Building resiliency: ensuring business continuity is on the health care agenda

Briana NL Geelen-Baass and Jade MK Johnstone

Abstract

In light of recent disasters and terrorist attacks, private and public organisations alike are becoming increasingly concerned with their ability to continue operating in spite of unforeseen events. This paper describes a project conducted at the Royal Victorian Eye and Ear Hospital to develop a Business Continuity Management (BCM) Framework, and outlines the learning experience. It provides a Framework and describes the key issues to be considered when initiating BCM in a health organisation, concluding that a project management approach can be used to establish a framework for BCM.

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What is known about the topic?

Previous contingency planning methodologies such as Y2K and IT disaster recovery are considered to fall short in the current environment of organisation-wide resilience. Best practice contingency planning relies on the principles of business continuity management (BCM). Yet, BCM is just making its way on to board agendas in the Australian health service sector.

What does this paper add?

This paper contributes to a health organisation view and analysis of BCM issues, outlining a project management approach to development of a BCM Framework sufficiently generic for application across the industry.

What are the implications for practitioners?

Australian health organisations need to expand their understanding of BCM and application of the Framework provided in this paper is an option for improving the resilience of health care organisations.

ORGANISATIONS ARE BECOMING increasingly concerned with their ability to continue serving their customers in spite of unforeseen events. Terrorist activities, tsunamis, mudslides, long-term power outages and threat of an avian flu pandemic have contributed to the unease around disaster recovery. Locally, it has been suggested that Australians are known to take a "wait and see" approach favoured by the mentality that "it won't happen to me".[1] Whether out of ignorance, lack of resources or lack of clarity around the direct business threat, failing to address the issue of service continuity puts many organisations at risk.[1] Hysteria around a possible disaster also places business in a vulnerable position. For example, employees' response to the SARS (severe acute respiratory syndrome) outbreak in 2003 resulted in large scale absenteeism as workers feared the worst for their children and family.[2] Literature in the area of disaster recovery and business continuity calls for improved business preparedness and planning.[3-8]

The most recent wide-scale evidence of disaster planning in the Australian health sector was seen in the preparation for the year 2000 ("Y2K"). This approach was coordinated by government, resulting in prescriptive strategies aimed at the continuation of services. However, there are concerns with the ability of Y2K planning to address today's threats. New York State Tax and Finance made the post September 11 statement that "While we had business continuity plans for Y2K, they were specific to Y2K, not generic".[9] The issue with existing Y2K plans stems from the principle that all scenarios anticipated at the time could be linked back to a

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1 Business continuity management in the context of risk management

single failure involving the date function inherent within the technology. Therefore, of the plans developed at the time, even those which were kept current may be inadequate to carry an organisation through a wider range of outages.

Given the diverse nature of emerging threats around the globe, Australian health services, which are now largely risk management savvy, are attempting to tackle these risks. We suggest that the management of consequences that arise from a multitude of sources relies on a set of principles of BCM.[10] BCM, supported by government, must be a priority for health service organisations in Australia.

Defining BCM

BCM is a decision-making process aimed at minimising business loss and maximising business recovery and continuance following any disaster that may occur at any time.[11] BCM has evolved beyond information technology disaster recovery plans and uses a whole-of-business approach to service continuity and recovery.[12,13] BCM's relationship to risk management continues to be debated within BCM circles.[14] We define BCM as a sub-set of risk management, in the sense that the absence of business continuity plans poses obvious risks to an organisation (Box 1). However, where risk analysis considers the source of risk, including both the likelihood and consequence, BCM focuses solely on the impact of an outage and the continuation of business after the outage has occurred. BCM should not be scenario based — it does not require a disrupting scenario to be envisaged. Thompson suggests that "scenario planning" is one of the nine deadly sins of BCM. "BCM is far more than that, providing a holistic understanding of what the business actually does, how it does it and what it needs to do it".[13] As such, BCM demands far greater understanding of the processes that achieve the organisation's outputs than can be determined from an organisational chart alone.[13]

