Exploring Key Attributes of Effective Crisis Risk Management in Corporate Environments

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ABSTRACT

In an era marked by increasing uncertainty and volatility, effective crisis risk management has become crucial for corporate sustainability and resilience. This paper explores the key attributes that contribute to effective crisis risk management within corporate environments. By comprehensively examining theoretical frameworks, real-world case studies, and best practices, this study aims to identify the critical components that enable organizations to anticipate, prepare for, respond to, and recover from crises. The research focuses on key attributes including agility, communication, leadership, and technology integration, providing businesses with a thorough grasp of how to improve their crisis management capabilities. This paper includes an in-depth analysis of the crisis risk management practices during the pre, current and post COVID-19 pandemic phases, with a particular focus on prominent Malaysian companies. These case studies underscore how organizations have effectively navigated crises by leveraging the identified key attributes that include agility, communication, leadership, and technology integration. By examining these diverse scenarios, the study offers valuable insights that businesses can use to fortify their crisis management strategies.

Keywords: Crisis risk management; Business resilience; Corporate strategy, COVID-19.

INTRODUCTION

In an era characterized by increasing uncertainty and volatility, the ability of organizations to effectively manage crises is paramount to ensuring their sustainability and resilience (Beninger & Francis, 2022). The global business environment today faces even greater risks than before, ranging from natural disasters and economic disruptions to technological failures and reputational crises (Dumitrescu et al., 2019). These events not only test the robustness of an organisation's operations but also its strategic foresight and adaptive capabilities. Consequently, the Crisis Risk Management System (CRMS) had become an essential discipline, encompassing a comprehensive approach to identifying, assessing, mitigating, and recovering from potential threats (Al Janabi, 2021).

Crisis risk management involves the identification, assessment, and mitigation of risks that could potentially disrupt organizational operations. In the corporate sector, crises can take many forms, including financial downturns and cyber-attacks, natural disasters and public relations scandals. Effective crisis risk management is essential not only for minimising the negative impacts of such events but also helps in maintaining stakeholder trust and ensuring business continuity. Effective crisis management requires a nuanced understanding of the complex interplay between crisis and resilience. The literature on crisis management has identified two primary perspectives: an internal focus on the dynamics within the organisation during a crisis and an external focus on managing relationships with external stakeholders (Bundy et al., 2016).

The internal perspective addresses key factors such as leadership, communication, and organisational culture, while the external perspective explores how organisations engage with and respond to external stakeholders during times of crisis (Williams et al., 2017). Organisational resilience, on the other hand, is defined as the ability of a firm not only to take proactive measures to cope with a crisis but also to recover and grow through adversity (Chen et al., 2021). Resilience is more than just reactive response, but it is a proactive capability that

enables organisations to anticipate, adapt, and thrive despite experiencing disruptions (Chen et al., 2021). Effective CRMS is a complex process, it means that the entity involved in this process has to be flexible and communicative, well-led, while also leveraging technological advancements (Abdalla et al., 2021; Kaka, 2020).

Literature on CRMS highlights agility as a crucial factor in enabling organisations to quickly respond to changing circumstances, allowing for rapid yet informed decisions making that mitigate the impact of crises (Abdalla et al., 2021; Kaka, 2020). Agile CRMS necessitates adaptive planning and the ability to quickly shift strategies as new information emerges, ensuring that responses are not only timely but also aligned with the evolving nature of the crisis. Adaptability is the key to minimise disruptions and maintaining operational continuity. Communication is equally vital in effective crisis management (Hassooni & Al-Naffakh, 2023; Zhao, 2020).

The literature emphasises the importance of transparent, timely, and accurate information dissemination both within the organisation and to external stakeholders. Such communication is essential in maintaining trust, reducing uncertainty, and facilitating coordinated responses during crises. Effective communication strategies are described by clearly defined roles and responsibilities, well-established channels for information flow, and the ability to swiftly address misinformation (Hassooni & Al-Naffakh, 2023; Salem Alawani & Salleh Hudin, 2023; Zhao, 2020). These elements collectively contribute to more resilient organisational response, ensuring that stakeholders remain informed and engaged throughout the crisis management process.

