

# Strategic Knowledge Management in Food Crisis Communication: A Framework for Organizational Preparedness and Consumer Trust

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## ABSTRACT

The intersection of knowledge management and crisis communication is essential for enhancing organizational resilience, especially in the food industry. This paper examines how knowledge management frameworks, including situational crisis communication theory, facilitate the effective dissemination of critical information during crises. Fresh Express, Tyson Foods, JBS Foods, and Costco case studies illustrate how knowledge-sharing platforms and real-time data exchange mitigate risks and build consumer trust. Failures, such as delays in the 2019 *Escherichia coli* outbreak, highlight the urgent need for robust data management. Leveraging organizational learning and memory, companies can navigate crises, like product recalls and supply chain disruptions, while aligning crisis communication with long-term recovery. This research underscores the strategic importance of integrating global knowledge networks, emerging technologies, and innovative management practices to enhance transparency, collaboration, and operational stability in high-stakes environments.

## KEYWORDS

Knowledge Management, Crisis Communication, Food Industry Risk Management, Organizational Learning, Consumer Trust

## INTRODUCTION

Knowledge management plays a key role in ensuring crisis preparedness within the food industry, where maintaining public trust and operational continuity is crucial. The highly interconnected nature of the global food supply chain, combined with the increasing scrutiny of consumers and regulatory bodies, necessitates robust systems to manage organizational knowledge effectively. Food contamination incidents, supply chain disruptions, and product recalls pose significant risks not only to public health but also to brand reputation and financial stability. The ability to anticipate, respond to, and recover from these crises hinges on a company's capacity to manage and leverage its knowledge assets. For instance, the 2016 *Listeria* outbreak involving Fresh Express demonstrated the value of proactive knowledge management. By employing centralized data repositories and real-time communication channels, the organization effectively coordinated its recall efforts, ensured

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transparency, and mitigated further risks. This approach showcased a commitment to safety, rebuilding consumer trust and highlighting the importance of accessible and actionable knowledge during crises. Robust systems for capturing, storing, and retrieving critical data are indispensable for timely and accurate information dissemination to stakeholders, including regulators, suppliers, and customers (Coombs, 2021; Nyoni & Kaushal, 2022). Despite these successes, significant challenges remain in integrating knowledge management processes seamlessly into crisis response strategies. Companies must navigate the complexities of identifying reliable data sources, maintaining updated organizational memory, and fostering efficient knowledge sharing among cross-functional teams. A failure in these areas can lead to miscommunication, delays, and diminished trust, which in turn exacerbate the crisis. The delayed response during the 2019 *Escherichia coli* (*E. coli*) outbreak linked to romaine lettuce underscores the consequences of such gaps. In contrast, organizations that swiftly access and analyze supply chain data are better positioned to mitigate crises before they escalate (Bundy et al., 2017; Dolgui et al., 2017).

The Covid-19 pandemic further exemplified the vulnerabilities in global supply chains and the critical importance of rapid knowledge dissemination. Organizations worldwide had to swiftly share best practices for safety and adapt operations under unprecedented conditions, highlighting that crisis knowledge must flow not just internally but also across organizations and borders (Nyoni & Kaushal, 2022). Global coordination mechanisms, like the Food and Agriculture Organization of the United Nations/World Health Organization International Food Safety Authorities Network (INFOSAN), have become instrumental in exchanging real-time information about food safety incidents, enabling countries to implement recalls and risk communication more quickly.

The global nature of the food industry further amplifies the challenges and implications of food crises. Companies must contend with diverse cultural, regulatory, and logistical contexts that complicate the application of uniform crisis management strategies. Effective communication in one region may fail to resonate in another, necessitating tailored approaches that account for local nuances (Dhanesh & Sriramesh, 2018). Additionally, the dynamic landscape of global trade and consumer expectations demands continuous learning and adaptation. Organizations must embed lessons from past crises into their frameworks to ensure improved responses in the future (Duchek, 2020; Evenseth et al., 2022). The integration of global perspectives is paramount for aligning knowledge management practices with international standards. This alignment ensures resilience in an interconnected world, where crises in one region often have ripple effects across the global supply chain. Recent advancements in technology, such as artificial intelligence (AI) and blockchain, offer promising tools to address these challenges. By leveraging these innovations alongside traditional knowledge management practices, companies can enhance transparency, foster collaboration, and maintain operational stability even in high-stakes environments.

