JMI Jurnal Multidisiplin Indonesia

Volume 5 Number 6, 2026
E-ISSN: 2964-9048 | P-ISSN: 2963-2900
https://jmi.rivierapublishing.id/index.php/rp

Analysis of Risk Management Strategies in the Handling of Natural Disaster Claims: A Phenomenological Study of Loss Adjuster Companies in Indonesia

Arief Prasojo Singgih
Sekolah Tinggi Manajemen Asuransi Trisakti, Indonesia
Email: ariefelva@gmail.com

Keywords

risk management, natural disaster claims, loss adjuster, interpretative phenomenological analysis, adaptive risk management strategy.

Abstract

Indonesia is highly vulnerable to natural disasters due to its location on active tectonic plates and within the Pacific Ring of Fire, exposing the country to earthquakes, tsunamis, floods, and landslides. The increasing frequency and severity of these events have placed significant pressure on the insurance sector, with surges in disaster claims impacting solvency and financial stability. This study aims to analyze adaptive risk management strategies employed by loss adjuster companies in handling natural disaster claims. Using a qualitative phenomenological approach with Interpretative Phenomenological Analysis (IPA), data were collected from 20 experienced loss adjusters through semi-structured interviews, supplemented by company documents, SOPs, and regulatory reports. Analysis revealed five emergent themes: multi-source risk identification, interpretative risk assessment, proximate cause determination, adaptive risk mitigation, and tacit knowledge-based decision making. These themes highlight that effective disaster claim management relies not only on formal procedures and technical evidence but also on professional experience, intuition, and continuous learning. The study concludes with a conceptual model of adaptive risk management, demonstrating that integrating evidence-based investigation, field experience, and tacit knowledge enhances decision quality, accountability, and organizational resilience. The findings provide theoretical insights and practical guidance for loss adjuster companies and regulatory bodies to strengthen disaster claim handling and risk management frameworks.

INTRODUCTION

Indonesia is one of the countries with the highest level of natural disaster vulnerability in the world because it is located in the zone of the confluence of active tectonic plates and the Pacific fire ring region (Fuady et al., 2021). This geographical condition makes Indonesia vulnerable to various geological disasters such as earthquakes, tsunamis, and volcanic eruptions, as well as hydrometeorological disasters such as floods, extreme weather, and landslides. Data from the National Disaster Management Agency (BNPB) shows that in the 2018–2025 period, more than 95% of disaster events in Indonesia were dominated by hydrometeorological disasters with a significant trend of increasing frequency and impact (BNPB, 2024). Several major events such as the Lombok and Palu earthquakes in 2018 and the Cianjur earthquake in 2022 show the magnitude of the economic losses caused. This phenomenon is in line with global climate change reports that show an increase in the intensity of extreme weather events due to global warming (IPCC, 2023).

The increase in the frequency and intensity of these disasters has a direct impact on increasing the burden on the national economy, especially in the financial protection sector. The insurance industry as one of the financial risk mitigation mechanisms is facing significant pressure due to a surge in claims that occur simultaneously in various types of disasters. The Indonesian General Insurance Association (AAUI) reported that claims in property and industrial lines have increased sharply, especially due to major floods in the Greater Jakarta and Java areas in the 2020–2022 period, as well as the impact of the Cianjur earthquake in 2022 (AAUI, 2023). The Financial Services Authority (OJK) also emphasized that the increase in disaster claims contributed to the pressure on the solvency ratio of insurance companies (OJK, 2024). This condition shows that the uncertainty in disaster risk estimation is still quite high and requires a more accurate and comprehensive validation process.

In this context, the role of the loss adjuster has become increasingly strategic as an independent party responsible for investigating claims, identifying the cause of losses, and determining the appropriate claim value based on the policy provisions. The process of handling disaster claims has a much higher level of complexity than conventional claims, because it is faced with uncertain field conditions, limited access, infrastructure damage, and high time pressure. A simultaneous surge in large claims requires loss adjusters to maintain quality, accuracy, and objectivity in every investigation process. Studies show that post-disaster conditions often pose systemic pressures for the insurance industry, including limitations of initial data and difficulties of verification in the field (Santos et al., 2022). Loss adjusters in Indonesia face various technical and operational obstacles in the investigation process (Marzuki, 2022).

Along with technological developments, the loss adjusting process has undergone a transformation through the use of digital tools such as drones, satellite imagery, and information technology-based scoring systems. This technology has been proven to be able to increase the efficiency and speed of the investigation process (Tawfik & El Feky, 2024). Nevertheless, the use of technology cannot completely replace the role of empirical experience and professional intuition in decision-making. In catastrophic situations full of uncertainty, loss adjusters often rely on tacit knowledge gained through field experience. This tacit knowledge is an important factor in supporting the quality of decisions, especially in conditions of limited information and complex situations (Nonaka & Takeuchi, 2021).

