

Advantages and Disadvantages of Business Continuity Management

K. Venclova, H. Urbancova, and H. Vostra Vydrova

Abstract—In current global economics the application of Business Continuity Management is the prerequisite for sustainable competitive advantage in an organization. Business Continuity Management is a managerial which identifies the potential impact of losses in an organization. The aim of this paper is to identify and critically evaluate the relative advantages and disadvantages of deploying Business Continuity Management in an organization on the basis of seven criteria. The strongest advantage of Business Continuity Management is in its capacity to identify a crisis situation and help the organization to flexibly and also to keep the critical knowledge within the organization. By contrast the main disadvantage is that establishing Business Continuity Management in an organization is time-consuming and its implementation as an integral part of the organizational culture present significant difficulties.

Keywords—Business continuity management, criteria, advantages, disadvantages, organisations, survey.

I. INTRODUCTION

It is considered that people are the most important asset of an organisation [1]–[3], but to achieve business objectives, there has to be a management process that addresses the people as well as the processes [4] that are vital for the survival of the organization. This approach to ensuring the continuity of critical processes is called Business Continuity Management (BCM) [5].

BCM itself has its roots in disaster recovery, which emerged in the 1950s and 1960s as companies began to store backup copies of their critical paper or electronic data at alternate sites. The functions of security and disaster recovery systems rely on the continuity of information technology (IT) systems. National and international disasters together reinforced the need for organizations to rethink their processes and systems along the lines of BCM principles [5].

Global factors and competitive pressures require organizations to take measures to assure the continuity of their business. Business continuity has become a topic of high interest to organizations striving to overcome negative forces [6]. Tammineedi [7] states that business enterprises are increasingly realizing the importance of BCM.

Business Continuity is the activity performed by organizations to ensure that critical business functions will be available to customers, suppliers, regulators, and other entities

that need to have access to those functions. These activities include many daily routine tasks. Business Continuity is not something implemented at the time of a disaster; it refers to those activities performed daily to maintain service, consistency and recoverability. The British Standards Institution (BSI) produced BCM Standards in two parts. The first, BS 25999-1:2006 Business Continuity Management. Code of Practice, takes the form of general guidance and seeks to establish processes, principles and terminology for BCM. The second, BS 25999-2:2007 Specification for Business Continuity Management, specifies requirements for implementing, operating and improving a documented BCM System (BCMS), describing only those requirements that can be objectively and independently audited [8].

BCM involves managing the recovery or continuation of business activities in the event of a business disruption, and involves management of the overall programme through training, exercises and reviews, to ensure the business continuity plan(s) stays current and up-to-date [9].

Based on the above mentioned definitions, it is possible to claim that BCM is a managerial process which identifies possible events threatening organizational activities and which ensures the basic frame of improvement of an organization's ability to successfully and appropriately react to these events [2], [5], [10]–[12]. The aim of BCM is primarily to protect business continuity activities and keep an organization's critical processes safe against the impact of aggressive, criminal and terrorist activities directed at the organization [13], [14].

II. OBJECTIVES AND METHODOLOGY

As noted above, the aim of this paper is to identify the relative advantages and disadvantages of using BCM within an organisation. The paper consists of two parts, practical and theoretical. The practical part is based on an analysis of scientific sources concerned with BCM. The practical part presents this critical evaluation of the advantages and disadvantages of using BCM. Comparison is based on the following seven criteria: time, finance, place, structure, application, human resources and Corporate Social Responsibility (CSR).

The results of the quantitative research carried out in Czech organizations are presented in the Discussion below. This work was sponsored by the Czech University of Life Sciences Internal Grant Agency (CIGA) focusing on Business Continuity Management. Primary data were obtained via questionnaire survey, which took place in the period from August to October 2012. Questionnaires were distributed to Czech organizations using the LimeSurvey software. The questionnaires were duly completed by specialists and

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managers concerned with Business Continuity Management. 779 organizations were contacted and the questionnaire was completed by 106 respondents. The overall questionnaire return rate was 13.5 %. The results are expressed in absolute and relative frequency.