## **LITERATURE REVIEW**

Theories of knowledge management, such as knowledge sharing and organizational learning, provide a robust framework for understanding how organizations can enhance their crisis response capabilities. Knowledge sharing, a critical component, involves the systematic dissemination of vital information across teams and stakeholders. This process enables coordinated and informed efforts during crises, reducing redundancies and improving response efficiency. Mechanisms, such as centralized data repositories, cloud-based collaboration platforms, and knowledge mapping tools, are instrumental in ensuring all stakeholders have access to up-to-date and relevant information. For instance, cloud-based systems, like Google Workspace or Microsoft Teams, have become essential in enabling remote collaboration and fostering seamless communication, especially during global crises (Dolgui et al., 2017). Moreover, real-time analytics and AI-driven communication systems have emerged as game-changers in streamlining decision-making processes. Technologies, such as machine learning algorithms, can rapidly analyze vast amounts of crisis data to identify contamination sources or

predict supply chain disruptions. This capability allows organizations to respond proactively rather than reactively. Blockchain technology, in particular, has proven its value in securing and verifying the integrity of shared data, ensuring transparency and trust during critical incidents (Liu et al., 2021). For example, Walmart's blockchain initiative for tracking food provenance has significantly enhanced traceability and accountability, reducing the impact of food recalls (Rashed et al., 2025). However, organizations must also address internal behaviors that impede knowledge flow; studies show that, during crises, factors, like role conflict or fear, can lead employees to hide knowledge, undermining the effectiveness of even the best knowledge systems (Nguyen et al., 2022).

## **Organizational Learning in Crisis Management**

Organizational learning complements knowledge sharing by embedding lessons from past experiences into institutional frameworks, thereby improving future preparedness. Modern organizational learning frameworks underscore the need for a shared vision and continuous adaptation, as well as converting tacit knowledge into explicit protocols, to build resilience (Duchek, 2020; Evenseth et al., 2022). These concepts directly inform crisis management by supporting the development of standardized protocols and training programs to address recurring challenges. For example, after the 2016 *Listeria* outbreak, Fresh Express implemented comprehensive after-action reviews and feedback mechanisms to refine recall processes and enhance stakeholder communication (Centers for Disease Control and Prevention [CDC], 2022). Such practices underscore the importance of institutionalizing learning to build a culture of continuous improvement. Similarly, organizations, like Nestlé, have leveraged organizational learning to align crisis management practices across diverse geographic regions, accounting for cultural and regulatory variations (Dhanesh & Sriramesh, 2018).

## **Situational Crisis Communication Theory and Knowledge Management**

The integration of situational crisis communication theory (SCCT) with knowledge management strategies offers a comprehensive approach to navigating crises. SCCT emphasizes tailoring communication strategies to the type and severity of a crisis, ensuring responses are both appropriate and effective (Coombs, 2021). Aligning SCCT with knowledge management practices enables organizations to develop targeted messaging strategies while leveraging organizational memory to support decision-making and stakeholder engagement. For example, during the *Listeria* outbreak linked to packaged salads, Fresh Express utilized SCCT principles alongside knowledge-sharing mechanisms to issue timely recalls and maintain transparency. This approach not only mitigated further risks but also rebuilt consumer trust by demonstrating accountability and proactive measures (CDC, 2022). In contrast, Tyson Foods' Covid-19 response highlighted the consequences of misaligned strategies and poor knowledge transfer, resulting in fragmented communication and diminished trust among stakeholders (Luscombe, 2020). Additionally, the rise of social media demands adaptation of SCCT; real-time online engagement can help address public concerns and rumors quickly. For instance, Chinese authorities during a 2020 food safety scare used platforms, like Weibo, to update consumers and dispel misinformation, an approach that complements SCCT by integrating direct public feedback into crisis knowledge management (Liu et al., 2023).

