Business Continuity Management Services Overview
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Introduction
The speed with which modern business is transacted means that a disruption of only a few hours can have a catastrophic impact on the profitability and reputation of the affected organisation. Although this will have an immediate and adverse impact, it can also damage on organisation’s long term viability.

Business continuity management (BCM) will help to prevent operational interruptions, crises and disasters happening and will help organisations quickly return to a state of 'business as usual' should any of these events occur. Once it has been prepared the business continuity plans (BCP) must be tested and exercised to ensure that it will perform as anticipated.

There will be a number of outcomes in every business continuity programme which are specific to each organisation, but the following are outcomes which should be achieved:

- **A deeper and clearer understanding of the organisation**
  The processes involved in developing the initial business continuity management (BCM) programme and then in maintaining and managing the BCM result in a clear overview of the overall organisation; its structures, dependencies, suppliers and stakeholders. This information is not only essential for BCM, it can also help planning and strategy in other non-related areas of organisational development and management.

- **Proactive Measures**
  Proactive measures are designed for the prevention of interruptions to organisational activities. The essence of good business continuity management is the identification and implementation of measures which can be put in place to proactively prevent operational interruptions taking place, and to prevent crises and disasters occurring. Business continuity management, at its highest level, is about keeping your organisation operating at maximum capability.

- **Reactive Measures**
  Reactive measures are designed for the recovery of interruptions to organisational activities. It includes plans for the reactive measures that will be taken should the proactive measures that are in place fail, become overwhelmed, or are bypassed by some unforeseen and unexpected crisis. Reactive measures enable the organisation to return to an acceptable level of operations within a desired timescale following an interruption, disaster or crisis.

- **Culture Change**
  Business continuity management programmes also involves an exploration of organisational culture. Effective programs will utilise change management techniques to ensure that the organisation encourages a culture where all employees are sufficiently aware of everyday risks and their individual responsibility to report, manage and mitigate risks.
In PwC, we are able to assist you in building resilience through a robust Business Continuity Management Programme.
Our Approach and Methodology
Business Continuity Management

Business continuity has never been more important for business success. In today's global market place the definition of a disaster has significantly changed; no longer are disasters only discussed in terms of hurricanes, fires or human errors, but also your ability to remain connected with your supply chain and customers. With the explosion of direct services and global, continuous operations, particularly over the Internet, organisations are experiencing highly publicised disruptions to services. These failures are having a direct impact on shareholder value, revenues, market share, brand equity and the quality of customer service.

The PwC top-down approach to business continuity focuses on key functions and processes, while also recognising the integral role information systems and technology play in the organisation. We evaluate the many recovery considerations that can affect the development and implementation of a recovery strategy to quickly and effectively get you to your optimal cost / benefit point. This point, which obviously changes from organisation to organisation, is dependent upon your environment, objectives and appetite for risk. The end result is a cost effective enterprise-wide strategy that encompasses all facets of your organisation. An organisation's ability to ensure the timely recovery of key business processes, as well as supporting information systems and technology, helps protect shareholder value and safeguard corporate assets in the event of a major incident.

The Value of Business Continuity Management

Organisations cannot possibly prepare for every scenario but the more extensive planning and preparation, the better-prepared is the organisation to react to the unexpected. A robust Business Continuity Plan (BCP) documents the steps to be taken, the resources needed and the procedures to be followed before, during and after the crisis. Strong Business Continuity Management (BCM) offers the following:

- Increased levels of employee readiness to ensure safety of personnel and an organised organisational response
- Compliance with applicable regulatory requirements and fiduciary responsibilities to avoid potential penalties and litigation
- Prioritised recovery of the organisation's business processes to achieve optimal allocation of resources focused on protecting revenue and containing costs
- Facilities/workspace management solutions that balance the high cost of real estate against the need to disperse the organisation's intellectual capital
- Customised response strategies focused on high probability scenarios that ensure the efficient and effective allocation of the organisation's Business Continuity Plan (BCP) budget
- Well-planned incident response/communications framework designed to address internal and external requirements
- Awareness of business partner/third party continuity plans to ensure uninterrupted service and protection of the entire value chain.
Business Continuity Management

The diagram below illustrates how Business Continuity Management fits within an organisation’s corporate governance framework.

