Business Review and Case Studies, Vol. 6 No. 3, December 2025
Permalink/DOI: http://dx.doi.org/10.17358/brcs.6.3.361
Available online at http://journal.ipb.ac.id/index.php/brcs
EISSN: 2721-6926

AN ANALYSIS OF OPERATIONAL RISK MANAGEMENT IN THE CATERING SERVICE INDUSTRY: A CASE STUDY OF PT XYZ

Renata Nurfitriani, Raden Dikky Indrawan, Anggi Mayang Sari[1]

School of Business, IPB University
Jl. Raya Padjajaran, Bogor 16151, Indonesia

Article history:

Received
8 April 2025

Revised
21 April 2025

Accepted
2 May 2025

Available online
31 December 2025

ABSTRACT

Background: PT XYZ is a catering service company that serves industrial employees in Karawang. During its operation, the company encountered various potential risks that could disrupt its business processes.
Purpose: This study aims to analyze operational risks, determine appropriate risk treatments, and formulate preventive measures to mitigate potential deviations in business processes based on the SNI ISO 31000:2018 risk management framework.
Design/Methodology/Approach: This study applied Godfrey's (1996) risk-assessment method and Flanagan and Norman's (1993) risk-treatment method for data processing and analysis.
Findings/Result: The study identified 20 types of operational risks, including six low-level risks, eight medium-level risks, five high-level risks, and one extreme-level risk. Risk treatment efforts were prioritized for those categorized as high or extreme.
Conclusion: Risk treatment strategies involve transferring uncontrollable risks to third parties, establishing effective communication with stakeholders to support risk management initiatives, and integrating Good Manufacturing Practice (GMP) standards to reduce the impact of each identified risk.

Keywords: catering services, ISO 31000:2018, mitigation strategy, operational risk, risk management

How to cite:
Nurfiriani, R., Indrawan, R. D., & Sari, A. M. (2025). An analysis of operational risk management in the catering service industry: A case study of PT XYZ. Business Review and Case Studies, 6(3), 361. https://doi.org/10.17358/brcs.6.3.361

[1] Corresponding author:
Email: anggimayangsari@ipb.apps.ac.id

INTRODUCTION

Indonesia's food industry has continued to show significant growth potential. In January 2024, the Industrial Confidence Index (ICI) for the food and beverage sector increased to 52.35, indicating optimism and expansion within the industry (Ministry of Industry, 2024). One of the rapidly growing subsectors is the catering industry. According to the Indonesian Catering Entrepreneurs Association (PPJI, 2024), catering businesses will experience a growth surge of up to 70% in 2024. This growth was driven not only by traditional event-based services, but also by the increasing demand for daily meal provisioning to state-owned and private companies (Entas & Wachyuni, 2024). The Karawang Regency, known for its rapid industrial development, has offered substantial potential for the growth of the catering industry.

One of the key players in this region was PT XYZ, which had been operating since March 2015 and producing up to 20,000 meal portions daily for corporate clients. However, PT XYZ, like many other medium-scale catering businesses, operated in a complex and high-risk environment. The company faced multiple challenges including food safety threats, fluctuating operational capacity, service quality issues, and client satisfaction management. Despite these risks, PT XYZ has not implemented a formal risk-management system. This reflects a broader gap in the Indonesian catering industry, where risk management practices based on standardized frameworks such as SNI ISO 31000:2018 and Good Manufacturing Practices (GMP) remain underutilized. The ISO 31000 standard provides a structured framework for risk management, which can be effectively applied to supply chain contexts to enhance resilience and decision-making processes (De Oliveira et al. 2017). Similarly, Ali et al. (2019) emphasized that an integrated risk evaluation framework helps prioritize critical control points across the food supply chain. Furthermore, Kleboth et al. (2016) highlighted that risk-based integrity audits grounded in complex systems thinking are essential for restoring trust and enhancing food safety performance in increasingly dynamic and interdependent food environments.

