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The mediating effect of crisis leadership and digital technologies on emergency supply chain capabilities of logistic companies

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A B S T R A C T

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This research aims to analyze the relationship between crisis leadership and supply chain emergencies. The study also investigates the effect of digital technology on supply chain emergencies and the effect of digital technology on crisis leadership. The research method is a quantitative approach, research data was obtained by distributing online questionnaires via social media. There were 856 questionnaires distributed to logistics company managers and of the 856 questionnaires distributed, 426 respondents or 50% gave responses determined by the simple random sampling method. This research uses quantitative methods with data analysis using Structural Equation Modeling (SEM) through Partial Least Square (PLS) with data processing software, SmartPLS 3.0. The results of this research show that crisis leadership had a positive and significant influence on supply chain emergencies. Digital technology had a positive and significant influence on supply chain emergencies and digital technology had a positive and significant influence on crisis leadership. In addition, crisis leadership mediated the relationship between digital technology and supply chain emergency capability. Crisis leadership had a fully mediated nature. Crisis leadership encourages an increase in the relationship between digital technology and emergency supply chain capability. These findings create the view that the application of digital technology and crisis leadership can encourage improvements in emergency supply chains and provide direction to logistics company managers to use digital technology to improve supply chain capabilities in their companies. The findings of this research indicate that digital technology under the influence of crisis leadership significantly improves emergency supply chain capabilities.

1. Introduction

Industry 4.0 encourages superior interconnection between materials, products, and equipment while meeting client requirements in supply network settings. Industry 4.0 and management have become an ever-increasing benchmark for modern supply chains to increase efficiency and build an increasingly viable culture. Industry 4.0 is considered another business attitude that can help business associations and society to move towards reasonable improvements. Industry 4.0 is also referred to as the newest model of the supply chain (MacCarthy & Ivanov, 2022). A brilliant processing plant can have a variety of support suggestions such as ideal asset utilization, innovation, and so on. This underlies the need for current research to understand the direction Industry 4.0 is driving support in supply chains. Increasingly dynamic market developments and technological advances make the supply chain process increasingly complex. This development not only brings many benefits but is also accompanied by various obstacles that may occur. Starting from changing demand to obstacles to delivery, and various other obstacles that can affect the efficiency of the supply chain process (Rasool et al., 2022). To be able to overcome problems in the supply chain, companies can implement supply chain management software. With this system, companies can have full control over all supply chain operations, making it easier to evaluate and optimize performance (Purwanto & Juliana, 2022). Consumer demands that change over time can be a challenge for companies to prepare demand estimates

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especially if the company has seasonal products. Incomplete historical demand data can make forecasting results inaccurate, so that companies may experience excess stock or shortages of goods. A common challenge in inventory management is balancing the amount of stock to match consumer demand. Apart from that, companies are also faced with holding costs for each product or stock of goods stored in the warehouse. Storing excessive stock can trigger the risk of dead stock and incur greater costs. On the other hand, if there is a shortage of goods in stock, the supply chain process becomes hampered and loses the ability to fulfil all consumer demands. According to Littlefield and Quenette (2007), the supply chain process is a collaboration between several parties. This can be a challenge for companies because they cannot monitor the activities or processing of stock of goods if they are still on the other side of the supply chain flow. Limited visibility in the supply chain can trigger delays, and inefficient processes and give rise to several risks that can be detrimental to the company. The movement of stock in the supply chain requires the role of logistics (Scholz et al., 2018). The transportation and distribution management process are inefficient and can hamper the entire supply chain process, increase costs and result in consumer dissatisfaction. Suppliers are one of the important parties in the supply chain process. Communication and collaboration with suppliers are the key to supply chain success. If communication is less than optimal, it can disrupt the entire supply chain process and result in delays, especially in providing raw materials for processing and meeting demand (Wang et al., 2022). This can certainly be detrimental to the company and result in consumers being dissatisfied with the company's experience and service.