## **Emerging Technologies in Knowledge Management**

Advancements in emerging technologies are reshaping the landscape of knowledge management. AI-driven analytics enhance the identification of contamination sources, predict potential disruptions, and automate routine tasks, thereby freeing resources for more strategic interventions. Semantic networks and topic maps enable organizations to structure and retrieve knowledge efficiently, while blockchain ensures transparent and immutable supply chain data (Dolgui et al., 2017). These technologies not only complement traditional knowledge management practices but also address the challenges posed by the dynamic and interconnected nature of the food industry. For instance, the International Business Machines Corporation's Food Trust blockchain has been instrumental in

providing end-to-end visibility into supply chains, facilitating rapid responses to contamination incidents (Rashed et al., 2025). Similarly, semantic AI tools are being used to analyze consumer sentiment and forecast the reputational impact of crises, enabling companies to fine-tune their communication strategies in real time (Cheng & Fu, 2013). Looking forward, technologies, like the Internet of Things and digital twin simulations, hold promise for further strengthening crisis preparedness. Internet of Things sensors can monitor food storage and transportation conditions continuously, triggering instant alerts in knowledge systems when anomalies are detected. Digital twins—virtual models of supply chains—allow organizations to simulate crisis scenarios and test their response plans in a risk-free environment, helping identify potential knowledge gaps and operational bottlenecks before real crises occur.

## Case Studies in Knowledge Acquisition and Transfer

Case studies of knowledge acquisition and transfer during food crises illustrate the critical role of effective knowledge management. Key lessons include the necessity of real-time data sharing to mitigate public health risks, as evidenced in the 2019 E. coli outbreak. In this case, delays in disseminating critical information led to prolonged public health risks, emphasizing the importance of robust data management systems (CDC, 2019). Conversely, the 2023 Costco smoked salmon recall showcased proactive measures, with the company leveraging real-time analytics and collaborating with the Food and Drug Administration to issue timely notifications and mitigate potential outbreaks (Harling, 2025). Failures in knowledge transfer, such as those observed in Tyson Foods' handling of Covid-19 outbreaks, underscore the need for robust organizational memory systems to standardize best practices across facilities. The absence of clear protocols and knowledge-sharing mechanisms contributed to inconsistent responses, highlighting the significance of continuous refinement and investment in innovative tools (Luscombe, 2020). Cultural and regulatory differences further complicate knowledge sharing in global crises, making cross-border collaboration essential. The 2015 Salmonella outbreak linked to frozen chicken products demonstrated the value of coordinated efforts between companies, public health agencies, and consumers. Such collaboration facilitated the timely exchange of critical information, minimizing the crisis's impact (CDC, 2015). Similarly, Nestlé's global knowledge-sharing platforms have enabled the company to navigate diverse regulatory landscapes, ensuring consistent crisis management practices across regions (Dhanesh & Sriramesh, 2018). A multi-country Salmonella outbreak in 2022 linked to contaminated chocolate exemplified how crucial rapid knowledge sharing is when a crisis spans borders. Once the contamination source was identified, a global alert through INFOSAN prompted recalls in over 100 countries, demonstrating that effective cross-border communication can significantly contain a widely distributed food safety threat (World Health Organization, 2022). Another illustrative case occurred in China during the Covid-19 pandemic, when public anxiety arose over potential virus contamination on imported frozen foods. Chinese authorities monitored social media discourse and provided transparent, frequent updates; this approach managed public concern and informed subsequent safety protocols, reinforcing that understanding stakeholder perceptions is a key part of crisis knowledge management (Liu et al., 2023).