Previous studies in the food service sector have focused primarily on hygiene, customer satisfaction, or service delivery, but few have addressed comprehensive risk management tailored specifically to the industrial catering context. The European Union's Food Safety Policy emphasizes the importance of risk management in ensuring food quality and safety in catering establishments. This involves a systematic risk analysis and categorization to plan effective interventions (Lopes, 2007). Various studies have explored interventions to improve dietary habits and prevent obesity in workplace cafeterias, focusing on nutrition education and financial incentives (Sawada et al. 2014), additionally. Fire safety measures in dining properties have been evaluated to ensure compliance with fire codes and enhance safety (Hassanain, 2024). Several studies have highlighted the importance of risk management in industrial settings, focusing on identifying, analyzing, and responding to risks to ensure safety and sustainability. These studies emphasize the need for systematic and comprehensive risk-management processes (Alamiah et al. 2025; Schroeder, 2013; Daneshjo, 2019; Potashnik, 2020). Specific to the catering industry, a study aimed at improving food safety control in the catering industry developed a risk-warning mechanism based on the identification and evaluation of food safety risks. This mechanism helps rationalize regulatory resources and ensure food safety in catering enterprises (Zhang, 2015). Research has identified key behavioral determinants of food handlers' safety behaviors, emphasizing the importance of knowledge and targeted training initiatives to improve food safety practices (Young et al. 2019). This study aimed to address this gap by evaluating the operational risks at PT XYZ and proposing a risk management framework using the integrated approach of SNI ISO 31000:2018 and GMP analysis. The uniqueness of this approach lies in combining a well-established international risk management standard with practical food production compliance measures, an integration that is not often seen in similar studies.

The scientific contribution of this study is twofold: (1) it introduces a structured model for risk identification, analysis, evaluation, and treatment within the context of industrial catering services in emerging markets; and (2) it offers practical insights that could be adapted by other catering businesses to strengthen their operational resilience and service sustainability. The research hypothesis proposed that implementing an integrated risk management system based on SNI ISO 31000:2018 and GMP analysis would significantly improve PT XYZ's ability to minimize operational risk, maintain service quality, and enhance business continuity. The expected outcomes of this study include identifying key

operational risks in catering businesses, demonstrating the applicability of ISO-based risk management in this sector, and proposing an actionable risk-mitigation strategy for PT XYZ and similar firms.

METHODS

Both primary and secondary data were used in this study. Primary data were obtained through in-depth interviews and questionnaires with seven internal company informants. Secondary data were collected from the literature and company documents.Data were collected through in-depth interviews and structured questionnaires, using purposive sampling. Informant selection was guided by an RACI matrix analysis of the roles of the company's business processes.

The data analysis was based on the risk assessment framework developed by Godfrey (1996) and the risk treatment method proposed by Flanagan and Norman (1996). These frameworks (Figure 1) provide a structured basis for identifying and treating operational risk.

The hypothesis in this study posits that implementing an integrated risk management system based on SNI ISO 31000:2018 and GMP analysis would significantly improve PT XYZ's ability to minimize operational risk, maintain service quality, and enhance business continuity.

RESULTS

PT XYZ was a limited liability company (Perseroan Terbatas/PT) that provided catering services specifically for industrial and factory employees in the Karawang Regency and its surrounding areas. Since its establishment in 2015, the company has maintained contractual partnerships with dozens of industrial units in the region. PT XYZ operates with a daily production capacity of 20,000 meal portions and is committed to delivering high-quality, safe, and halal catering services in accordance with client specifications and food safety standards. The company's service philosophy is grounded in five operational pillars: efficiency, cleanliness, orderliness, maintenance, and diligence.