A planned response incorporating

**People**
- Succession planning
- Alternates appointed
- Chain of command
- Cohesive team
- Right nominations
  - Ability
  - Authority
  - Specialists
- Clear roles
- Trained personnel
- Awareness
- Accountability

**Plans**
- Action driven
- Simple and concise
- Checklist:
  - Generic
  - Worst nightmares
- Roles & responsibilities
- Team recovery
  - Reference material
  - Listings
  - Contact numbers

**Infrastructure**
- Command centre
- Business facilities
  - Customer areas
  - Meeting rooms
  - Work area
- Resources
  - equipment
  - furniture
- Vendor agreements
- Communications
# Our Approach

## The PwC Approach

PricewaterhouseCoopers approach to business continuity management is designed to be top-down and interactive in nature. Using our innovative and unique approach of a series of interactive workshop and facilitated simulations, we are able to help organisations to have a deeper understanding of business continuity and thus able to develop business continuity plans quicker and respond better in the event of a disaster.

Of course, the simulations and workshops don’t just happen by themselves. We plan and prepare meticulously with you to ensure that your people are faced with a realistic scenario that best fit your organisation.

Our facilitators are people who are experienced in business continuity and include people with the relevant industry knowledge. These expert facilitators will be able to lead the participants better in the workshops and simulations.

We believe that effective Business Continuity Management (BCM) should be addressed within the context of a framework as illustrated in the next page.
Our Approach

Business Continuity Management (BCM) Framework

In order to achieve your organisation’s objective of a company-wide BCM which will effectively mitigate and minimise the effects of a disaster, your organisation needs to develop a Business Continuity Management (BCM) Framework taking into account all aspects of the organisation as illustrated below in the PwC BCM Framework.

The Framework consists of 4 pillars which form the foundation of a BCM Programme, which are:

- **Business Vision and Strategy** refers to the alignment of the BCM Programme to the corporate vision and strategy.
- **Senior Management Commitment** is essential to ensure that the BCM Programme is given the support and right level of importance and priority as there are many competing demands for time and resources within an organisation.
- **Business Continuity Management Structure** refers to the importance of the PEOPLE component in the BCM Programme. The establishment of an organisation structure with defined roles and responsibilities for both BCP development and recovery is important to ensure a comprehensive workable plan which is able to effectively mitigate the effects of a disaster. In the chaos of a disaster, there must be proper command, control and co-ordination of the many teams of people involved in the recovery process; and
- **Training and Awareness Programme** refers to the continual education programme for the people to respond to a disaster and also to develop the plans. This also includes the change management programme which is essential to ensure sustainability of the BCM Programme.
Our Approach

Business Continuity Management (BCM) Framework (cont’d)

The execution of the BCM framework comprises the following components:

- **Decision Driver** – This phase shows the linkage between the enterprise-wide risk / operational risk within an organisation and the role of an effective BCM Programme in mitigating the effects of a risk materialising.

- **Design** – This phase sets out to develop a BCM policy, standards and procedures for the development, testing and maintenance of the BCM Programme in order to ensure consistency of the programme across the organisation.

- **Implementation** – This phase looks at the stages involved in the plan development for each of the business units comprising of the following stages:

  1. **Risk Assessment & Business Impact Assessment** – This is to determine and prioritise critical business processes based on a business risk assessment. It is at this stage where the Recovery Time Objective (RTO), critical activities, resource requirements and the internal and external interdependencies are identified.

  2. **Selecting a recovery strategy** – Identify range of strategies to recover the business in terms of alternate processing site for IT, alternate work site for the business units and management etc that is consistent with the agreed business objective and priorities.

  3. **Development of the BCP and supporting infrastructure** – Following from the selection of the recovery strategy, an appropriate BCP needs to be documented and the supporting infrastructure put in place (for example offsite command centre and business recovery sites).

  4. **Testing and ongoing maintenance of the BCP** – Regular, comprehensive testing and ongoing review and updates to the BCP is important to ensure workability of the plan.