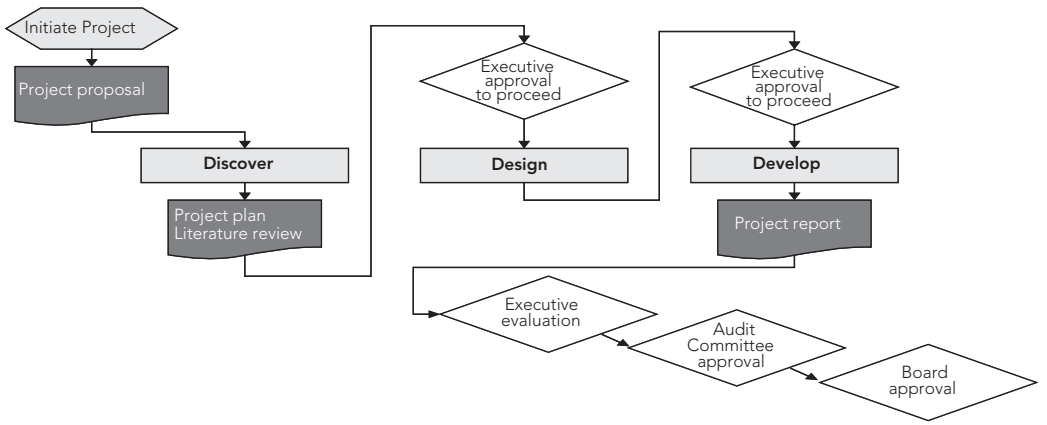
According to Cartland,[12] financial services in Australia are leaders in business continuity, enforced by Australian legislation issued in April 2005 by the Australian Prudential Regulation Authority (APRA). Intended for financial institutions, these standards (APS 232 for authorised deposit-taking institutions and GPS 222 for general insurers) detail a whole-of-business approach to BCM appropriate to the nature and scale of a business's operations. Cartland[12] shows that this standard is not confined to financial services but embodies best practice with application across many industries.

Ultimately, as part of best practice corporate and clinical governance, BCM must be considered by boards of directors, chief executives and senior managers. Many services delivered by government organisations "are critical to the economic and social well-being of our society" and failure to deliver services could have serious legal, commercial and ethical consequences.[15] Rather than being a well-practised business function with support from academic institutions, BCM, within the Australian health care context, is in its infancy. In comparison, the United States health care industry requires business continuity planning to be tabled for compulsory practice (Health Insurance Portability and Accountability Act 1996), and is supported by a task force to write "security guidelines".[16]

The project

Based in East Melbourne, The Royal Victorian Eye and Ear Hospital is a specialist teaching hospital primarily serving as an elective day surgery centre. The hospital identified the need to ensure continued

2 Project methodology pathway



operation of key business processes in the event of an outage. This project, which marks the first step towards achieving this organisational aim, set out to develop a BCM Framework which could be supported and implemented by key managers within the organisation. Both the outcome (Framework) and the process provided important lessons in relation to the initiation of BCM in a health service.

Methods

The project method followed a simple pathway: discover, design and develop. Deployment (implementation) of the Framework, which would be the subsequent project phase, was outside scope. This method was chosen for its simplicity and applicability to the needs of the project. Although renamed and realigned, the elements in the methodology are, in essence, consistent with current project management thinking.[17-19] The pathway is illustrated in Box 2. To support the development of the Framework, common project management tools were utilised including a project risk management strategy, communications and engagement strategy, a Gantt chart and various action plans.

Discover

The first step was to understand the organisation and to establish the needs. Key documents were sourced, including the board of directors' audit log accompanied with corresponding audit reports. Documentation from Y2K was reviewed in order to understand previous business continuity endeavours. The second step involved seeking information externally through a detailed literature review.

Design

Design of the Framework was guided by the output of the discovery phase. We sought to resolve issues identified through appraisal of the current guidelines including designing a process that minimised the complexity that is often found in BCM guidelines.

Develop

Developing the Framework involved trialling elements of BCM according to the organisation's learning culture. This allowed wider aspects of the Framework, including the policy implications within the hospital, to be identified. Finally, recommendations were developed to guide the hospital as it progressed towards implementation of the Framework.

