

## Business continuity management: From literature framework to practical application in Vietnamese small and medium-sized enterprises

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**Abstract:** Empirical data analysis from 128 selected Vietnamese SMEs indicated that the firms have experienced losses and disruptions in their business activities during turbulent times. Along with that, the paper identified the major reasons, not only unexpected changes in business environments but also deficiencies in risk and crisis management in these Vietnamese enterprises. A widely accepted crisis management model, Business Continuity Management (BCM), is defined as a “holistic management process that identifies potential threats to an organization and the impacts to business operations those threats, if realized, might cause” [1]. This paper reviews literature on risk and crisis management and introduces BCM as a crisis management approach and as a practical framework. Consequently, the necessity of applying the BCM model/approach to Small and Medium-sized Enterprises (SMEs) in Vietnam has been confirmed. Finally, the paper suggests major recommendations for successfully applying the BCM model toward sustainable development in these firms, such as developing a business continuity plan and organizing a BCM structure.

**Keywords:** Business continuity management (BCM), Crisis management, Crisis, Small and medium-sized enterprises (SMEs).

### 1. Introduction

Recently, small and medium enterprises (SMEs) have been experiencing a rapidly changing global economy, which may cause crises such as disruptions to global supply chains, difficulties in accessing financing, and rising material and transportation costs. Therefore, crisis management plays a crucial role in SMEs' sustainable development. This paper begins with a review of the literature on one popular model of crisis management, Business Continuity Management, and the necessity of applying this model in Vietnamese SMEs.

Crisis is defined as “an event perceived by managers and stakeholders to be highly salient, unexpected, and potentially disruptive” [2]. The word crisis originates from the ancient Greek expression “krino,” which means to choose, decide, judge, or measure; also, the word “krino” signifies the moment of change and the necessity to decide [3]. Crisis is believed to involve a period of discontinuity, a situation where the core values of the organization are under threat, requiring critical decision-making [4].

Crisis management is defined as a proactive process that involves dealing with the crisis before it happens, during the crisis, and afterward. In other words, it is a process designed to prevent or lessen the damage that a crisis can inflict on an organization and its stakeholders [4, 5]. Crisis management should be perceived as a process, not a single thing or a single action. It plays a crucial role in protecting the organization or stakeholders from damage and preventing or diminishing the negative outcomes of a crisis [6].

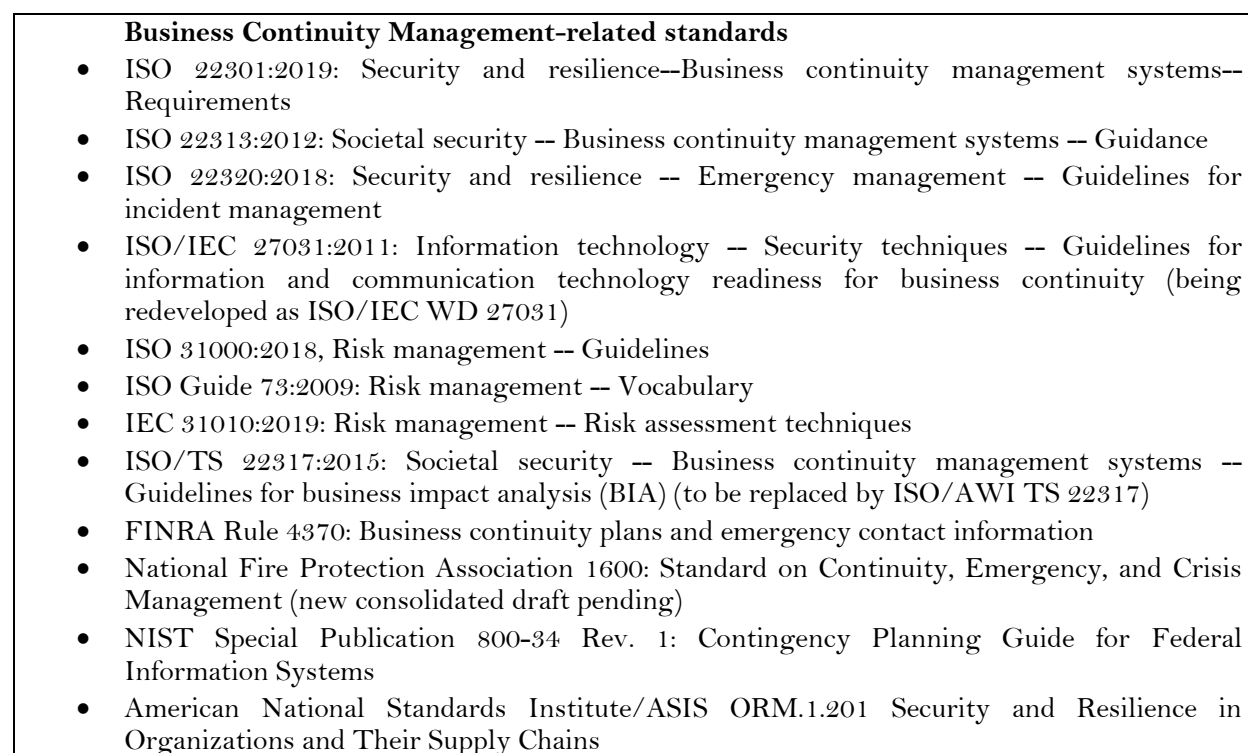
In more detail, Coombs [6] developed a crisis management model as a three-stage process: (1) The pre-crisis stage consists of three sub-stages: signal detection, prevention, and crisis preparation. The objectives of this stage are to detect a crisis and prepare for crisis management with a crisis