Based on this description, there is a significant research gap related to the lack of studies that integrate risk management, phenomenological experience, and tacit knowledge in the context of loss adjuster work. Most previous research has not been able to explain how risk management strategies are implemented in real life in complex and dynamic disaster situations. Therefore, the phenomenological approach is seen as the right method to explore the lived experience of loss adjusters in depth. This approach allows researchers to understand how individuals interpret risk, make decisions under stressful conditions, and develop adaptive strategies in dealing with uncertainty (Creswell & Poth, 2018). This research is directed to analyze risk management strategies in handling

natural disaster claims through a phenomenological perspective to fill the gap and make a contribution both theoretically and practically to the Indonesian insurance industry.

Risk management is a systematic process to identify, assess, control, and monitor risks that can interfere with the achievement of organizational goals. According to ISO 31000:2018, risk management includes principles, frameworks, and processes that enable organizations to handle uncertainty in a structured manner. In recent studies, risk management increasingly focuses on the adaptability and resilience of organizations to external dynamics such as natural disasters, climate change, and economic volatility (Rahman & Chen, 2021). In the loss adjuster industry practice, the risk management function includes evaluating the source of risk, assessing the impact of damage, the claims verification process, and technical recommendations to insurance companies. Companies that are able to integrate strategic risk management have been shown to have higher operational resilience in the face of large-scale disasters (Santos et al., 2022).

Natural disaster insurance is an important instrument in risk management that functions as a mechanism for transferring financial risks due to disaster events. Conceptually, insurance is defined as an agreement between the insurer and the insured, in which the insurer compensates for losses incurred due to certain risks in exchange for premiums (Rejda & McNamara, 2021). In the context of natural disasters, the risks incurred have the characteristics of low frequency but high severity events. Along with the increasing intensity of disasters due to climate change, the role of insurance is becoming increasingly strategic in maintaining economic stability and accelerating post-disaster recovery (OECD, 2021; IPCC, 2023). In Indonesia, protection against disaster risks such as earthquakes and floods is usually provided through extended coverage in standard fire insurance policies (AAUI, 2023). The claim process in natural disaster insurance involves various parties ranging from the insured, insurance companies, reinsurance, to loss adjusters as independent parties. This process has become more complex due to a simultaneous surge in the number of claims, limited access to affected locations, and uncertainty about the condition of the damage that is still developing (Carter, 2020).

Natural disasters are events caused by natural phenomena that result in great losses to human life and environmental damage. In the global context, the increase in the frequency and intensity of natural disasters in recent decades has been associated with climate change, environmental degradation, and uncontrolled urbanization (IPCC, 2023). Natural disasters are classified into geological (earthquakes, tsunamis, volcanic eruptions) and hydrometeorological (floods, landslides, storms, droughts). In the context of Indonesia, the dominance of hydrometeorological disasters reaches more than 90% of the total annual occurrences (BNPB, 2024). The UNDRR report (2022) places Indonesia as one of the countries with a high level of risk exposure to geological and hydrometeorological disasters. Disaster management and mitigation includes a series of efforts before a disaster occurs to reduce risk, such as building disaster-resilient infrastructure and strengthening early warning systems (Coppola, 2021).

Loss adjusters are professionals who are in charge of investigating, verifying, and assessing claims for damage to the covered object. The role of the loss adjuster is especially important in natural disaster claims due to the more complex investigation process, accompanied by high external pressures (Jaffar & Tan, 2021). From a strategic perspective, the loss adjuster not only ensures the objectivity of the value of the loss, but also acts as a risk manager in the field who conducts advanced risk identification, provides mitigation recommendations, and helps insurers understand a more comprehensive risk profile. Technological developments such as drone mapping, digital assessment, and artificial intelligence also affect the role of loss adjusters in producing more accurate and faster claims reports (Tawfik & El Feky, 2024). From a regulatory perspective, the OJK through POJK Number 24 of 2023 concerning Insurance Loss Assessment Companies regulates the competency and operational standards of loss adjuster companies in Indonesia (OJK, 2023). The risks faced by loss adjusters in natural disaster claims include operational risks (field access, claim surge), technical claims risks (proximate cause determination, policy interpretation), legal and compliance risks, and reputational and professional ethics risks.