## METHODOLOGY

This study uses a qualitative dual-method approach, combining comparative case study analysis with a systematic literature review to investigate how organizations manage knowledge during food crises. Two high-profile cases, the 2019 E. coli outbreak linked to romaine lettuce and the 2022 *Listeria* outbreak in packaged salads, were selected based on diversity in outcomes, product types, and data availability. The E. coli case revealed critical delays in public communication, while the *Listeria* case demonstrated the effective use of real-time tools, such as CDC's PulseNet, to accelerate recall and response. Together, they represent contrasting examples of crisis knowledge management, allowing for theoretical replication and comparative insights. Complementing the case analysis, a

systematic review of peer-reviewed literature and industry reports from 2010 to 2023 was conducted using databases, like Scopus and Web of Science. Search terms included “crisis communication,” “knowledge management,” “food supply chain resilience,” and “emerging technologies.” Eight core studies were selected for their relevance and conceptual depth, covering topics, such as organizational learning (Evenseth et al., 2022), supply chain resilience (Dolgui et al., 2017; Liu et al., 2021), and digital infrastructure in crisis response (Kovacs, 2021). To synthesize insights, we developed a comparative analytical framework evaluating each case and source across three dimensions: knowledge integration, stakeholder communication, and use of technology. This structured coding enabled identification of patterns, best practices, and gaps across both empirical and theoretical domains. Ethical standards were upheld throughout, with all data derived from public sources and fully cited. By triangulating real-world events with scholarly analysis, this methodology yields a robust foundation for understanding how knowledge management drives effective food crisis communication. Nonetheless, certain limitations should be acknowledged. The analysis relies on publicly available documentation, which may omit some contextual details or proprietary insights from the organizations involved. We addressed this by cross-verifying events through multiple sources where possible. In addition, the lack of direct interviews or surveys means the findings are interpretative; future research could enhance this approach by incorporating quantitative metrics of knowledge management performance or conducting expert interviews to validate and enrich the case findings.

## DISCUSSION

The analysis identifies significant enablers and inhibitors of knowledge sharing in crisis communication within the food industry. Enablers include the implementation of advanced knowledge-sharing platforms, fostering a culture of transparency, and encouraging cross-functional collaboration. These elements contribute to stakeholder trust and engagement, which are essential during crisis situations (Nonaka & Takeuchi, 1996). Organizations that invest in real-time data-sharing platforms and digital tools for collaboration, as demonstrated by Fresh Express during the 2016 *Listeria* outbreak, can mitigate risks effectively and maintain public trust (CDC, 2022). Transparency initiatives play a critical role in enhancing stakeholder engagement. For instance, the 2023 smoked salmon recall by Costco illustrated how proactive communication with regulatory bodies and the public could prevent further health risks and bolster consumer confidence (Harling, 2025). By maintaining open lines of communication and ensuring the timely dissemination of accurate information, organizations demonstrate accountability and competence in managing crises.

Despite these enablers, several inhibitors pose challenges to effective knowledge sharing. Organizational silos and fragmented communication channels hinder the seamless flow of information, as observed during the 2019 E. coli outbreak linked to romaine lettuce (CDC, 2019). This fragmentation resulted in delays that exacerbated public health risks and underscored the need for more integrated knowledge management systems. Another significant inhibitor is cultural resistance to change. In regions with limited technological infrastructure or in organizations hesitant to adopt new technologies, the effectiveness of knowledge management strategies is diminished. For example, Tyson Foods faced challenges in transferring best practices across facilities during the Covid-19 pandemic, highlighting the barriers created by uneven technological adoption and organizational silos (Luscombe, 2020). Moreover, internal organizational dynamics can impede information flow; if employees fear blame or job loss in a crisis, they may hide or withhold knowledge that could be vital to the response. Such knowledge hiding behavior further fragments the crisis response and has been shown to negatively affect performance (Nguyen et al., 2022). Leadership must proactively cultivate psychological safety and trust, encouraging staff to surface problems early without fear of retribution.