III. THEORETICAL BACKGROUND OF THE WORK

All processes taking place in a company can be said to take place between two extremes, characterized by periods of crisis and periods of stability. The success of an organization in the marketplace depends among other things on their ability to adapt to these swings. According to Garcia [15] crises and disasters create serious problems for employers, leading to massive losses in profits, time and other resources during the crisis period.

A. Business Continuity Management

BCM is a topic that is currently being widely discussed by a broad spectrum of organizations [13]. The development of BCM dates from the last half of the previous century and results from different drivers and practices (Fig. 1).

As discussed in [16] to achieve operational and business continuity, there needs to be a management process that addresses the processes and employees that are critical for the survival of the organization. This approach to ensuring the continuity of critical processes is called “Business Continuity Management” (BCM).

BCM involves managing the recovery or continuation of business activities in the event of a business disruption, and management of the overall programme through training, exercises and reviews, to ensure the business continuity plan(s) stays current and up-to-date [9].

BCM is not only a professional specialist discipline but also an issue that is business-owned and driven, unifying a broad spectrum of business and management processes. These include the following: management of risk, facilities, supply chain and quality; disaster recovery; security; crisis communication and public relations; and health and safety [16].

It is crucial to establish a good connection between organizational resource management and the result. The success of organizations (in terms of profit) depends on decisions about the implementation of the strategies chosen. To achieve the required outcomes, some essential investment into material or non-material (human) resources is required [9], [17].

Some important features of BCM identified from the existing definitions include:

- 1) BCM activities should be prioritised with major attention directed towards critical business processes [16].
- 2) BCM covers both the prevention of disasters/disruption as well as reduction of risk and reduction of the impact on business in cases when disaster/disruption strikes [14], [18]. Hence, it has a preventive and corrective function [5].
- 3) BCM is an ongoing management process – not a one-off project [16].



Fig. 1 The development of Business Continuity Management – periods, drivers and practices

B. Business Continuity Management Components

As in all the operations of an organization, the respective elements are present in the operational flow and involve business processes, participants, infrastructure and resources [19].

A business is termed as “an integrated set of activities and assets that is capable of being conducted and managed for the purpose of providing either a return to investors or dividends, lower costs, or other economic benefits directly and proportionally owners, members or participants” [19].

The business continuity approach has three fundamental aspects that can be viewed in a systemic way: technology, people and process. Technology refers to the recovery of mission-critical data and applications contained in the disaster recovery plan (DRP). It establishes technical and organizational measures in order to face events or incidents with potentially huge impact that in a worst case scenario could lead to the loss of data centers. Its development ought to ensure that IT emergency procedures intervene and protect the data in question at company facilities [20].

People refer to the recovery of the employees and physical workspace. Also the managers of these teams should possess general skills and they should be partially drawn from business areas other than IT departments. Nowadays this is perceived as essential to real survival with more emphasis on human assets and value, rather than on those hardware and software resources that in most cases are probably protected by backup systems [20].

To summarize, the components of BCM include the following:

Understanding the organization – using business impact and risk assessment to identify the critical deliverables, evaluate recovery priorities and evaluate the risks that may lead to a disruption in service delivery.

Determining BCM strategy – identifying alternative strategies available to mitigate loss, and determine their potential effectiveness to deliver its critical function.

Developing and implementing BCM response – developing a response to business continuity challenges and plans underpinning it.

Maintaining and auditing BCM – ensuring that BCM plans are fit for use, kept up to date and quality assured.

Establishing a BCM culture in the organization – the need to ensure that a continuity culture is embedded in the company by raising awareness throughout the key stakeholders, and

offering training to key staff members on BCM issues [19].

Maintaining a business continuity management program is an ongoing process of corporate discovery, risk management evaluation, strategy implementation, testing and review. International standards, like BS 25999, can help business continuity implementers set out guidelines to achieve these processes (Fig. 2) To help select an appropriate standard that best suits a company and its shareholders, the business continuity team should ask about the above issues [15].



