



CRISIS MANAGEMENT STRATEGIES IN THE DISTRIBUTION SECTOR

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ABSTRACT

This paper investigates the role and implementation of crisis management strategies in the distribution sector, with a particular focus on logistics operations, supply chain systems, organizational structures, and communication processes. The theoretical framework addresses the core concepts of crisis management, different categories of crises, and contemporary strategic approaches, including organizational resilience, business continuity planning, and digital transformation. The empirical part of the research is based on a survey conducted among employees in distribution companies, aiming to assess the level of organizational preparedness for crisis situations. The findings indicate that, although companies demonstrate a moderate level of readiness, significant deficiencies remain in employee training, internal communication, and strategic crisis planning. The study further highlights the vulnerability of modern supply chains and emphasizes the necessity for greater operational flexibility and adaptability in times of crisis. Drawing on the results obtained, the paper proposes recommendations for improving crisis management practices through the adoption of an integrated management approach, enhanced digitalization, and the development of stronger organizational resilience.

1 INTRODUCTION

Contemporary society is characterized by continuous economic, political, and social transformations, which frequently emerge in the form of crises. These crises may be triggered by external factors, such as economic recessions, energy shortages, global pandemics, natural disasters, and geopolitical conflicts, or by internal

organizational weaknesses, including insufficient adaptability, limited resources, and ineffective management practices. In this context, crisis management represents a crucial component of modern corporate governance, enabling organizations to prepare, respond to, and recover from disruptive events in a timely and effective manner.

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The distribution sector, as an intermediary link between production and end consumers, is particularly vulnerable to crises. Its performance is highly dependent on the stability of supply chains, transportation infrastructure, regulatory frameworks, consumer behavior, and overall market conditions.

In recent years, the distribution sector has been significantly affected by a series of global crisis events:

- The COVID-19 pandemic disrupted global supply chains, introduced border restrictions, and limited the movement of goods and people. As a result, distribution delays, product shortages, and the need for rapid operational adaptation became widespread.
- The energy crisis, along with rising transportation and storage costs, placed considerable pressure on corporate profitability.
- Inflation and increasing living expenses reduced consumers' disposable income, thereby decreasing purchasing power.
- Digitalization and the expansion of e-commerce created new opportunities but also introduced challenges for traditional distributors, who were required to invest in advanced technologies and logistics systems.
- Geopolitical crises contributed to disruptions in raw material supply, price volatility, and the necessity for supplier diversification.

These developments demonstrate that crises are an unavoidable aspect of modern business environments, and organizations lacking structured crisis management strategies are exposed to significant operational and financial risks.

Within the European Union, particularly in the post-pandemic period, crisis management has become an essential element of corporate governance. Companies are increasingly encouraged to develop Business Continuity Plans, implement risk management systems, and invest in digital technologies that enhance supply chain resilience.

In the Western Balkans, including North Macedonia, such practices are still in the process of development. Many distributors operate without formally established crisis management plans,

which increases their vulnerability to disruptions. Furthermore, the region is additionally affected by political instability, underdeveloped transport infrastructure, and a high dependence on imports, all of which further complicate crisis response mechanisms.

The Macedonian distribution sector represents an important segment of the national economy, contributing significantly to trade and employment. However, it faces several structural challenges:

- High dependence on imports, as a large proportion of goods on the domestic market originates from abroad, increasing exposure to external shocks.
- Limited supplier diversification, with many companies relying on a small number of partners, increases operational risk during global disruptions.
- Insufficient financial resources for digital transformation, particularly among small and medium-sized enterprises.
- Regulatory instability, characterized by frequent changes in laws and regulations, creates uncertainty for business planning.

These factors clearly indicate the need for the development and implementation of comprehensive crisis management strategies aimed at ensuring resilience, continuity, and long-term stability within the distribution sector.

2 THEORETICAL FOUNDATIONS OF CRISIS MANAGEMENT

2.1 Definition and conceptual distinction

Crisis management is an integrated process that involves identifying, analyzing, and managing events that may result in severe negative consequences for an organization. Mitroff (2005) describes a crisis as a low-probability but high-impact event that threatens an organization's core values and survival. Similarly, Coombs (2014) emphasizes the importance of a systematic approach to crisis management, particularly in relation to communication processes and reputation protection.

Crisis management is a critical priority for organizations seeking to prevent or mitigate disruptions that may significantly affect operations

or threaten organizational continuity (Postolov & Postolov, 2025).

