an established schedule <u>and</u> in response to designated "triggering" events:
 - Log activities and report progress to Steering Committee, etc.
 - Respond to organizational changes, test results, audits, etc.
 - Adjust schedule and/or procedures as necessary/appropriate
- Key ongoing (scheduled) activities:
 - Exercises/Tests/Drills
 - Staff Training
 - Maintenance
 - Enhancement
 - Reviews/Audits



FFIEC BCP GUIDANCE



FFIEC BCP Handbook

- High-level guidance on best practices and regulatory requirements for a sound planning program
- Follows closely with industry best practices
- Aligns with the methodologies developed by RSM,
 Disaster Recovery Institute International (DRII), and other industry sources
- Supplemented by interagency statements
- Latest revision: November 2019



FFIEC BCP Handbook – Key Focus Areas

- Enterprisewide continuity planning
- Management oversight and support including formal and documented Board approval
- Business impact analysis (BIA) and disaster risk assessment (DRA)
- Strategic risk management
 - Adequate risk reduction strategies and recovery strategies
 - Integration with other processes-System Development Life Cycle (SDLC), audit, training, etc.



FFIEC BCP Handbook – Key Focus Areas continued

- Ongoing testing and maintenance programs
 - Including logging (documentation) of activities and the associated results
- IT disaster recovery and increased IT complexity
- Integration with third-party service providers
- Consideration of security



FFIEC BCP Handbook – "Recent" Additions

- Pandemic Response Planning
- Tiered regulatory assessment
- Increased emphasis on previous guidance
 - Board and Senior Management involvement
 - Cyclical planning process
 - Business Impact Analysis (BIA)
- Comprehensive assessment of third-party risks
- Failure of primary DR/BCP strategies and plans
 - Supplemental measures, such as Sheltered Harbor



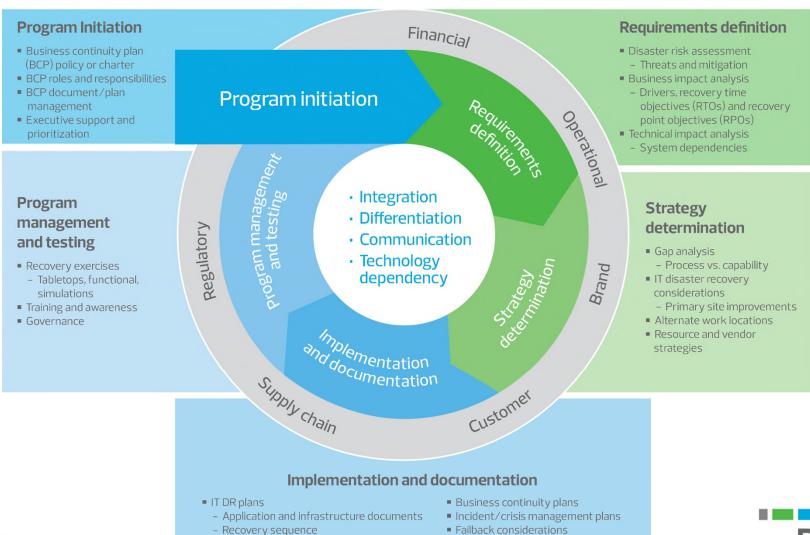
RSM'S 5-PHASE BCP METHODOLOGY



PROGRAM INITIATION



RSM's Business Continuity Planning Methodology



BCP Policy and/or Charter

- Concise, but clear and definitive
- Formally approved and properly adopted
- Regularly reviewed and updated
- Suggested topics:
 - Scope, objectives, and assumptions
 - Roles and responsibilities with clear accountability
 - General approach/methodology
 - Timeline and budget
 - Ongoing planning processes



BCP Roles

- Executive Sponsor
- Steering Committee
- Business Continuity Coordinator and/or Administrator(s)
- Recovery Teams
 - Team Leaders
 - Alternate Team Leaders
 - Team Members (and Alternates)
- Evaluators/Auditors
- Liaisons



BCP Software Tools

- Specialized tools for developing, maintaining and storing your BCP(s) and other related materials
- Support consistent and effective planning
- Relational databases to support data collection and maintenance
- Specialized user interfaces and output reporting
- User security, external interfaces, expanded features, etc.