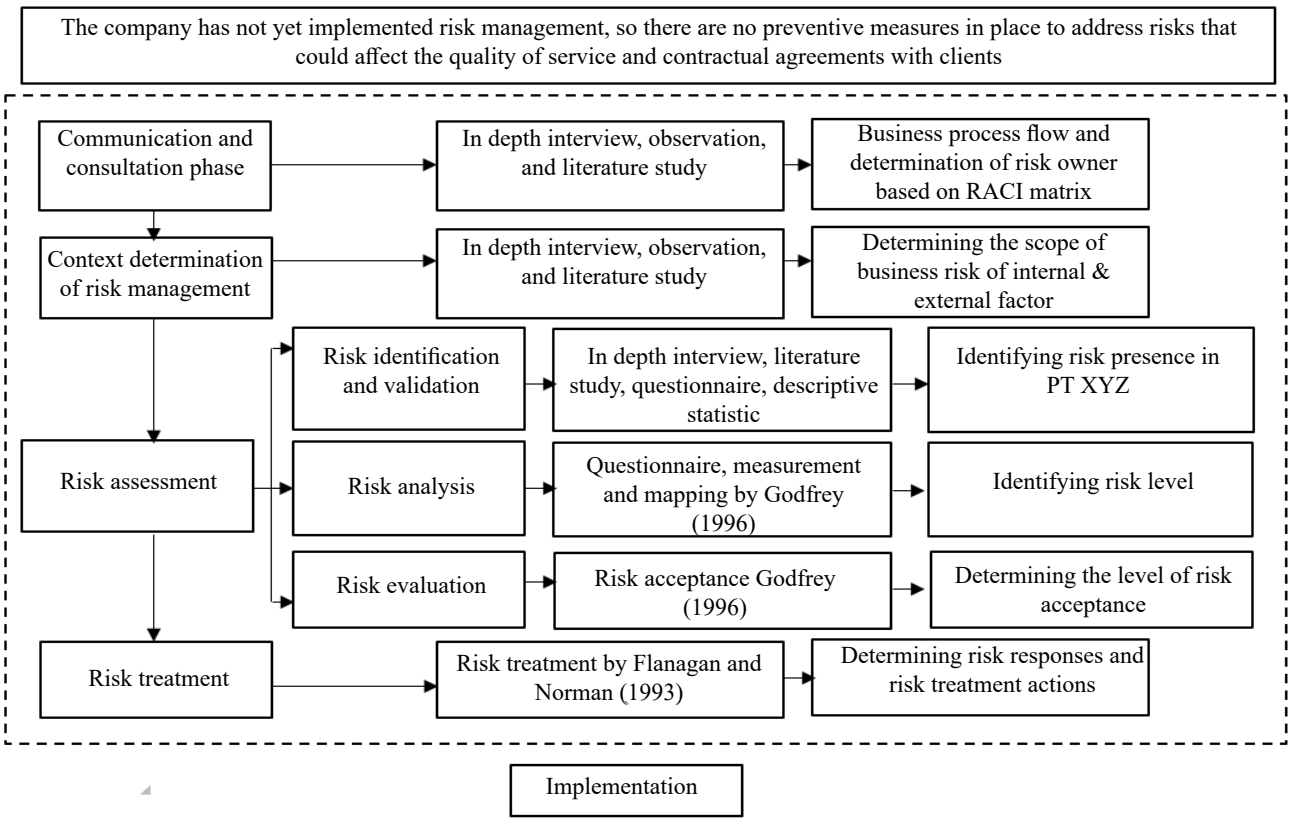

Figure 1. Proposed risk management framework for service quality and contractual compliance

PT XYZ offered a range of catering options, including boxed meals (*nasi box*), bento sets, snacks, and buffet-style services. The company envisioned becoming the leading, most innovative, and largest catering service provider in the Karawang Region. This vision was supported by its mission to fulfill customer expectations by delivering flavorful, hygienic, and professionally managed catering products through innovative service practices.

The company was led by a President Director, who also served as the owner. Operational activities were coordinated by an Operational Manager who supervised five key divisions: Finance and Purchasing, Transportation, Menu and Production, Person-in-Charge (PIC), and Human Resources Development (HRD).

In general, a company's business process includes menu planning and portion forecasting, raw material procurement, quality and quantity inspection of ingredients, storage, food preparation, packaging, order delivery, customer service, and payment processing.

Communication and Consultation

Communication and consultation are the initial processes in risk management, aimed at gathering comprehensive perspectives on risk from all relevant stakeholders. To identify the specific roles and responsibilities of each stakeholder within PT XYZ, a RACI matrix analysis was utilized, as presented in Table 1.

In determining the risk owner, Larson and Gray (2017) stated that, within the RACI matrix, the party designated as responsible was responsible for ensuring that a particular process was completed. Consequently, the responsible party is also expected to manage any associated risks that might arise during the business process. Based on this understanding, the party selected as the informant in this study included the Operational Manager, Head of Menu and Production Division, Deputy Head of Production Subdivision, Head of Finance and Purchasing Division, Deputy Head of Warehouse, Subdivision, Head of PIC Division, and Head of Transportation Division.