Phenomenology is used to understand an individual's subjective experience of a phenomenon. According to Moustakas (1994), phenomenology focuses on lived experience or life experiences spoken directly by participants. The IPA approach contains the concept of double hermeneutics, which is a double interpretation process in which informants attempt to understand their own experiences, while researchers attempt to interpret those understandings (Smith et al., 2009). In modern research, phenomenological approaches are often used to understand decision-making in risky environments, especially in professions that require professional intuition and adaptive responses (Snyder & Chen, 2020). The concept of tacit knowledge developed by Nonaka and Takeuchi (2021) explains that professional knowledge is formed through practical experience and is difficult to transfer through formal procedures alone. This tacit knowledge is an important factor in supporting the quality of loss adjusters' decisions, especially in conditions of limited information and complex situations. Eraut's (2023) research also shows that professional intuition plays an important role in decision-making in complex and unstructured situations.

The conceptual framework of the research is built from the integration of three main concepts: (1) Risk Management Strategy which includes risk identification, risk assessment, risk mitigation, and monitoring and evaluation; (2) Natural Disaster Claims Handling Process which includes damage investigation, analysis of the cause of loss, estimation of claim value, and preparation of reports; and (3) Phenomenological Loss Adjuster Experience which includes perception of risks, field challenges, adaptation strategies, and tacit knowledge. The interconnectedness of the three concepts forms an analytical relationship model: Phenomenological Experience of the Loss Adjuster (PF) → Dynamics of the Claims Investigation Process (DIK) → Risk Management Strategy (SMR). Based on the theory and research gap, three propositions were formulated: (P1) The professional experience of the loss adjuster has a significant effect on the risk

management strategy in handling natural disaster claims; (P2) The complexity of natural disasters encourages the adaptation of risk strategies and the adjustment of company SOPs; and (P3) The interaction between phenomenological experience, field information, and external pressures shape the quality of loss adjuster's decisions in the claims investigation process.

METHOD

Types of Research and Approaches

This study used a qualitative approach with the Interpretative Phenomenological Analysis (IPA) method. This approach was chosen because the purpose of the research is to understand in depth the subjective experience (lived experience) of loss adjusters in handling natural disaster claims. The IPA approach is relevant because it contains a double hermeneutic concept that allows researchers not only to produce descriptions of phenomena, but also to have an in-depth understanding of how risk management strategies are formed in disaster claims handling practices. This approach is also in line with recent views on risk management that emphasize the importance of tacit knowledge, professional intuition, and field experience in the decision-making process (Hopkin, 2022). This research does not use quantitative approaches or statistical analysis, so the findings do not aim to produce statistical generalizations but transferable conceptual understandings (Creswell & Poth, 2018).

Informant Research and Informant Selection Techniques

The research informant includes all professional loss adjusters who work in loss adjuster companies in Indonesia and have experience handling claims due to natural disasters. The sampling technique used is purposive sampling based on the following criteria: (1) minimum five years of experience as a loss adjuster; (2) have handled at least one large-scale natural disaster claim; (3) have professional certification or training related to loss adjusting; and (4) willing to provide information in depth and openly. This research involved 20 informants consisting of senior loss adjusters, claims managers, supervisors, technical adjusters, and company leaders. The number of informants exceeded the IPA's recommendation of 6–12 informants (Creswell & Poth, 2023) to achieve more comprehensive saturation data and improve the validity of cross-case analysis.

Data Collection Methods

Primary data were obtained through semi-structured in-depth interviews. Each interview lasted 60–90 minutes and was recorded with the informant's permission. Interview materials include experience handling disaster claims, risk and damage analysis processes, technical and nontechnical challenges, adaptation strategies and critical decisions, and professional learning and personal reflection. Secondary data was obtained from company documents, SOPs for handling claims, OJK regulations (POJK No. 24 of 2023), BNPB official reports, and insurance industry publications. Indirect observations were carried out through the analysis of damage photos, technical documents, and field investigation footage. Secondary data were used to triangulate and reinforce the primary

findings (Miles, Huberman, & Saldaña, 2020). Research ethics are applied through informed consent, the principles of confidentiality and anonymity (each informant is given a special code), non-maleficence, and scientific integrity through triangulation and member checking (Smith, Flowers, & Larkin, 2022).

Data Analysis Techniques

The data analysis in this study uses the science approach developed by Smith et al. (2009). The stages of analysis include: (1) Reading and Re-reading repeated reading of interview transcripts to understand the context of the informant's experience; (2) Initial Noting initial recording of important statements, keywords, and meanings; (3) Developing Emergent Themes identification of initial themes; (4) Searching for Connections Across Themes grouping and connecting themes to form a structure of meaning; (5) Cross-case Analysis cross-informant analysis to find common patterns and variations; and (6) Interpretation interpreting meaning and relating it to relevant theory. Testing the validity of data (trustworthiness) includes four aspects: credibility (data triangulation, member checking, repeated in-depth interviews), thickness, dependency (audit trail), and confirmability (triangulation and interpretation retesting).