## Knowledge-Sharing Barriers

Even beyond internal obstacles, global crises reveal how cultural and regulatory factors impede knowledge exchange. International differences in legal disclosure requirements can slow the sharing of vital information; what one country mandates to report in a food safety incident may not be required in another, causing delays in a cross-border outbreak response. Likewise, cultural attitudes toward transparency and hierarchy can discourage open communication; in high power-distance environments, employees might hesitate to escalate bad news promptly, exacerbating the crisis (Cheng & Fu, 2013). These examples demonstrate that aligning knowledge-sharing practices across borders requires sensitivity to local norms and proactive harmonization of crisis communication policies. One approach to overcoming these barriers is to establish joint crisis protocols and communication channels before a disaster occurs. Companies that operate globally can conduct regular cross-border crisis drills with their subsidiaries and supply chain partners, and industry associations can facilitate international knowledge-sharing workshops. By building relationships and trust in advance, organizations are more likely to share information quickly when an incident happens, regardless of differing regulations or cultural expectations. The findings reinforce the relevance of established organizational learning frameworks. Recent research on organizational learning emphasizes converting tacit knowledge into explicit guidance and maintaining a shared vision to navigate complex challenges (Duchek, 2020; Evenseth et al., 2022). These theoretical foundations align with real-world examples, such as JBS Foods' successful use of digital infrastructure to recover from a ransomware attack, demonstrating how resilience and innovation can mitigate the impacts of crises (Kovacs, 2021).

Emerging technologies, including AI and blockchain, are reshaping the knowledge management landscape. AI-powered analytics enable organizations to predict and identify potential crisis sources, improving the speed and accuracy of response efforts (Dolgui et al., 2017). Blockchain technology, by providing transparent and immutable records, enhances trust in supply chain operations, as seen in the evolving practices of global food producers (Liu et al., 2021). These technologies not only address existing inhibitors but also present new opportunities for enhancing crisis preparedness and response. Successful implementation of such tools requires more than just technology deployment; organizations need clear strategies for integration. Investing in training programs ensures that employees can interpret AI outputs or use blockchain data effectively. Importantly, companies should work toward common data standards and interoperability—if supply chain partners use incompatible systems, the benefits of real-time knowledge sharing will be limited. Therefore, part of the implementation strategy must involve collaboration with industry consortia and regulatory bodies to develop standards that allow different organizations and systems to communicate during a crisis.

## Technological Risks

However, technological adoption is not without risks. AI-driven systems can inadvertently embed biases or operate opaquely, potentially leading to stakeholder mistrust or flawed decisions if data quality is poor. Heavy reliance on digital platforms can also introduce cyber vulnerabilities, as exemplified by the ransomware attack on JBS Foods that disrupted operations (Kovacs, 2021). Blockchain implementations face hurdles of high costs and scalability limitations that may deter widespread use or integration with legacy systems (Mbadlisa & Jokonya, 2024). Thus, while emerging technologies offer powerful tools, organizations must address these potential pitfalls through governance, training, and robust cybersecurity measures. In addition, data governance and privacy regulations must be considered when deploying global data-sharing technologies. Organizations should establish clear policies about data ownership and consent to maintain trust when sharing sensitive information across borders. The discussion also underscores the importance of cultural and regulatory considerations in global crisis management. Cross-border collaboration, as explored by Cheng & Fu (2013), reveals how cultural differences and regulatory inconsistencies can impact the efficiency of knowledge-sharing practices. Addressing these challenges requires organizations to develop context-sensitive strategies and invest in cross-cultural training to bridge gaps and foster collaboration. In conclusion, the findings

illustrate that effective knowledge management in food crisis communication hinges on the strategic integration of technology, organizational learning, and transparency. By addressing inhibitors and leveraging enablers, organizations can enhance their resilience, protect public trust, and ensure operational continuity during crises. Continuous investment in innovative tools and adaptive strategies will remain essential as the food industry navigates increasingly complex global challenges.

## CONCLUSION

The integration of knowledge management into crisis communication strategies is important for strengthening organizational resilience in the food industry. By developing centralized knowledge repositories, adopting real-time data-sharing platforms, and establishing standardized crisis protocols, organizations can significantly mitigate the adverse impacts of crises. Effective knowledge-sharing practices, driven by transparency and cross-functional collaboration, enable organizations to foster trust among stakeholders and ensure a coordinated response to emergencies. Embedding lessons learned from past crises into institutional frameworks is a cornerstone of organizational preparedness and adaptability. This requires implementing digital repositories for retaining and sharing critical insights, providing ongoing training programs to equip staff with best practices, and utilizing advanced technologies, such as AI, for predictive analysis and scenario planning. These tools not only ensure that organizational knowledge remains accessible and actionable but also enhance the speed and precision of crisis responses. Equally, a knowledge-centric approach to crisis management strengthens corporate social responsibility by prioritizing consumer safety and transparency. Organizations that treat knowledge management as a strategic asset not only navigate crises more effectively but also reinforce public trust and regulatory confidence in their operations.