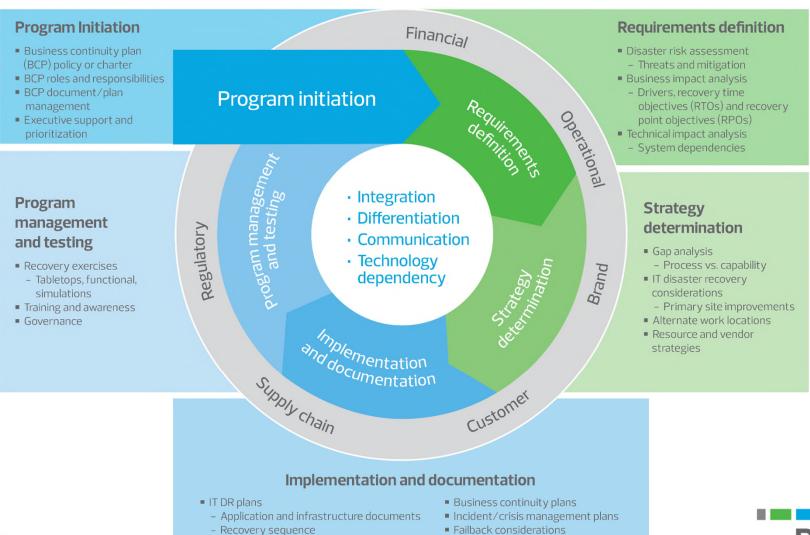
Facilitate, but do not replace, the plan development, maintenance and testing processes



REQUIREMENTS DEFINITION



RSM's Business Continuity Planning Methodology



REQUIREMENTS DEFINITION

Disaster Risk Assessment (DRA)

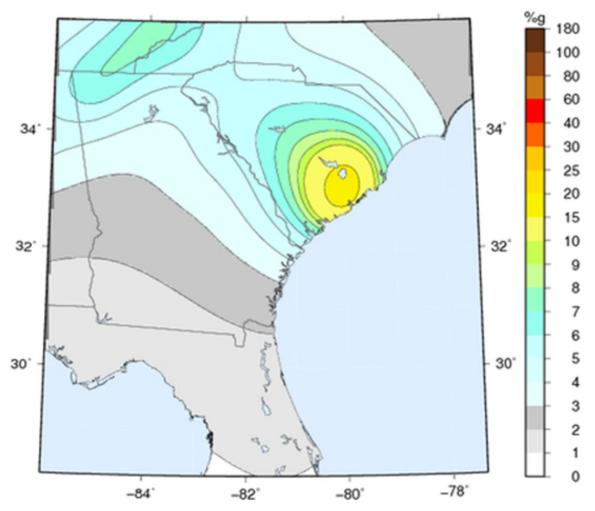


Disaster Risk Assessment (DRA) Process

- Assemble a comprehensive library of risk factors
- Collect and analyze data from multiple sources
 - Perceptions
 - Government and industry authorities
 - Historical experiences
 - Observation
 - Other research
- Assign ratings for Probability and appropriate Impact categories
- Calculate inherent risk
- Appropriately integrate mitigation considerations
- Document conclusions and rationale



Custom Hazard Map



Peak Ground Acceleration

http://www.usgs.gov/

DRA Sample

Threat Factor	Probability (High, Medium, Low, or None)	Speed of Onset R = Rapid	(Hi	Impact igh, Medium,	t Ratings n, Low, or No	one)	(>60: High risk 41-60: Moderate risk; 21-40: Low risk;	Current Mitigation / Preparedness (High, Medium, Low, or None)	Residual Risk Rating (>60: High concern 41-60: Moderate concern; 21-40: Low concern; 0-20: None or Minimal concern)	Threat Rank	Comments	
		G = Gradual	Staff	Facilities	Systems	Overall / Business	▼ 0-20: None or Minimal risk)					
Human and Proximity Threats												
Transportation Accident (Aircraft, Train, Motor Vehicle, etc.)	L	R	L	М	L	М	30	М	18		Risk Factors: The headquarters is located at a major intersection and surrounded by heavy vehicle traffic; However, this does not pose a serious threat of severe physical damage (excluding spills), as traffic speeds are slow. Very few flight paths within the region and the closest railway is over 3 miles from the site. Mitigating Factors: Some staff have the ability to temporarily work from other sites or home in the event of such incidents. Reference: https://skyvector.com/	