Tabel 1. RACI Matrix

Business Process	President Director	Operational Manager	Head of Menu & Production Division	Deputy Head of Production Subdivision	Head of PIC Division	Head of Transporta-tion Division	Head of Finance & Purchasing Division	Deputy Head of Warehouse Subdivision
Menu planning	-	C/I	R/A	I	I	-	-	-
Calculation of required portions	C/I	C/I	R/A	I	-	-	C/I	I
Pre-order and order of raw materials	C/I	R/A	I	I	-	-	R	I
Inspection of raw material type, quality, and quantity	-	I	I	C/I	-	-	I	R/A
Storage of raw materials	-	I	-	C/I	-	-	I	R/A
Production process of customer orders	-	R/A	C/I	R	I	-	-	I
Packing process of customer orders	-	I	-	C/I	R/A	-	-	-
Delivery of orders	-	I	I	-	C/I	R/A	I	-
Presentation and customer service	I	C/I	-	-	R/A	I	-	-
Presentation and customer service	C/I	R	-	-	-	-	R/A	-

Context Establishment

The establishment of context in risk management refers to the definition of boundaries that serve as the basis for the risk management process. This study was limited to the operational risk management of PT XYZ by analyzing the company's internal and external factors. Underwent a validation process, 20 operational risks were identified at PT XYZ, as listed in Table 2. The risk assessment process consisted of three stages: risk identification, risk analysis, and risk evaluation.

Risk Identification

Based on the analysis of GMP implementation according to SNI CXC 1:1969 (Revised 2020), PT XYZ had several GMP aspects that needed to be implemented and improved to ensure that risks related to health, safety, and product quality were minimized. The following presents an analysis of the implementation of GMP aspects at PT XYZ.

Food Hazard Identification and Control

Top management was taught through food safety system seminars; however, the implementation of Good Hygiene Practices (GHP), particularly in controlling pathogen contamination, has not been carried out effectively.

Core production

The core production process included the suitability of the water used, contaminant control, safety of the production area, and the application of proper hygienic production practices. The water used for PT XYZ production was ensured to be safe. However, several practices still require improvement, such as contamination control and proper implementation of hygienic production processes.

Table 2. Operational risks identified at PT XYZ

Risk Area	Risk Code	Operational Risk
Human Resource (HR)	R1	Service staff fell ill or were absent suddenly without prior notice.
	R2	Employees lacked discipline.
	R3	Service staff violated standard operating procedures (SOP).
	R4	Production time scheduling was delayed or disrupted.
	R5	Foreign object contamination occurred in food.
	R6	Food was too salty, undercooked, overcooked, or tasteless.
Production System and Service System	R7	Orders were missed or the number of portions was insufficient.
	R8	Incidents of foodborne illness occurred.
	R9	Delivery to the work site was delayed.
	R10	Food arrived spoiled at the work site.
	R11	Pack meal contents were below the standard completeness required by the client (in terms of size and portion).
	R12	Delays occurred in the delivery of raw material stocks.
Procurement System	R13	Ordered items were unavailable (out of stock) at the supplier.
	R14	Prices of raw materials and fuel increased.
	R15	The quality and quantity of raw materials delivered by the supplier were poor and not in accordance with specifications.
	R16	Traffic congestion occurred during order delivery to the work site.
	R17	Government regulations related to the catering industry changed.
External	R18	Sudden changes in portion quantities were requested by clients.
	R19	Industrial worker demonstrations disrupted the delivery of orders.
	R20	Traffic accidents occurred during order delivery.

Process control

PT XYZ needed to design, implement, monitor, and review an effective control system in accordance with food business operations from upstream to downstream.
Personal hygiene

PT XYZ has not yet officially implemented standard operating procedures (SOPs) that are mandatory for employees to follow, such as wearing complete work attire and maintaining personal and food hygiene. PT XYZ needs to implement better personal hygiene practices as a preventive measure against cross-contamination.

Facility and Equipment Design

PT XYZ did not have a waste disposal facility that met the standard requirement (located more than 500 m from the production area), and its drainage and ventilation systems were still inadequate.

Training and competency

Training was conducted intensively for top management and was subsequently conveyed to workers by top management.

Transportation

The transport equipment and containers used were able to protect the food and were cleaned under the appropriate conditions.

Maintenance of Buildings, Cleaning and Disinfection, and Pest Control

PT XYZ is needed to facilitate the continuous and effective control of food contaminants, pests, and other agents that could compromise food safety. This was necessary because PT XYZ had not yet optimized the maintenance of the production area and waste handling.

Product information and consumer awareness

Product-related information at PT XYZ was limited to expiration date labeling. Labeling regarding allergen information and handling instructions has not yet been provided to either workers or consumers.

Risk Analysis

A risk analysis was conducted to identify the level of risk and determine the appropriate response to each risk.

Risk measurement

At this stage, the risks were measured based on the probability of occurrence and their impact. Figures 2 and 3 present the probability level (P) and impact level (I) of risks.

