



The Role of Occupational Safety and Health Performance in Strategic Resilience and Organizational Transformation in Riau Industries

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Abstract

In the context of increasing global uncertainty and the growing demand for sustainability towards the Sustainable Development Goals (SDGs) 2030, organizations operating in high-risk industries are required to strengthen their strategic resilience and undertake adaptive organizational transformation. Occupational Safety and Health (OSH) performance plays a crucial role not only in maintaining operational sustainability but also in enhancing organizational capacity to manage risks and respond to dynamic business environments. This phenomenon is reflected in empirical data on workplace accidents in Riau Province. Based on data from BPJS Ketenagakerjaan, from January to June 2025, there were 9,416 workplace accident cases, including 32 fatal cases. By August 2025, the number of fatalities increased to 33 cases, indicating that the level of occupational risk remains high and significant. This study aims to examine the role of OSH performance in enhancing strategic resilience and promoting organizational transformation in high-risk industries. The study adopts a conceptual approach through literature review and analysis of empirical phenomena related to workplace safety.

The findings indicate that OSH performance contributes to strengthening strategic resilience and driving adaptive and sustainable organizational transformation. The integration of safety aspects into organizational strategy is essential in addressing uncertainty and achieving long-term sustainability.

Keywords: occupational safety and health performance, strategic resilience, organizational transformation, high-risk industries

1. Introduction

Global uncertainty, characterized by economic dynamics, technological changes, and increasing sustainability demands, requires organizations to adapt rapidly and effectively. In this context, strategic resilience becomes a critical factor for organizations to survive and thrive amid increasingly complex business environments. In addition, organizational transformation is essential to ensure that organizations can continuously adjust to ongoing changes. In high-risk industries such as oil and gas and palm oil plantations, the challenges faced are not only related to economic and operational aspects but also to occupational safety and health (OSH). Optimal OSH performance is not only essential for protecting workers but also serves as an integral part of organizational strategy in maintaining business sustainability. The phenomenon of workplace accidents in Riau Province indicates that OSH implementation still faces significant challenges. Data from BPJS Ketenagakerjaan recorded 9,416 workplace accident cases during the period of January to June 2025, with 32 fatal cases, which increased to 33 fatalities by August 2025. These figures indicate that occupational risk levels remain high and reflect a gap between OSH policies and their implementation in practice. Previous studies have generally examined OSH in the context of operational and regulatory compliance; however,

limited research has linked it to strategic resilience and organizational transformation. Therefore, this study aims to examine the role of OSH performance in strengthening strategic resilience and promoting organizational transformation in high-risk industries in Riau Province.

2. Research Method

This study adopts a conceptual approach by reviewing relevant scientific literature on occupational safety and health (OSH), strategic resilience, and organizational transformation. This approach is chosen to develop a theoretical understanding of the relationship between OSH performance and the organization's ability to cope with uncertainty and dynamic business environments, particularly in high-risk industries. The data used in this study are derived from secondary sources, including official reports from BPJS Ketenagakerjaan on workplace accidents in Riau Province, as well as relevant scientific publications from the last five years. These empirical data are utilized to strengthen the analysis of real-world phenomena, particularly the high rate of workplace accidents and their implications for organizational sustainability.

The analytical method employed is qualitative descriptive analysis, which focuses on identifying patterns of relationships between OSH performance and organizational strategic resilience. The analysis is

conducted through literature synthesis and interpretation of empirical data to illustrate the role of OSH as part of organizational strategy in enhancing resilience and adaptability to change.

In this study, OSH performance is positioned as the main variable influencing strategic resilience and organizational transformation. Strategic resilience is defined as the organization's ability to survive, adapt, and recover from disruptions, while organizational transformation refers to the organization's ability to implement continuous change to improve performance and competitiveness.

This approach is expected to produce a comprehensive conceptual framework that explains the strategic role of OSH not only as an operational aspect but also as a key factor in supporting sustainability and organizational transformation in high-risk industries.

2.1. Data Sources and Data Collection Techniques

The data used in this study were obtained from relevant and credible secondary sources, including both empirical data and literature-based data. The primary empirical data were derived from official reports of BPJS Ketenagakerjaan on workplace accidents in Riau Province in 2025, which include information on the number of accident cases, fatality rates, and characteristics of incidents in high-risk industrial sectors. These data are used to describe the actual conditions of occupational safety in the field and to identify the level of occupational risk faced by organizations. In addition, the data were strengthened by information from relevant government institutions, such as the Regional Office of Manpower in Riau Province, the Ministry of Manpower of the Republic of Indonesia, and national reports on occupational safety and health. Additional sources were obtained from international organizations such as the International Labour Organization (ILO), which provides global data and references on workplace accident trends and safety practices. The use of these various sources aims to enhance the validity and comprehensiveness of the analysis.