Leadership plays a pivotal role in steering organisations through turbulent times (Alblooshi et al., 2023; Jaaffar et al., 2023; Purnomo et al., 2021). Effective leaders who demonstrate decisiveness, empathy, and transparency can profoundly influence the outcome of a crisis. They are responsible for setting the organisational tone, maintaining morale, and ensuring that the organisation remains focused and unified in its response efforts (Alblooshi et al., 2023; Jaaffar et al., 2023; Purnomo et al., 2021). Leadership in CRMS extends beyond managing immediate responses; it also involves fostering a culture of preparedness, resilience, and continuous improvement within the organisation.

The integration of technology within CRMS is increasingly recognised as a critical enabler of effective crisis management (Hassankhani et al., 2021; Iershova et al., 2021; Saide & Sheng, 2021). Advanced technologies such as artificial intelligence, real-time data analytics and communication platforms enhance an organisation's ability to predict, monitor and respond to crises. These technologies provide actionable insights, improve situational awareness, and facilitate more efficient and informed decision-making processes, thereby strengthening the overall crisis management capability of the organisation.

This paper explores the key attributes that contribute to effective crisis risk management within corporate environments. By examining theoretical frameworks, real-world case studies, and best practices, this study aims to identify the critical components that enable organisations to anticipate, prepare for, respond to, and recover from crises (Williams et al., 2017). This paper is structured in a few sections. The next section outlines the theoretical foundations that have shaped prior research in crisis risk management. This is followed by a discussion of the key attributes identified in previous studies that significantly impact effective crisis risk management within organisations. The methodology section details the systematic review analysis employed in this study. Finally, the discussion and conclusion sections offer insights into the integration of these attributes, providing valuable contributions to the understanding and enhancement of risk management practices in organisations.

LITERATURE REVIEW

Theory Underpinning the Study

Several theoretical frameworks provide a foundation for understanding crisis risk management. The contingency theory, for instance, suggests that organizational effectiveness depends on the ability to adapt to changing environments. This theory highlights the importance of flexibility and responsiveness in managing

crises. Another relevant framework is the resource-based view (RBV), which emphasizes the significance of organizational resources and capabilities in achieving competitive advantage, particularly during crises.

Contingency Theory states that organizational effectiveness depends on the alignment between the organization's strategy and the external environment in which it operates. In the context of Crisis Risk Management (CRMS), this theory emphasizes the importance of the ability to adapt and flexibility in managing a crisis (Coombs & Tachkova, 2022; Rose et al., 2023). A contingency in crisis management can be viewed as environmental uncertainty, sudden changes, or situations beyond one's control, necessitating a responsive and adaptive approach to effectively manage crises (Mintzberg, 1979; Shulga & Busser, 2024). The organization's ability to adapt its crisis management strategy to the specific nature and demands of the crisis is essential. For example, highly volatile markets or sudden regulatory changes may require a quick and adaptive crisis management response (Booyens et al., 2022; Daood et al., 2024).

According to this theory, it posits that the performance of a firm is reliant upon its alignment with external conditions. In a crisis, this alignment requires strong leadership that can make quick, informed decisions and guide the organization through uncertain times. Leaders must possess the adaptability to respond to rapidly changing circumstances, embodying the flexibility that Contingency Theory advocates (Monehin & Diers-Lawson, 2022; Shulga & Busser, 2024). Communication is also a significant attribute and allows the organization to communicate efficiently among itself, and with the external public during such crisis. Contingency Theory highlights that communication strategies to be adaptable to the specific demands of the crisis circumstances by ensuring clarity, transparency, and responsiveness (Coombs & Tachkova, 2022; Rose et al., 2023).