Risk Mitigation

- Establish formal risk mitigation plans
 - Priorities correlated to risk assessment results
 - Objectives and tasks
 - Responsibilities
 - Timelines
- Monitor progress and publish status reports
- Periodically reevaluate both risks and mitigation



REQUIREMENTS DEFINITION

Business Impact Analysis (BIA)



BIA Process

- Establish the BIA "framework"
 - Impact categories
 - Impact rating criteria and thresholds
- Assemble a comprehensive inventory of business functions
- Assess each function using the established framework
- Identify and evaluate technical requirements



Business Impact Analysis— Recovery Time Objective (RTO)

Critical Impact Level Business Impact Elapsed Time Since the Incident



Technical Requirements

- Identify the key technical applications or services that are required to perform each function
- Individually evaluate the criticality of each system
- Determine the RTO of each system requirement
- Validate the data loss tolerance or Recovery Point Objective (RPO) of each system



BIA Sample

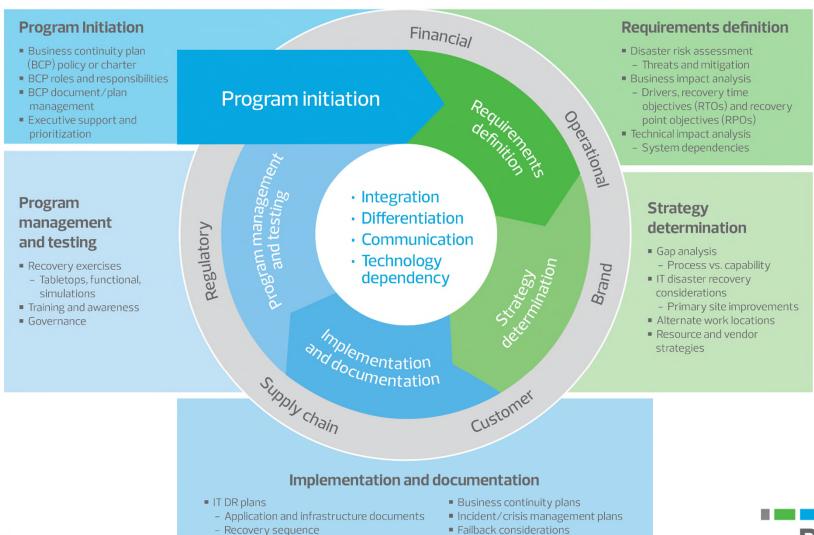
	Functional RTO (Days)	Disruption Duration		In	npact Rating	gs		System Dependencies		
Business Function (Name/Description)			Customer Service (H/M/L)	Operations (H/M/L)	Financial (H/M/L)	Legal/ Regulatory (H/M/L)	Human Well-Being (H/M/L)	System Requirements	System RTO (Days)	Comments/Rationale
Accounts Payable	14	1 Day or Less	L	L	L	L	L	G/L System	21	The Company stays current with outstanding payments and vendors would likely provide extensions as needed. However, after 2 weeks, the Company would be at risk of losing access to critical products and services. Manual (check) payments could be made temporarily without access to required systems.
Managing payments made to		2-3 Days	L	L	L	L	L	Internet – Bank Website	21	
vendors for products and services rendered to the		4-7 Days	L	L	L	L	L			
Company.		8-14 Days	L	М	L	L	L			
		14+ Days	L	Н	М	М	L			
Payroll Processing	3	1 Day or Less	L	L	L	L	L	HRIS	14	If the Company was more than 3 days late distributing payroll, employees may encounter significant hardships and potentially may cease their activities. For a single pay cycle, temporary (estimated) payments could be distributed in the absence of automated systems. Manual checks could be issued for two pay cycles.
Calculating and remitting		2-3 Days	L	М	М	L	М	Internet – Bank Website	28	
salary payments to the Company's employees.		4-7 Days	М	М	М	М	Н	G/L System	28	
Includes retaining and distributing funds for benefits		8-14 Days	М	Н	Н	М	Н			
and other payments.		14+ Days	Н	Н	Н	Н	Н			