A leader who is faced with a crisis must be able to respond quickly to any existing problems. Problems in crises generally occur in dynamic environmental conditions. Leaders must be able to invite the entire organization to adapt and collaborate to overcome existing uncertainties by minimizing risks and being able to survive in difficult conditions (Samuel et al., 2015). Crisis Leadership Basically crises are often random, unexpected, and new. At times, the scale of incidents is unprecedented and overwhelming. Nevertheless, leaders prepare themselves for a variety of exigencies, from natural and man-made disasters to disruptive financial and technological crises. It involves high-stakes risks and uncertain outcomes that depend on adaptive responses. Crisis management often focuses on the threat or physical environmental conditions of an event. However, crises have many Basically crises are often random, unexpected and new. At times, the scale of incidents is unprecedented and overwhelming. Nevertheless, leaders prepare themselves for a variety of exigencies, from natural and man-made disasters to disruptive financial and technological crises. It involves high-stakes risks and uncertain outcomes that depend on adaptive responses. Crisis management often focuses on the threat or physical environmental conditions of an event (Asbari et al., 2023). However, crises have many forces that influence their outcome. Those in crisis leadership positions need to understand how the physical threat environment impacts incident management, as well as how psychological social, operational, and political elements impact their ability to handle emergencies (Ji & Zhu, 2021; Zhu et al., 2021). Ignoring these five forces of crisis creates the illusion of control for those who must lead in times of disaster. In the context of crisis management, leadership factors play a very crucial role. According to Collins et al. (2023), in crises, a leader's role is needed in carrying out crisis management. Crisis management for a leader is like the art of turning a downward curve into an upward curve. Three management processes are generally used to overcome a crisis in an organization, namely: pre-crisis management, crisis management, and post-crisis management. In the pre-crisis period (1), management needs to understand the crisis indicators. According to Dwivedi et al. (2018), management also needs to change potential crisis conditions into readiness to look for opportunities. Furthermore, in (2) times of crisis, management needs to take preventive action to avoid a bigger crisis. Furthermore, when the crisis ends, the post-crisis period (3) begins. During this period, leaders will find the right solutions that are adapted to change, solutions that bring a new dimension to their activities and strategies. The unity between what is planned, delivered, and implemented should be reflected in the leader (He et al., 2019).

Especially in crises, members will see their leaders as role models. It is possible that these members do not have as much experience in dealing with crises as those faced by their leaders. So, it is very natural for members to have high expectations of their leaders. According to Prewitt et al. (2011), leaders are still humans who are not free from mistakes so that members' expectations may not be met. On the other hand, an attitude that will make the leader remain authoritative when he makes a mistake is to apologize to anyone who feels aggrieved due to his wrong actions. Apologizing may not be enough so it could result in a loss of some loyalty, but not integrity. The supply chain is a complex system. For it to run well, all components must be arranged with good management. That way, the company can continue running and customers will not be disappointed because the product stock is empty. According to Ghaffari et al. (2020), risk management is also needed to deal with unexpected situations such as pandemics so that supply chains are not disrupted, and losses can be minimized. This disruption in the supply chain raises fears not only for consumers but also producers/business owners. Disruptions and uncertain times make business people worry about how they will be able to maintain their business in the future. These disruptions can be small-scale and local, possibly affecting only a few small businesses or industries (Wiens et al., 2018). It can also be large-scale, and global in scope, and this disturbance can affect the situation of a country, and even regionally.

2. Literature Review

2.1 Crisis Leadership

Leaders in crises must be able to guide the way, make decisions, and initiate and operate actions. During a crisis, people need leaders who are strong, confident, and easy to communicate. According to Prewitt et al. (2011), leaders must be able to overcome crises where there is an environment of chaos in the organization, they must restructure the organization and adapt

it to the changing environmental circumstances. So, we can conclude that a leader has an important role in crisis management (Samuel et al., 2015). Thus, it is necessary to study the characteristics of a leader in crisis management. The role of a leader is closely related to the functions of planning, organizing, supervising, and controlling so that organizational goals can be achieved. Without good leadership, what is planned and determined in the organization will not be achieved. According to Mutch (2020), leadership is needed to mobilize organizational resources to achieve goals. In the workplace, good leadership is also very necessary in the soul of a project manager who is a leader in an important project. The leadership spirit possessed by a project manager is a good initial foundation for directing a project to success and achieving the company's vision and mission so that the company can develop for the better and make a profit. Relation to project managers in building construction work, have a high level and complexity in coordinating the procurement of equipment, materials, and human resources. Many people and organizations are involved in the implementation process (Okeagu et al., 2021). The participation of many organizations has a high level and complexity in coordinating the procurement of equipment, materials, and human resources as well as many people and organizations involved in the implementation process.