Table 1. Operationalization of Phenomenological Research Concepts

Key Concepts	Operational Definition	Exploration Indicators	Data Source
Risk Management Strategy	The loss adjuster's professional approach, policies, and actions in identifying, assessing, and handling risks in disaster claims.	Risk identification, SOP adaptation, decision-making, technical analysis, advanced mitigation.	Interviews, SOPs, internal documents.
Natural Disaster Claims Handling	The investigation process, damage verification, technical analysis, and the preparation of claim reports.	Investigation flow, damage assessment, evidence documentation, claim estimation, stakeholder communication.	Interviews, investigation reports, field photos.
Phenomenological Loss Adjuster Experience	Perceptions, reflections, and meanings experienced by the loss adjuster during claims handling.	Emotional experience, risk perception, field challenges, tacit knowledge, learning.	In-depth interviews, field notes.

Source: Processed by Researcher (2026)

Table 2. Phenomenological Interview Instruments (Summary)

No.	Indicator	Sub-Indicators	Main Questions
1	Risk Management Strategy	Identify Risks	How do you identify the various risks that arise in the handling of natural disaster claims in the field?

No.	Indicator	Sub-Indicators	Main Questions
2	Risk Management Strategy	Risk Assessment	How do you assess the level of risk in conditions of information uncertainty and time pressures?
3	Risk Management Strategy	Risk Mitigation	What strategies do you implement to mitigate risk in the claims investigation process?
4	Natural Disaster Claim Process	Damage Investigation	Can you describe your experience in conducting damage investigations on natural disaster claims?
5	Natural Disaster Claim Process	Nearby Cause	How do you determine the main cause of loss (proximate cause) in complex conditions?
6	Phenomenological Experience	Tacit Knowledge	To what extent does experience, intuition, or tacit knowledge play a role in decision-making?

Source: Processed by Researcher (2026)

RESULTS AND DISCUSSION

Informant Overview

This study involved 20 informants who are loss adjuster practitioners with direct experience handling natural disaster claims in Indonesia. The selection of informants was carried out by purposive sampling based on consideration of the relevance of professional experience to the phenomenon being studied. In phenomenological research, the selection of informants does not aim to obtain statistical representations, but rather to gain a deep understanding of the individual's lived experience (Smith, Flowers, & Larkin, 2022). The informants consist of senior loss adjusters, claims managers, supervisors, technical adjusters, and company leaders who have experience in handling various types of natural disaster claims such as floods, earthquakes, landslides, strong winds, fires due to disasters, and various other catastrophic events. Most of the informants have more than five years of work experience and some of them have more than ten years of experience in handling large-scale and complex claims.

Based on the results of the interviews, it was found that all informants faced relatively similar challenges, namely data limitations, pressure on claim settlement time, difficult location access, potential moral hazards, differences in policy interpretation, and the need to make decisions in conditions of incomplete information. This condition shows that the process of handling natural disaster claims is a complex activity and requires a combination of technical skills, field experience, and professional judgment. These findings are in line with the concept of risk management which states that risk management in conditions of high uncertainty requires adaptive skills, information-based decision-making, and continuous organizational learning (Hopkin, 2021; ISO 31000, 2018).

Table 3. Characteristics of Research Informants

Code	Departments	Experience	Specialization
AGS (I-1)	Manager Loss Adjuster	> 15 years old	Property & Industry
RA (I-2)	Staff Loss Adjuster	5–10 years	Natural Disasters
KA (I-3)	Staff Loss Adjuster	5–10 years	Construction & Property
I-4	Senior Adjuster	> 10 years	Catastrophic
AD (I-5)	President Director	> 20 years old	All claim lines
NI (I-6)	Staff Loss Adjuster	5–10 years	Floods & Earthquakes
U.S. (I-7)	Manager Loss Adjuster	> 15 years old	Major & Complex Loss
OK (I-8)	Branch Manager	> 15 years old	All claim lines
DH (I-9)	Technical Adjuster	5–10 years	Engineering
RR (I-10)	Manager Loss Adjuster	> 15 years old	Industrial Property
SAW (I-15)	Supervisor Marine	> 10 years	Marine & Disaster
APS (I-19)	Staff Loss Adjuster	5–10 years	Hydrometeorology
I-11 to I-14, I-16 to I-18, I-20	Supervisor/Senior/Technical Staff	5–15 years	Different types of claims