Risk Mapping

After risk measurement was conducted, the next stage was risk mapping, which referred to Godfrey's (1996) risk map. Risks were categorized based on their probability levels (P) and impact level (I) was divided into four categories: low, medium, high, and extreme. The results of the risk-level l analysis for the 20 operational risks identified at PT XYZ are presented in Figure 4.

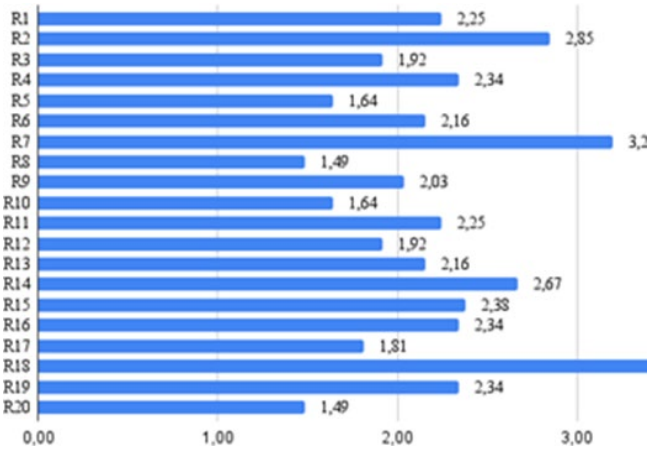

Figure 2. Risk probability level

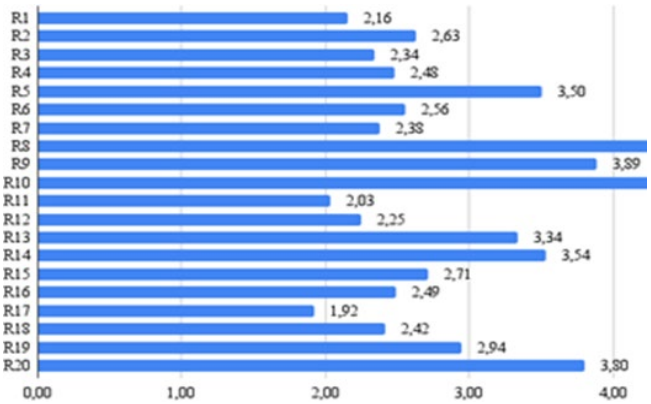

Figure 3. Risk impact level

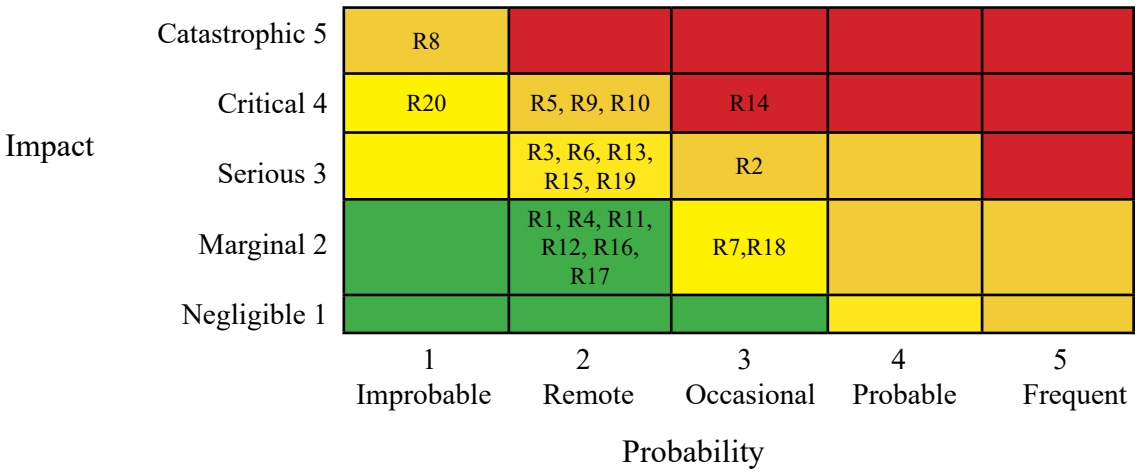

Figure 4. Operation risk mapping of PT XYZ (red: extreme risk (1 risk); orange: high risk (5 risks); yellow: medium risk (8 risks); green: low risk (6 risks))

Risk Evaluation

Risk evaluation was the process of determining the level of risk acceptance to decide on further treatment for each risk. Godfrey (1996) states that risk acceptance can be classified into four categories: negligible, acceptable, undesirable, and unacceptable. The levels of risk acceptance for each identified risk were presented in Table 3.