Furthermore, organizational agility has become essential in allowing businesses to swiftly change course in response to unforeseen difficulties, helping to ensure continuity and minimizing the crisis's impact. Such agility aligns well with Contingency Theory's emphasis on being able to adapt to new circumstances, as Kazancoglu et al. (2022) discussed. Technological integration underpins these efforts, offering the necessary tools for timely decision-making, effective internal communication, and operational agility. Advanced technologies facilitate real-time data analysis and help automate crisis management processes, which are essential for maintaining alignment with evolving external conditions (Hamdan et al., 2023; Moretto & Caniato, 2021). Taken together, these attributes comprise a coherent framework for effective Crisis Risk Management, as guided by Contingency Theory.

The Resource-Based View (RBV) theory is a strategic management framework that suggests an organization's sustainable competitive advantage is derived from its distinct resources and capabilities (Alraja et al., 2022; Amornwattahcharoenchai & Naipinit, 2024). RBV highlights the significance of internal competencies and the strategic utilisation of resources to achieve long-term success and resilience, especially in dynamic and competitive environments (Gupta et al., 2018). The RBV theory also offers a fundamental framework for comprehending the role of internal resources CRMS within organizations (Amornwattahcharoenchai & Naipinit, 2024). RBV posits that leadership plays a crucial role in driving strategic decision-making, ensuring that responses are aligned with organizational objectives. Additionally, good communication promotes synchronised action and the smooth flow of information, both internally and externally (Jaradat et al., 2023). Organisations with dynamic capabilities, such as agility, possess the ability to swiftly adjust to changing circumstances. This enables them to effectively address crises by being flexible and quick in their response (Nandi et al., 2021). Technological integration enhances these capabilities by providing real-time data and tools that support swift and informed decision-making (Rodríguez-Espíndola et al., 2022).

By emphasizing the strategic importance of these internal resources, RBV offers a comprehensive perspective on how organizations can achieve resilience and maintain competitive advantage during a crisis. Effective leadership and communication are essential for ensuring that the crisis response is unified and focused, while agility and technological integration enable rapid adaptation to external pressures (Rodríguez-Espíndola et al., 2022). Together, these attributes enable organizations not only to survive a crisis but also emerge stronger, with enhanced capabilities and a strengthened strategic position.

This approach underscores the importance of internal resources in CRMS, emphasizing the necessity for organizations to continuously cultivate and utilise their unique capabilities to effectively manage crises. By doing so, organizations can maintain resilience, reduce the impact of crises, and ensure long-term sustainability, in line with the core principles of RBV in strategic management (Alraja et al., 2022).

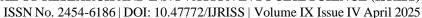## Key Attributes of Effective Crisis Risk Management

Leadership

Leadership plays a pivotal role in Crisis Risk Management Systems (CRMS), significantly impacting an organization's ability to navigate uncertainty and manage crises effectively. Effective leadership is paramount in crisis risk management. Leaders must exhibit decisiveness, resilience, and the ability to inspire confidence among stakeholders. The role of leadership extends beyond immediate crisis response to include fostering a culture of preparedness and continuous improvement. During times of crisis, companies must navigate through challenging periods characterised by instability and heightened emotions. Therefore, it is imperative to adapt leadership styles to be adjusted to effectively sense the situation and react accordingly (Dahmen, 2023). Technical obstacles may generally be overcome by using specialised knowledge and allocating sufficient resources. Nevertheless, the adaptive challenges or issues posed by a crisis require shifts in people's priorities, beliefs, and mindset. Thus, leaders must acknowledge the adaptive nature of a crisis, which encompasses the characteristics of uncertainty and the need for innovative responses (Dahmen, 2023).