Source: Primary Interview Data (2026)

Initial Noting Results

The initial noticing stage is the first stage in the science analysis process which aims to deeply understand the subjective experience of the informant. At this stage, the researcher conducts repeated reading of the entire interview transcript to identify descriptive, linguistic, and conceptual comments. From this process, six key patterns of experience were found that consistently emerged in most informants: (1) risk identification based on multi-source verification; (2) risk assessment based on severity and coverage; (3) adaptation to field uncertainty; (4) risk mitigation through investigation and documentation; (5) the complexity of determining proximate cause; and (6) the role of professional experience and intuition.

Regarding risk identification, Informant 5 explained that the analysis process began based on the type of disaster, then data verification and field information validation were carried out through direct surveys, reports from the insured, and external sources such as BMKG or local authorities. Informant 2 added the importance of checking in the media related to the incident, then field inspections to verify the most likely potential disasters. Regarding risk assessment, Informant 8 starts with the validation of the cause of loss, evaluation of severity and exposure, and in-depth policy analysis. Informant 6 stated that the highest risk is not always in the greatest value for money, but in the uncertainty of the cause and potential for legal disputes. In terms of adaptation to uncertainty, Informant 8 prioritizes the principles of materiality and risk priority, while

Informant 6 states that data uncertainty can be managed by triangulating sources and transparent documentation of assumptions.

Regarding risk mitigation, Informant 1 emphasized the importance of immediate investigation, good documentation, and cross-checking all data. Informant 8 added that early assessment and site verification were carried out to secure the initial facts and prevent loss escalation. Regarding the complexity of proximate causes, Informant 6 views it as the most critical and often the most complex step, while Informant 8 conducts an end-to-end chronological analysis of events to identify the most dominant cause-and-effect relationships. Regarding the role of intuition and experience, Informant 2 stated that professional experience and intuition play a role up to 70% in the success of decision-making on complex or high-value claims. Informant 8 added that pattern recognition from previous cases helps identify key risks and prioritize analysis more effectively.

Interpretative Coding Results

The interpretative coding stage is a follow-up analysis process after initial noting, where the researcher begins to interpret the hidden meanings behind the informant's experience through hermeneutic dialogue. Based on the analysis of all interview transcripts, six main groups of interpretive codes were found. First, the construction of risk reality through multi-layered verification, shows that risk is understood as a reality that must be constructed through a series of tests on various sources of information this is an epistemological process, not just a technical activity. Second, risk as a combination of uncertainty and professional responsibility, suggests that there is a reflective awareness that any claim recommendation has the potential to have consequences for many parties. Third, professional adaptation to information limitations, shows that the main competence of a loss adjuster is not just technical skills, but the ability to manage uncertainty productively.

Fourth, risk mitigation through the formation of defensible decisions, where documentation is perceived not only as an administrative function but as a tool for legitimacy of decisions and protection against potential disputes. Fifth, the negotiation of meaning in determining proximate cause, shows that proximate cause is not just an objective fact that can be found directly, but the result of interpretation of various evidence, chronology, and policy context. Sixth, the internalization of tacit knowledge in decision-making, where work experience gradually forms tacit knowledge that becomes the main source of professional decision-making this knowledge is personal, contextual, and difficult to explain formally. These six interpretive codes as a whole show that risk management strategies in loss adjuster companies are built through a combination of formal procedures, field experience, and professional judgment.

Emergent Themes

Based on the results of the analysis of all interview transcripts, five main emergent themes were found. The first theme, Multi-Source Risk Identification, describes risk identification through triangulation of various sources of information. Phenomenologically, the loss adjuster views risk as a reality that must be constructed through a process of repeated verification risk is not something that is immediately

visible, but must be discovered through the interaction between field facts and professional interpretation. The second theme, Interpretative Risk Assessment, shows that risk assessment is an interpretive process that involves analytical skills as well as interpretive skills there is a shift from a purely quantitative risk paradigm to an understanding of risk as a multidimensional phenomenon. The third theme, Proximate Cause Determination, describes the loss adjuster as a meaning-maker who seeks to understand the cause-effect relationship. This theme shows that proximate cause is a central point in risk management strategies because it has a direct effect on claims payment decisions.