Risk Treatment

According to the SNI ISO 31000, risk treatment is defined as the process of modifying risks, particularly in terms of reducing risk exposure. Flanagan and Norman (1993) classify risk responses into four categories: risk retention, risk reduction, risk transfer, and risk avoidance. The results of the risk-response analysis based on Flanagan and Norman (1993) are presented in Table 4.

According to Razali and Tahir (2011), risks categorized as high and extreme need to be prioritized in risk treatment because such risks have the potential to cause significant losses to the company. The extreme-level risk identified was an increase in raw materials and fuel prices (R14). High-level risks included undisciplined employees (R2), foreign object contamination in food (R5), delays in delivery to the worksite (R9), spoiled food upon arrival at the worksite (R10), and incidents of foodborne illnesses (R8). The treatment efforts for these risks are as follows.

Increase in raw material and fuel prices (Extreme Risk)

1. Implemented long-term contract systems.
2. Applied an optimal procurement strategy using a two-stage procurement approach.
3. Diversified raw material sources.

Undisciplined employees (High Risk)

1. Implemented regular disciplinary actions.
2. Conducted training and development programs combined with food safety training.
3. Optimized the communication approach by the PIC in fostering work discipline within each team.

Delays in delivery to the worksite (High Risk)

1. Implemented Field Service Management (FSM).
2. Applied effective time management throughout the entire production process.
3. Conducted regular maintenance and inspection of vehicle conditions.

Foreign object contamination in food (High Risk)

1. Maintained the building in a good condition and performed necessary repairs to prevent construction particles from falling and contaminating the food.
2. Implemented SOPs on personal hygiene for employees who had direct contact with food.
3. Designed buildings are sturdy and use durable materials that are easy to maintain, clean, and disinfect.
4. Ensured that the packaging used for food was in good condition and undamaged.

Spoiled food upon arrival at the worksite (High Risk)

1. Applied proper temperature control for food.
2. Implemented correct cooking, cooling, and reheating procedures.
3. Ensured adequate and properly functioning air ventilation.

Foodborne illness (High Risk)

1. Selected suppliers that applied food safety principles.
2. Implemented personal hygiene practices among employees to prevent cross-contamination.
3. Managed drainage and waste disposal systems appropriately.
4. The layout of the production area was designed to follow a one-way flow aligned with the production process to prevent cross-contamination.
5. Contaminated or leftover food was separated from food storage areas, and all waste was disposed of properly and hygienically.
6. Ensured that eating and cooking utensils were cleaned properly.
7. Used separate cooking utensils for each type of raw material.
8. Maintain the production area and building in good condition and cleanliness to prevent pathogen access and eliminate potential breeding grounds.

Table 3. Operational risk level of PT XYZ

Risk Code	Operational Risk	Risk Level	Risk Acceptance
R1	Service staff fell ill or were absent suddenly without prior notice.	Low	Negligible
R2	Employees lacked discipline.	High	Undesirable
R3	Service staff violated standard operating procedures (SOP).	Medium	Acceptable
R4	Production time scheduling was delayed or disrupted.	Low	Negligible
R5	Foreign object contamination occurred in food.	High	Undesirable
R6	Food was too salty, undercooked, overcooked, or tasteless.	Medium	Acceptable
R7	Orders were missed or the number of portions was insufficient.	Medium	Acceptable
R8	Orders were missed or the number of portions was insufficient.	High	Undesirable
R9	Incidents of foodborne illness occurred.	High	Undesirable
R10	Delivery to the work site was delayed.	High	Undesirable
R11	Food arrived spoiled at the work site.	Low	Negligible
R12	Pack meal contents were below the standard completeness required by the client (in terms of size and portion).	Low	Negligible
R13	Delays occurred in the delivery of raw material stocks.	Medium	Acceptable
R14	Ordered items were unavailable (out of stock) at the supplier.	Extreme	Unacceptable
R15	Prices of raw materials and fuel increased.	Medium	Acceptable
R16	The quality and quantity of raw materials delivered by the supplier were poor and not in accordance with specifications.	Low	Negligible
R17	Traffic congestion occurred during order delivery to the work site.	Low	Negligible
R18	Government regulations related to the catering industry changed.	Medium	Acceptable
R19	Sudden changes in portion quantities were requested by clients.	Medium	Acceptable
R20	Industrial worker demonstrations disrupted the delivery of orders.	Medium	Acceptable