Results

Each of the three project phases produced specific findings which guided the structure of the final Framework.

Discovery phase

Needs of the organisation

The needs of the organisation were identified through discussion with the hospital executive and

review of key hospital documents. Y2K documentation was reviewed and found to be out of date. In addition, internal audit reports noted that, although significant work had been completed in the area of emergency management, there was a lack of formal business continuity documentation to assist the hospital in responding to a business disruption.

Process of engagement

The literature convincingly states the case for having a top-down organisation-wide approach to BCM. At the Eye and Ear Hospital, the Board of Directors identified the importance of BCM and, subsequently, the Chief Executive initiated the project. It was imperative to engage the support and sponsorship of the Executive Management Committee to achieve a Framework that was understood and supported by this group of stakeholders. This was achieved through regular updates and "sign offs" dispersed throughout the life of the project. Existing internal communications channels were also used, with presentations conducted at the completion of each phase. In all presentations and meetings, a context map and process model were used to generate consistent key messages; thus enhancing organisational learning and ensuring a shared perception of BCM principles.

Success of the engagement process was determined using semi-structured interviews with Executive Management Committee members. The interviews sought to confirm support by the Executive Management Committee for the Framework and ascertain whether it could be implemented at the hospital.

The top-down approach not only enabled an organisation-wide perspective,[20] but also proved to be a critical success factor in engaging the Executive Management Committee. It ensured BCM received airtime in appropriate forums to reach the key stakeholders.

Business owners are considered to be the front-line managers who will ultimately own and update the business continuity plans (BCPs) pertaining to the processes under their control. Similar communication methods were used to engage this group of stakeholders, with a focus on spreading an awareness of BCM, as well as understanding the concept of a process, and planning to ensure the continuity of that process.

Appraisal of existing BCM standards and guidelines

A range of guidelines exists to direct practitioners through the process of initiating BCM, of which the following were selected to inform the development of the Framework for the Eye and Ear Hospital:

- Australian National Audit Office. Better practice guide: business continuity management — keeping the wheels in motion. Canberra: Commonwealth of Australia, 2000.
- Standards Australia/Standards New Zealand. Handbook — business continuity management (2nd ed). (HB 221: 2004.) Sydney/Wellington: Standards Australia International Ltd and Standards New Zealand, 2004.
- Business Continuity Institute. Business continuity management — good practice guidelines. Caversham, United Kingdom: BCI, 2005.[21]
- Australian Prudential Regulation Authority. Business continuity management for authorised deposit taking institutions. (Prudential Standard APS 232.) Canberra: Commonwealth of Australia, 2005.
- Australian Prudential Regulation Authority. Business continuity management for general insurers. (Prudential Standard GPS 222.) Canberra: Commonwealth of Australia, 2005.
- British Standards Institution. The guide to business continuity management. (BS PAS 56: 2003; forerunner of the official standard BS 25999-1: 2006.)

Additionally, an extensive range of literature was consulted to critically appraise current thinking around BCM. Although there are a number of terms defining BCM, they tend to oscillate around a common theme. APS 232 and GPS 222 describe a "whole-of-business approach to ensure critical business functions can be maintained, or restored in a timely fashion, in the event of material disruptions arising from internal or external events".[22,23] Alternatively, HB 221 uses the definition of providing "the availability of processes and resources in order to ensure the continued achievement of critical objectives".[24] In addition, the Australian National Audit Office (ANAO), which received input from

both Standards Australia and Emergency Management Australia, defines BCM as "maintaining the uninterrupted availability of all key business resources required to support essential business activities".[15] Siutryk views BCM as a decision-making process aimed at minimising business loss and maximising business recovery and continuance following any disaster that may occur at any time.[11] We combined the themes to define BCM as a holistic methodology for ensuring continued operation of key business processes in the event of an outage.

The standards and guidelines listed above vary in three key areas:

- The inclusion and positioning of risk analysis
- The complexity and purpose of the business impact analysis (BIA)
- The terminology used.

