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Introduction

In the current global landscape, characterized by rapid technological advancements and increasing environmental and cyber threats, a robust Business Continuity and Disaster Recovery (BCDR) Plan is imperative for organizations. The plan provides a structured approach for maintaining critical operations during disruptions and effectively recovering afterward. The 2011 earthquake and tsunami in Japan, which caused significant global supply chain disruptions, underscore the importance of such planning. An effective BCDR Plan not only addresses immediate operational challenges but also contributes to the long-term sustainability and resilience of the organization.

Governance and Roles

The foundation of a successful BCDR Plan is a well-defined governance structure with clear roles and responsibilities. Establishing a Business Continuity Management (BCM) team is

essential. This team, led by a Business Continuity Manager, should be a cross-functional group including representatives from all critical business areas like IT, HR, finance, operations, and logistics. The BCM team's responsibilities encompass plan development, ongoing reviews, and coordination of recovery efforts during a crisis.

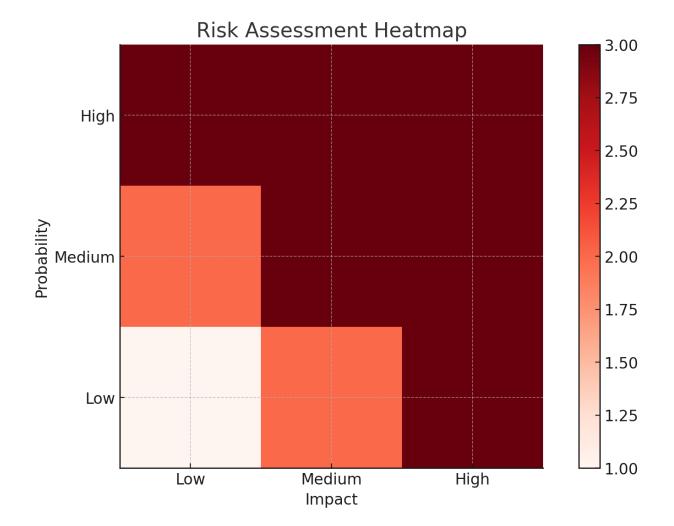
Key roles within the BCM team include:

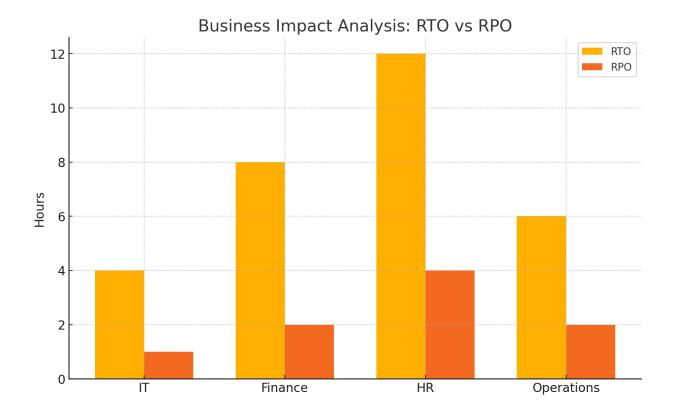
- Business Continuity Manager: This individual spearheads the BCDR planning process, liaising across departments to ensure the plan is comprehensive and aligns with the overall business strategy.
- Disaster Recovery Coordinator: Primarily focused on restoring IT infrastructure and services, crucial for operations in today's digital business environment.
- Crisis Communication Coordinator: Handles all communication strategies, ensuring clear and timely information is relayed to employees, stakeholders, and the public during a crisis.
- Human Resources Representative: Manages personnel-related aspects, focusing on employee welfare during and post-disaster.

Risk Assessment

A thorough risk assessment is the cornerstone of the BCDR Plan. It involves identifying potential internal and external threats, assessing their likelihood, and evaluating their potential

impact on the organization. This step is crucial for prioritizing resources and strategies to mitigate the most significant risks. Risks can range from natural disasters, such as floods and earthquakes, to man-made threats, including cyber-attacks, as evidenced by the widespread impact of the 2017 WannaCry ransomware attack.





The risk assessment process should encompass:

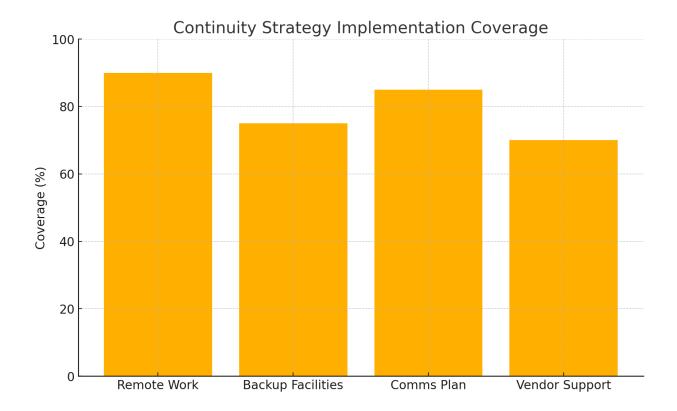
- Identification of Threats: Listing all potential risks that could impact the organization, from environmental to technological.
- Assessment of Probability and Impact: Evaluating how likely each threat is to occur and the extent of its potential impact on operations and reputation.
- Vulnerability Analysis: Assessing the organization's current vulnerabilities and weaknesses that could exacerbate the impact of these risks.
- Risk Prioritization: Ranking the risks to focus on those that pose the greatest threat to the organization.