Fig. 2 Business Continuity Management Life Cycle Diagram (BS 25999-1:2006)

IV. RESULTS

BCM is considered by most organizations to be an important element of an organization [21]. They also recognize knowledge as one of the most important advantages. As knowledge is involved in all processes, it is also important for business continuity management. One of the strategies for retaining the critical knowledge in an organization is to use BCM [12], [22].

It is necessary to use the valuable knowledge of employees and specialists in particular areas to successfully implement and ensure BCM. It is not possible to support BCM without these people [5], [12].

As already noted above, the British Standards Institution (BSI) has produced Business Continuity Management standards in two parts [23].

An ineffectively designed BCM system can result in financial loss to an organization. It can also damage the organization's image from the business and personnel point of view [5]. On the other hand, a well-designed BCM system leads to competitive advantage in the form of not only keeping critical knowledge in the organization [2], [15], [21], but also ensuring the basic framework for improvement of the organization's ability to react successfully and appropriately to crisis situations [2], [5], [10]-[12].

BCM is becoming more important in various areas of the economy, especially in the financial sector [20], [24]. The authors state that banks should be more concerned with risks and threats than other sectors [6]. This illustrates strong sector dependency on technology, which supports key processes in

organizations [25].

In addition to the two British standards currently used in the Czech Republic, BS 25999-1 and BS25999-2, the other international standards used are for example ISO/IEC 27001:2005 Management Systems Standards – Information Security and COBIT – Control Objectives for information & related technology 4.1 and ITIL v.3 (international) – IT Infrastructure Library, as referred to in the Discussion section below.

It is not possible to use every standard in all countries, because the use of BCM depends on several factors such as corporate governance, central government, existing and potential customers, legislation, and regulations in a given country [21]. A suitable standard (with regard to the above mentioned factors) should be utilized when developing a system for BCM in order to ensure its success [7].

BCM has the closest connection to business. This gives the organization the possibility to quickly react to customer demands [25]. This is also one of the reasons why some customers in this aggressive and competitive environment prefer organizations with guaranteed service continuity [16].

Organizations applying BCM via standards can utilize this competitive advantage in the long term. On the other hand, authors mention the time disadvantage, which is connected with the use of BCM [3], [5]. Another essential disadvantage is slow return, i.e. time-consuming implementation in an organization [5], [12].

Social responsibility is voluntary. It is not defined by law and organizations can but do not have to implement it. This type of activity involves a higher financial impact on an organization. The social advantage of developing and using BCM is the support of new skills and knowledge acquisition and consequent specialist motivation and environmental protection [3], [5], [12].

ADVANTAGES	DISADVANTAGES
TIME CRITERION	
Long-term experience in the application of BCM in an organization. Assurance of rapid recovery of normal operating functions	Time-consuming requirement to implement BCM in the organization.
FINANCIAL CRITERION	
Competitive advantage given by response to crisis situations and preservation of critical knowledge in the organization	Bad implementation of BCM leads to financial losses. in the organization
SPACE CRITERION	
Possibility of mutual benefit in using existing standards.	Problems arising in less economically strong organizations and dependence on the national economic situation.
STRUCTURAL CRITERION	
Specific BCM for each organization in each sector.	Uneven utilization of BCM across individual economic sectors. The maximum utilization is in the banking sector.

CRITERION OF APPLIED STANDARDS	
Applications of BSI standards in the Czech Republic.	Dependence on technological support for BCM in the organization – only available from valuable specialists with knowledge in the field.
HUMAN RESOURCE CRITERION	
Retention of critical knowledge and key employees in the organization.	Specialists leaving to join the competition. Poor communications.
CSR CRITERION	
National support for new skills and knowledge. The company appreciates and motivates specialists in BCM.	Higher financial burden. Environmental Protection.

Fig. 3 Critical evaluation of Business Continuity Management

V. DISCUSSION

Nowadays, BCM is considered a managerial discipline which is focused on the identification of the potential impact which can appear as a consequence of negative events. These can mean a threat to the organization. BCM creates the framework for ensuring organizational resistance and an increased organization ability to react to unexpected events and thus protect not only key organization processes but also their interests (e.g. market share value).