2.2 Digital technology

Digital technology is a technology whose operation no longer requires a lot of human power and tends to utilize automated systems with computer systems (Juwaini et al., 2022). The challenges of supply chains are increasingly complex with many businesses struggling to meet increasingly demanding supply chain challenges. Companies are required to sense fluctuations in demand well in advance and take agile and decisive action to respond. This lack of transparency, complex processes and poor partner relationships will affect the company's business supply chain. According to Attaran (2020), digitalization has brought significant changes in supply and demand chains in various industrial sectors. With transparency, collaboration, and improved use of data in the supply chain, businesses can optimize their operations and provide added value to customers. According to Núñez et al. (2020), customers can enjoy a personalized experience and greater accessibility to meet their needs. In this era of digitalization, adapting and utilizing digital technology is the key to success for businesses in facing challenges and taking advantage of emerging opportunities.

2.3 Emergency Suply Chain

Supply Chain Management (SCM) is a series of activities that include coordination, scheduling and control of procurement, production, inventory and delivery of products or services to customers which includes daily administration, operations, logistics and information processing from customers to suppliers (Scholz et al., 2018). Simply put, SCM is a mechanism that connects all parties concerned and the process of changing raw materials into a product. Meanwhile, the supply chain itself is a network, organization, and process activities to move products from producers/suppliers to final customers or consumers. According to Dasaklis et al. (2017), supply chain disruption is a sudden change or crisis whether local or global, that hurts the process. This effect can be exacerbated when a business has only one supplier as a source for part the supply chain, or when one area holds most of the production for a particular supply. According to Núñez et al. (2020), there are many types of supply chain disruptions. There are two things to pay attention to: first, what is the probability, and second, how big is the severity? In the supply chain, not once or twice warnings about coordinating performance between one party and another are often emphasized. Although coordination is the most important factor for achieving successful supply chain flow, it is not always easy to do without obstacles. Various obstacles hinder coordination itself. These constraints lead to distortions, information delays, and variability in the supply chain (MacCarthy & Ivanov, 2022). Information processing barriers occur when demand information is distorted when moving between various stages, causing increased order variability in the supply chain. For example, forecasting is based on the number of orders and not direct consumer demand. Because there is no direct access to consumers, manufacturers tend to receive distorted information from retailers. Information or data transmitted at this stage of the supply chain is susceptible to distortion, resulting in decisions that trigger fluctuations. According to Iddris (2018), transparency or openness of information between stage one and other stages of the supply chain is very important and deserves careful attention. Operational obstacles refer to the ordering process until the fulfilment of the order. When a company orders a lot size in larger quantities than the lot size when demand arises, order variability increases. However, this results in an erratic order flow.

3. Hypothesis development

3.1 The Relationship of Crisis Leadership to the Emergency Supply Chain

In this era of the Industrial Revolution, many companies experienced a significant increase in the form of a crisis. This supply chain crisis had a severe impact on company performance and leadership was needed to resolve this crisis problem (Wisittigars et al., 2019). Leadership plays a significant role in resolving supply chain crises. In the context of crisis management, leadership factors play a very crucial role. A leader who is faced with a crisis must be able to respond quickly to any existing problems. Problems in crises generally occur in dynamic environmental conditions. Leaders must be able to invite the entire organization to adapt and collaborate to overcome existing uncertainties by minimizing risks and being able to survive in difficult conditions (Wu et al., 2021). According to Jaques (2012), leaders can complete and provide emergency supply chain solutions with innovation and creativity. Leadership supports companies applying digital technology to solve supply chain problems. Based on this study, the following hypothesis was formulated.