In literature, a clear distinction is made between risk, incident, and crisis. Risk refers to a potential adverse event with a certain probability of occurrence. An incident is an event with limited consequences that can typically be managed using existing resources. A crisis, however, represents a severe disruption requiring urgent and often non-standard decision-making (Fink, 1986).

Although closely related to risk management, crisis management differs in focus. Crisis management emphasizes response and recovery after a disruptive event, whereas risk management is primarily preventive (Coombs, 2014).

2.2 Types of crises in the distribution sector

The distribution sector is exposed to various types of crises due to the complexity of supply chains and external environmental dependencies. Christopher and Peck (2004) noted that globalization and interdependence among markets significantly increase logistics system vulnerability.

Crises in this sector may be classified as:

- Operational crises (e.g., supply disruptions, transport failures, resource shortages)
- Technological crises (e.g., system failures, cyberattacks)
- Financial crises (e.g., liquidity problems, market instability)
- Natural disasters (e.g., events disrupting physical distribution flows)
- Reputational crises (e.g., loss of trust among customers and partners)

Sheffi (2005) argues that distribution organizations must develop adaptive and flexible systems, as even minor disruptions may create significant cascading effects across supply chains.

2.3 Crisis management models (proactive, reactive, integrated)

Three primary crisis management models are identified in the literature.

The proactive model focuses on prevention and preparedness, including risk identification, scenario planning, and simulation training. Fink (1986) emphasizes that early detection of warning signals is crucial for minimizing crisis impact.

The reactive model focuses on response after a crisis has occurred, including damage control, communication with stakeholders, and operational stabilization (Coombs, 2014).

The integrated model combines proactive and reactive approaches and is based on continuous learning and adaptation. This model enables organizations to anticipate crises and reduce their impact while also responding effectively when they occur (Mitroff, 2005).

2.4 Modern approaches (resilience, business continuity, digitalization)

Modern crisis management increasingly emphasizes organizational resilience and sustainability.

Resilience refers to the ability of an organization to adapt to change, maintain functionality during disruptions, and recover quickly afterward (Hollnagel et al., 2006). This is particularly important in dynamic and uncertain environments.

Business Continuity Management (BCM) ensures the continuity of critical business functions. The ISO 22301 standard provides a framework for planning, implementing, and improving continuity systems (International Organization for Standardization [ISO], 2019).

Digitalization also plays an increasingly important role. Technologies such as big data analytics, artificial intelligence, and automation improve risk detection and decision-making efficiency (Ivanov et al., 2019).

3 CRISIS MANAGEMENT IN THE DISTRIBUTION SECTOR

3.1 Role of logistics and supply chain

Logistics and supply chain systems are central to the distribution sector, particularly during crises. Modern supply chains are highly complex and interdependent, making them vulnerable to disruptions. Christopher (2016) stated that

effective logistics management is essential for continuity and reducing crisis impacts.

Events such as transport failures, raw material shortages, or global disruptions (e.g., pandemics) may generate a ripple effect across the supply chain (Ivanov et al., 2019). Flexibility, supplier diversification, and digital integration are therefore essential for resilience.

Sheffi (2005) further highlights that organizations with resilient supply chains are better able to maintain operations during severe disruptions.

3.2 Organizational structure and human resources

Effective crisis management requires a clearly defined organizational structure with assigned roles and responsibilities. This includes crisis teams, command hierarchies, and rapid decision-making procedures (Mitroff, 2005).

Human resources are a key determinant of crisis response effectiveness. Leadership, communication skills, and the ability to perform under pressure are essential (Boin et al., 2013). Training and simulations are widely used to prepare employees for crisis situations.

Organizational culture also plays an important role. Organizations that promote transparency, learning, and adaptability are better able to manage uncertainty (Hollnagel et al., 2006).

3.3 Communication strategies in crisis

Communication is one of the most important elements of crisis management. Lack of timely and accurate information can worsen crises and damage stakeholder trust. Coombs (2014) emphasizes that crisis communication must be timely, transparent, and consistent.

Communication occurs at multiple levels: internal, external, and public. Therefore, communication strategies should be pre-established within crisis plans.

The Situational Crisis Communication Theory (SCCT) suggests that communication strategies should be adapted based on crisis type and organizational responsibility level (Coombs, 2007).

3.4 Examples from domestic and international companies

Practical examples illustrate crisis management applications.

Toyota faced a major crisis involving vehicle recalls due to technical defects. Through transparent communication and rapid response, the company successfully restored customer trust (Liker & Ogden, 2011).