  5. **Monitoring & enforcement** – Ongoing monitoring of the programme to ensure compliance with internal standards and regulatory requirements. In order for this to be effective there needs to be effective enforcement in the event of non-compliance.
Our Approach

We have outlined in the following pages in detail the work we will undertake in the Implementation Phase of a BCM programme:

| Business Impact Assessment | We will undertake a thorough analysis of each of your business processes, with the objective of determining the correct prioritisation for recovery purposes and the minimum resources required to achieve a recovery following a disaster. Our approach covers a wide range of activities including:
| | • Facilitating risk assessment workshop
| | • Reviewing relevant documentation
| | • Developing process flow diagrams, mapping key internal and external dependencies
| | • Determining recovery time objectives, critical activities and recovery point objectives for the key business processes in the event of a disaster
| | • Establishing the correct sequence of recovery activities
| | • Determining the minimum number of staff required to commence a business function’s recovery
| | • Determining the minimum set of applications and business tools required to commence recovery
| | • Defining the necessary network infrastructure to support recovery efforts.

| Strategy Selection | The objective here is to define and agree a realistic and cost-effective strategy that is achievable and will provide a genuine basis for the recovery of critical business processes within a set of organisation-specific deadlines.
| | The approach to recovery strategy selection focuses on three areas:
| | • Enterprise: Identify the strategy for business alliances/vendors, insurance, vital records, employee safety and communications, etc. and define target service levels.
| | • Business processes: Identify the strategy for business processes while they await the return of facilities and IT resources, and
| | • Information Systems, Technology and Facilities: Identify the most appropriate recovery strategy solution(s) given the business requirements. How much will it cost to establish a recovery capability that restores the resources needed by critical functions in the required time frame? |
## Our Approach

### Plan Development

The most critical element of a recovery strategy is ensuring that those staff likely to be involved in making it happen have a clear understanding of the actions required of them and resources available to them in the wake of a disaster. We can help your organisation achieve this by:

- Defining invocation criteria for the Business Continuity Plan’s use
- Establishing a contact call tree mechanism
- Working with key client staff to develop a set of recovery actions for each business function.

The 3 key types of plans are:

1. **Crisis Management Plans (CMP)**
   A response mechanism that ensures command and control during an operational disruption. These plans include Incident Identification, Evaluation, Escalation, Declaration, Plan Activation, Plan Deactivation and Restoration procedures. This also includes Corporate Communications, Public Relations and liaison with the authorities.

2. **Business Continuity Plans (BCP)**
   Plans that address the continuity and recovery of critical business processes required to maintain an acceptable level of operation in the event of an interruption of these processes and / or their supporting resources.

3. **Disaster Recovery Plans (DRP)**
   Plans addressing the restoration of business system software and data as well as the information systems and technology infrastructure, after a disaster has occurred.
### Plan Development (cont’d)

It is important to realize that neither the plan nor the report will recover a business. It is people that recover a business and people need supporting infrastructure to support their efforts. In developing the BCP it is important that the BCP require gathering data pertinent to specific business functions and understanding which critical resources are essential to the continuation of the functions; staff, facilities, technology and third parties.

The Crisis Management Team (CMT) should be viewed as a centralized and structured approach to respond to critical events that may impact the business. Characteristics of an effective crisis management framework include; Common terminology; published and readily available call lists and hotline numbers, roles and responsibilities are clearly delineated and the organization is aware of this chain of command. The CMT could include, but not limited to, key executives, Information Systems and Technology, core business operations, facilities, legal and corporate communications. Coordination with the public sector including local authorities, state and federal is also important.

### Testing and Maintenance

Additionally, when plans for all business functions have been developed and approved, we will take the process a stage further by testing the plans, bearing in mind the need to avoid disruption to “live” operations. In particular, we can:

- Produce test scripts for organisation staff to use
- Develop desktop exercises for management and business units
- Facilitate test workshops and run full-scale tests of recovery arrangements

The BCP needs to have sustainability. Build sustainability objectives in the BCP to ensure that processes exist to update and maintain the plans when processes, technology or people change.
Crisis Simulation

As part of the Testing Phase we conduct crisis simulation exercises to provide a realistic scenario for organisations to test their plans.

This involves preparing and facilitating disaster scenario in a controlled environment. We plan and prepare meticulously with you to ensure that your people are faced with a realistic disaster scenario that could adversely impact your organisation. This include having a team to “act” and role play realistic personalities involved in a crisis.