Business Impact Analysis (BIA)

The Business Impact Analysis (BIA) is vital in understanding the effects of disruptions on critical business functions. It involves identifying which processes are essential for the organization's survival and determining the maximum acceptable downtime for these processes. This analysis was crucial for businesses in New Orleans post-Hurricane Katrina, as it helped prioritize recovery actions based on criticality to business operations.

The BIA addresses:

- Critical Functions Identification: Pinpointing the business functions and processes that are essential to the organization's operations.
- Dependency Mapping: Identifying interdependencies between various business units and external partners.
- Determination of RTO and RPO: Setting specific Recovery Time Objectives (RTO) and Recovery Point Objectives (RPO) for each critical function.
- Impact Assessment: Evaluating the operational, financial, legal, and reputational impacts of interruptions.



## Continuity Strategies

Continuity strategies are designed to ensure that an organization can maintain operations during a disruption. These strategies can include alternative working arrangements, such as the shift to remote work during the COVID-19 pandemic, or diversifying supply chain routes, exemplified by Toyota's response to the Thailand floods in 2011. Effective communication is also crucial for managing expectations and maintaining stakeholder confidence during a crisis.

Essential elements of continuity strategies include:

- Operational Continuity Plans: Developing alternative methods for maintaining critical business functions, such as remote working capabilities, backup facilities, and flexible manufacturing strategies.
- Employee Safety Protocols: Implementing plans for employee safety, including remote working policies, evacuation procedures, and mental health support.
- Comprehensive Communication Plan: Ensuring clear, timely communication with employees, customers, suppliers, and other stakeholders.
- Partnership and Vendor Management: Collaborating with suppliers, partners, and service providers to ensure they are prepared and can support continuity efforts.

**Recovery Strategies** 

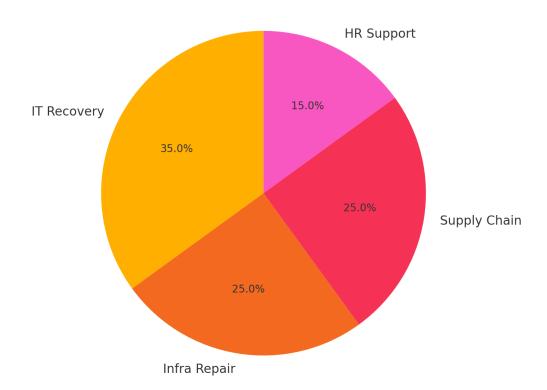
Recovery strategies are focused on restoring business operations to normal functioning postdisruption. This includes restoring IT systems, repairing physical infrastructure,

and re-establishing supply chains. The recovery approach used by Maersk following the 2017 NotPetya cyberattack, involving both IT recovery and manual workarounds, exemplifies the multi-faceted nature of these strategies.

Key areas of recovery strategies include:

- IT and Data Recovery Plans: Establishing robust data backup systems, disaster recovery sites, and protocols for rapid restoration of IT services.
- Physical Infrastructure Recovery: Plans for repairing or relocating physical facilities and equipment damaged during a disaster.
- Supply Chain Restoration: Strategies to quickly re-establish supply chain operations, including identifying alternative suppliers and logistics solutions.
- Human Resource Management: Addressing employee return to work, support services, and continuity of critical HR functions like payroll.

## Recovery Strategy Emphasis



Testing and Maintenance

The effectiveness of the BCDR Plan is highly dependent on regular testing and maintenance. This process involves conducting periodic drills and simulations, updating the plan to reflect new risks, changes in the business environment, and lessons learned from past incidents. Regular testing helps in employee training, identifying gaps, and improving the overall efficacy of the plan. For example, organizations in flood-prone regions like Bangladesh have significantly improved their response capabilities through regular flood response drills.

Key aspects of testing and maintenance include:

- Conducting Regular Drills: Testing different components of the BCDR Plan through scheduled drills and simulations.
- Continuous Plan Review and Updates: Regularly reviewing and updating the plan to incorporate new business changes, emerging risks, and technological advancements.
- Integrating Lessons Learned: Applying insights and feedback from both drills and actual incidents to continuously refine and improve the plan.

## Conclusion

In conclusion, a comprehensive Business Continuity and Disaster Recovery Plan is a critical component of an organization's strategic planning. It not only ensures operational continuity

during crises but also facilitates a robust and effective recovery, thereby safeguarding the organization's long-term interests. The plan must be dynamic, evolving with changes in the business landscape, technological advancements, and emerging threats.

Real-world incidents like the Japan earthquake, the COVID-19 pandemic, and various cyberattacks illustrate the importance of being prepared for a wide range of scenarios. An effective BCDR Plan not only addresses immediate operational challenges but also reinforces the organization's resilience and adaptability in the face of adversity. It is a testament to the organization's commitment to its employees, customers, and stakeholders, ensuring its survival and success in an increasingly unpredictable world.