STRATEGY DETERMINATION



RSM's Business Continuity Planning Methodology



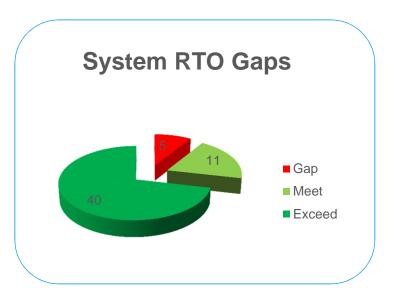
Recovery Strategy Coverage Areas

- Technology
 - Hardware, software, and data
 - Voice and data communication
 - Third-party systems and interfaces
- Facilities
 - Workspace
 - Data center(s)
 - Specialized sites (secure areas, lobbies, meeting rooms, etc.)
- Specialized equipment and other resources
- Operational workarounds and transfers
- Technical assistance and general staffing
- Crisis communication



Recovery Strategy Gap Analysis

- Map BIA Requirements to Current/Planned Strategies
- Determine Current/Planned Capabilities
 - Realistic/Valid Timelines
 - Timing From Initial Disruption
 - Foundation for Estimates
 - Interdependency Considerations
 - Predecessors
 - Restoration Capacity
- Include a Formal Gap Analysis
- Identify Enhancement Requirements





Basic Recovery Strategy Options

- Internal Resources
- Specialized Vendors/Services
- Business Partners
- Public Resources
- Acquire/Address As Needed



Vendor Continuity Management Program

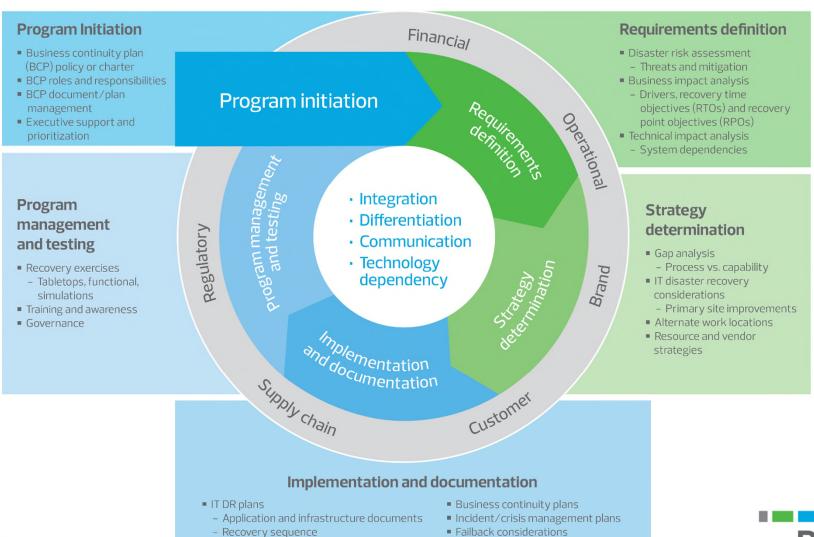
- Risk-rate ALL suppliers and services-providers
 - Different than other vendor risk assessments
 - Rating based on their impact to the continuity of your operations
 - Consider criticality of product/service, portability, etc.
 - Include technology providers
- Evaluate vendor continuity capabilities based on the assigned risk rating
 - Evaluation frequency
 - Evaluation criteria
- Proactively remediate and validate deficiencies



IMPLEMENTATION AND DOCUMENTATION



RSM's Business Continuity Planning Methodology



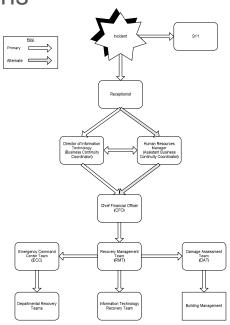
BCP Manual – Structure and Format

- Defined, consistent, and logical
- Should facilitate (or even mimic) a recovery effort
- Supported by a detailed table of contents or even chapter summaries
- Segregates administrative and overview sections from actionable recovery plans
- Includes team-specific sections/plans ("playbooks")