The objective of the Crisis Simulation is to:

• Improve the level of crisis preparedness;
• Assess the current recovery ability with current resources for the critical business processes and information systems and technology components; and
• Assess that the existing Computer Disaster Recovery Plan is aligned to the business units requirements.

At the end of the Crisis Simulation, there would be a debrief for the Crisis Simulation participants on the following:

• Areas where participants performed well;
• Areas where participants are able to improve on; and
• Recommendations and next steps, if required.
Our Approach

We include below a high level BCM checklist to address some of the key areas in a BCM programme.

<table>
<thead>
<tr>
<th></th>
<th>CHECKLIST</th>
<th>YES/NO</th>
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<tbody>
<tr>
<td>1</td>
<td>Do you know the potential financial and non-financial impact of a business interruption involving major human, physical and technology loss?</td>
<td>Y/N</td>
</tr>
<tr>
<td>2</td>
<td>Do you know what resources you need as a minimum to recover your critical business functions?</td>
<td>Y/N</td>
</tr>
<tr>
<td>3</td>
<td>Do you know what are your recovery time objectives, recovery point objectives and your critical activities in the event of a disaster?</td>
<td>Y/N</td>
</tr>
<tr>
<td>4</td>
<td>Have you defined your Business Continuity Teams including the crisis management function and critical business functions? Have you clearly defined the roles and responsibilities of the Business Continuity Team members and has it been endorsed by the senior management.</td>
<td>Y/N</td>
</tr>
<tr>
<td>5</td>
<td>Do you have a business continuity plan in place and have you assigned the appropriate person(s) to maintain it?</td>
<td>Y/N</td>
</tr>
<tr>
<td>6</td>
<td>Have you tested your business continuity plans in the past 6 months to 1 year?</td>
<td>Y/N</td>
</tr>
<tr>
<td>7</td>
<td>Do you reassess your business continuity plans on a periodic basis, especially when your business environment changes?</td>
<td>Y/N</td>
</tr>
<tr>
<td>8</td>
<td>Do you and all personnel in the company know what to do when a disaster strikes?</td>
<td>Y/N</td>
</tr>
<tr>
<td>9</td>
<td>Is your Senior Management Team involved in the business continuity plan testing?</td>
<td>Y/N</td>
</tr>
<tr>
<td>10</td>
<td>Have you identified alternates for all your personnel, especially your recovery team members who hold responsibilities during a disaster?</td>
<td>Y/N</td>
</tr>
<tr>
<td>11</td>
<td>Are you happy with your critical suppliers’ and outsourced providers’ business continuity plans, such that they will not have a significant impact on your business?</td>
<td>Y/N</td>
</tr>
</tbody>
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03

Our Credentials and People
You need people with the right skills and experience, specialist expertise and local knowledge

In Malaysia, our committed BCM team members are senior, experienced PwC personnel with in-depth knowledge of developing and implementing BCM programmes for a varied range of industries. Through our experiences, we are able to articulate your requirements and customise our BCM methodologies to suit your requirements and corporate culture.

Our local knowledge
We have successfully developed and implemented Business Continuity Management (BCM) Programmes for a wide range of industries such as Malaysia’s largest financial services group, 2 international insurance company, Malaysia’s satellite media broadcasting company, a major Malaysian healthcare company, corporate office for Malaysia’s leading conglomerate and multinational oil & gas company. We are currently undertaking a BCM project with the national provident fund and the national airport operator.

International Experience
Additionally, our integrated global network have international resources who can bring their knowledge and real life experience of acceptable recovery time objectives (RTOs), recovery point objective (RPOs) and critical activities in the capital market industry to bear, in their role as facilitators in the workshops and crisis simulation exercise.