The fourth theme, Adaptive Risk Mitigation, describes risk mitigation as an ongoing process of adaptation informants do not wait for ideal conditions to act, but seek to optimize the information available at the time. This theme also shows the importance of communication, coordination, documentation, and the use of technology in supporting the effectiveness of mitigation. The fifth theme, Tacit Knowledge-Based Decision Making, illustrates that decisions in handling disaster claims do not only depend on SOPs or formal data. The phenomenological meaning that emerges is that professional experience produces tacit knowledge knowledge acquired through practice and difficult to explain explicitly that becomes a strategic resource in dealing with situations that cannot be fully explained by theory. These five themes form a conceptual framework that explains how loss adjusters manage uncertainty, complexity, and risk in handling natural disaster claims.

Table 4. Emergent Themes and Descriptions

No.	Main Themes	Phenomenological Meaning	Representative Quotes
1	Multi-Source Risk Identification	Risk is constructed through multi-source triangulation; It is not accepted as such.	"I verify data and validate field information, both through direct surveys, insured reports, and BMKG." (AD, May 2026)
2	Interpretative Risk Assessment	Risk assessment is multidimensional covering technical, financial, and legal aspects.	"The highest risk is not always in the greatest value for money, but in the uncertainty of the cause and potential legal dispute." (NI, May 2026)
3	Proximate Cause Determination	Proximate cause is an interpretive process that involves chronological reconstruction and negotiation of meaning.	"Determining the root cause of loss is the most critical and often the most complicated step." (NI, May 2026)
4	Adaptive Risk Mitigation	Mitigation is adaptive and lasts throughout the claims cycle, not just after a loss has occurred.	"Early assessment and site verification are conducted to secure the initial facts and prevent loss escalation." (OK, May 2026)

No.	Main Themes	Phenomenological Meaning	Representative Quotes
5	Tacit Knowledge-Based Decision Making	Experience forms tacit knowledge as a source of professional excellence that cannot be fully written in SOPs.	"Professional experience and intuition play a role up to 70% in successful decision-making." (RA, May 2026)

Source: Science Analysis Results (2026)

Cross-Case Analysis

Cross-case analysis of 20 informants showed a high degree of convergence on five key aspects, although there were variations in operational approaches. First, convergence in risk identification: all informants agreed that risk identification should be carried out through a combination of field observation, document verification, and incident context analysis. Variations were found in the focus of identification some informants placed more emphasis on physical damage, while others emphasized policy aspects and validity of coverage. Second, convergence in risk assessment: most informants agree that the level of risk is determined by a combination of technical, financial, legal, and operational aspects. Informants with technical backgrounds tend to focus on severity, while those who handle corporate claims emphasize the contractual aspect. Third, convergence in the determination of proximate cause: all informants place it as the most critical element and admit that most claims disputes stem from differences in interpretations of the main cause of loss. Informants who frequently handle large-scale earthquake and flood claims report more cases with multiple proximate causes.

Fourth, convergence in mitigation strategies: almost all informants emphasize quick action, good documentation, and effective communication. Variations relate to specific techniques some prioritize team coordination; others emphasize historical data or the involvement of independent experts. Fifth, convergence in tacit knowledge-based decision-making: all informants recognize the importance of professional experience. The difference lies in confidence levels senior informants are more confident using intuition, while younger informants rely more on formal procedures and consultation with seniors. This shows that tacit knowledge develops gradually through the accumulation of field experience. In addition to the convergence, divergences were found between theory and field practice. Informant 3 states that theory provides a legal basis and legitimate limitations, but field practice demands intuition, negotiation, and an understanding of operational technicalities. This pattern shows that the loss adjuster's competence lies not only in understanding the theory, but also in the ability to translate the theory into unique and dynamic situations.

Phenomenological Interpretation and Research Findings Model

The phenomenological interpretation stage produces five main meaning structures. First, risk is interpreted as a multidimensional reality the informant perceives risk not as an external object to be avoided, but as an inherent part of the reality of work that must be understood and managed continuously. Second, investigation is interpreted as a process of searching for the truth for informants, investigation is not just about

fulfilling administrative procedures, but an effort to reconstruct a series of events that result in losses. Third, professional judgment is interpreted as a mechanism for adapting to uncertainty the loss adjuster does not act as a passive executor of procedures, but rather as an actor who actively interprets the situation and chooses the best course of action. Fourth, experience is interpreted as a source of tacit knowledge work experience not only serves as a memory of the past, but also as an interpretive framework that helps individuals understand the current situation. Fifth, risk management is interpreted as a continuous learning process mistakes, obstacles, and successes are all sources of knowledge to improve the quality of decisions in the next case.