Amazon strengthened its logistics and digital systems during the COVID-19 pandemic to maintain delivery continuity, demonstrating strong organizational resilience (Ivanov & Dolgui, 2020).

In North Macedonia, distribution companies faced supply chain disruptions and increased demand. Many responded by diversifying suppliers and accelerating digital transformation, helping stabilize market conditions (OECD, 2021).

These examples demonstrate that successful crisis management depends on strategic planning, flexibility, and effective communication.

4 RESEARCH METHODOLOGY

The aim of this research is to examine how distribution companies manage crises, with a focus on logistics, organization, and communication.

A questionnaire was used and distributed to 50 employees and managers from different companies. It included demographic questions and Likert-scale statements.

Based on the presented data, one of the main limitations of the study concerns the size and representativeness of the sample. The sample consists of a total of 50 respondents, which represents a relatively small number for broader generalization of the results. A smaller sample size may reduce statistical reliability and limit the possibility of applying the obtained results to the entire population.

Additionally, the sample shows an uneven distribution across certain demographic characteristics. In terms of gender, male respondents (42) dominate compared to female respondents (8), indicating a gender imbalance. Furthermore, regarding educational level, the majority of respondents hold a bachelor's degree (37), while the categories with a master's degree

(3) and secondary education (10) are significantly less represented. Concerning age, certain categories are underrepresented, such as respondents over 50 years old (4) and those aged 44–49 years (2).

Due to these characteristics, the sample may not be fully representative of the target population, which constitutes a limitation in the interpretation and generalization of the research findings. Therefore, it is recommended that future studies include a larger and more demographically balanced sample in order to obtain more relevant and broadly applicable results.

The data were analyzed using descriptive statistics such as averages (Saunders et al., 2019).

Part 1 included three demographic questions related to the respondents' age group, gender, and level of education.

Part 2 consisted of closed-ended questions based on a Likert scale (1–5), aimed at measuring respondents' attitudes and perceptions.

According to Saunders et al. (2019), the survey approach is suitable for collecting standardized data and analyzing trends.

The data were processed using descriptive statistics and other methods, with results presented in mean values.

The first table presents the demographic characteristics of the respondents by gender, education level, and age. Its content is presented in Table 1.

We constructed Table 2 based on the answers received and obtained a mean score. The data from these demographic categories were used to better understand the respondents' backgrounds and their potential influence on perceptions of crisis management in distribution enterprises.

Table 1. *Demographic characteristics of respondents*

Sex	
Male	42
Female	8
Level of education	
High school	10
Graduated	37
M.A.	3
Age	
Under 25	5
Between 26- 31	15
Between 32-37	8
Between 38-43	16
Between 44- 49	2
Above 50	4

Source: (Authors' original research, 2026).

Table 2. *Level of organizational preparedness and crisis planning*

No.	Finding	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Results
1.	Prepared for crisis	10	12	15	10	3	2.68
2.	The organization has a fully developed crisis plan	8	10	15	10	7	2.96

Source: (Authors' original research, 2026)

According to the first question, "Prepared for crisis situation."

Calculated values are:

- Mean = 2.68
- SD = 1.17

The standard deviation (SD = 1.17) indicates a moderate dispersion of opinions around the mean value. Respondents do not have completely consistent views regarding the organization's preparedness for crisis situations.

Since the mean value is below the neutral point (3), respondents tend to disagree that the organization is adequately prepared for a crisis.

According to the second question, "The organization has a fully developed crisis plan."

Calculated values:

- Mean = 2.96
- SD = 1.26

The standard deviation (SD = 1.26) indicates slightly greater variability in responses compared to the first question. Respondents have differing perceptions of whether the organization has a fully developed crisis plan.

The mean value (2.96) is almost identical to the neutral value (3), indicating uncertainty or divided opinions among respondents.

A reliability analysis was performed using Cronbach's Alpha to examine the internal consistency of the variables "Prepared for Crisis Situation" and "The Organization Has a Fully Developed Crisis Plan." The analysis yielded a Cronbach's Alpha coefficient of 0.885, indicating excellent internal consistency between the items. Therefore, the scale demonstrates a high level of reliability and can be considered suitable for further analysis.

The subsequent phase of the empirical investigation was devoted to the systematic examination of organizational practices concerning the implementation of structured training programs and simulation-based exercises aimed at enhancing employee preparedness for crisis situations. The corresponding empirical evidence is presented in Figure 1.