management plan. In this stage, the author suggested organizations form a team for managing the crisis, select spokespersons, and prepare draft crisis messages. (2) The second stage is the crisis stage, which consists of two substages: crisis recognition and crisis containment. At this stage, the organization's response to the crisis situation, its communication with stakeholders, and how the organization deals with the crisis are important. (3) The post-crisis stage comes after the crisis is resolved. At this stage, the organization evaluates how it dealt with the crisis [6, 7].

### 1.1. Business Continuity Management – An Approach to Crisis Management

Business Continuity Management (BCM) has been developed as a crisis management approach since the 1970s, responding to technical and operational risks affecting enterprises [8-10]. In essence, BCM is a tool to identify and manage risks that threaten business processes, mitigate their effects, and ensure the successful recovery of processes after risks occur [11, 12].

In 2012, the International Organization for Standardization (ISO) defined BCM as a “holistic management process that identifies potential threats to an organization and the impacts to business operations those threats, if realized, might cause” [1] (see Figure 1). The organization highlighted the roles of BCM as “a framework for building organizational resilience with the capability of an effective response that safeguards the interests of its key stakeholders, reputation, brand, and value-creating activities” [1]. Similarly, the German Federal Office for Information Security recognized BCM as “a management process with the goal to discover fatal risks for an institution that could endanger viability at an early stage and establish methods against them” [13].



**Figure 1.**

Business Continuity Management-related standards.

Source: Moore and Crocetti [14].

### *1.2. Business Continuity Management- A Practical Framework*

In practice, BCM can be recognized and utilized as a business framework that outlines the planning process for developing prior arrangements and procedures to enable organizations to respond to an event in such a manner that critical business functions can continue within planned levels of disruption. BCM integrates the disciplines of Emergency Response, Crisis Management, Disaster Recovery (technology continuity), and Business Continuity (organizational/operational relocation) [15]. A typical BCM framework includes: Policies and Strategies; Business Impact Assessment; Risk Assessment; Validation and Testing; Incident Identification; and Disaster Recovery [16].

Similarly, a good example of a BCM process has been developed and applied with six steps: (1) Risk Identification and Business Impact Analysis (BIA); (2) Identify and define response options; (3) Develop Business Continuity Plans; (4) Develop a Communication Strategy; (5) Training, Testing, and Maintaining Plans; (6) Activation and Deployment of Plans. Along with the development and application of a BCM process, organizations should consider the links between BCM and Risk Management, Emergency Response Management, and Crisis Management [17].