H_1: *Crisis Leadership has a positive and significant influence on supply chain emergencies.*

3.2 The relationship between digital technology and emergency supply chains

In this era of digital technology, technology has a very important role in improving supply chain performance (Scholz et al., 2018). Sharing visibility of information and resources is important for improving supply chain emergencies. To be able to overcome problems in the supply chain, companies can implement supply chain management software. With this system, companies can have full control over all supply chain operations, making it easier to evaluate and optimize performance. Limited visibility in the supply chain can trigger delays, and inefficient processes and give rise to several risks that can be detrimental to the company (Rasool et al., 2022). The movement of stock in the supply chain requires the role of logistics. According to Iddris (2018) transportation and distribution management process is inefficient it can hamper the entire supply chain process, increase costs and result in consumer dissatisfaction. Based on this study, it was prepared

H_2: *Digital technology has a positive and significant influence on emergency supply chains.*

3.3 The relationship of digital technology to Crisis Leadership

In this era of the Industrial Revolution, many companies experienced a significant increase in the form of a crisis. According to Jaques (2012), the supply chain crisis had a severe impact on company performance and leadership was needed to resolve this crisis problem. Leadership plays a significant role in resolving supply chain crises. Digitalization has brought significant changes in supply and demand chains in various industrial sectors. With transparency, collaboration, and improved use of data in the supply chain, businesses can optimize their operations and provide added value to customers (Scholz et al., 2018). Meanwhile, customers can enjoy a personalized experience and greater accessibility to meet their needs. In this era of digitalization, adapting and utilizing digital technology is the key to success for businesses in facing challenges and taking advantage of opportunities that arise (Okeagu et al., 2021). Leadership can resolve and provide emergency supply chain solutions with innovation and creativity. Leadership supports companies applying digital technology to solve supply chain problems. Based on this study, the following hypothesis was formulated

H_3: *Digital technology has a positive and significant influence on Crisis Leadership.*

4. Method

This research method is a quantitative approach, research data was obtained by distributing online questionnaires via social media. There were 856 questionnaires distributed to logistics company managers and of the 856 questionnaires distributed, 426 respondents or 50% gave responses determined by the simple random sampling method. This research uses quantitative methods with data analysis using Structural Equation Modeling (SEM) Partial Least Square (PLS) with data processing software SmartPLS 3.0. The questionnaire was designed using a 1 to 5 Likert scale. The stages of data analysis were respondent description, validity, reliability, and hypothesis testing. or the significance of the direct effect and testing the mediation effect hypothesis.

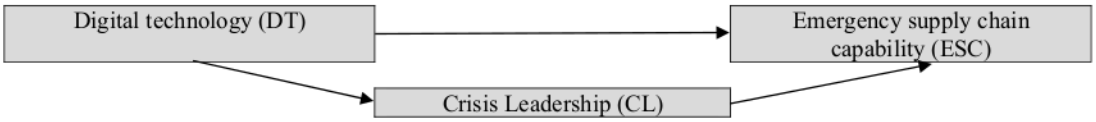

Fig. 1. Research Model

5. Results and Discussion

5.1 Validity and Reliability Testing

At this analysis stage, loading factors, composite reliability (CR) and Average variance extracted (AVE) are tested. The recommended threshold values are factor loading for all indicators is ≥ 0.5, composite reliability (CR) is ≥ 0.7 and Average variance extracted (AVE) is ≥ 0.5.

The results of reliability testing show that the composite reliability value and Cronbach's alpha for all variables in this study are more than 0.70 with the conclusion that the construct is reliable and can be continued to the next analysis step. This research uses a Composite Reliability value greater than 0.60 or > 0.60 and a Cronbach's alpha value greater than 0.50 or > 0.50. The results of the outer loading test to test the validity of all indicators concluded that all indicators were valid.