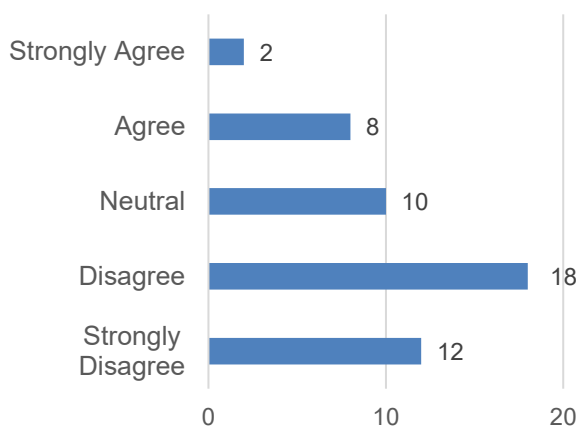


Figure 1. Distribution of responses regarding crisis training and simulation activities
Source: (Authors' original research, 2026)

The findings indicate that organizations operating within the distribution sector in the Republic of North Macedonia exhibit a limited implementation of structured training programs in structured training and simulation activities related to crisis management. This indicates that crisis preparedness is not yet fully embedded within organizational human resource development strategies, thereby reflecting a limited degree of

maturity in the implementation of proactive resilience-building mechanisms.

From a theoretical standpoint, such deficiencies may be interpreted as a lack of integration of anticipatory crisis management practices within organizational learning systems.

Based on the given table, we calculated the standard deviation, which in this case equals 1.13. A standard deviation of 1.13 in this case means that respondents answered relatively similarly, but there are still some individual differences in their attitudes.

Using the original research data, where respondents were categorized according to age, gender, and level of education, the following analyses were conducted in order to obtain more relevant results.

For our data, where the first variable is Age (ranked or in categories from 1 to 6) and the second variable is a Likert scale response (from 1 to 5), the value of Spearman's coefficient (ρ) is -0.10, with a statistical significance p-value 0.50.

This means that there is no statistically significant relationship between the age of the respondents and their responses on the Likert scale.

An independent samples t-test was conducted to determine whether there is a statistically significant difference in responses on the Likert scale depending on the gender of the respondents. Levene's test for equality of variances indicated that the assumption of homogeneity of variances was met ($F = 0.10$, $p = 0.750$).

The results indicate a statistically significant difference between groups, $t(48) = -2.81$, $p = 0.007$. Female respondents achieved a significantly higher mean score ($M = 3.38$, $SD = 1.06$) compared to male respondents ($M = 2.21$, $SD = 1.07$). Since the p-value is below the 0.05 threshold (and even below 0.01), the null hypothesis is rejected, indicating that gender has a significant effect on the responses.

A one-way ANOVA analysis was conducted to examine the influence of education and age on responses on a Likert scale. The results showed a highly significant difference in responses

depending on the level of education, $F(2,47) = 8.12, p = 0.001$. Respondents with a lower level of education (Level 1) showed significantly higher scores on the scale compared to those with Level 2.

In the domain of crisis communication, the results demonstrate that:

- 70% of respondents perceive organizational crisis communication as insufficiently structured;
- 65% of respondents report the absence of formally established communication protocols.

These findings point to substantial deficiencies in both the formalization and operationalization of crisis communication frameworks. Within the theoretical framework of Situational Crisis Communication Theory (Coombs, 2014), such structural weaknesses may significantly increase the probability of reputational damage, reduce organizational legitimacy, and amplify stakeholder uncertainty during crisis events.

With respect to logistics and supply chain operations, 74% of respondents confirmed that crisis events most frequently manifest through disruptions in supply chain processes. This empirical outcome aligns with contemporary scholarly discourse on supply chain vulnerability and resilience, particularly the work of Ivanov, Dolgui, and Sokolov (2019), who emphasize that modern supply chain systems are characterized by high levels of interconnectivity and structural fragility, rendering them highly susceptible to cascading disruptions under conditions of uncertainty.

4.1 Discussion of results

The interpretative analysis of the empirical data suggests that organizations within the distribution sector demonstrate a moderate overall level of crisis preparedness; however, this preparedness remains fragmented and unevenly developed across key organizational dimensions.

Firstly, logistics systems constitute the most critically vulnerable subsystem. This vulnerability is primarily attributable to the inherent complexity, global interdependencies, and limited redundancy

within supply chain structures. In line with Christopher's (2016) conceptualization of supply chain resilience, the absence of multi-sourcing strategies, adaptive logistics frameworks, and contingency planning mechanisms significantly constrain organizational responsiveness and recovery capacity in crisis conditions.