These elements were thoroughly analysed in the context of the hospital to select an appropriate approach for this Framework. Findings are presented below.

BCM and risk

Underpinned by the Risk Management Standard (AS/NZS 4360: 2004), HB 221 advises readers to "establish the context" so that links may be formed with an already recognised risk management framework.[24] This appears logical, given that business continuity management is an integral process for dealing with major disruptions where likelihood is difficult to assess and consequences are great. The integration between risk management and business continuity management is conceptualised in Standard HB 221 (see page 6, Figure 1, The interrelationship between risk management and BCM[24]).

Business impact analysis

An essential element of business continuity planning is the BIA. The BIA is explained within the literature as the process for studying the effect that the unavailability of a system, activity or resource would have on different areas of the business.[25] Harrison further simplifies BIA in terms of the assessment taken before prevention, preparation, response and recovery.[26] Standard HB 221 explains BIA as a process where "management level analysis ... identifies the impacts of losing company resources".[24] On the other hand, the ANAO presents BIA in the context of key business processes (KBP), where analysis is "undertaken for all key business processes and establishes recovery priorities".[15] Implicit in this definition is the notion of the BIA serving as a means of setting priorities. While similar concepts are presented, discrepancies are found in what businesses must assess and how much data need to be collected at this stage of the BCM process.

To minimise extraneous data collection, a BIA was designed with the principal purpose of prioritising business processes to focus planning efforts towards critical processes.

This BIA uses two criteria to evaluate the loss of each business process: *time sensitivity*, measured by recovery time objective (RTO) and *organisational impact* (OI). The RTO depicts how quickly the process needs to be backed up and running, while the assessment of impact is achieved through assigning a numerical value of perceived impact on predetermined sub-criteria. In this case, the measure of time sensitivity is attached to each process rather than the activities or resources within the process. The authors believe this design of BIA improves on previous methods by quantifying only the necessary information.

Terminology

While Standard HB 221 employs critical business *objectives*, the ANAO Guideline prefers key business *processes* with APS 232 and GPS 222 using critical business *functions*. These slight differences in the definitions may appear to be trivial; however, the diversity of the terms, coupled with the unclear understanding of potential disaster impacts, may exemplify the laissez faire approach taken by business when considering business BCM.

Significant discrepancies in terminology between the guidelines are also noted in the measure of time sensitivity. Unfortunately, clarity within Standard HB 221 is lost owing to the use of three terms: maximum acceptable outage (MAO); maximum tolerable outage (MTO); and maximum downtime (MD). Although not explicit, one can assume that MAO, MTO and MD are one in the same. APS 232 and GPS 222 are consistently clear

by rejecting these terms and using plain language for institutions to consider time criticality in the event of a disaster. Simply, APS 232 and GPS 222 ask for consideration of "timeframes assigned for the recovery of critical business functions, resources and infrastructure".[22] The authors have taken a similar approach to APS 232 and GPS 222 by using simple and clear definitions such as "cry point", "die point" and RTO in the business continuity work (Box 3).

Design phase

BCM Framework

The BCM Framework is an original model that is, although specifically designed for Eye and Ear Hospital, sufficiently generic to apply to other health services. It is illustrated in Box 4 with accompanying explanation in Box 5.

Development phase

The development phase allowed stages of the proposed BCM process to be trialled. This proved to be important for the following reasons:

- The functionality of the Framework could be tested and therefore refinements made
- Several components of the BCM process were completed for the organisation including:
- The context map
- The BIA
- 4 process-level BCPs
- 1 tabletop exercise
- Increased organisational awareness of BCM
- Education of business owners about the components and complexity of the Framework.