Combined Efforts
With both local and international BCM team members, we are able to combine a firm understanding of your organisation’s business culture and local regulatory requirements with global technical knowledge of the capital market industry in meeting your organisation’s needs.
Our local BCP experience

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<thead>
<tr>
<th>CLIENTS</th>
<th>APPROACH</th>
<th>RESULTS</th>
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</thead>
<tbody>
<tr>
<td>National Provident Fund</td>
<td>• Developed a BCP framework for the organisation.</td>
<td>• On-going</td>
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<tr>
<td></td>
<td>• Conducted business impact analysis to determine the recovery time</td>
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<td></td>
<td>objectives and critical activities.</td>
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<td></td>
<td>• Determine the recovery strategies for the organisation.</td>
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<td></td>
<td>• Facilitate and assist in the development BCP documentation for the</td>
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<td></td>
<td>organisation.</td>
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<tr>
<td></td>
<td>• Conducted an “as-is” review of the BCP documentations.</td>
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<td></td>
<td>• Developed the BCM Programme.</td>
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<td></td>
<td>• Identified and evaluated the recovery objectives and strategy for</td>
<td>• Cultivated the BCM culture and provided relevant knowledge the</td>
</tr>
<tr>
<td></td>
<td>the group.</td>
<td>management.</td>
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<tr>
<td></td>
<td>• Identified critical business processes, recovery time objectives,</td>
<td>• Assisted client in identifying and prioritising the critical</td>
</tr>
<tr>
<td></td>
<td>recovery point objectives, and minimum service level.</td>
<td>business processes.</td>
</tr>
<tr>
<td>Largest financial services group in Malaysia</td>
<td>• Conducted a “as-is” review of the BCP documentations.</td>
<td>• Provided a standardise process for the development, maintenance</td>
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<tr>
<td>with 24,000 employees and 336 local branches</td>
<td>• Conducted business impact analysis to identify the recovery time</td>
<td>and testing of the BCM Programme.</td>
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<tr>
<td></td>
<td>objectives and strategy for the group.</td>
<td>• BCM framework was further tested through a pilot implementation,</td>
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<tr>
<td></td>
<td>• Developed the BCM Programme.</td>
<td>which included a Crisis Simulation exercise.</td>
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<td>recovery point objectives, and minimum service level.</td>
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<tr>
<td></td>
<td>• Conducted a “as-is” review of the BCP documentations.</td>
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<td></td>
<td>• Conducted business impact analysis workshop to identify the recovery</td>
<td>• Have a structured and integrated BCM for the organisation</td>
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<td></td>
<td>time objectives and minimum service level</td>
<td>• Identified critical business processes, recovery time</td>
</tr>
<tr>
<td></td>
<td>• Facilitated in recovery strategies development</td>
<td>objectives, recovery point objectives, and minimum service</td>
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<td></td>
<td>• Reviewed the consistency and comprehensiveness of the BCP plan</td>
<td>level.</td>
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<tr>
<td></td>
<td>• Conducted business impact analysis workshop to identify the recovery</td>
<td>• Finalised recovery strategies to minimise the impact of the</td>
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<td></td>
<td>time objectives and minimum service level</td>
<td>disaster</td>
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<tr>
<td>A major European general insurance company</td>
<td>• Conducted business impact analysis workshop to identify the recovery</td>
<td>• Increased BCP awareness within the recovery</td>
</tr>
<tr>
<td>A Japanese general insurance company</td>
<td>time objectives and minimum service level</td>
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<tr>
<td></td>
<td>• Identified and evaluated the recovery objectives and strategy for the</td>
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<td></td>
<td>group.</td>
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<td></td>
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Our local BCP experience

<table>
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<th>CLIENTS</th>
<th>APPROACH</th>
<th>RESULTS</th>
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</table>
| **Malaysia largest airport operator and manager of Malaysia’s 39 airports which comprise international, domestic and Short Take-Off and Landing (STOL) ports.** | • Review the various BCM related initiatives to incorporate and develop a BCM framework for the group  
• Implementation of the BCM programme for the largest international airport in Malaysia as a pilot, which includes the following:  
  - Conduct business impact analysis to determine the recovery time objectives and minimum service level for KL international airport.  
  - Determine the recovery strategies for KLIA.  
  - Identify and evaluate the recovery objectives and strategy for KLIA.  
  - Assist in the documentation of the plans  
  - Conduct testing  
• Conduct trainings and workshops to create BCM awareness throughout the organisation. | • On-going |
| **A satellite broadcast company** | • Assisted in a Business Impact Analysis (BIA) and performed an "as-is" review of the existing BCP documentations.  
• Assisted in developing a company-wide BCP Manual, reviewed recovery plans and assessing current recovery capabilities.  
• Conducted crisis simulation and a surprise crisis simulation a year later. | • Established a structured and integrated BCP programme for the company.  
• Increased BCP awareness and realised gaps in the current recovery capability.  
• Improved communication between interdependent departments.  
• Sustainability of the BCP initiatives. |
## Our local BCP experience