Based on the overall science analysis process, this study produced a conceptual model called Adaptive Risk Management Strategy in Natural Disaster Claims Handling. This model consists of five main components that make up the adaptive cycle: (1) Risk Identification and Situational Awareness; (2) Evidence-Based Investigation; (3) Professional Judgment under Uncertainty; (4) Tacit Knowledge Integration; and (5) Continuous Learning and Risk Improvement. The essence of the informants' experience can be formulated as the process of managing uncertainty through the integration of evidence-based investigations, risk interpretation, professional experience, and continuous learning to produce fair, objective, and accountable claims decisions. In contrast to conventional risk management models that are procedural and linear, this model is adaptive, interpretive, and experience-based.

Table 5. Components of the Adaptive Risk Management Strategy Model in Natural Disaster Claims Handling

No.	Model Components	Description	Confirmed Propositions
1	Risk Identification & Situational Awareness	Build an initial understanding through multi-source triangulation and multi-layered verification.	Q1: Professional experience influences risk identification strategies.
2	Evidence-Based Investigation	Systematically collect and verify physical evidence, documentation, and forensic data.	P3: The interaction of field information and external pressures shapes the quality of decisions.
3	Professional Judgment under Uncertainty	Integrate incomplete data with experience and historical data for defensible decisions.	P3: Interaction of phenomenological experience and field information.
4	Tacit Knowledge Integration	Utilize professional intuition and pattern recognition from accumulated field experience.	Q1: Professional experience has a significant impact on strategy.
5	Continuous Learning & Risk Improvement	Conducting post-claim evaluation, lesson learned, and improving organizational procedures.	P2: The complexity of disasters drives adaptation of strategies and SOPs.

Source: Phenomenological Analysis Results (2026)

The findings of this study expand the understanding of risk management which has been seen as more of a procedural and formal process. First, multi-source-based risk identification is in line with the principles of ISO 31000:2018 which places risk identification as the main foundation. However, this research shows that the process is not just a technical activity, but an epistemological attempt to build professional beliefs about the truth of an event. This broadens the understanding that the quality of risk identification is largely determined by the accuracy of the information sources chosen, not just compliance with procedures. Second, the findings regarding interpretive risk assessment support the view of Aven (2021) that modern risk should be understood as a combination of consequences and uncertainty. In the context of loss adjusting, such uncertainties are not only technical, but also social and interpretive involving policy interpretation, stakeholder communication, and legal consequences.

Third, the complexity of proximate cause reinforces the research of Baker and McKenzie (2021) which places causal analysis as a central element in the investigation of catastrophic claims. Zurich Risk Insights (2024) also states that most claim disputes are rooted in differences in interpretation regarding proximate cause. These findings confirm that the ability to accurately determine proximate causes is a core competency that must continue to be developed. Fourth, adaptive risk mitigation was found to support the concepts of adaptive risk management (Comfort et al., 2023) and UNDRR (2023) which emphasize the importance of organizational resilience through adaptability. This research shows that risk mitigation in the context of disasters is not just a reactive action, but a proactive process that takes place throughout the claims cycle. Fifth, the dominant role of tacit knowledge is consistent with the theories of Nonaka and Takeuchi (2021) and Eraut (2023). This study provides empirical evidence that tacit knowledge is formed through direct experience and becomes a strategic resource that differentiates the quality of decisions between experienced and less experienced loss adjusters. Sixth, continuous learning is in line with organizational learning theory (Argote, 2022) and the findings of UNDRR (2023) which emphasize post-disaster learning as an important element of organizational resilience.

CONCLUSION

This study successfully identified and formulated the Adaptive Risk Management Strategy in Natural Disaster Claims Handling model which consists of five main components, namely Multi-Source Risk Identification, Interpretative Risk Assessment, Proximate Cause Determination, Adaptive Risk Mitigation, and Tacit Knowledge-Based Decision Making, which all of which form an adaptive cycle in handling natural disaster claims. Key findings show that risk management strategies in loss adjuster companies in Indonesia are adaptive, interpretive, and experience-based: the success of claims handling is determined not only by formal procedures and technical evidence, but also by the ability of loss adjusters to integrate multi-source information, accurately determine proximate causes, utilize tacit knowledge and professional judgment in uncertain situations, and learn of each case handled. The study also found that risk is perceived as a

multidimensional reality that simultaneously involves technical, legal, operational, social, and psychological aspects, so its management requires an approach that goes far beyond procedural compliance. Based on these findings, loss adjuster companies are recommended to develop knowledge management systems that allow tacit knowledge transfer from senior practitioners, strengthen multidisciplinary mentoring and training programs including disaster risk analysis and proximate cause analysis, and accelerate the adoption of digital technologies; regulators such as the OJK are advised to strengthen the professional competency standards of loss adjusters and develop specific guidelines for handling disaster claims including data integration between the insurance industry, disaster agencies, and meteorological institutions; and for further research, it is recommended to involve multiple stakeholders, use a mixed-methods approach to test and validate the model quantitatively, and explore the influence of digital transformation and climate change on future loss adjusting practices.

