### Chapter 10

# Methodological Approach to Systematization of Business Continuity in Organizations

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#### **ABSTRACT**

The underlying concept of business continuity is that an organization must have the strategic and tactical capability to plan and respond to business incidents and interruptions, in order to continue business operations at an acceptable predefined level. This chapter proposed an approach to business continuity management in an organization through the definition and implementation of a set of four related phases. The authors integrate the main guidelines, based on the literature review and on good practices and concerns, referred to in the ISO standards and on ITIL, CMMI, and COBIT frameworks. This approach will allow organizations to address the most relevant activities for the development of a business continuity management program. By implementing each of the phase activities, the organization will have a systematic overview of the steps required for an optimized planning and response to business incidents and disruptions, supported by the strategy defined framed within their needs.

#### INTRODUCTION

The underlying concept of Business Continuity (BC) is that an organization must have the strategic and tactical capability, to plan and respond to business incidents and interruptions (Ramakrishnan & Viswanathan, 2011), in order to continue business operations, at an acceptable predefined level.

In the third section of this chapter, is proposed an Approach to Business Continuity Management (BCM) in an organization, through the definition and implementation of a set of related phases, integrat-

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ing the main guidelines, good practices and concerns, underlying the constraints of its management and the definition of the scope of each of the activities of the phases.

The methodology was based on the literature review on the theme and on the frameworks presented in the International Organization for Standardization (ISO) standards, in the field of Information and Communication Technologies (ICT). Also considered the good practices referred to in the Information Technology Infrastructure Library (ITIL), Control Objectives for Information and Related Technologies (COBIT) and Capability Maturity Model Integration (CMMI) frameworks about BC and on the service delivery guarantee by ICT.

The chapter presents, in the third section, a proposal for a Business Continuity Planning Approach in organizations, consisting of four phases, in order to be comprehensive in relation to the theme. The first phase aims to assess the impact to which the organization is exposed and encompasses (Understand the Organization, Administration Support, Risk Assessment, Business Impact Analysis and Business Continuity Teams). The second phase proposes the strategic analysis of BCM and of ICT. The third phase advises to consider Alternatives to Critical Functions in the characterization of the design and implementation of the Business Continuity Plan (BCP). The fourth phase proposes the BC training and the Testing and Maintenance activities of the BCP.

The main conclusions focus on the presentation of an Approach, being an instrument that will allow organizations to address the most relevant activities for the development of a BCM Program. By implementing each of the phase activities identified in the Approach, duly framed within their needs, the organization will have a systematic and, desirably, complete overview of the steps required for planning and responding to business incidents and disruptions. It is considered that the added value of the Approach focuses on the systematization of the procedures underlying the theme, to optimize the response to business incidents and interruptions, supported by the organization defined strategy.

The BC can be managed, so the management concepts of the BC and the role of the BCP in this context are presented. Naturally, as BCM is a process, it should have a methodology to support the design of the BC in the organization. The BCP concept and the authors' considerations on continuity planning are presented, with the objective of distinguishing the activities involved, in the areas of crisis management, Disaster Recovery (DR) and the BC.

#### BUSINESS CONTINUITY MANAGEMENT

Contingency planning and DR were, in the past, largely information technology-led responses to natural disasters and terrorism that affected businesses. Nowadays (Tangen & Austin, 2019), recognize that this needs to become a business-led process and encompass preparing for many forms of disruption, creating a discipline known as BCM.

Any incident has the potential to cause major disruption to the organization's operations and its ability to provide products and services. However, (Filho, 2016) states that implementing BCM before a disruption incident occurs, rather than waiting for something to happen, allows the organization to resume operations before unacceptable impact levels emerge.

Thus, BCM can prepare the organization to maintain the continuity of its services during a disaster by implementing a contingency plan (Syed & Syed, 2004).

As a starting point, (Hiles, 2011a) considers that it is useful to obtain a statement of support from the administration, stressing the importance of the BC project and that some of the benefits of BCM are:

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