Table 4. Operational risk response of PT XYZ

Risk Code	Operational Risk	Risk Acceptance	Risk Response
R1	Service staff fell ill or were absent suddenly without prior notice.	Negligible	Retention
R2	Employees lacked discipline.	Undesirable	Transfer
R3	Service staff violated standard operating procedures (SOP).	Acceptable	Reduction
R4	Production time scheduling was delayed or disrupted.	Negligible	Retention
R5	Foreign object contamination occurred in food.	Undesirable	Transfer
R6	Food was too salty, undercooked, overcooked, or tasteless.	Acceptable	Reduction

Managerial Implications

The findings of this study highlight the importance of proactive and structured operational risk management in the catering industry, especially for companies operating on a large scale such as PT XYZ. The managerial implications of this study are as follows.

1. The integration of Risk Management Frameworks PT XYZ must formally adopt a risk management system based on SNI ISO 31000:2018 to ensure a consistent approach for identifying, assessing, and treating operational risks. This institutionalization of risk management can enhance decision making at all organizational levels and prevent reactive crisis handling.
2. The prioritization of critical risk managers should focus on addressing high- and extreme-level risks, such as supply chain disruptions and food contamination, through targeted strategies such as long-term supplier contracts, the use of diverse procurement sources, and the application of strict hygiene standards. These priorities help optimize resources and minimize potential financial and reputational losses.
3. Strengthening Human Resource Governance. The company must improve its disciplinary mechanisms and training programs to reduce human-related operational risk. Formalizing standard operating procedures (SOPs), investing in food safety training, and fostering a culture of accountability are essential to improve employee compliance and performance.
4. Enhancement of Food Safety through GMP Implementation. The implementation of Good Manufacturing Practice (GMP) should be reinforced across all operational aspects, including building design, personal hygiene, equipment maintenance, and pest control. This will not only mitigate health-related risks, but also support regulatory compliance and enhance customer trust.
5. Improved Communication and Stakeholder Engagement. Establishing open and effective communication channels with stakeholders, including clients, suppliers, and internal divisions, is critical for collaborative risk mitigation. This approach allows for better anticipation of client needs, quicker response to emergencies, and alignment of quality expectations.
6. Digitalization and Field Service Management (FSM). The application of digital tools such as FSM systems can streamline order tracking, improve logistics, and ensure timely food delivery. This increases operational transparency and enhances service reliability.
7. Business Continuity and Resilience Planning. The identification of external threats, such as government regulation changes, traffic issues, and labor strikes, underscores the need for a robust business continuity plan. Managers should simulate risk scenarios and prepare contingency actions to ensure an uninterrupted service delivery.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

Based on the results of this study, 20 operational risks were identified in PT XYZ. These included service staff falling ill or being absent suddenly without prior notice; undisciplined employees; service staff violating standard operating procedures (SOPs); delayed or disrupted production time scheduling; foreign object contamination in food; food that was too salty, undercooked, overcooked, or bland; missed orders or insufficient portion quantities; incidents of foodborne illness; delays in delivery to the worksite; spoiled food upon arrival at the worksite; pack meal contents not meeting the client's required standards (in terms of size and portion), delays in the delivery of raw material stocks, unavailability of ordered items at the supplier, increases in raw material and fuel prices, and raw materials delivered by suppliers that were of poor quality and did not meet specifications; traffic congestion during delivery to the worksite; changes in government regulations related to the catering industry; sudden changes in portion quantities requested by clients; industrial worker demonstrations that disrupted order deliveries; and traffic accidents during delivery.

Referring to the assessment results of the 20 identified operational risks, six risks were classified as low, eight as medium, five as high, and one as extreme. Risk treatment efforts were prioritized for risks at extreme and high levels by transferring risks that were beyond the company's control through the involvement of third parties, establishing communication with various stakeholders to support the company's risk mitigation efforts, and integrating GMP standards to reduce the impact of each identified risk.

Recommendations

Suggestions for future research include conducting a more in-depth analysis of the implementation of a Food Safety Management System (FSMS) that could be adopted by the company. This study was limited to risk management analysis from the company management perspective. Therefore, future researchers could expand the scope by involving other stakeholders, such as risk management analysis from the perspectives of clients and suppliers.

FUNDING STATEMENT: This research did not receive any specific grants from funding agencies in the public, commercial, or not-for-profit sectors.