REFERENCES

Argote, L. (2022). Organizational learning: Creating, retaining and transferring knowledge (3rd ed.). Springer.

Aven, T. (2021). Risk science: An introduction. Routledge.

BNPB. (2024). Indonesian disaster information data (DIBI) and national disaster reports in 2024. Jakarta: National Disaster Management Agency.

Carter, R. L. (2020). Reinsurance and claims management in catastrophe losses. Insurance Institute Press.

Coppola, D. P. (2021). Introduction to international disaster management (4th ed.). Butterworth-Heinemann.

Creswell, J. W., & Poth, C. N. (2018). Qualitative inquiry and research design: Choosing among five approaches (4th ed.). Sage Publications.

Creswell, J. W., & Poth, C. N. (2023). Qualitative inquiry and research design: Choosing among five approaches (5th ed.). Sage Publications.

Eraut, M. (2023). Developing professional knowledge and competence. Routledge.

Fuady, M., Munadi, R., & Fuady, M. A. K. (2021). Disaster mitigation in Indonesia: between plans and reality. *IOP Conference Series: Materials Science and Engineering*, *1087*(1), 12011.

Hopkin, P. (2021). Fundamentals of risk management (6th ed.). Kogan Page.

Hopkin, P. (2022). Risk management: Strategic thinking and governance. Kogan Page.

IPCC. (2023). Climate change 2023: Synthesis report. Geneva: Intergovernmental Panel on Climate Change.

ISO. (2018). ISO 31000:2018 Risk management Guidelines. Geneva: International Organization for Standardization.

Jaffar, N., & Tan, C. H. (2021). Professional competency and claims assessment quality in insurance adjusting practice. Journal of Risk Management, 14(3), 233–249.

Marzuki, M. (2022). Challenges faced by loss adjusters in catastrophe investigations. Indonesian Journal of Insurance and Risk, 9(1), 55–70.

Miles, M. B., Huberman, A. M., & Saldaña, J. (2020). Qualitative data analysis: A methods sourcebook (4th ed.). Sage Publications.

Moustakas, C. (1994). Phenomenological research methods. Sage Publications.

Nonaka, I., & Takeuchi, H. (2021). The wise company: How companies create continuous innovation. Oxford University Press.
OECD. (2021). Building financial resilience to disaster risks. Paris: OECD Publishing.
OECD. (2025). Insurance and catastrophe risk outlook 2025. Paris: OECD Publishing.
OJK. (2023). Financial Services Authority Regulation Number 24 of 2023 concerning Insurance Loss Assessment Companies. Jakarta: Financial Services Authority.
OJK. (2024). Report on the development of the Indonesian insurance industry in 2024. Jakarta: Financial Services Authority.
Rahman, M., & Chen, L. (2021). Risk management framework based on ISO 31000 in the insurance sector. International Journal of Risk and Insurance Management, 12(4), 211–227.
Rejda, G. E., & McNamara, M. (2021). Principles of risk management and insurance (14th ed.). Pearson.
Santos, R., Almeida, P., & Costa, J. (2022). Organizational resilience in the insurance industry after major catastrophic events. International Journal of Disaster Risk Reduction, 73, 102856.
Smith, J. A., Flowers, P., & Larkin, M. (2009). Interpretative phenomenological analysis: Theory, method and research. Sage Publications.
Smith, J. A., Flowers, P., & Larkin, M. (2022). Interpretative phenomenological analysis: Theory, method and research (2nd ed.). Sage Publications.
Snyder, H., & Chen, R. (2020). Decision making under uncertainty: A phenomenological perspective. Journal of Organizational Studies, 41(7), 945–962.
Tawfik, A., & El Feky, M. (2024). Technology adoption in loss adjusting practices: Artificial intelligence and remote assessment. International Journal of Insurance Technology, 11(1), 44–61.
UNDRR. (2022). Global assessment report on disaster risk reduction 2022. Geneva: United Nations Office for Disaster Risk Reduction.
UNDRR. (2023). Global assessment report on disaster risk reduction 2023. Geneva: United Nations Office for Disaster Risk Reduction.
Zurich Risk Insights. (2024). Complex claims and proximate cause: Industry perspectives on catastrophe loss adjustment. Zurich Insurance Group.