To effectively address the crisis issues, leaders must be committed to continuous learning and adaptation, allowing them to efficiently navigate changing circumstances and capture emerging opportunities as the issues arise (Heifetz & Laurie, 2001; Dahmen, 2023). Ideas and solutions are frequently found not just within the leadership team, but through the collective intelligence of employees, who should be enabled to produce innovative solutions (Hernandez et al., 2011; Kantur & İşeri-Say, 2012; Dahmen, 2023). A coherent strategy provides direction and stability during periods of uncertainty and chaos. However, this strategic capacity must be strengthened through the leader's strategic actions, which are characterized by flexibility, innovation, and proactive behaviour. Kantur & İşeri- Say (2012) suggest that this technique may promote improvisation, resourcefulness, and adaptability (Dahmen, 2023).

Leadership also plays an essential role in effective crisis risk management within corporate environments, particularly during unprecedented events such as the COVID-19 pandemic. The literature emphasizes that strategic leaders must exhibit agility, decisiveness and the ability to communicate effectively under pressure to navigate crises successfully. Paul (2024) highlights that leaders are required to make rapid decisions with limited information, necessitating a proactive approach to crisis management that includes preparation, planning and the ability to adapt quickly to changing circumstances. This adaptability is crucial, as arises often present unique challenges that require tailored responses rather than a one-size-fits-all approach (Hahang et al., 2022). Moreover, the importance of rational leadership is underscored in the context of crisis management. Effective leaders foster strong relationships within their teams and across the organization, enhancing collaboration and collective problem-solving during crises. This is particularly relevant in the hospitality industry, where Hahang et al., (2022) note that leadership skills and strategies significantly influence how organizations manage the impacts of crises. The ability to cultivate trust and maintain open lines of communication is essential for leaders to motivate their teams and ensure a coordinated response (Glenn et al., 2020).

In addition, the role of leadership in crisis management is not limited to immediate responses but extends to long-term organizational resilience. Williams and Liou (2023) emphasize that leaders must embody competencies that facilitate connectivity and relationship-building, which are vital for sustaining organizational performance during and after crisis. This holistic view of leadership underscores the necessity for leaders to engage in continuous leaning and adaptation, as crises can reveal both strengths and weaknesses within organizational structures. Furthermore, during the period of transition, leaders who act as stabilizing figures help changes to be more effective (Petriglieri & Petriglieri, 2020; Dahmen, 2023). Since they can reduce tension and foster a sense of togetherness in the organisation, leaders must continue to be powerful and visible (Petriglieri & Petriglieri, 2020; Dahmen, 2023). Their self-assurance is essential for bringing about

change and inspiring others to endure challenging situations. Optimism and hope are examples of positive outlooks that are vital in helping organizational members in overcoming negative mindset that can cause stagnation, in the end, fostering greater resilience within the organization (Huy, 1999; Kantur & İşeri-Say, 2012; Dahmen, 2023).

In conclusion, the literature reveals that effective crisis leadership is characterized by agility, relational dynamics, and strategic communication. Leaders who can navigate the complexities of crises while fostering collaboration and trust are better positioned to guide their organizations through turbulent times. As organizations continue to face evolving challenges, the insights gained from examining leadership during crises will be invaluable in shaping future crisis management strategies.

Communication

Clear, transparent, and timely communication is crucial during crises. Organizations must establish robust communication channels to disseminate information, coordinate responses, and manage stakeholder expectations. Effective communication helps in reducing uncertainty and preventing misinformation. Effective communication is a cornerstone of Crisis Risk Management Systems (CRMS) in corporate environments, as it really changes how organizations deal with crises. Marsen (2020) emphasizes that communication is essential in managing organizational crises and helps maintaining stakeholder trust, so that more critical information can be one of the supports during turbulent times (Kartikawangi & Dahesihsari, 2020). Clear and transparent communication also has a huge impact on public perception and organizational reputation. Marsen (2020) adds, the longer an organization takes to respond to a crisis, the more it suffers in the eyes of the public and stakeholders. This observation has become particularly pertinent in the era of social media, which facilitates immediate, two-way symmetric communication. This is also one of the reasons why social media research is a growing field in crisis communication.