CONFLICTS OF INTEREST: The authors declare no conflict of interest.

REFERENCES

Almaiah M.A., Mekimah S., Zighed R., Alkdour T., Alali R., Shehab R. (2025). The Impact of Industrial Security Risk Management on Decision-Making in SMEs: A Confirmatory Factor Analysis Approach. Journal of Applied Data Sciences, 6, 1159-1174

Ali, S. M., Moktadir, M. A., Kabir, G., Chakma, J., Rumi, M. J. U., & Islam, M. T. (2019). Framework for evaluating risks in the food supply chain: Implications in food wastage reduction. Journal of Cleaner Production, 228, 786–800

[BSN] Badan Standarisasi Nasional. (2017). Manajemen Risiko Berbasis SNI ISO 31000. Jakarta Pusat: Badan Standarisasi Nasional.

Daneshjo N.; Dudáš Pajerská E.; Danishjoo M. (2019). Energy industry and risk management. Quality - Access to Success. 20, 103-106

De Oliveira, U. R., Marins, F. A. S., Rocha, H. M., & Salomon, V. A. P. (2017). The ISO 31000 standard in supply chain risk management. Journal of Cleaner Production, 151, 616–633.

Entas D, Wachyuni SS. (2024). Manajemen Katering dalam Industri Tambang. Tersedia pada: https://www.researchgate.net/publi cation/378904493.

Flanagan R, Norman G. (1993). Risk Management and Construction. Oxford (GB): Blackwell Scientific.

Godfrey PS. (1996). Control of Risk: A Guide to the Systematic Management of Risk from Construction. London: CIRIA

Hassanain M.A., Sawalha H., Hamida M.B., Alshibani A., Zami M.S. (2024). Fire hazard management in dining properties: a case study. International Journal of Emergency Services. 13. 271-284

[KEMENPERIN] Kementrian Perindustrian. 2024. Awali Tahun 2024, Optimisme Industri Pengolahan Tertinggi. [diakses 2024 Jul 9]. Tersedia pada: https:// kpaii.kemenperin.go.id/detail/ siaran-pers/awali-tahun-2024- optimisme-industri-pengolahan-tertinggi.

Kleboth, J. A., Luning, P. A., & Fogliano, V. (2016). Risk-based integrity audits in the food chain—A framework for complex systems. Trends in Food Science & Technology, 56, 167–174

Lopes P. (2007). Hygiene and sanitation evaluation framework of catering establishments. Revista de Alimentacao Humana, 3. 79-96

Pembaruan Prinsip Umum Higiene Pangan Codex (CXC 1-1969): Versi 2020. (2023). Issuu.com [internet]. [diakses pada 13 September 2024]. Tersedia pada: Pembaruan Prinsip Umum Higiene Pangan Codex (CXC 1- 1969): Versi 2020 - Issuu

Potashnik Y.S., Kozlova E.P., Kuznetsova S.N., Tsymbalov S.D., Chelnokova E.A. (2020). Methodology of Risk Management Assessment at an Industrial Enterprise. Lecture Notes in Networks and Systems. 265-271

[PPJI] Persatuan Pengusaha Jasa Boga Indonesia. (2024). Membangun Sinergi: Kolaborasi PPJI dengan Berbagai Pihak untuk Memajukan Industri Jasa Boga dan Katering Nasional [internet]. [diakses 2024 Jul 17]. Tersedia pada: https://www.ppji.or.id/articles/ memb angun-sinergi-kolaborasi-ppji- dengan berbagai-pihak-untuk- memajukan-industri-jasa-boga-dan- katering-nasional.

Razali AR, Tahir IM. (2011). Review of the Literature on Enterprise Risk Management. Business Management Dynamics. 1(5):08-16.

Sawada K., Ota E., Shahrook S., Mori R. (2014). Financial incentive policies at workplace cafeterias for preventing obesity-a systematic review and meta-analysis (Protocol). Systematic Reviews.

Schroeder W.E. (2013). Risk management and its methodological support in the performance economy. WIT Transactions on the Built Environment. 134, 155-164

Young I., Thaivalappil A., Waddell L., Meldrum R., Greig J. (2019). Psychosocial and organizational determinants of safe food handling at retail and food service establishments: a systematic review and meta-analysis. International Journal of Environmental Health Research. 29, 371-386

Zhang X. (2015). Application of food risk index on food safety control of sports meeting caterings. Carpathian Journal of Food Science and Technology. 7, 42-50