This study also utilizes literature data obtained from various scientific sources, including reputable national and international journals, reference books, and policy documents related to occupational safety and health (OSH), strategic resilience, and organizational transformation. The literature selected prioritizes publications from the last five years to ensure the relevance and timeliness of the information used in the analysis.

Data collection techniques were carried out through documentation and literature review. Documentation studies involved collecting and examining official reports and statistical data related to workplace accidents from relevant institutions. Meanwhile, the literature review involved analyzing theories, concepts, and previous research findings related to the study variables. This process includes identification, selection, and

evaluation of relevant sources to ensure the quality and validity of the data used.

Furthermore, the collected data were analyzed systematically by grouping information based on the study variables, namely OSH performance, strategic resilience, and organizational transformation. This approach enables the researcher to obtain a comprehensive understanding of the relationships among variables and to identify patterns that support the development of the conceptual framework. Thus, the use of secondary data in this study not only serves as supporting information but also as the primary basis for building a structured and evidence-based analysis

2.2. Data Analysis Method

The analysis method employed in this study is qualitative descriptive analysis with a conceptual approach. This method aims to examine and explain the relationship between Occupational Safety and Health (OSH) performance, strategic resilience, and organizational transformation in high-risk industries. This approach is selected as the study focuses on developing a conceptual framework and theoretical understanding based on empirical phenomena observed in the field. The analysis process is carried out through several stages. First, empirical data on workplace accidents in Riau Province are identified, particularly concerning the number of incidents and fatality rates, to understand the actual condition of occupational safety. Second, a literature review is conducted on various theories and previous research related to OSH performance, strategic resilience, and organizational transformation. This stage aims to identify key concepts and determine the research gap.

Subsequently, a synthesis process is conducted by integrating empirical data and findings from the literature to construct conceptual relationships among the study variables. This synthesis involves combining various theoretical perspectives to produce a comprehensive understanding of the role of OSH performance in supporting strategic resilience and organizational transformation. The analysis also includes interpreting empirical phenomena by linking conditions in Riau Province with the relevant theoretical concepts.

Furthermore, this analytical approach emphasizes the development of logical and systematic arguments to explain the interrelationships among variables. The results of the analysis are presented in a descriptive narrative supported by the conceptual framework of the study. Therefore, the analysis method not only describes the observed phenomena but also provides an in-depth understanding of the strategic role of OSH in enhancing resilience and driving organizational transformation in high-risk industries

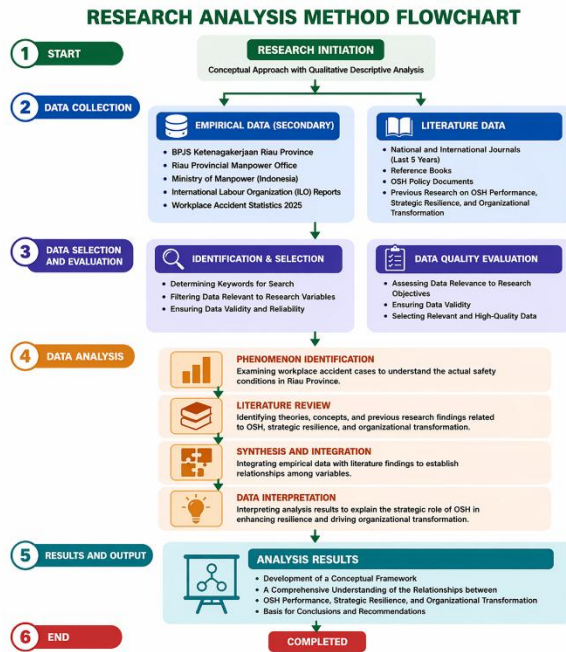


Figure 2. Research Analysis Method Flowchart

2.3. Research Framework

The research framework in this study illustrates the conceptual relationship between Occupational Safety and Health (OSH) performance, strategic resilience, and organizational transformation in high-risk industries. OSH performance is positioned as the main variable influencing the organization's ability to manage risks and maintain operational sustainability. OSH performance in this study encompasses several key aspects, namely regulatory compliance, safety culture, risk control, worker competence and behavior, and management commitment. These five aspects serve as important indicators in assessing the extent to which organizations effectively and integratively implement OSH systems.

Strategic resilience is defined as the organization's ability to anticipate and mitigate risks, maintain operational continuity, adapt to changes, and recover from disruptions. Meanwhile, organizational transformation refers to the organization's capability to implement continuous changes through process improvement, technology integration, organizational learning, and overall performance enhancement.