Emerging technologies, such as blockchain and semantic networks, further augment traditional knowledge management practices, enabling organizations to maintain transparency and improve accountability in global supply chains. Leveraging global knowledge networks is essential in an interconnected world where crises often transcend geographic and regulatory boundaries. As demonstrated by case studies, like the Fresh Express *Listeria* outbreak and the Costco smoked salmon recall, the strategic integration of innovative technologies and knowledge-sharing frameworks has proven effective in protecting public trust and maintaining operational stability. Moving forward, continuous investment in adaptive knowledge management systems and cross-cultural collaboration will be critical for navigating the complexities of modern food crises. By embracing innovation and embedding organizational learning into crisis communication strategies, companies can enhance resilience, safeguard their reputations, and uphold public safety in an increasingly volatile global environment.

## FUTURE RECOMMENDATIONS

To enhance crisis readiness and response, organizations must develop centralized knowledge hubs and protocols by creating and regularly updating a comprehensive repository of crisis-related information, including standard operating procedures for recalls and communication strategies. This ensures all departments have swift access to critical data when it matters most. Equally important is investing in ongoing training and cross-functional crisis simulations that break down silos, promote collaboration, and improve real-time decision-making under pressure. Leveraging emerging technologies, like AI, for early outbreak detection and blockchain for traceability can further strengthen crisis management, but these tools must be paired with oversight mechanisms to address biases, cybersecurity threats, and scalability concerns. Building strong stakeholder communication networks with regulators, suppliers, and industry peers also enables rapid, coordinated responses across the supply chain during both domestic and international emergencies. Above all, organizations should foster a culture of transparency and continuous learning, encouraging employees to report

issues without fear and conducting thorough post-crisis reviews to capture lessons learned and refine strategies. Additionally, companies should periodically audit and update their knowledge management systems and crisis playbooks to ensure these tools evolve with new threats and lessons. Incorporating social media monitoring into crisis response plans can help managers detect early warning signs of public concern and adjust communications proactively. Finally, active participation in industry forums and global networks (e.g., INFOSAN) before a crisis occurs can establish trust and common protocols, so that, when an emergency arises, information sharing and mutual support are already in motion.