BCM has been developed for all kinds of enterprises and should be considered for application regardless of size. However, it is noticeable that there are limitations in applying BCM in SMEs, even in developed economies. Reuter [13] reported that in a survey conducted by the Network Electronic Trading, only one-fifth of SMEs had an emergency plan for IT, and one-fourth lacked a standardized procedure for dealing with IT emergencies as quickly as possible [13]. Other research discovered that 45% of US-American and European SMEs could not demonstrate a BCM concept [18], or BCM is significantly less present in SMEs, and 41% of enterprises do not plan for crises of all kinds at all [19]. Therefore, it is concluded that the use of BCM in SMEs has not been appropriately examined yet, which makes the security level of SMEs significantly lower than in larger enterprises [9, 13, 18, 20]. Some major points of a BCM framework that may be applied in SMEs, particularly in Vietnam, are discussed in the next parts of this paper.

### *1.3. Examination of the Necessity of BCM in Vietnamese SMEs*

The paper examined different categories of crises and crisis management activities that have occurred in Vietnamese SMEs over the past 5 years. 200 SMEs were randomly selected and participated in the survey. The SMEs were provided with online questionnaires, using a 5-point Likert scale, that required responses from top-level managers. 128 (out of 200, equal to 64%) responses were received and analyzed. Three categories of business crises were examined: crises from general environmental factors (5 items), crises from operational environmental factors (4 items), and crises from internal factors (1 item). The collected data were analyzed to examine the informants' evaluations of crises that occurred recently; also, the items were ranked in terms of their importance to the selected SMEs.

**Table 1.**  
Business crisis facing Vietnamese SMEs.

No.	Crisis/Source of crisis	Rank	Mean	Min	Max	Standard Deviation
1. General Environmental Factors						
1.1.	Legal/Political factors	1	3.58	2	5	0.92
1.2.	Economic factors	3	3.51	1	5	1.13
1.3.	Sociology factors	6	3.32	1	5	1.07
1.4.	Technology factors	8	3.19	1	5	1.02
1.5.	Natural factors	9	3.16	1	5	0.96
2. Operational Environment Factors						
2.1.	Crisis from customers	2	3.54	2	5	1.06
2.2.	Crisis from suppliers	5	3.39	1	5	1.12
2.3.	Crisis caused by competitors	4	3.42	2	5	1.10
2.4.	Financial crisis/crisis from banks and financial institutions	7	3.31	1	5	1.16
3. Crisis from internal factors						
		10	2.66	1	5	1.14

**Source:** Data analysis.

The analyzed data showed that all three categories of business crisis were recognized and experienced by the selected companies (with scores from 2.66 to 3.58) (see Table 1). In other words, all types of crises occurred in business firms, and the managers addressed their effects on the firm's operations.

In importance ranking or the degree of effects on business, the legal/political factors had the highest score (ranked 1, 3.58), followed by crisis from customers with the second highest score (ranked 2, 3.54), and crisis from economic factors with the third highest score (ranked 3, 3.51). The three highest scores were all above 3.5, indicating their importance to Vietnamese SMEs. This can be explained by the radical changes initiated by Vietnamese authorities, where legal/political issues lead to customer and economic factors, which then significantly affect SMEs. These three factors were identified as the most prominent and critical sources that Vietnamese SMEs should pay appropriate attention to.

The second group consisted of four factors with scores from above 3.3 to under 3.5: crisis caused by competitors (ranked 4, 3.42); crisis from suppliers (ranked 5, 3.39); crisis caused by sociological factors (ranked 6, 3.32); and financial crises from banks and financial institutions (ranked 7, 3.31). The three factors with the lowest scores below 3.2 were technology factors (ranked 8, 3.19); natural factors (ranked 9, 3.16); and crises from internal factors (ranked 10, 2.66). This may be because Vietnamese SMEs probably have a limited understanding or awareness of internal factors or consider these issues as expected with low uncertainty.

**Table 2.**  
Business Crisis Management at Vietnamese SMEs.

No.	Crisis/Source of crisis	Mean	Min.	Max.	Standard Deviation
<b>1. Perception of BCM necessity</b>					
1.1.	Need for Risk Management	4.58	2	5	1.12
1.2.	Need for Crisis Management	4.18	2	5	1.06
1.3.	Need for BCM	3.42	1	5	1.17
<b>2. Having BCM activities</b>					
2.1.	Risk Management activities	3.94	2	5	0.98
2.2.	Crisis Management activities	3.39	1	5	0.89
2.3.	BCM Activities	3.12	2	5	0.90
<b>3. BCM/Crisis Management application</b>					
3.1.	Business Continuity strategies/policies	3.16	1	5	1.18
3.2.	Impact Identification and Assessment	3.45	1	5	1.20
3.3.	Crisis Recovery	3.08	1	5	1.02
<b>4. BCM structure</b>					
4.1.	Support from top management	3.26	2	5	1.21
4.2.	Coordination with other organizational units	3.15	1	5	0.95
4.3.	BCM team/unit	2.98	1	5	0.86
4.4.	Recovery team	2.86	1	5	0.66

Source: Data analysis.

