Trends & Issues of Business Continuity Planning (BCP) in Financial Institutions

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Outline

- What is BCP
- BCP Regulations & Standards
- Trends of BCP
- Problems in implementing BCP
- September 11 Case Studies
- Hong Kong Monetary Authority Case Study
- Disaster Recovery Options
- Conclusion
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What is BCP?

- Business continuity procedures that are designed to minimize the impact of any significant business disruption (e.g. loss of personnel, facilities and IT infrastructure)
- RTO (Recovery Time Objective)
- RPO (Recovery Point Objective)
Importance of BCP

- Maintaining the economic activity of residents in disaster areas

- Preventing widespread payment and settlement disorder
  - Transactions cannot go through when systems fail, disrupting payments in the settlement system, leading to monetary losses
  - E.g. cash payments, funds transfer
## BCP Regulations and Standards

<table>
<thead>
<tr>
<th>Basel II</th>
<th>Requires accurate maintenance of historical transaction data and continuous availability of all components of distributed financial systems involved in the Bank of International Settlements systems (banking regulations by Basel Committee on Bank Supervision)</th>
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<td>FINRA-Rule 4370</td>
<td>Requires member organizations to have Business Continuity Plans appropriate to the scale and scope of their businesses, and to provide emergency contact information.</td>
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<td>SEC regulations (SEC 17 CFR 240)</td>
<td>Requires that financial transaction histories be maintained for all electronic securities transactions, and backup power be in place to maintain continuity</td>
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<td>(SEC-Securities and Exchange Commission)</td>
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Trends in BCP

- Every after major disasters e.g. September 11 terrorist attacks, Hurricane Katrina, BCP regulations will be updated accordingly

- The scale and the frequency of tests and exercises have continued to increase over the last few years

- IT-Dependence
  - The ability for companies to connect — to their employees, banks and other critical vendors and business partners — is vital
  - E.g. Quick dissemination of information, Critical contact details

- Trend of looking at cloud computing for disaster recovery
Problems In Implementing BCP

- Difficulty in coordinating business continuity planning with external parties: vendors, clearing houses, telecom service providers
- Budget constraint
- Shortage of human resources in sections that actually promote development of BCP
- Shortage of the knowledge to counter against new threats
Many backup sites of financial institutions are located in New Jersey, from their New York offices.

The backup sites were in another state with separate utility providers and multiple forms of rapid transportation to and from both sites. Data files were updated frequently.

After the World Trade Center collapse, staffs were evacuated and backup facilities were without either primary or backup personnel to execute the BCP and keep the businesses operating. The plans failed.
The firms involved further noted that the psychological effects of witnessing a major disaster had not been factored into their BCPs.

As a result, physical proximity is being carefully scrutinized and stress and crisis management training is being introduced into many organizations.
September 11: BCP Success
(FiduciaryTrust Company International)

- Within hours of the attack the company:
  - Secured accurate backup data
  - Re-established basic telephone and computer communication (IT & Communications Recovery Plan)

- Why successful?
  - Top Management Support
  - Disaster Declaration & Command & Control Procedures
  - Access to Key Telephone Numbers & an alternate Processing Site
Lessons Learnt after Sept 11

- Risk of geographical concentration of key offices and back-up sites.
- Vulnerability of financial institutions to breakdown of the telecommunications and power infrastructure.
- Need to be able to cope with prolonged disruptions.
- Case study of “Hong Kong Monetary Authority help to ensure the readiness of BCP in Hong Kong banking industry”.
What is Hong Kong’s Monetary Authority Supervisory Objective?

- Ensure that the banks have workable and well thought-through BCPs to protect all the critical areas of their business and to cope with prolonged disruptions

- Issue a guidance note on BCP in December 2002

  ★ Expect Authorized Institutions to take recommendations into account.
Business Continuity Planning Models

Two types of business continuity models:

1. Traditional “active/back-up” model
   - Base on an “active” operating site with a corresponding alternate site (back-up site)

2. A split operations model
   - Operates with two or more widely separated active sites for the same critical operations, providing inherent back-up for each other
Disaster Recovery: Options Available

- **Cloud Computing & Storage**
  - Internet-based computing
  - A model of networked computer data storage

- **What can they offer help to Disaster Recovery?**
  - Cloud resources are inherently flexible, giving needed capacity on demand. This is especially important for compute resources, since business continuity operations often have unpredictable usage point as systems come online and resume operations.
  - Cloud resources are available anywhere. Rather than trying to keep displaced employees in close proximity to technology, public cloud systems can be used from anywhere during a disaster.
Disaster Recovery: Options Available

- **Log Shipping**
  - Capability to automatically send transaction log backups from a primary database on a primary server instance to one or more secondary databases on separate secondary server instances.

- **Consists of 3 Operations**
  1. Back up the transaction log at the primary server instance.
  2. Copy the transaction log file to the secondary server instance.
  3. Restore the log backup on the secondary server instance.
Conclusion

➢ To sum up, business continuity planning is important because it helps to ensure that organization stay resilient even though there are disasters which disrupt business operations.

➢ Base on the case studies we have gathered, we conclude that business continuity is a human resources issue as well as an IT issue.

➢ Businesses should continue to update their BCPs in line with the latest regulations.
Bibliography