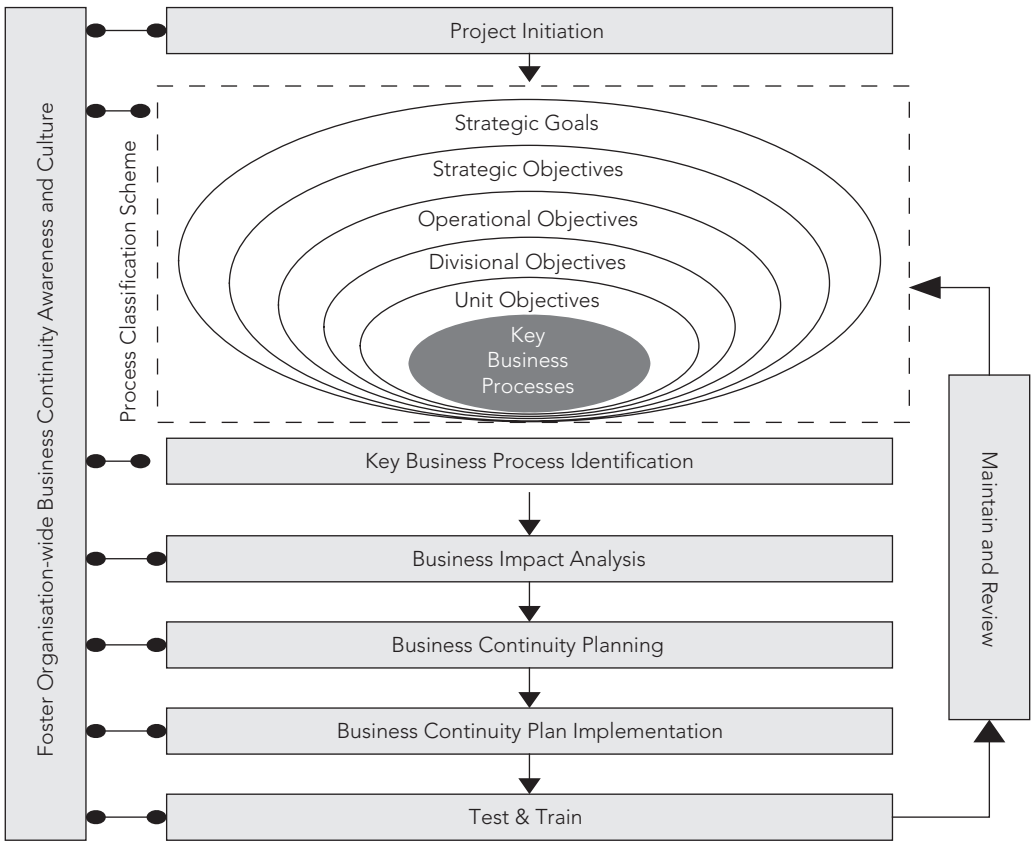
Discussion and interpretation

The project developed a BCM Framework with executive endorsement and ownership. Through close contact with the hospital, the authors identified the need for the Framework to be sufficiently comprehensive yet not weighed down with complexity. The experience reinforced the notion that if an organisation plans for widespread disaster calling for hospital-wide relocation, the task appears too overwhelming, and thus, BCM will fail.

3 Chosen business continuity management project definitions[15,24]

Key business process (KBP)	Processes essential to delivery of outputs and achievement of business objectives. Business activities and resources are the essential elements that combine to make up each KBP
Business impact analysis (BIA)	A management level analysis, which identifies the impacts of loosing company resources. The BIA measures the effect of resource loss and escalating losses over time in order to provide senior management with reliable data upon which to base decisions of risk mitigation and continuity planning. The BIA allows the KBPs to be prioritised according to predefined criteria. The criteria are time sensitivity and impact criticality
Time sensitivity	Quantifies the impact in terms of days/weeks/months it would take (following total loss of the KBP) for the Division to suffer
Organisational impact (OI)	Quantifies the severity of the impact on the organisation, according to sub criteria as defined by the organisation. This is aligned with the current risk management Framework
Cry point	Breaching of an implicit acceptable level of service. Recipients of the KBP are voicing significant concern
Die point	The point of no return where loss of the KBP would cause catastrophic consequences to the organisation, and the community or backlogs are sufficiently large to make recovery impossible, or reputation is irreversibly damaged
Recovery time objective (RTO)	The period of time required to fully re-establish adequate outputs of the KBP
Time of impact	The loss of a KBP is assessed based on the loss occurring at the time in the year/week/day which is considered to be a "worst case scenario"
OI total	The OI total is weighted measure. It is calculated by multiplying the numerical rating given to each impact category by the weighting listed below. The weighted impact scores are then added together to reach the OI total