In Table 2, Vietnamese SMEs have the lowest scores on both perception of the necessity of BCM (3.42) and having BCM activities (3.12) compared to perception and activities of Risk Management and Crisis Management. These results emphasize that Vietnamese SMEs may need to improve their perception of BCM necessity and put greater effort into BCM application. Furthermore, Vietnamese SMEs indicated that, although they have *Impact Identification and Assessment* activities (the highest score in part 3, 3.45), they need to formulate and implement *Business Continuity strategies/policies* (score 3.16) as a solid foundation for *Crisis Recovery* activities (the lowest score in part 3, 3.08). The lowest score on Crisis Recovery activities could be explained by the absence of a Recovery team (the lowest score in part 4, 2.86) and the inefficiency of the BCM team/unit (the second lowest score in part 4, 2.98). With these two scores below 3.0, it is recommended that Vietnamese SMEs prioritize formulating a BCM team or Recovery team. Support from top management (the highest score in part 4, 3.26) can be considered a supportive factor; however, firms should focus more on ensuring coordination among all organizational units in the BCM application.

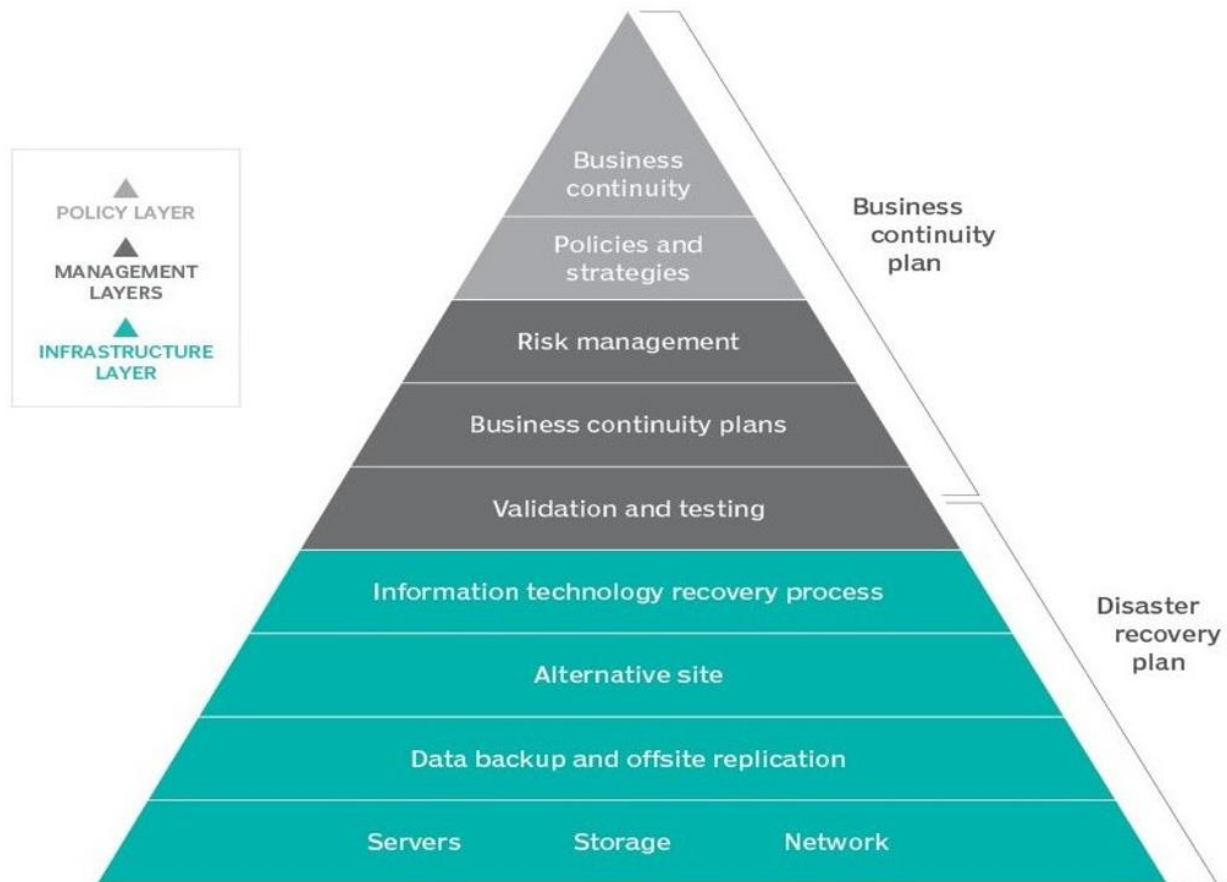
#### 1.4. Recommendations for Vietnamese SMEs