Table 1
Measurement of Construct Properties

Constructs	Indicators	Factor Loadings	CR	AVE
Crisis Leadership (CL)	CL1	0.919	0.912	0.781
	CL2	0.904		
	CL3	0.966		
Digital Technology (DT)	DT1	0.899	0.932	0.872
	DT2	0.908		
	DT3	0.917		
Emergency supply chain capability (ESC)	ESC1	0.926	0.913	0.801
	ESC2	0.929		
	ESC3	0.943		

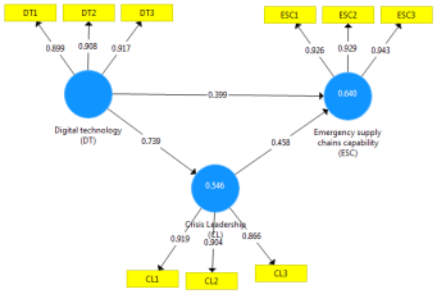

Fig. 2. Validity Testing

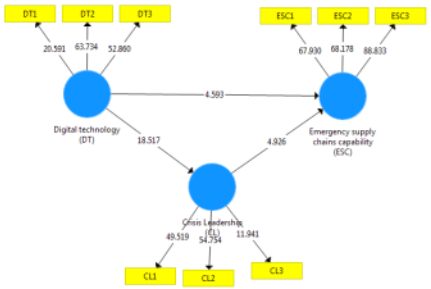

Fig. 3. Hypothesis Testing

5.2 Hypothesis testing

In hypothesis testing or significance testing, testing the hypothesis can be seen through the t-statistic value and probability value. To test the hypothesis using statistical values, for alpha 5% the statistic value used is 1.96. So, the criteria for accepting or rejecting the hypothesis are Ha accepted and H0 rejected if the t-statistic is > 1.96. To reject/accept the hypothesis using probability, Ha is accepted if the p-value <0.05.

Table 2
Direct Hypothesis Testing

Hypothesis	Original sample (O)	T-statistic	P-value	Remark
CL → ESC	0.458	4.926	0.000	Supported
DT→ ESC	0.399	4.593	0.000	Supported
DT → CL	0.739	18.517	0.000	Supported

Table 3
Indirect Hypothesis Testing

Hypothesis	Original sample (O)	T-statistic	P-value	Remark
DT→ CL→ ESC	0.203	6.234	0.000	Supported

The Relationship of Crisis Leadership to the Emergency Supply Chain

Based on the results of data analysis, the results obtained were a T value of 4.926 > 1.96 and a p-value of 0.000 < 0.50, so it was concluded that Crisis Leadership had a positive and significant influence on supply chain emergencies. These results are in line with Wu et al. (2021) and Samuel et al. (2015. In this era of the Industrial Revolution, many companies experienced a significant increase in the form of a crisis. According to Littlefield and Quenette (2007), supply chain crises had a severe impact on company performance and leadership was needed to resolve this crisis problem. Leadership plays a significant role in resolving supply chain crises. In the context of crisis management, leadership factors play a very crucial role. A leader who is faced with a crisis must be able to respond quickly to any existing problems. Problems in crises generally occur in dynamic environmental conditions (Wisittigars et al., 2019). Leaders must be able to invite the entire organization to adapt and collaborate to overcome existing uncertainties by minimizing risks and being able to survive in difficult conditions. Leaders can complete and provide emergency supply chain solutions with innovation and creativity. Leadership supports companies applying digital technology to solve supply chain problems.

The relationship between digital technology and emergency supply chains

Based on the results of data analysis, the results obtained were a T value of 4.593 > 1.96 and a p-value of 0.000 < 0.50, so it was concluded that digital technology had a positive and significant influence on supply chain emergencies. These results are