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## REFERENCES

- Bundy, J., Pfarrer, M. D., Short, C. E., & Coombs, W. T. (2017). Crises and crisis management: Integration, interpretation, and research development. *Journal of Management*, 43(6), 1661–1692. DOI: 10.1177/0149206316680030
- Centers for Disease Control and Prevention. (2015). Salmonella outbreak linked to raw, frozen, stuffed chicken entrees produced by Aspen Foods – Consumer advice. U.S. Department of Health and Human Services. [https://archive.cdc.gov/www\\_cdc\\_gov/salmonella/frozen-chicken-entrees-part2-07-15/recall-advice.html](https://archive.cdc.gov/www_cdc_gov/salmonella/frozen-chicken-entrees-part2-07-15/recall-advice.html)
- Centers for Disease Control and Prevention. (2019). E. coli outbreak linked to romaine lettuce. U.S. Department of Health and Human Services. <https://archive.cdc.gov/#/details?url=https://www.cdc.gov/ecoli/2019/o157h7-11-19/index.html>
- Centers for Disease Control and Prevention. (2022). Outbreak of Listeria infections linked to packaged salads produced by Dole. U.S. Department of Health and Human Services. <https://archive.cdc.gov/#/details?url=https://www.cdc.gov/listeria/outbreaks/packaged-salad-mix-12-21/index.html>
- Cheng, J.-H., & Fu, Y.-C. (2013). Inter-organizational relationships and knowledge sharing through the relationship and institutional orientations in supply chains. *International Journal of Information Management*, 33(3), 473–484. DOI: 10.1016/j.ijinfomgt.2013.01.002
- Coombs, W. T. (2021). *Ongoing crisis communication: Planning, managing, and responding* (5th ed.). Sage Publications.
- Dhanesh, G. S., & Sriramesh, K. (2018). Culture and crisis communication: Nestle India's Maggi noodles case. *Journal of International Management*, 24(3), 204–214. DOI: 10.1016/j.intman.2017.12.004
- Dolgui, A., Ivanov, D., & Sokolov, B. (2017). Ripple effect in the supply chain: An analysis and recent literature. *International Journal of Production Research*, 56(1–2), 414–430. DOI: 10.1080/00207543.2017.1387680
- Duchek, S. (2020). Organizational resilience: A capability-based conceptualization. *Business Research*, 13(1), 215–246. DOI: 10.1007/s40685-019-0085-7
- Evenseth, L. L., Sydnes, M., & Gausdal, A. H. (2022). Building organizational resilience through organizational learning: A systematic review. *Frontiers in Communication*, 7, 837386. DOI: 10.3389/fcomm.2022.837386
- Harling, D. (2025, Jan 24). Costco's smoked salmon recall now classified as potentially deadly, according to FDA. *MSN.com*. <https://www.msn.com/en-us/health/nutrition/costco-s-smoked-salmon-recall-now-classified-as-potentially-deadly-according-to-fda/ar-AA1xOtLr>
- Kovács, G., & Falagara Sigala, I. (2021). Lessons learned from humanitarian logistics to manage supply chain disruptions. *The Journal of Supply Chain Management*, 56(1), 41–49. DOI: 10.1111/jscm.12253
- Liu, J., Bai, J., & Wu, D. (2021). Medical supplies scheduling in major public health emergencies. *Transportation Research Part E, Logistics and Transportation Review*, 154, 102464. DOI: 10.1016/j.tre.2021.102464 PMID: 36570618
- Liu, R., Liu, M., Li, Y., & Wu, L. (2023). Crisis management experience from social media: Public response to the safety crisis of imported aquatic products in China during the pandemic. *Foods*, 12(5), 1033. DOI: 10.3390/foods12051033 PMID: 36900551
- Luscombe, B. (2020, Apr 27). *The food supply chain is breaking. Tyson Foods warns of meat shortage as plants close due to COVID-19*. Time. <https://time.com/5827631/tyson-foods-meat-shortage/>
- Mbadlisa, G., & Jokonya, O. (2024). Factors affecting the adoption of blockchain technologies in the food supply chain. *Frontiers in Sustainable Food Systems*, 8, 1497599. DOI: 10.3389/fsufs.2024.1497599
- Nguyen, T. M., Malik, A., & Budhwar, P. (2022). Knowledge hiding in organizational crisis: The moderating role of leadership. *Journal of Business Research*, 139, 161–172. DOI: 10.1016/j.jbusres.2021.09.026 PMID: 34667337
- Nonaka, I., Takeuchi, H., & Umemoto, K. (1996). A theory of organizational knowledge creation. *International Journal of Technology Management*, 11(7–8), 833–845. DOI: 10.1504/IJTM.1996.025472

Nyoni, A. M., & Kaushal, S. (2022). Sustainable knowledge management during crisis: Focus on COVID-19 pandemic. *Business Information Review*, 39(4), 136–146. DOI: 10.1177/02663821221109928

Rashed, M. S., Fakhry, S., Satour, R., & Pathania, S. (2025). Blockchain technology in food supply chain management: Enhancing traceability, safety, and quality. In *Food and Industry 5.0: Transforming the Food System for a Sustainable Future* (pp. 427–455). Springer., DOI: 10.1007/978-3-031-76758-6\_27

World Health Organization. (2022, Apr 27). Multi-country outbreak of *Salmonella* Typhimurium linked to chocolate products – Europe and the United States of America. <https://www.who.int/emergencies/disease-outbreak-news/item/2022-DON369>

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