Although the scope and implementation process of risk management and BCM may vary among firms due to their different natures and situations, two crucial actions recommended for Vietnamese SMEs are developing an appropriate Business Continuity Plan and organizing an effective Business Continuity Management structure.

##### 1.4.1. Develop a Business Continuity Plan

Waryjas [21] stressed that one should be careful and thoughtful in planning for a crisis, as that might not even be predictable given the history or complexity of the business. It is dangerous that many organizations face crises without any plan, but with blindness and overconfidence. The author provided results from a survey of 500 CEOs, in which 89% responded that business crises were inevitable; 50% stated that they did not have any preparations for dealing with crises, but 97% of that same group still felt confident they would respond effectively in a crisis. Smith [22] stated that a Business Continuity Plan should aim to preserve not only customer services/support services to guarantee revenue generation but also the confidence of customers, shareholders, and employees, as well as the public image of the company.

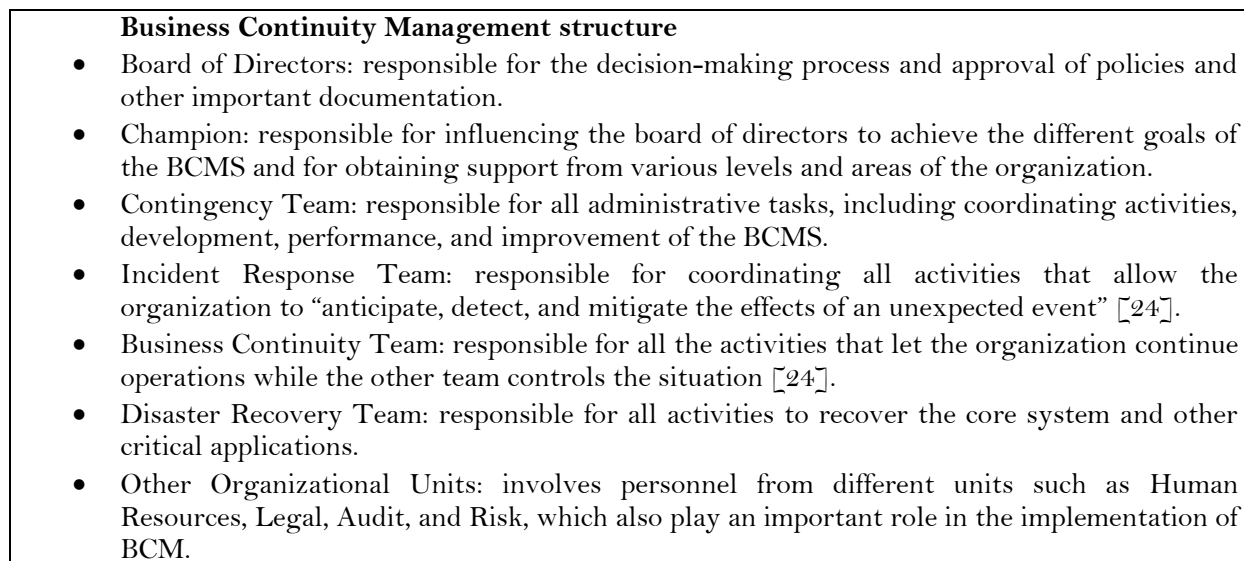
Moore and Crocetti [14] provided a good example of a Business Continuity Plan with components arranged as a pyramid with three layers. The lowest layer was the infrastructure layer or disaster recovery plan (servers, storage, network, data backup and offsite replication; alternative site; and information technology recovery process), focused on recovery actions after a crisis occurred. Many organizations, especially SMEs, started with the contents of the first layer; however, with this layer, they may find that they are only capable of reacting after a crisis occurs, not effectively preventing or mitigating the crisis and its consequences [23]. Therefore, based on the first layer, they should improve to the second and third layers: the business continuity plan (Infrastructure layer: validation and testing; business continuity plans; risk management) and the policy layer (policies and strategies; business continuity). (see Figure 2).