Secondly, the findings indicate insufficient institutionalization of crisis preparedness and strategic crisis planning. This suggests that crisis management practices are largely reactive rather than proactive, which contradicts established resilience-oriented management paradigms emphasizing preparedness, anticipation, and adaptive capacity as core organizational competencies.

Thirdly, human resource preparedness remains underdeveloped. The lack of systematic training programs, scenario-based simulations, and experiential learning mechanisms indicate deficiencies in organizational learning capabilities. From the perspective of organizational learning theory, this reflects limited knowledge codification and weak feedback-loop integration within human capital development systems, thereby reducing overall organizational adaptability in crisis contexts.

Finally, communication emerges as a critical structural vulnerability. The absence of clearly defined communication protocols and insufficient transparency mechanisms undermines the effectiveness of crisis response coordination and increases the likelihood of information asymmetry. Within the framework of SCCT (Coombs, 2014), such deficiencies may significantly amplify reputational risk exposure and erode stakeholder trust during crisis escalation phases.

4.2 Recommendations for improvement

Based on the empirical findings and theoretical insights presented in this study, several strategic measures can be proposed to enhance crisis management effectiveness within companies operating in the distribution sector.

First, organizations should focus on the development of comprehensive crisis management plans and strategies. These plans

need to be formalized and systematically structured, incorporating clearly defined scenarios, roles, responsibilities, and procedural guidelines. As emphasized by Mitroff (2005), well-developed crisis frameworks significantly increase organizational preparedness and enable more coordinated responses during disruptive events.

Second, there is a strong need for continuous investment in training and development of human resources. Companies should implement regular training programs, simulations, and crisis response exercises aimed at strengthening employees' competencies and situational awareness. According to Boin et al. (2013), such preparatory activities are essential for improving decision-making capacity and leadership performance under pressure.

Third, organizations should prioritize the enhancement of logistical flexibility and supply chain resilience. This can be achieved through supplier diversification, the establishment of alternative transportation routes, and the integration of advanced digital technologies. These measures contribute to reducing vulnerability and improving adaptive capacity in supply chain operations (Christopher, 2016; Ivanov et al., 2019).

Fourth, it is essential to ensure the development and standardization of crisis communication strategies. Clear communication protocols must be established to guarantee timely, accurate, and transparent information exchange with all relevant stakeholders. Effective communication is a critical determinant of trust, reputation management, and overall crisis response effectiveness (Coombs, 2014).

Finally, companies should invest in the implementation of business continuity management systems in accordance with internationally recognized standards such as ISO 22301. Such systems enable organizations to maintain essential functions during disruptive events and facilitate faster recovery and organizational stabilization (International Organization for Standardization [ISO], 2019).

Overall, these recommendations highlight the necessity of a proactive, structured, and integrated approach to crisis management, with a

strong emphasis on preparedness, flexibility, communication, and continuity planning.

5 CONCLUSION

Crisis management represents an essential element in modern organizational management, especially in the distribution sector, which is characterized by high complexity, dynamism, and dependence on global supply chains. The theoretical analysis showed that crises are an inevitable part of the business environment and that their effective management requires a systematic, integrated, and proactive approach.

Through the review of theoretical concepts, it was determined that successful crisis management is based on a clear distinction between risk, incident, and crisis, as well as on the application of appropriate management models. The integrated model, which combines preventive and reactive measures, stands out as the most effective under conditions of increased uncertainty.

The analysis of the distribution sector indicated that logistics and supply chains are among the most critical segments in times of crisis. Their vulnerability, especially in the context of global disruptions, highlights the need for developing flexible and resilient systems (Christopher, 2016; Ivanov et al., 2019).

The empirical research confirmed that companies in the distribution sector have partial preparedness for dealing with crisis situations, but at the same time face significant challenges. Particularly notable are the shortcomings in human resource training, underdeveloped communication strategies, and the limited implementation of formalized crisis plans.

Additionally, the results showed that communication represents one of the weakest segments in crisis management, which can have serious consequences for the trust and reputation of organizations. This indicates the need for developing clear and structured communication protocols.

Overall, it can be concluded that crisis management in the distribution sector is in a developmental phase, with significant room for improvement through the application of modern approaches such as organizational resilience, business continuity, and digitalization.

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