The relationships among variables in this study indicate that OSH performance directly affects both strategic resilience and organizational transformation. Effective OSH performance strengthens strategic resilience by enhancing the organization's ability to manage risks and maintain operational stability. In addition, OSH performance directly drives organizational transformation through continuous improvement and the strengthening of safety culture.

Furthermore, strategic resilience also acts as a variable that strengthens the relationship between OSH performance and organizational transformation. It

serves as a foundation for organizations to implement transformation effectively, as organizations with a high level of resilience are more capable of adapting and evolving in uncertain environments.

This research framework is visualized in the conceptual model presented in Figure 1, which illustrates the relationship between OSH performance as the main variable, strategic resilience as an intervening variable, and organizational transformation as the outcome variable. Therefore, this framework serves as the basis for explaining the strategic role of OSH in supporting sustainability and enhancing organizational competitiveness in high-risk industries.

3. Result And Discussion

The findings indicate that Occupational Safety and Health (OSH) performance plays a strategic role in supporting organizational resilience and driving organizational transformation, particularly in high-risk industries. The high number of workplace accidents in Riau Province, with 9,416 cases and 33 fatalities in 2025, indicates that OSH implementation remains suboptimal. This condition not only affects worker safety but also impacts operational stability and overall organizational sustainability.

From the perspective of strategic resilience, OSH performance contributes to enhancing the organization's ability to anticipate, respond to, and recover from operational disruptions. Effective OSH implementation enables organizations to identify potential hazards at an early stage and apply appropriate mitigation measures, thereby minimizing the risk of workplace accidents. This improves operational continuity and strengthens the organization's adaptability to external environmental changes. Therefore, OSH should not be viewed merely as a regulatory requirement, but as a strategic instrument for strengthening organizational resilience.

In addition to reinforcing strategic resilience, OSH performance also plays a significant role in driving organizational transformation. The integration of OSH into business processes encourages continuous improvement in work processes, management systems, and organizational culture. This transformation includes enhancing operational standards, utilizing technology for risk control, and strengthening safety culture as a core organizational value. Organizations that successfully internalize OSH within their business strategies tend to be more adaptive and innovative in responding to change.

Furthermore, the relationship between strategic resilience and organizational transformation demonstrates that both are interconnected and mutually reinforcing. Strategic resilience serves as a foundation for effective transformation, as resilient organizations are better equipped to maintain stability while adapting to change. Without adequate resilience, transformation efforts may be hindered by unmanaged risks.

Conversely, continuous organizational transformation also contributes to strengthening resilience over time.

Thus, OSH performance acts as a key factor linking strategic resilience and organizational transformation. The integration of safety aspects into organizational strategy not only enhances worker protection but also provides significant contributions to sustainability and organizational competitiveness. Therefore, organizations in high-risk industries must position OSH as an integral part of their business strategy to address uncertainty and achieve long-term sustainability

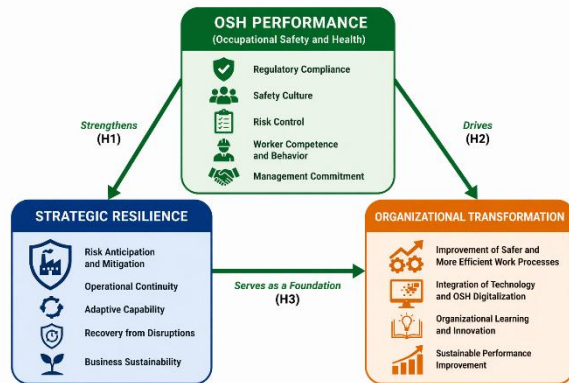


Figure 2. Conceptual Framework Linking Occupational Safety and Health (OSH) Performance, Strategic Resilience, and Organizational Transformation

3.1. The Role of OSH Performance in Strategic Resilience

Occupational Safety and Health (OSH) performance plays a crucial role in shaping organizational strategic resilience, particularly in high-risk industries. Strategic resilience reflects an organization's ability to anticipate, respond to, and recover from disruptions that may hinder operational continuity. In this context, OSH performance not only functions as a means of protecting workers but also serves as an integral part of the organization's risk management system.

Effective implementation of OSH enables organizations to identify potential hazards at an early stage and apply appropriate mitigation measures. This contributes to reducing workplace accidents and enhancing operational continuity. The workplace accident data in Riau Province, which recorded 9,416 cases and 33 fatalities in 2025, indicate that challenges in OSH implementation still exist and may weaken the organization's strategic resilience.