<table>
<thead>
<tr>
<th>CLIENTS</th>
<th>APPROACH</th>
<th>RESULTS</th>
</tr>
</thead>
</table>
| A global upstream oil & gas company with significant operations in Malaysia | • Conducted a Business Impact Analysis.  
• Determined the Recovery Strategy and development of the disaster recovery site.  
• Development of the computer disaster recovery plan. | • Identification of backup communication links for the offshore oil rigs and platforms.  
• Established an effective and practical disaster recovery strategy.  
• Established a structured computer disaster recovery programme for the company.  
• Increased disaster recovery and business continuity awareness.  
• Improved communication between interdependent departments.  
• Improved incident and crisis preparedness. |
| A Pharmaceutical manufacturer and distributor | • Developed and documented an organisation wide BCP framework.  
• Developed and conducted training for the BCP teams on the BCP programme to increase awareness and educate the teams on the key concepts of BCP  
• Conducted business impact analysis to validate critical business and IT processes to recover, minimum acceptable service levels, Recovery Time Objectives, business impacts and recovery strategies  
• Plan and facilitate crisis simulation  
• Facilitate business recovery team workshops to guide and assist in exploring different recovery strategies and plan documentation  
• Quality review the documented plans to ensure consistency and comprehensiveness of the plans. | • Have a structured and integrated BCP for the organisation  
• Identified critical business processes, recovery time objectives and the critical interdependencies and resources.  
• Finalised recovery strategies to minimise the impact of a disaster when it happens  
• Established infrastructure and documented plans to assist the recovery teams during a disaster  
• Increased BCP awareness amongst the recovery team members to handle disaster situation  
• Improved communication between interdependencies and departments  
• Improved skills with the BCP programme for the organisation |
## Our local BCP experience

<table>
<thead>
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<th>RESULTS</th>
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</table>
| A global Corporate office for Malaysia’s leading conglomerate in infrastructure development, healthcare and manufacturing | • Developed the organisation’s framework.  
• Developed and conducted training for the BCM teams on the BCM programme to increase their awareness and educate the teams on the key concepts of BCM.  
• Conducted business impact analysis and recovery strategy workshop to validate critical business processes, recovery time objectives, recovery point objectives and minimum service level.  
• Facilitated and assist the business recovery teams in plan development  
• Reviewed the consistency and comprehensiveness of the BCP plans | • Have a structured and integrated BCM for the organisation  
• Identified critical business processes, recovery time objectives, recovery point objectives, and minimum service level.  
• Finalised recovery strategies to minimise the impact of the disaster  
• Established infrastructure and documented plans  
• Increased BCM awareness among recovery teams to handle disaster situation  
• Improved skills by the BCP coordinators in continuing with the BCP program for the organisation. |
| Telecommunication | • Performed a ‘gap analysis’ of the client’s BCPs through benchmarking with BCP best practice and provided recommendations for enhancement to the plans.  
• The gap analysis involved determining the process used to develop the BCP documents and infrastructure; taking an inventory of, reviewing the activities and work the client had carried out in respect of BCP. From the interviews, the status or progress of the BCP programme was also established for 6 key business processes with reference to the following milestone:  
  - Risk and Threat analysis  
  - Business Impact Analysis  
  - Strategy Options  
  - Infrastructure Implementation  
  - Plan Development  
  - Plan Testing  
  - Plan Maintenance | • Able to close the gaps and to increase managements awareness of the gaps in the company’s BCP. |
How can we help?

If something goes wrong in your business, your prime concern will be to minimise disruptions to operations, maintain legal and regulatory compliance, and to continue to meet the expectations of your customers, shareholders and business partners.