Most Czech organizations (81.9%) are not focused on BCM. This figure is based on the results of the quantitative research carried out by the Authors (as already noted above, this was sponsored by the CULS University-wide Internal Grant Agency focusing on Business Continuity Management conducted in Czech organizations). Organizations which implement BCM are mostly based in the tertiary sector, especially in the IT, banking and financial areas. These organizations use standards BS 25999-1 (47 %) and BS25999-1 and 2 (37 %). Other norms used by Czech organizations are ISO 27001 (ISMS), which was used by all organizations of the given sample, CobIT used in 16 % of the organizations and ITIL in 53 % of the organizations.

The most important disadvantages are insufficient justification of the need for BCM and low support from the management which is linked with it, the high acquisition price of BCM and the need for qualified employees [16] who know the organizational needs and factors influencing its processes. Small organizations which are dependent on the economic situation in a particular country are disadvantaged. On the other hand, support of new skills and knowledge acquisition is viewed as an advantage of the BCM implementation. Other strong competitive advantages of the BCM are a positive image of the organization and protection of its resources (both financial and human).

While the percentage of organizations implementing BCM is increasing every year in the Czech Republic as well as worldwide, there are still some managers who fail to address the need for the BCM despite the fact that the number of catastrophes is increasing. Given the fact that the external environment of an organization is constantly changing, the importance of the use of BCM is growing. Organizations have

to adjust to low customer and client tolerance and loyalty; demands to fulfill financial commitments toward banks etc. All of this increases the pressure on organizations in the area of BCM. Unless an organization is able to address a situation quickly and appropriately, this can develop into a crisis and the organization can be forced to stop their operations. The need for BCM is mostly ignored by the small and middle-sized organizations which are however considered to be the most threatened by potential risks. These organizations form the base of most world economics, therefore it is important to raise their awareness and motivate them to implement BCM.

VI. CONCLUSION

BCM is not only a professional specialist discipline but also a business owned and driven issue that unifies a broad spectrum of business and management processes. These include risk, facilities, supply chain and quality management; disaster recovery; security; crisis communication and public relations; and health and safety [22]. In particular, BCM provides the strategic and operational framework to both review, and where appropriate, redesign the way an organization provides its products and services whilst increasing its resistance to disruption, interruption or loss [16].

Only 11 countries have their own BCM standards suitable for application in organizations under their conditions, the Czech Republic is not one of them and the international and British standards are used there.

The advantages of implementing BCM are widely ignored by many Czech organizations. A similar situation is occurring in Singapore, where a survey was conducted among large construction companies [19]. A large majority of the respondents (82%) did not have any form of BCM implemented within their organizations

Based on the theoretical approaches and evaluation of BCM advantages and disadvantages it is possible to conclude that:

- Business continuity should be buffer for organizations against drastic changes of circumstances.
- The application of business continuity has long-term advantages and opportunities.
- BCM can positively influence the company image.
- BCM implementation is a time-consuming issue, which requires financial resources and implementation specialists.
- Business continuity should be an integral part of the organisational culture.
- BCM implementation and sustainability is dependent on the level of IT within the organization.
- Moments of radical change can be seen as opportunities for business continuity to protect and steer the projects and processes of an organization.
- Applying the principles of business continuity to ensure recovery and a return to normal.
- Long-term continuity includes ongoing post-recovery activities such as amendments to the protection systems, acknowledgment of key personnel and improvements to the plans.
- It is critically important to maintain and retain essential business continuity resources.

- Big threat is human factor.