In the study by Lopes de Sousa Jabbour et al., (2023) highlights how integrating customer initiatives and leveraging Industry 4.0 technologies enhance organizational resilience. Their findings suggest that communication through these initiatives enables firms to adapt to market opportunities and threats effectively. This dynamic capability underscores the importance of clear and consistent communication as part of a firm's strategic risk management framework. Other study by Davidson et al., (2023) provide insights into the role of shared identity in enhancing communication among emergency responders during the COVID-19 pandemic. Their findings emphasize the importance of horizontal communication among local responders and the need for vertical alignment with national agencies. Pre-existing relationships, a sense of common fate, and strategic leadership were identified as key factors that facilitated effective communication and interoperability in multi-agency crisis management.

The role of leadership in crisis communication cannot be understated. Effective leaders must not only communicate clearly but also embody transparency and accountability. Grace & Tham (2020) suggest that adapting Uncertainty Reduction Theory (URT) can aid technical communicators in designing effective crisis communication campaigns that address the uncertainty experienced by stakeholders. This approach emphasizes the importance of clear, consistent messaging that reassures stakeholders and fosters a sense of stability during turbulent times. Furthermore, the COVID-19 pandemic has underscored the necessity of robust crisis communication frameworks. Vőneki (2020) discusses how organizations must prioritize communication responses alongside operational and management strategies to maintain business continuity and protect their reputations during crises. This holistic approach to crisis management emphasizes that communication is not merely a reactive measure but a proactive strategy that can significantly influence the outcomes of crisis situations.

Prior study by Recchia et al. (2022) further describes on the evolution of risk management and communication strategies from SARS to COVID-19, outlining lessons learned regarding proactive framing of community responses ("Community-based Crisis Management Model Focusing on the Process of Relief and Rescue in Natural Disasters in Iran", 2021). The research provides further evidence that organizations with well-defined communication plans are better equipped to handle crises effectively (Recchia et al., 2022). Thus,

organizations can prepare their crisis communication strategies to better confront potential risks that arise, thereby effectively reducing the impact of crises and increasing organizational resilience.

In the study by Mateane, (2023) explores risk preferences and their implications for managing foreign debt in emerging market economies. By proposing constrained portfolio selection frameworks, the study underscores the importance of transparent communication of risk preferences and strategies to stakeholders. Effective communication of such frameworks ensures alignment and informed decision-making, particularly in volatile economic environments. Furthermore, Situational Crisis Communication Theory (SCCT) provides a useful framework for examining how organizations can tailor their communication strategies based on the nature of the crisis (Grace & Tham, 2020). By classifying crises and aligning communication, organizations can better manage stakeholder expectations and reduce the potential for reputational damage. This strategic alignment of communication with crisis management practices is critical for ensuring that stakeholders receive consistent and accurate information throughout the crisis lifecycle.

In addition, effective communication promotes the interaction and coordination between the different departments within an organization for the success of the CRMS. As highlighted by Kartikawangi & Dahesihsari (2020), the interdepartmental communication suitable for CRMS is necessary to ensure that every department is well informed and can align the specific functions with a cohesive strategy that addresses the complexity of the crisis, solution, and implementation and evaluation actions. Besides that, spokespersons in the organization or department who cater for diverse audiences in their communication during a crisis tend to be more successful than those who make generic (Marsen, S.,2020). For instance, during the Toyota accelerator crisis in 2010, in which a family was killed in the United States when the brakes of their car failed, President Akio Toyoda apologized and expressed personal condolences to the Saylor family, who suffered the loss. This strategy was generally accepted positively in media responses (Marsen, S.,2020). Based on this situation, it is not only enhancing the effectiveness of CRMS but also contributes to long-term sustainability by building a culture of preparedness and responsiveness.