**Figure 2.**  
The Business Continuity Plan.  
Source: Moore and Crocetti [14].

#### 1.4.2. Organize a Business Continuity Management structure.

Besides creating proper business continuity plans, it is suggested that Vietnamese SMEs should pay appropriate attention to organizing an effective business continuity management structure. The structure consists of many components as suggested: boards of directors, contingency team, incident response team, business continuity team, disaster recovery team...with discrete responsibilities and authorities (see Figure 3). The business continuity management structure will implement and update business continuity plans and guarantee that Vietnamese SMEs respond effectively to all types of risk and crisis.



**Figure 3.**  
Business Continuity Management structure.  
Source: Sanchez Dominguez [25].

## 2. Conclusion

To conclude, empirical evidence supports that Vietnamese SMEs are facing a rapidly changing global economy, which may cause different types of crises that negatively impact and challenge the firms. As Tran et al. [26] noted, “many Vietnamese SMEs experience high production costs, poor product quality, and low innovativeness. Moreover, capital shortages, lack of advanced technology, management skills, and expertise, and insufficient market information hinder these young SMEs from competing globally” [26].

Therefore, crisis management and business continuity management have played increasingly important roles in SMEs’ sustainable development [27]. As a widely accepted model of crisis management, BCM should be applied as “a framework for building organizational resilience with the capability of an effective response that safeguards the interests of its key stakeholders, reputation, brand, and value-creating activities” [1]. However, the applications of BCM and other crisis management models in Vietnamese SMEs are still limited. It is a good topic for further research on BCM and its applicability in Vietnamese enterprises in general and Vietnamese SMEs in particular.

### Transparency:

The author confirms that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

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### References

- [1] ISO (International Organization for Standardization), "ISO 22301:2012 Societal security - Business continuity management systems – Requirements," 2012. <https://www.iso.org/standard/50038.html>. [Accessed 01/3/2026]