4 BCM Framework model



By presenting BCM in a series of manageable stages, the hospital can confidently execute a coordinated approach to BCM with an acceptable level of effort. After consideration and collation of several current BCM guidelines, a process was designed to achieve an increased level of resilience while addressing aspects of the available literature that were deemed to be unsuitable in this context. Minimising the collection of extraneous data was a key factor in simplifying the process. In addition, participants appeared to adapt to the terminology, such as "cry point" and "die point" with ease. Beyond creating a user-friendly process, success was gleaned through effective facilitation throughout each phase of the BCM process.

The Framework was endorsed by the Board, the Audit Committee (Board subcommittee) and Executive Management Committee. Beyond these milestones, feedback was sought via semi-structured interviews. These interviews allowed executive directors to comment on their understanding of BCM as presented within the Framework. Members of the Executive generally expressed understanding of the BCM concepts and the relevance to their organisation. They also voiced support for the Framework and its implementation. Some members displayed their understanding of the BCM process through their awareness of the challenges that the organisation faces in going forward. This included providing the human resources to continue the initiation of BCM into the organisation. The human resources barrier provides two potential limitations: the intellectual knowledge required, plus the human resources needed to complete the task.

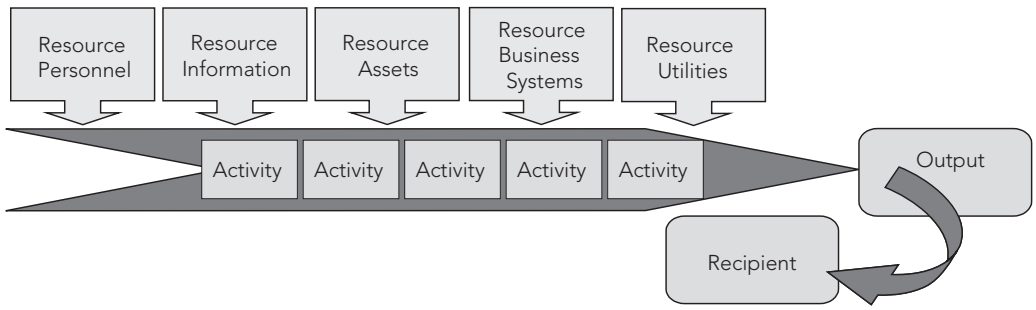
5 Framework guidelines

Stage 1: Project initiation	The introduction of business continuity management (BCM) into an organisation may be best tackled using project management methods. It is essential that the project be initiated by executive and conducted as an organisation-wide initiative
Stage 2: Development of a process classification scheme	*2.1 Strategic analysis* Each level of an organisation operates within a strategic environment and the strategic analysis considers the objectives of each level. The result is a context map, which combines both the organisational structure and high level planning documents *2.2 Business process identification* Each of the divisions represented in the context map contribute to the goals of the organisation. They will do this through the execution of many processes. Box 6 illustrates the essential components of a process The output of the strategic analysis, together with the output of the business process identification phase form a process classification scheme
Stage 3: Business impact analysis (BIA)	The business processes identified in phase 2 form the input of an organisation-wide business impact analysis. This Framework uses two criteria to evaluate the loss of each business process: time sensitivity, measured by recovery time objective (RTO) and organisational impact (OI). The RTO depicts how quickly the process needs to be back up and running. The assessment of impact is achieved through assigning a numerical value of perceived impact on predetermined sub-criteria. For instance, consider what the financial impact might be of losing the process of patient admission. Then consider how that impact might change if the process was lost for a day, a week, a month or a year. The following sub-categories have been selected for this Framework: ■ Environment and safety ■ Patient and staff safety ■ Reputation ■ Financial viability ■ Continuity of service These criteria allow the business process to be prioritised, thus enabling a targeted approach to business continuity planning. See Appendix 1 BIA worksheet for business owners/executive directors to complete when conducting or reviewing a BIA
Stage 4: Business continuity plan (BCP) development	Three levels of BCPs are required: *Process level BCPs*: the processes that will require a BCP are determined in accordance with the BIA *Utility recovery BCPs*: corporate level BCPs. For the organisation-wide response to the loss of a widely shared resource such as personnel
Stage 4: BCP implementation	Once each BCP has been devised and approved, the strategies within the plans must be implemented
Stage 5: Test and train	Tabletop exercises allow BCPs to be tested with a relatively low level of complexity. In addition to keeping the plans current, tabletop exercises also serve the purpose of training staff. Appendix 2 provides information as to how to conduct a tabletop exercise and an accompanying worksheet