Agility

Agility refers to an organization's capability to adapt quickly and effectively to changing circumstances, enabling it to navigate dynamic and unpredictable environments with ease. Agile organizations possess the flexibility to rapidly modify their strategies, processes, and structures in response to emerging challenges or crises. This critical attribute not only allows businesses to address immediate disruptions but also supports their ability to maintain resilience and achieve sustainable performance over time. Recent studies, such as those conducted by Miceli et al., (2021) emphasize that agility plays a pivotal role in empowering firms to respond swiftly and decisively to complex and ever-evolving situations, thereby ensuring their long-term viability and success.

Agility is increasingly recognized as a critical factor influencing Crisis Risk Management Systems (CRMS) in corporate environments. During times of crisis, an organization's capacity to quickly adjust to shifting conditions is essential to efficient management and recovery. This highlights the fact that firms that foster an agile organizational environment can prosper during prolonged crises because they are better equipped to react quickly to new challenges (Ou, 2024). This adaptability is not solely determined by internal resources but is fundamentally linked to an organization's capacity to embrace change and innovate in response to crises. It has been noted that strategic agility is increasingly recognized as a vital factor for organizational success in volatile context. Zahoor et al., (2024) explore the role of strategic agility in addressing grand challenges faced by small and medium-sized enterprises (SMEs) in emerging markets. Their findings demonstrated that agility fosters responsible collaborative innovation, especially when moderated by gender diversity in senior management teams. Similarly, Ahammad et al., (2021) reveal that strategic agility, derived from exploration and exploitation activities, enhances international performance amidst environmental uncertainties. These studies underscore the importance of adaptive strategies to mitigate risks effectively in crisis-prone settings.

The literature also emphasizes the role of importance of leadership in promoting agility during crises, discusses how different leadership styles can improve organizational response, particularly during complex crisis scenarios like the COVID-19 pandemic (Smithson, 2021). Effective leadership that encourages agility can lead

to quicker decision-making and more effective communication, both of which are necessary for effective crisis management. This is consistent with the idea that agile leadership is critical for navigating teams through uncertainty and complexity, ultimately improving CRMS efficacy. Soni et al., (2023) explore adaptive distributed leadership, emphasizing its importance in fostering collaborative decision-making and innovation. Their findings suggest that such leadership styles enhance organizational agility, particularly in SMEs adopting circular economic practices. Similarly, Bouguerra et al., (2024) delve into the micro-foundations of agility, emphasizing the roles of employee resilience and self-efficacy. Their research shows that these individual-level capabilities mediate the relationship between strategic agility and product development performance. Likewise, Ferraris et al., (2022) identify cognitive attributes of subsidiary CEOs, such as problem-solving and communication skills, as critical to fostering agility in multinational enterprises (MNEs). These findings highlight the importance of human capital in building agile organizations capable of navigating crises.

Technology is another enabler of agility, particularly in manufacturing SMEs. Ahmed et al., (2022) investigate the impact of digital platform capabilities on organizational agility, finding that intellectual capital mediates this relationship. Their results suggest that technology-driven agility enhances firms' ability to manage risks effectively, even under challenging environmental conditions. This aligns with findings by Jiménez et al., (2023), who examine the integration of digital asset markets with financial markets, emphasizing agility in risk management strategies. Furthermore, incorporating agile approaches into crisis management procedures enables organizations to develop interactive processes that promote continuous learning and progress. Past study highlights how the automotive industry has employed agile tactics to deal with pandemic-related disruptions, providing specific instances of how agility may be used as a strategic tool (Hoeft, 2021). This operationalization of agility not only helps with immediate crisis response but also promotes long-term resilience and sustainability. In conclusion, the literature emphasizes the importance of agility as a crucial factor impacting CRMS practices. Organizations can strengthen their crisis management capabilities by cultivating an agile organizational culture, developing effective leadership, and integrating agile practices, resulting in increased resilience and sustainability in the face of future crises.