Recovery Coordination Teams

- Discovery and notification
- BCP activation
 - Broad disaster identification/detection options
 - Clear communication and escalation channels
 - Defined roles and alternates
 - Summary graphic and detailed narrative
 - Defined activation criteria
 - Correlation to other portions of the BCP





Recovery Coordination Teams continued

- Initial evaluation and escalation
- Damage assessment
- Internal and external communication
- Coordination with external parties
- Coordination with other internal processes
- Priority determination
- Strategy selection and allocation
- Overall recovery coordination
- Recovery process tracking and administration



Departmental Business Resumption Plans (BRPs)

- Team/department overview
 - Ongoing ("normal") responsibilities
 - Disaster responsibilities
- Departmental recovery strategies
 - Facilities/workspace
 - Technology
 - Personnel
 - Other
- Team assignments (including alternates)
- Business functions and priorities/RTOs
- External resource requirements (schedule)



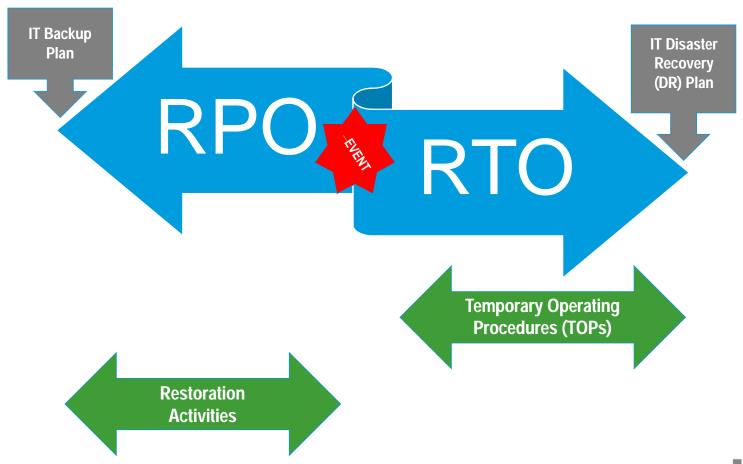
Departmental BRPs continued

- Internal resources requirements
 - Quantity over time (schedule)
 - Source (including off-site storage)
- Administrative/common recovery tasks
- Custom recovery tasks
- Reference materials
 - Contact lists
 - Resource inventories
 - User manuals

- Standard Operating Procedures (SOPs)
- Configuration specs or parameters
- Other
- Other miscellaneous sections, such as:
 - Interdependency diagrams
 - Vital records list



Custom Recovery Tasks continued





IT Disaster Recovery Plans (DRPs)

- Overview and scope
- Team assignments (including alternates)
- Recovery priorities and RTOs
- Recovery strategy or strategies
- Resource requirements
 - Quantity
 - Specs
 - Source
 - Location
 - Other



IT DRPs continued

- Technical restoration tasks
 - Restoration
 - Configuration
 - Validation
- Interdependencies and other considerations
- Reference materials
 - Contact lists
 - Diagrams
 - Inventories
 - Addresses and settings
 - Administration and support procedures
 - Other



Pandemic Response Plans

"Recognized variation from traditional BCPs"

- Little or no impact on facilities, technology, etc.
- Major impacts on staffing, customers, vendors, etc.
- Leverage and integrate with crisis management plans
- Consider:
 - Prevention and containment
 - Monitoring
 - Escalation and de-escalation
 - Personnel (HR) policies
 - Demand variations
 - Operational priorities and scaling