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REFERENCES

- [1] P. Banfield, R. Kay, Introduction to human resource management. 1st Edition. New York: Oxford University Press, 2008, pp. 367.
- [2] H. Beazley, J. Boenisch, D. Harden, Continuity Management: Preserving Corporate Knowledge and Productivity When Employees Leave, New York: John Wiley & Sons, 2002.
- [3] F. Bělohávek, Jak vést rozhovory s podřízenými pracovníky. [How to conduct interviews with junior employees] 1st Edition. Praha: Grada. pp.136, 2009.
- [4] RAC BCMS, Zavedení systému řízení kontinuity činností [Introduction of systems for the management of continuity activities] Risk Analysis Consultants [online]. [cit. 2012-11-10]. Accessible at: <http://www.bcms.cz/>.
- [5] M. Blyth, Business continuity management: building an effective incident management plan. Hoboken, NJ: J. Wiley, 2009, pp. 362.
- [6] KPMG, Information Security and Business Continuity: When Business is Not as Usual!, KPMG, Sharjah, 2006.
- [7] R. L. Tammineedi, "Business Continuity Management: A Standards-Based Approach", Information Security Journal: A Global Perspective, vol. 19, no. 1, pp 36 – 50, 2010.
- [8] K. Roebuck, Business continuity and disaster recovery. UK: Lightning Source UK Ltd., 2011.
- [9] D. Kaye, Managing risk and resilience in the supply chain. UK: Business Information, British Standard Institution, 2008.
- [10] D. Elliott, E. Swartz, and B. Herbane, Business Continuity Management: A Crisis Management Approach. London: Routledge, 2002.
- [11] J. Graham, and D. Kaye, A Risk Management Approach to Business Continuity, USA: Bookfield. 2006.
- [12] B. Herbane, "The evolution of business continuity management: A historical review of practices and drives." Business history, vol. 52, no.6, pp. 978-1002, 2010.
- [13] A. Hiles, The Definitive Handbook of Business Continuity Management. Second Edition. Hoboken, NY: John Willey & Sons, 2007.
- [14] P. Massingham, "Knowledge risk management: a framework", Journal of Knowledge Management, vol. 14, no. 3, pp. 464-485, 1997.
- [15] A. Garcia, "Business Continuity Best Practices", eWeek. vol. 25, no. 33, pp. 32-40, 2008.
- [16] K. Randeree, K., A. Mahal, and A. Narwani, "A business continuity management maturity model for the UAE banking sector", Business Process Management Journal, vol. 18, no. 3, pp. 472 – 492, 2012.
- [17] M. Pitt, and S. Goyal, "Business continuity planning as a facilities management tool", Facilities, vol. 22, no. 3, pp. 87 – 99, 2004.
- [18] B. Münstermann, A. Eckhardt, and T. Weitzel, „The performance impact of business process standardization: An empiric evaluation of the recruitment process”, Business Process Management Journal, vol. 16, no. 1, 2010.
- [19] S. P. Low, J. Liu, and S. Sio, "Business continuity management in large construction companies in Singapore," Disaster Prevention and Management, vol. 19, no. 2, pp. 219 – 232, 2010.
- [20] F. Arduini, and V. Morabito, "Business Continuity and the Banking Industry", Communications of the ACM, vol. 53, no. 3, 2010.
- [21] N. W. Wong, "Journal of Business Continuity & Emergency Planning" Henry Stewart Publications, vol. 4, no. 1, pp. 62–68, 2009.
- [22] J. Burtles, J. Principles and Practice of Business Continuity, Tools and Techniques. Rothstein Associates Inc., USA: Rothstein Associates Inc., 2007. ISBN 978-1-931332-39-2.
- [23] Business Continuity Institute, Business Continuity Management Legislations, Regulations and Standards, Business Continuity Institute, UK, available at: <http://www.bcifiles.com/LRSG.pdf>.
- [24] L. Mohan, and S. Rai, "Business continuity model: a reality check for banks in India", Journal of Internet Banking and Commerce, vol. 11, no. 2, 2006.
- [25] V. Váňa, „Význam certifikace dle ISO/IEC 20000 pro obchod s ICT službami [The importance of certification focused on business in the area of ICT services according to ISO/IEC 20000]" in Proc. 5th Annual International Conference Systems Integration 2007, Prague, 2007, pp. 19 – 27.