- [2] J. Bundy, M. D. Pfarrer, C. E. Short, and W. T. Coombs, "Crises and crisis management: Integration, interpretation, and research development," *Journal of Management*, vol. 43, no. 6, pp. 1661-1692, 2017. <https://doi.org/10.1177/0149206316680030>
- [3] M. Marikova, R. Rolínek, and J. Vrchota, "Crises and its occurrence in SMEs in the Czech Republic," *Journal of Logistics Management*, vol. 5, no. 1, pp. 1-5, 2016.
- [4] S. Simola, "Teaching corporate crisis management through business ethics education," *European Journal of Training and Development*, vol. 38, no. 5, pp. 483-503, 2014. <https://doi.org/10.1108/EJTD-05-2013-0055>
- [5] W. T. Coombs, *Ongoing crisis communication: Planning, managing, and responding*, 3rd ed. Thousands Oak: Sage, 2012.
- [6] W. T. Coombs, "Crisis management and communications," 2014. <http://www.instituteforpr.org/crisis-management-communications/>. [Accessed 01/3/2026]
- [7] K. Zamoum and T. S. Gorpe, "Crisis management: A historical and conceptual approach for a better understanding of today's crises. IntechOpen," 2018. <http://dx.doi.org/10.5772/intechopen.76198>. [Accessed 01/3/2026]
- [8] B. Herbane, "The evolution of business continuity management: A historical review of practices and drivers," *Business History*, vol. 52, no. 6, pp. 978-1002, 2010. <https://doi.org/10.1080/00076791.2010.511185>
- [9] B. Herbane, "Exploring crisis management in UK small-and medium-sized enterprises," *Journal of Contingencies and Crisis Management*, vol. 21, no. 2, pp. 82-95, 2013. <https://doi.org/10.1111/1468-5973.12006>
- [10] K. J. Engemann and D. M. Henderson, *Business continuity and risk management: Essentials of organizational resilience*. Brookfield, CT, USA: Rothstein Publishing, 2014.
- [11] N. Bajgoric, "Business continuity management: a systemic framework for implementation," *Kybernetes*, vol. 43, no. 2, pp. 156-177, 2014. <https://doi.org/10.1108/K-11-2013-0252>
- [12] C. Păunescu and R. Argatu, "Critical functions in ensuring effective business continuity management. Evidence from Romanian companies," *Journal of Business Economics and Management*, vol. 21, no. 2, pp. 497-520, 2020. <https://doi.org/10.3846/jbem.2020.12205>
- [13] C. Reuter, "Towards efficient security: business continuity management in small and medium enterprises," *International Journal of Information Systems for Crisis Response and Management*, vol. 7, no. 3, pp. 69-79, 2015.
- [14] J. Moore and P. Crocetti, "What is BCDR? Business continuity and disaster recovery guide. TechTarget," 2020. <https://www.techtarget.com/searchdisasterrecovery/definition/Business-Continuity-and-Disaster-Recovery-BCDR>. [Accessed 01/3/2026]
- [15] DRI International, "What is business continuity management?," 2020. <https://drii.org/what-is-business-continuity-management>. [Accessed 01/3/2026]
- [16] PhoenixNAP, "What is business continuity management (BCM)?: Framework & key strategies," 2019. <https://phoenixnap.com/blog/what-is-business-continuity-management>. [Accessed 01/3/2026]
- [17] Griffith University, "Business continuity management and resilience framework," 2018. <https://policies.griffith.edu.au/pdf/Business%20Continuity%20Management%20and%20Resilience%20Framework.pdf>. [Accessed 01/3/2026]
- [18] ENISA (European Network and Information Security Agency), "Assessing a simplified Information Security approach," 2009. <http://www.enisa.europa.eu/publications/archive/assessing-a-simplified-information-security-approach>. [Accessed 01/3/2026]
- [19] Symantec, "SMB disaster preparedness survey," 2011. [http://www.symantec.com/about/news/resources/press\\_kits/detail.jsp?pkid=dpsurvey](http://www.symantec.com/about/news/resources/press_kits/detail.jsp?pkid=dpsurvey). [Accessed 01/3/2026]
- [20] P. Hong, C. Huang, and B. Li, "Crisis management for SMEs: Insights from a multiple-case study," *International Journal of Business Excellence*, vol. 5, no. 5, pp. 535-553, 2012. <https://doi.org/10.1504/IJBEX.2012.048802>
- [21] M. A. Waryjas, *Effective crisis management: Grace under pressure*. Chicago: KMZ Rosenman, 1999.
- [22] D. Smith, "Beyond contingency planning: Towards a model of crisis management," *Industrial crisis quarterly*, vol. 4, no. 4, pp. 263-275, 1990. <https://doi.org/10.1177/108602669000400402>

- [23] M. Blyth, *Business continuity management: building an effective incident management plan*. New York: John Wiley & Sons, 2009.
- [24] M. Whitman, H. Mattord, and A. Green, *Principles of incident response & disaster recovery*. United States of America: Course Technology, Cengage Learning, 2014.
- [25] A. P. Sanchez Dominguez, "Business continuity management: A holistic framework for implementation. Culminating Projects in Information Assurance," 2016. [https://repository.stcloudstate.edu/msia\\_etds/7](https://repository.stcloudstate.edu/msia_etds/7). [Accessed 01/3/2026]
- [26] T. C. Tran, X. S. Le, and K. A. Nguyen, *Vietnam's small and medium-sized enterprises development: Characteristics, constraints and policy recommendations*. In H. Lim (Ed.), *SMEs in Asia and globalization (ERIA Research Project Report 2007-5, pp. 323-364)*. Jakarta, Indonesia: Economic Research Institute for ASEAN and East Asia (ERIA), 2008.
- [27] M. Kato and T. Charoenrat, "Business continuity management of small and medium sized enterprises: Evidence from Thailand," *International Journal of Disaster Risk Reduction*, vol. 27, pp. 577-587, 2018. <https://doi.org/10.1016/j.ijdr.2017.10.002>