Furthermore, strong OSH performance reflects the presence of a robust safety culture, adequate worker competence, and strong management commitment in managing occupational risks. These elements form the foundation for enhancing the organization's adaptability to external environmental changes. Organizations with well-integrated OSH systems tend to be more resilient in

facing operational pressures, whether arising from internal or external factors.

Thus, OSH performance acts as a reinforcing factor in strengthening organizational strategic resilience through improved risk anticipation, maintenance of operational continuity, and acceleration of recovery processes from disruptions. This highlights that integrating OSH into organizational strategy is a critical step in ensuring sustainability and competitiveness in high-risk industries.

3.2. The Role of OSH Performance in Organizational Transformation

Occupational Safety and Health (OSH) performance plays a strategic role in driving organizational transformation, particularly in high-risk industries. Organizational transformation reflects the ability of an organization to implement continuous changes in order to improve effectiveness, efficiency, and competitiveness in response to dynamic business environments. In this context, OSH is not merely an operational aspect but also a driver of change that is integrated into organizational strategy.

The effective implementation of OSH encourages organizations to continuously improve work processes, including enhancing operational standards, strengthening risk control systems, and adapting to technological advancements. This transformation is not limited to technical aspects but also involves changes in organizational culture that emphasize safety as a core value. A strong safety culture fosters the involvement of all organizational members in creating a safe and productive work environment.

Furthermore, strong OSH performance encourages organizations to adopt modern management approaches, such as the digitalization of safety systems, the use of monitoring technologies, and the integration of data into decision-making processes. This aligns with industrial demands that require organizations to be more responsive to change and capable of managing risks effectively. Therefore, OSH becomes a critical component in driving organizations toward more adaptive and sustainable systems.

Thus, OSH performance acts as a catalyst for organizational transformation through the improvement of work processes, the strengthening of safety culture, and the utilization of technology to support sustainability. Transformation driven by OSH not only enhances organizational performance but also creates long-term value for all stakeholders.

3.3. The Relationship between Strategic Resilience and Organizational Transformation

Strategic resilience has a close relationship with organizational transformation, where resilience serves as a fundamental foundation for organizations to implement continuous change. Strategic resilience

reflects an organization's ability to cope with uncertainty, manage risks, and maintain operational stability amid dynamic business environments. Organizations with a high level of resilience are generally better prepared to respond to change and carry out transformation effectively.

In the context of high-risk industries, strategic resilience enables organizations to maintain operational continuity while simultaneously creating opportunities for innovation and the development of more adaptive work systems. The ability to anticipate disruptions, implement risk mitigation measures, and accelerate recovery processes becomes a critical factor in ensuring the success of organizational transformation. Without adequate resilience, transformation efforts are likely to be hindered by unmanaged risks.

Furthermore, continuous organizational transformation also contributes to strengthening strategic resilience. The transformation process encourages organizations to enhance their adaptive capacity, improve management systems, and optimize resource utilization. This indicates that the relationship between strategic resilience and organizational transformation is reciprocal and mutually reinforcing.

Thus, the integration of strategic resilience and organizational transformation becomes a key factor in enhancing organizational competitiveness and sustainability. Organizations that effectively manage this relationship will have a competitive advantage in dealing with uncertainty and will be better positioned to achieve sustainable growth in high-risk industries.

4. Conclusion

This study concludes that Occupational Safety and Health (OSH) performance plays a crucial role in enhancing strategic resilience and driving organizational transformation in high-risk industries. This is supported by empirical data from Riau Province, where 9,416 workplace accident cases were recorded during the period of January to June 2025, with 32 fatalities increasing to 33 cases by August 2025. These figures indicate that the level of occupational risk remains high and suggest that OSH performance has not yet reached an optimal level, potentially affecting operational stability and organizational resilience.

Effective OSH performance has been shown to support organizations in anticipating risks, maintaining operational continuity, and enhancing their adaptability to changes in the business environment. In addition, OSH performance contributes to organizational transformation through improvements in work

processes, the strengthening of safety culture, and the utilization of technology in risk management. The implementation of OSH should be directed toward achieving the **Zero Fatality** target as a key indicator of success in protecting workers while ensuring sustainable operations.

The implications of this study highlight that integrating OSH into organizational strategy is a key factor in enhancing competitiveness and sustainability, particularly in high-risk industries in Riau Province. Therefore, organizations need to strengthen OSH implementation not only as a regulatory obligation but also as part of a long-term business strategy. Future research is recommended to adopt empirical approaches using primary data to examine the relationships between OSH performance, strategic resilience, and organizational transformation more comprehensively, as well as to expand the scope of industries under investigation.

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