in line with Ivanov et al. (2019) and Rahadi et al. (2022) that digital technology has a positive and significant influence on supply chain emergencies. digitalization of every processing process and supply chain is one of the keys. According to Núñez et al. (2020) Internet of Things (IoT) applications, the use of robots and Artificial Intelligence (AI), the use of sensors in every process, process automation and the application of big data analysis in the supply chain are tools that can improve performance and consumer satisfaction. The use of IoT logic and cloud computing can increase the depth of the system to monitor every product movement and supply chain actor (MacCarthy & Ivanov, 2022). In this era of digital technology, technology has a very important role in improving supply chain performance. According to Ivanov et al. (2019), sharing visibility of information and resources is important for improving supply chain emergencies. To be able to overcome problems in the supply chain, companies can implement supply chain management software. With this system, companies can have full control over all supply chain operations, making it easier to evaluate and optimize performance. Limited visibility in the supply chain can trigger delays, and inefficient processes and give rise to several risks that can be detrimental to the company (Scholz et al., 2018). The movement of stock in the supply chain requires the role of logistics. So, if the transportation and distribution management process is inefficient it can hamper the entire supply chain process, increase costs and result in consumer dissatisfaction.

The relationship of digital technology to Crisis Leadership

Based on the results of data analysis, the results showed that the T value was 18.517 > 1.96 and the p-value 0.000 < 0.50, so it was concluded that digital technology had a positive and significant influence on Crisis Leadership. These results are in line with Okeagu et al. (2021) that digital technology has a positive and significant influence on Crisis Leadership. These results are also in line with Núñez et al. (2020) that digital technology has a positive and significant influence on Crisis Leadership. According to Prewitt et al. (2011), digitalization has brought significant changes in supply and demand chains in various industrial sectors. With transparency, collaboration and improved use of data in the supply chain, businesses can optimize their operations and provide added value to customers. According to Collins et al. (2023), customers can enjoy a personalized experience and greater accessibility to meet their needs. In this era of digitalization, adapting and utilizing digital technology is the key to success for businesses in facing challenges and taking advantage of opportunities that arise. Leadership can resolve and provide emergency supply chain solutions with innovation and creativity. Leadership supports companies applying digital technology to solve supply chain problems (Scholz et al., 2018).

The relationship between digital technology mediation and supply chain emergency capability through Crisis Leadership

The results of data analysis obtained a T value of 6,234 > 1.96, so it was concluded that crisis leadership mediates the relationship between digital technology and supply chain emergency capability. Crisis leadership has a fully mediated nature. Crisis leadership encourages an increase in the relationship between digital technology and emergency supply chain capability. Implementing optimal supply chain management will benefit the company. Through the implementation of SCM, companies can maintain the amount of inventory available, know stock levels accurately and ensure products are delivered on time and accurately. That way, companies can ensure that consumers get the products they ordered and provide the best service. Of course, in running a supply chain, companies are faced with various problems. According to Núñez et al. (2020), the supply chain is an activity that involves several parties, so cooperation and coordination must be well established. If not, of course, the supply chain process will be disrupted, triggering delivery delays, and resulting in decreased consumer satisfaction with the company. To overcome problems in the supply chain, companies can apply SCM Software. Supply chain management is the entire process of handling the production flow of goods and services starting from procuring raw materials to sending final products to consumers. This entire process includes product production, material sourcing and logistics. Leaders must consider these risks in their supply chain planning and seek sustainable solutions. According to Attaran (2020), cybersecurity issues increasingly plague modern supply chains. Cyber-attacks can result in data theft, operational disruption, or even destruction of goods. Leadership needs to understand cybersecurity technology and implement effective countermeasures in the supply chain (Oscarius et al., 2022). Globalization has opened the door to new business opportunities but has also increased the complexity of the supply chain. So, this challenge requires leaders to learn to manage cross-border supply chains efficiently, understand international regulations, and face problems such as language and cultural differences in business communication.