Our worldwide experience and research with organisations that have experienced major crises has enabled us to develop a full understanding of what constitutes a workable business continuity solution. It comprises three fundamental elements:

- **People** trained to respond
- **Infrastructure** implemented to support recovery
- **Plans** brief, action-driven checklists to act as a guide to recovery

Our integrated approach delivers a business continuity capability incorporating these three elements. Some of the services which PwC can provide are:

- Conduct Crisis Simulation
- Gap Analysis of your BCM programme
- Assistance in the development of BCM programme based on the following activities:
  - Establish a BCM Framework
  - Establish a BCM recovery organisation structure with clear roles and responsibilities
  - Facilitate Business Impact Analysis
  - Facilitate strategy workshop
  - Develop Business Continuity Plans
  - Facilitate and develop realistic call tree exercise, walkthrough exercises and crisis simulations

We have the right people with the right knowledge and experience to make your business continuity management programme work for you.
## Value to you…

| **Business Driven Solution** | PwC conducts round table discussions, and workshops for all business units and interdependencies to articulate their assumptions and requirements, to determine the critical business processes, recovery objectives, critical activities and recovery priorities which is subsequently approved by the senior management team. This is followed by training before plan documentations are developed. This ensures that plans developed are business driven and not thick BCP manuals developed in isolation. |
| **Buy-in and Commitment** | A successful BCM programme requires the commitment from personnel at all levels. Other initiatives of your company may be competing for the same resources and hence hindering the success of your BCM programme roll-out. Our approach in involving personnel from senior management team to operational staff in workshops, training programmes and focus group meetings will assist in achieving this objective. |
| **Committed Resources** | A committed BCM management team is necessary to coordinate, monitor, manage and provide training. More importantly, they are the main drivers of this initiative to ensure the every success of your BCM programme. PwC has a committed and experienced BCM team with global experience to work with you to ensure the transfer of necessary knowledge and skills to run your company’s BCM programme. |
| **Knowing your Roles & Responsibilities** | The success of a BCM roll-out requires organisation-wide effort from all divisions and departments of your company. Every personnel in your organisation has to be trained and kept informed of their roles and responsibilities during a disaster. PwC’s crisis simulation exercise will help your people to familiarise themselves with the recovery strategies by putting them through a “realistic” disaster scenario for them to respond to. In addition, PwC provides training programmes for your people at the start of the project to ensure that all personnel of all levels are kept informed of your BCM Programme. |
Preparation for times of uncertainty

By CING AI LIN

The world today is increasing in complexity, driven by the economic growth, the "dotcom" bubble, the September 11 attacks, and more recently the SARS epidemic. In light of all these and with the increasing emphasis on good corporate governance, chief executive officers are increasingly more conscious of the need to manage their risks. As part of this effort, many organisations have recognised that they have to provide themselves with a safety net in the event of a disaster in the form of effective Business Continuity Planning (BCP).

Traditionally, business continuity has been focused on recovering from the impact of:

- A natural disaster, power or other environmental events
- Information technology/technology component failure
- Given recent events, the possibility of more catastrophic disaster scenarios can increase due to:
  - Loss of or inaccessibility of entire parts of a company
  - Loss of personnel due to physical threats (e.g. chemical/biological attacks)
- Cyber threats
  a) Cyber terrorism
  b) Cyber vandalism
  c) Cyber theft

So what should organisations do in response to this new risk paradigm?

Take a macro view of BCP

There is a new focus on risk minimisation strategies and post-event planning that can be employed to key protect an organisation's assets and profitability based on a comprehensive threat and vulnerability assessment and a defined set of disaster scenarios.

People

Your employees are your most important asset. While many organisations have had business continuity plans as business continuity plans have been focused on business and technical recovery. Few have addressed succession planning. This will be discussed in the next section. The lack of succession planning and the high cost of losing key personnel is a major risk.

Effective planning and well-thought-out crisis management and incident response planning is critical to ensuring the safety of employees.

Having clear roles and responsibilities defined for who is in control of the facility, and having an effective communications plan and the ability to locate all employees is just some of the critical elements that need to be considered as part of an emergency response plan.

Messages like the “building is secure” and “employees should return to their workplaces” should not be made unless a comprehensive assessment has been made by a responsible management level employee using a well-planned and pre-defined process.

Geographic concentration

While there has been a trend in the last decade to consolidate operations and facilities in one location to minimise costs, it may be worthwhile for organisations to re-evaluate their location strategy and diversify their risk.

The failure of the paperless environment

In this age of paperless environment, many organisations are surprised by their continued reliance on paper documents. Local and wide area networks allow tremendous amounts of critical information to be shared and viewed on the internet.