Technological Integration

Technological advancements play a critical role in enhancing crisis risk management capabilities within corporate environments, particularly as organizations navigate the complexities of modern crises. Technology not only facilitates communication but also enhances decision-making processes during crises. Technologies such as predictive analytics, artificial intelligence, and real-time monitoring systems enable organizations to anticipate potential risks and respond proactively.

The increasing dependence on digital technologies has fundamentally altered how organizations handle crisis events. As such, the seamless integration of technology within Crisis Risk Management Systems has become imperative for effective crisis preparedness and response. In line with this notion, Mahmood et al. (2024) highlights the necessity of a digital resilience framework for organizations to effectively manage crises, especially in the context of higher education and research. Their research findings underscore the critical role of factors such as strong cybersecurity practices and the strategic utilization of technology to bolster communication and decision-making capabilities during times of crisis.

The COVID-19 pandemic has further illustrated the necessity of technology in crisis management. Moorkamp et al., (2020) discuss how organizations have utilized technology to centralize and coordinate their crisis response efforts, balancing the need for autonomy with centralized decision-making. This adaptability is crucial in a rapidly changing environment, where organizations must pivot quickly to address emerging challenges. The use of technology not only streamlines operations but also enhances the ability to monitor and respond to crises in real-time, thereby improving overall organizational resilience (Moorkamp et al., 2020).

Additionally, the concept of organizational learning through technology is gaining traction in crisis management discourse. Buhagiar and Anand argue that integrating knowledge management systems with crisis leadership can create a synergistic effect that enhances organizational learning and preparedness for future crises (Buhagiar & Anand, 2021). This integration allows organizations to capture lessons learned from past

crises, thereby refining their crisis management strategies and improving their technological capabilities over time.

The integration of technology within CRMS not only enables real-time data collection and analysis but also improves situational awareness, allowing organizations to respond quickly to emerging threats. Effective crisis management necessitates specialized skills, including the capacity to use technology for informed decision-making. This aligns with Mahmood et al. (2024) findings, which highlight that organizations equipped with modern technological tools can reduce the impact of crises and ensure operational continuity and decision making.

Moreover, the alignment of technological integration and organizational strategy has a substantial impact on corporate sustainability. Organizations that effectively use technology into their crisis management strategies are better able to respond to changing conditions while maintaining stakeholder trust (Mahmood et al.,2024). This adaptability is crucial for long-term sustainability since it enables the companies to not only survive crises but also emerge stronger (Mahmood et al.,2024). To summarize, technological integration is a vital influencing component in CRMS, increasing organizational resilience and sustainability. Organizations that use a digital resilience framework can better plan for and manage crises, resulting in enhanced outcomes and sustained operational effectiveness.

METHODOLOGY

This paper employs systematic review analysis to identify the key attributes of effective crisis risk management within corporate environments. The study focuses on examining both theoretical frameworks and real-world case studies to provide a comprehensive understanding of the critical components of crisis risk management, particularly within the context of the pre-, during-, and post-COVID-19 periods. The research is primarily exploratory in nature, aiming to identify and analyse the attributes of agility, communication, leadership, and technology integration as critical elements in corporate crisis management strategies. The study begins with an extensive literature review to identify existing theoretical frameworks and models related to crisis risk management. This involves reviewing academic articles, industry reports, and books that discuss the principles, strategies, and best practices for managing crises in corporate settings. The literature review focuses on identifying the attributes of agility, communication, leadership, and technology integration and their roles in effective crisis management. The insights gathered from the literature provide a foundation for developing the conceptual framework and guide the case study analysis. The primary data collection method for this study is case study analysis. The research focuses on prominent Malaysian companies that have faced significant crises during the pre-, during-, and post-COVID-19 periods. The selected companies represent diverse sectors such as finance, manufacturing, healthcare, and technology to provide a holistic understanding of crisis management practices across different industries. The cases are selected based on their relevance to the research objectives, the availability of comprehensive data, and the diversity of their experiences during crises. Companies that demonstrated significant resilience and effective crisis management during the COVID-19 pandemic are prioritized.