Technological advances such as the Internet of Things (IoT), big data analytics, and artificial intelligence (AI) have changed the way supply chains are run. Leaders must continually update their knowledge to take advantage of this technology and increase operational efficiency (Scholz et al., 2018). Do not be left behind by progress but use existing technology to work smartly. In facing these challenges, Logistics Engineering professionals need to build strong relationships with suppliers. Good cooperation can help overcome problems that arise in the supply chain and maintain the smooth flow of goods. According to Iddris (2018), Leadership will be prepared to face the complex and ever-changing world of modern supply chain management. Your ability to manage risk and innovate will be the key to success in your career in this field. So, continue to develop a deeper understanding of the supply chain and the strategies you must have for every possible challenge you will face. The mentality of organizational members, during times of crisis, will tend to require adjustments. There are even members who become pessimistic when facing a crisis (Samuel et al., 2015). This situation is understandable because a crisis always has a shocking effect on those who have never experienced it. Unpreparedness, frustration, and other negative things generally colour the organizational environment. The first step that leaders need to take is to build communication that is full of empathy and motivation with their members without leaving anything out. Leaders need to provide calming messages to

maintain the mental stability of each member. The resilience shown by the leader is a representation of the toughness of the organization, as well as being a trigger for enthusiasm for each member. In the second step, leaders in crisis management need to build nuances that make each member continue to develop (Wisittigars et al., 2019). A crisis is the right time for all members of an organization to learn holistically to see the phenomena experienced by the organization and its beneficiaries. The third step, establish partnerships with related partners. The goal is to resolve the crisis together. According to Dwivedi et al. (2018), supply chain in the digitalization era means that information about inventory, production, delivery and more can be accessed quickly and easily. This allows businesses to have better visibility into their supply chain. With this transparency, stakeholders in the supply chain can identify and overcome obstacles or problems more effectively. Digitalization enables closer collaboration between various partners in the supply chain. By using digital platforms, information can be shared in real-time, and stakeholders can work together to optimize production, inventory, and delivery processes (Wiens et al., 2018). This better collaboration can reduce demand and supply imbalances and increase customer satisfaction. In the era of digitalization, data has become an asset in managing supply chains. By analyzing data generated by various digital platforms and devices, businesses can better understand demand patterns, market trends and consumer behaviour. This information enables more accurate planning, more efficient inventory management, and more timely decision-making. In the era of digitalization, customers expect experiences that are more personalized and tailored to their needs (Kamarudin et al., 2024). Through data analysis and digital technology, businesses can understand customer preferences and desires in more depth. By leveraging this information, businesses can present customized offers and increase customer satisfaction. Digitalization has opened accessibility to products and services globally. Customers can now easily search, compare, and buy products from various brands and sellers through digital platforms. According to Ji et al. (2012), This increases competition between businesses and encourages them to provide unique added value to win market competition. Social media has become a significant force in shaping demand in the era of digitalization. Through social media platforms, users can share experiences, recommend products and leave reviews. This can have a major impact on customer perceptions of the brand and influence purchasing decisions.

6. Theoretical and Practical Implications

This research offers contributions from three disciplines, namely information management, emergency supply chain and organizational behaviour (leadership). Digital technology contributes to improving crisis leadership and emergency supply chains. Having appropriate crisis leadership using digital technology will encourage improvements in the emergency supply chain. Logistics company managers must implement digital technology in their company operations and have crisis leadership to overcome supply chain problems in logistics companies.

7. Conclusion

The results of this research have shown that crisis leadership has a positive and significant influence on supply chain emergencies. Digital technology has a positive and significant influence on supply chain emergencies. Digital technology has a positive and significant influence on Crisis Leadership. Moreover, crisis leadership mediates the relationship between digital technology and supply chain emergency capability. Crisis leadership has a fully mediated nature. Crisis leadership encourages an increase in the relationship between digital technology and emergency supply chain capability. These findings create the view that the application of digital technology and crisis leadership can encourage improvements in emergency supply chains and provide direction to logistics company managers to use digital technology to improve supply chain capabilities in their companies. The findings of this research show that digital technology under the influence of crisis leadership significantly increases emergency supply chain capabilities. Digitalization has brought significant changes in supply and demand chains in various industrial sectors. With transparency, collaboration and improved use of data in the supply chain, businesses can optimize their operations and provide added value to customers. Meanwhile, customers can enjoy a personalized experience and greater accessibility to meet their needs. In this era of digitalization, adapting and utilizing digital technology is the key to success for businesses in facing challenges and taking advantage of emerging opportunities.

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