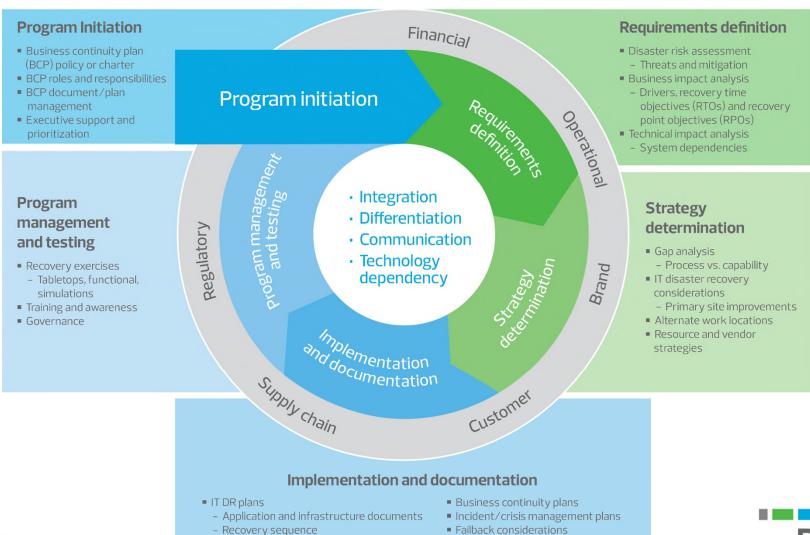




PROGRAM MANAGEMENT AND TESTING



RSM's Business Continuity Planning Methodology



Testing & Training – Initial Activities

- Train personnel on the overall BCP and their specific recovery roles
- Implement recovery strategies
- Perform initial testing—typically walk-through exercises:
 - Verify the BCP is accurate, adequate and usable
 - Validate effectiveness of recovery strategies
 - Allow participants to experience key recovery processes and practice their roles
 - Identify weaknesses and opportunities to enhance the Plan
- Establish an ongoing BCP program



BCP Training Program

- Key positions need to develop and maintain familiarity with their role and key BCP components
 - Document structure and navigation
 - Teams and responsibilities
 - Activation and escalation procedures
 - Recovery priorities and outage tolerances
 - Core recovery strategies
- All staff should be aware of the BCP Program and key concepts
 - New-hire training
 - Ongoing awareness initiatives
- Goal is to understand the BCP not memorize it



BCP Testing Program – Best Practices

- Avoids repetition
 - Varies test type, scope, scenario, participants, timing, etc.
- Considers realistic and unpredictable disaster circumstances
 - Adds realism to the events
- Elevates complexity and expands scope over time
- Evaluates and documents/reports all tests and any actual activations
- Considers all tests collectively to determine BCP status and identify additional testing requirements



Basic Test Schedule

- Rolling 24-month calendar
- Specific vs. approximate information
 - Timing
 - Test type
 - Participants
- Gain approval and commitment
- Maintain and adjust as needed



Enhanced Test Schedule

- Test scope and objectives to be achieved
- BCP objectives to be exercised
- Disaster scenario to be simulated
 - Type
 - Timing
 - Impact
- Participant roles
- Constraints or other variables

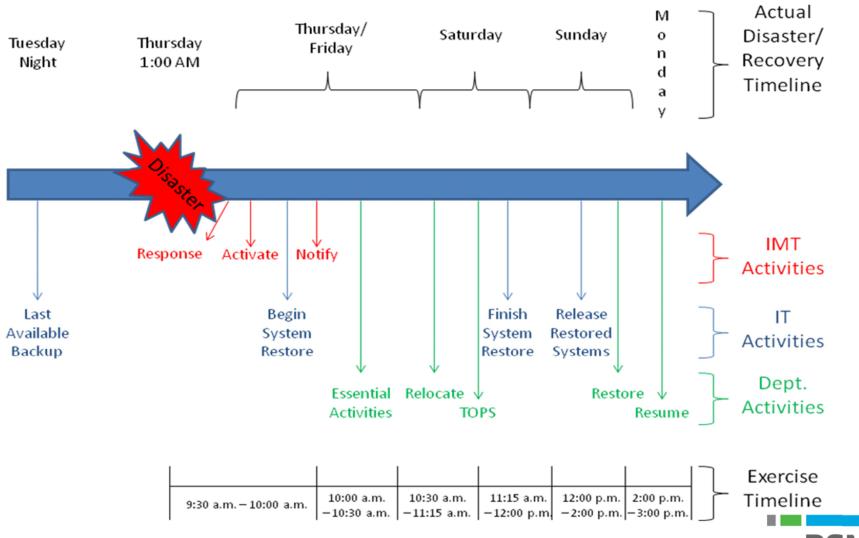


Disaster Scenario

- Correlate to BCP objectives and test objectives
- Outline realistic characteristics and circumstances
- Derive from DRA, relevant research, etc.
- Integrate unfolding circumstances
- Vary type, timing, impact, duration, constraints, etc.