DISCUSSION

To illustrate the application of effective Crisis Risk Management principles, a thorough analysis was conducted on various case studies, including examples from prominent Malaysian companies before, during, and after the COVID-19 pandemic. These cases demonstrate how organizations effectively managed crises by utilising key elements such as agility, strong communication, leadership, and the integration of technology. By exploring these varied situations, it can be identified the crucial elements that enables firms to effectively foresee, prepare for, respond to, and recover from crises.

The crisis scenarios concerning Nestlé Malaysia, Sapura Energy Berhad, and Petronas underscore key elements of efficient crisis risk management. In 2019, Nestlé Malaysia faced a problem with the way they labelled their products. They had to quickly fix the labelling mistakes and work with Islamic officials to make sure they followed the halal rules. Transparent communication with consumers was crucial throughout the process to restore trust and reinforce Nestlé's dedication to upholding high standards (The Malketeer, 2023).

This example emphasizes the significance of agility and clear communication in managing product-related crises.

Next, Sapura Energy Berhad experienced a significant financial problem in 2019, necessitating a focus on strategic resource management and effective leadership. The company's endeavours to improve operational efficiency and investigate new market prospects highlight the significance of effective resource allocation and proactive leadership in managing financial challenges. The objective of these steps was to restore financial stability and enhance stakeholder confidence in Sapura Energy (Wong Ee-Lin, 2021). This case illustrates the critical role of leadership and resource management in overcoming financial crises and ensuring sustainability.

During the COVID-19 pandemic, Petronas faced notable operational difficulties as a result of unpredictable demand and interruptions in the supply chain (Petronas Integrated Report, 2020). Petronas responded by implementing rigorous operational risk management practices, which encompassed addressing supply and demand issues and upholding transparent communication with stakeholders. Petronas utilised technology to enhance its risk management system, allowing the company to sustain its operations during the global crisis (Petronas Group Strategic Communication, 2020). This example emphasizes the importance of comprehensive risk management, effective communication, and technology integration in managing complex crises. Collectively, these cases demonstrate that agility, communication, leadership, and technological integration are key attributes for effective crisis risk management, allowing organizations to respond quickly and maintain resilience during crises.

CONCLUSION

This study provides a comprehensive approach to exploring the key attributes of effective crisis risk management in corporate environments. By combining literature review and case study analysis, the study aims to offer valuable insights into how organizations can enhance their crisis management capabilities and ensure long-term sustainability and resilience in an increasingly uncertain and volatile world.

Effective crisis risk management is vital for corporate sustainability and resilience. By exploring the key attributes contributing to successful crisis management, this paper provides valuable insights for organizations seeking to enhance their preparedness and response capabilities. Strong leadership, clear communication, agility, and technological integration are critical components that enable organizations to navigate crises effectively and emerge stronger. In conclusion, effective crisis risk management (CRMS) is vital for organizational resilience and sustainability in an increasingly volatile environment. This paper proposes four critical characteristics—leadership, communication, agility, and technological integration—that considerably improve an organization's ability to predict, plan for, respond to, and recover from crises.

Leadership is crucial because decisive and empathetic leaders establish a culture of preparedness and instil trust in stakeholders. Clear and transparent communication is essential for managing stakeholder expectations and building trust, especially in the age of social media. Agility enables organizations to quickly change their plans, strategies and processes in changing circumstances, ensuring successful crisis management. Finally, technological integration improves situational awareness and enables proactive reactions using advanced tools like predictive analytics and real-time monitoring systems. Combining these attributes creates a comprehensive framework for organizations to effectively navigate crises, resulting in increased resilience and long-term sustainability. By focusing on these basic elements, organizations survive crises and emerge stronger, equipped with enhanced capabilities to face future challenges. This study emphasizes the significance of a proactive and integrated strategy for crisis risk management in today's dynamic corporate environment.

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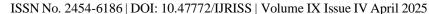
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