Supporting components

Maintaining and reviewing
It is essential that BCPs are living documents. Therefore, the plans must be regularly formally evaluated. Process level business continuity plans are reviewed and updated by the business owner on a six monthly basis or immediately following any major change to the manner in which the business process is delivered
Organisation-wide BCM culture and awareness
The success of BCM is dependent on being fully integrated into the organisation. Executive management and business owners, in particular, need to have a firm understanding of the processes they oversee, and the way they contribute to the overall goals of the hospital. As new processes, capital, contracts or facilities are introduced to the organisation, BCM must be considered and incorporated in the decision-making process

6 Process model



Executive and senior management involvement is critical according to Miller, with interdepartmental and functional area teams providing a broader perspective in addressing all aspects of business continuity.[20] Hoffer concurs, explaining that to be successful in completing the BIA, the support of upper management is essential.[27] By championing the process, executive leadership assists in determining staff roles and responsibility, enabling the quick assessment of priorities. Siutryk also refers to management and leadership linking in with business continuity planning.[11] We suggest that a unified executive team and executive sponsor must advocate a business continuity culture.

Conclusion

By using a project management approach supported by an executive sponsor, it is possible to establish a Framework for BCM to suit the needs of a health care organisation. The success of BCM is dependent on being fully integrated into the organisation, and it is essential that Australian health organisations expand their understanding of BCM to reflect a holistic view. Executive and senior management, in particular, need to have a firm understanding of the processes they oversee, and the way they contribute to the strategic goals of the hospital. The authors reiterate the following critical success factors for initiating BCM into a health organisation:

- Best practice BCM is a relatively novel concept for most health services, so ensure sufficient resources are dedicated to completion of the BCM project, with comprehensive content knowledge of those undertaking it.
- Planning for BCM will be easier if you have a firm understanding of how the strategic goals feed into the processes that make the service tick. Getting this perspective is easiest with an organisation-wide approach that is initiated from the top, with ongoing executive support and sponsorship.
- Stay away from thoughts about all the possible disaster scenarios. Keep focused on the processes and consider the loss of each, regardless of the cause or likelihood of the loss.
- Make sure that all key stakeholders have a consistent understanding of BCM. One way to achieve this is to use consistent terminology that is well defined and easy to adopt.
- Bring your key stakeholders along for the journey. By including the stakeholders in the process, support for the project can be obtained incrementally along the way.
- Health services need to engage tertiary institutions to give the time to BCM training that it deserves.

Appendix 1 (Box A, Box B, Box C, Box D)

Description of key business processes in order of RTO for all business units/departments then mapped to organisational impacts for the following Division.

A Worksheet for BIA

				Organisational impact (OI)															
	Time sensitivity			Financial			Environment and safety			Patient and staff safety			Reputation			Continuity of service			OI total
Key business processes	Cry	RTO	Die	1D	1W	1M	1D	1W	1M	1D	1W	1M	1D	1W	1M	1D	1W	1M	

B Ratios for BIA calculations

			Organisational impact (OI)													
Financial			Environment and safety			Patient and staff safety			Reputation			Continuity of service			OI total
1D	1W	1M	1D	1W	1M	1D	1W	1M	1D	1W	1M	1D	1W	1M	
1.0	0.5	0.1	1.0	0.5	0.1	1.0	0.5	0.1	1.0	0.5	0.1	1.0	0.5	0.1	SUM

Calculation of the OI for each key business process included weighting each time category within each organisational impact category. Thus, 1 day equated to a weighting of 1, while 1 week was equated to 0.5 and 1 month equal to a weighting of 0.1. Thus, each score was weighted then added across each row of the BIA worksheet. A maximum of 40 could be achieved for the OI score, indicating a catastrophic event.