But paper files remain a significant source of personal information storage and work in progress. When this paper information is rendered inaccessible or destroyed, critical data is typically lost or at best requires significant investment in employee resources to reconstruct. At minimum, a new cost benefit analysis around imaging technology should be considered.

A tactical plan to ensure your organisation is prepared

Moving forward, there are some tactical actions an organisation can undertake to improve overall readiness and preparedness for the unexpected.

- Review disaster declaration procedures
  - When there is a widespread disaster that will impact a large number of potential clients, being the first to declare a disaster is critical.
  - Many steps are typically involved during the activation of a disaster recovery of business continuity plan, many of which occur prior to the actual declaration. Some firms have difficulty executing these critical decisions and activities when management is unavailable or when great uncertainties still exist in a rapidly evolving situation.
  - An informed decision process can be established in advance to provide an effective framework to allow those "on the ground" to take critical steps in a timely manner to best position the organisation for a successful recovery.

- Implement appropriate backup technologies
  - Of the critical impacts in the recovery process is the issue of lost data reconstruction and data synchronisation. Until the technical environments could be brought on to a consistent state, in line with the designated recovery plans, the effort will be at a standstill. Both current mirroring technologies and well-structured manual workarounds must be aggressively considered to improve overall recovery capabilities.

a) Vendor dependencies
- Understanding your dependence on key vendors is critical to the success of your BCP.
- Vendor review process should include considering a vendor's criticality, security, and data access controls, active network monitoring, and other physical security systems and ongoing employee training is important.

b) Review physical and logical security requirements
- A comprehensive review of both physical and logical security including a threat assessment analysis and evaluation of response programmes should be performed. Passive and active access controls, active network monitoring, and other physical security systems and ongoing employee training is important.

c) Test all aspects of the plan
- Scenarios for technical disaster recovery planning can frequently become unrealistic, ensuring successful tests and the appearance of preparedness. Incorporating "Red Team" staff, impacts of degraded critical vendors (especially networks), and complex data-backups and other realistic problems will ensure the recovery programme is realistically evaluated for its true capabilities.

d) Test insurance coverage
- Understanding your coverage before a disaster occurs is critical to being able to respond quickly and establish procedures to capture the needed information to prepare a claim. While you cannot possibly prepare for every event, with strong management commitment, extensive planning and preparation, the better prepared organisations are better able to react to the unexpected.

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Our Credentials and People

Companies & Strategies

December 21, 2002

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Can your business survive a disaster?

A recent topic in the headlines is the increasing frequency and severity of natural disasters, with significant impacts on businesses. This month, PricewaterhouseCoopers (PwC) published an article in Forum magazine titled "Our Credentials and People," which includes a section on business continuity management (BCM). The article discusses the importance of BCM for businesses to ensure they can survive and recover from disasters.

The article highlights the role of BCM in providing a framework for businesses to prepare for and respond to disasters. It emphasizes the need for businesses to have a comprehensive disaster recovery plan in place to mitigate the impact of disasters on their operations. The article also stresses the importance of having a disaster recovery plan that is regularly reviewed and updated to ensure its effectiveness.

The article concludes with a summary of theBCM principles and practices that businesses should consider when developing a disaster recovery plan. These principles include:

1. Establishing a clear and comprehensive disaster recovery plan
2. Conducting regular disaster recovery simulations to test the plan
3. Ensuring that all employees are aware of the disaster recovery plan
4. Regularly updating the disaster recovery plan to account for changes in business operations

In conclusion, the article emphasizes the importance of BCM for businesses to survive and recover from disasters. By implementing a comprehensive disaster recovery plan, businesses can minimize the impact of disasters on their operations and ensure business continuity.
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Ong Ai Lin leads PricewaterhouseCoopers’ Systems and Process Assurance - Advisory group. With over 20 years of experience in the area of information security and business continuity management, she has undertaken and managed many such assignments in the United Kingdom, Singapore and Malaysia. Her clients have included regulators and quasi-government agencies as well as companies in the financial services, oil and gas, telecommunication, media, airport operator and healthcare sectors. She has completed several BCM projects for major clients in Malaysia and had written articles on BCM for the local press. Ai Lin also sits in the SIRIM Technical Committee for Information Security which oversees information security and business continuity management standards development in Malaysia.