Disaster Scenario – Timeline (Example)



Test Results and Actions

- Test evaluation
 - Pre-defined objectives
 - Feedback from participants, evaluators, etc.
 - Adherence to test plan
 - Adherence to BCP
- Test reporting
- Enhancement/remediation plan
 - Correlated to test results
 - Designated responsibilities
 - Defined timelines
- Monitoring and follow-up testing



QUESTIONS AND ANSWERS?



CONCLUSIONS/ WRAP-UP



Key Elements of an Effective BCP Program

- Solid organizational commitment
 - Management visibly endorses the risk mitigation and recovery planning initiative
- Effective risk management
 - Disaster risks are identified and sound mitigation measures have been implemented
- Thorough BIA
 - Disruption impacts are evaluated and recovery requirements and priorities are determined



Key Elements of an Effective BCP Program continued

- Viable recovery strategies
 - Techniques for achieving critical recovery objectives are defined and fully implemented
- Documented recovery plan
 - Recovery processes are defined, responsibilities assigned and reference information is available
- Effective plan deployment
 - The current plan is distributed to appropriate individuals
 - Obsolete materials are collected
 - Participants remain knowledgeable of their role and the overall recovery process



Key Elements of an Effective BCP Program continued

- Plan testing and maintenance
 - Realistic exercises are conducted to confirm plan accuracy, prepare participants to respond and identify enhancement opportunities
 - The plan is updated on a defined schedule and whenever the organization, operation and/or environment changes



Key Elements of an Efficient BCP Program

- Established goals and objectives
- Clear roles and responsibilities
- Defined standards, methodologies, and techniques
- Ongoing and regular collaboration
- Proficient resource utilization
- Useful and productive tools
- Formal reporting and monitoring
- Regular evaluation and constructive feedback
- Continuous refinement



RSM US LLP

One South Wacker Drive, Suite 800 Chicago, IL 60606 312.634.3400

+00 (1) 800 274 3978

www.rsmus.com

This document contains general information, may be based on authorities that are subject to change, and is not a substitute for professional advice or services. This document does not constitute audit, tax, consulting, business, financial, investment, legal or other professional advice, and you should consult a qualified professional advisor before taking any action based on the information herein. RSM US LLP, its affiliates and related entities are not responsible for any loss resulting from or relating to reliance on this document by any person. Internal Revenue Service rules require us to inform you that this communication may be deemed a solicitation to provide tax services. This communication is being sent to individuals who have subscribed to receive it or who we believe would have an interest in the topics discussed.

RSM US LLP is a limited liability partnership and the U.S. member firm of RSM International, a global network of independent audit, tax and consulting firms. The member firms of RSM International collaborate to provide services to global clients, but are separate and distinct legal entities that cannot obligate each other. Each member firm is responsible only for its own acts and omissions, and not those of any other party. Visit rsmus.com/aboutus for more information regarding RSM US LLP and RSM International.

RSM® and the RSM logo are registered trademarks of RSM International Association. *The power of being understood*® is a registered trademark of RSM US LLP.

© 2019 RSM US LLP. All Rights Reserved.

Disclaimer

The descriptions contained in this communication are for preliminary informational purposes only and should not be taken as legal advice. The product is available on an admitted basis in some but not all US jurisdictions through Beazley Insurance Company, Inc., and is available on a surplus lines basis through licensed surplus lines brokers underwritten by Beazley syndicates at Lloyd's. The exact coverage afforded by the product described herein is subject to and governed by the terms and conditions of each policy issued. The publication and delivery of the information contained herein is not intended as a solicitation for the purchase of insurance on any US risk. Beazley USA Services, Inc. is licensed and regulated by insurance regulatory authorities in the respective states of the US and transacts business in the State of California as Beazley Insurance Services (License#: 0G55497). BZEM076 US 12/19