C Ratings of non-financial impacts[24]

Rating	Category	Description
1	Insignificant	No measurable operational impact to the business
2	Minor	Minor degradation of operations or service delivery Impact limited to a single area of the business Local management intervention required, with locally available resources
3	Moderate	Substantial degradation of operations or service delivery Impact to multiple areas of the business Substantial management intervention required, may require some possible external assistance
4	Major	Major degradation of operations or service delivery Impact to multiple and diverse areas of the business, threatening the viability of the organisation Significant senior management intervention required, will require significant mobilisation of resources including external assistance
5	Catastrophic	Widespread and total degradation of operations or service delivery Impact across critical functions of the organisation, threatening the immediate viability (and introduces significant long-term doubt on the ongoing sustainability) of the organisation Immediate senior executive and Board intervention required

D Ratings of financial impacts

Rating	Category	Description
1	Insignificant	Financial loss < 1% of budgeted expenses
2	Minor	Financial loss > 1% of budgeted expenses
3	Moderate	Financial loss > 3% of budgeted expenses
4	Major	Financial loss > 5% of budgeted expenses
5	Catastrophic	Financial loss > 10% of budgeted expenses

A financial impact is based on the operating expense that continues following an interruption or disaster, which, as a result of the event, cannot be offset by income and directly affects the financial position of the organisation. The ratings of these impacts are provided.

Appendix 2 Tabletop exercise and worksheet (Box E)

Objectives of the tabletop exercise

- Demonstrate viability of the business continuity plan; and
- Educate key stakeholders on the workings of the plan.

  Due to the process taken within the business continuity management Framework, the scope includes the "Process level" business continuity plan and it excludes the following:
- Management level recovery plans that address utility outage
- Management level communications plan
- Multi-systems outages.

Exercise agenda

The agenda for this exercise includes the following:

- Overview of the objectives
- Introduction of participants and roles
- Business process overview
- Presentation of the scenario
- Description of team procedures and assigned tasks
- Evaluation of business continuity plans, redundancy/work around strategies
- Review issues, corrective actions and responsible parties
- Closing discussion/next steps

"Rules"

- Everyone is free to contribute
- "Silence" indicates agreement
- The scenario can/will change as needed
- This is an exercise, not a "test"
- Facilitator has the right to table any issues for later resolution
- No outside interruptions are permitted

Checklist

The following points are a guide to issues needing attention during the scenario.

- Who makes the decision to activate the department level business continuity plan?
- On what basis is this decision made?
- Who does what first? Then next?
- What is the timing or sequence of this action? How long will it take?
- Can the next step begin? Is it independent or systematically linked?
- Anticipated barriers?
- Are there any possible accelerators? What could be done to assist recovery?
- Who else needs to be notified?
- Is there someone here today who can commit resources with authority?
- Succession planning if key contacts are unavailable
- When is it deemed that we are back in normal business?
- Have we done all that is needed to return to normal business?

E Work sheet for the tabletop exercise

Name of Exercise:				
Date of Exercise:				
Type of Exercise: (please circle)	Desk check		Tabletop	Simulation
Facilitator:		Position, Department		
1				
Participants		Position, Department		
1				
2				
3				
4				
5				
6				

Processes Disrupted by Scenario	RTO	OI	Foreseeable impact on the process	Notes/Comments
1				
2				
3				
4				

Principal resource contingency plans invoked as a result of the scenario	Impact	Notes/Comments
1		
2		

Note

Both authors contributed equally in the research and writing of this article. This work was completed during their postgraduate study at La Trobe University.

Competing interests

The authors declare that they have no competing interests.

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