

Fraud Risk Management in Life Insurance: Challenges and Control Strategies in the Digital Age

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Abstract

The development of digital technology has driven significant transformations in the life insurance industry, especially in the process of marketing, policy administration, and claims management. Digitalization provides operational efficiency and ease of service, but at the same time increases the complexity of the risk of life insurance fraud. Fraud is no longer limited to conventional practices, but is thriving in the form of digital data manipulation, identity forgery, and collusion that exploits the weaknesses of technological systems. This condition makes fraud risk management a strategic issue that needs to be studied in depth, especially in the context of life insurance in the digital era. This research aims to analyze the challenges of fraud in life insurance and identify risk control strategies implemented in the digital era. This study used a qualitative approach with a case study design. Data was collected through in-depth interviews with management, questionnaires open to licensed employees, and observations of operational processes and internal control systems. The results of the discussion show that digitalization improves service efficiency, but also widens the gap in fraud risk if it is not balanced with adequate control. The main challenges identified include limited human resource competencies, the lack of optimal use of data-based fraud detection technology, and weak internal control culture. The findings of the study also show that there is a gap in perception between management and operational employees regarding the level of fraud risk. The conclusion of this study confirms that life insurance fraud risk management in the digital era requires an integrated approach between technology, governance, and human resource development. Strengthening the internal control system and implementing digital-based preventive strategies are key to mitigating fraud risks in a sustainable manner.

INTRODUCTION

The development of digital technology has brought significant changes to the financial services industry, including the life insurance sector. Digitalization drives operational efficiency through claims process automation, digital platform-based marketing, and the use of big data in risk assessment. However, behind these opportunities, digital transformation also opens up new space for the emergence of fraud risks that are increasingly complex and difficult to detect. Life insurance fraud is no longer limited to falsifying conventional documents, but is developing in the form of digital data manipulation, identity engineering, internal collusion, and misuse of information technology-based systems. This phenomenon makes fraud a serious global issue and has a direct impact on the stability of the insurance industry.

Globally, the increase in life insurance fraud cases has occurred in line with the increasing adoption of digital services by insurance companies and customers. Based on the *Coalition Against Insurance Fraud* (2023) report, losses due to insurance fraud worldwide reach around

USD 308.6 billion per year, with a significant contribution coming from the life insurance sector. Meanwhile, the *Association of Certified Fraud Examiners (ACFE) in its Report to the Nations* (2024) noted that the financial services sector, including insurance, accounts for 16% of total global fraud cases with an average loss of USD 2.5 million per case. At the regional level, *the Insurance Fraud Bureau* (2023) reported that insurance fraud cases in Southeast Asia increased by 23% in the last three years, in line with the post-pandemic acceleration of digital service adoption. This data shows that insurance fraud is not a marginal issue, but rather a systemic threat that requires serious attention from all stakeholders.

In the Indonesian context, the life insurance industry also faces serious challenges related to fraud in the digital era. Based on data from the Financial Services Authority (OJK, 2024), the number of public complaints related to insurance fraud increased by 18.7% compared to the previous year, with increasingly diverse modes and taking advantage of digital system loopholes. In addition, *the Financial Services Authority* report (2023) revealed that life insurance fraud practices include falsifying customer identities, manipulating claim data, and collusion between agents and external parties who take advantage of weaknesses in the digital verification system. A survey conducted by the Indonesian Life Insurance Association (AAJI, 2024) shows that 62% of life insurance companies in Indonesia admit that there has been an increase in fraud risk in the last two years, but only 38% have a technology-based fraud detection system. The level of public financial literacy is still relatively low (Indonesia's financial literacy index has only reached 49.68% according to the OJK, 2022) is also a factor that increases vulnerability to fraudulent practices. Rapid digitalization has not been fully balanced with human resource readiness, cybersecurity infrastructure, and a strong risk management culture. As a result, life insurance companies in Indonesia are in a vulnerable position to various fraud modes, both carried out by customers, agents, and internal party companies.

Fraud on life insurance not only impacts companies, but also harms policyholders collectively. Losses due to fraud can increase the company's operating costs, which ultimately has the potential to affect premiums, service quality, and the sustainability of protection for honest customers. In addition, weak fraud risk control can also trigger legal and reputational problems, which further worsens the image of the insurance industry in the eyes of the public. Therefore, fraud risk management is a crucial aspect that cannot be separated from the life insurance business strategy in the digital era.

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that increases vulnerability to fraudulent practices. Rapid digitalization has not been fully balanced with human resource readiness, cybersecurity infrastructure, and a strong risk management culture. As a result, life insurance companies in Indonesia are in a vulnerable position to various fraud modes, both carried out by customers, agents, and internal party companies.

Research in Indonesia is still relatively limited. Idrus, (2023) examines fraud in life insurance companies in Indonesia with a simple qualitative approach, but has not specifically discussed the dynamics of fraud in the context of digital transformation. (Puspasari, 2015) discusses the evolution of fraud theory and its relevance to fraud prevention, but the research focuses on the context of village government, not the insurance industry. Thus, there are still significant *research gaps*, namely: (1) there is no research that comprehensively examines the risk management of life insurance fraud in the digital era with an integrative approach, (2) there are limited research that discusses the readiness of organizations and human resources in dealing with digital fraud, (3) there is still little research that compares the perception between management and operational employees on the risk of fraud in the digital era. digital era, and (4) the absence of a contextual and applicable fraud risk management framework for the life insurance industry in developing countries such as Indonesia.

The urgency of this research is getting stronger along with the life insurance industry's increasing dependence on digital technology. Without an adaptive and comprehensive risk management strategy, digitalization can actually backfire on companies. The risk of poorly managed fraud threatens not only financial performance, but also the sustainability of the industry as a whole. Therefore, a scientific study is needed that is able to identify the main challenges of life insurance fraud in the digital era while formulating relevant and realistic risk control strategies.

The novelty or novelty of this research lies in several aspects that distinguish it from previous research. This study adopts an integrative approach that combines the perspectives of risk management, life insurance fraud, and digital transformation, which has not been widely done in the existing literature. In contrast to (Eling & Lehmann, 2018) which focuses more on the insurance value chain, or (Aslam et al., 2022) which is limited to the technical aspects of fraud detection, this study simultaneously examines the form of fraud, causative factors, implementation gaps, and control strategies in one complete analysis framework. In addition, this study uses a qualitative approach with a case study design involving two different groups of respondents, namely management and operational employees, thus allowing the study to uncover perceptual gaps that were not detected in previous quantitative studies. The study also specifically addresses human resource readiness and internal control culture as key factors for fraud risk management success, which is still rarely a major focus in the insurance risk management literature. Furthermore, this study contributes to the development of contextual fraud risk management frameworks for developing countries, where risk characteristics and organizational readiness differ significantly from those of developed countries that were the subject of much of the previous research.

The main objective of this study is to analyze the fraud challenges faced by life insurance companies in the digital age as well as identify effective risk control strategies. In particular, this study aims to examine the forms of fraud that arise due to digitalization, evaluate the weaknesses of existing control systems, and formulate strategic recommendations to increase

companies' resilience to fraud risks. Through this goal, this research is expected to provide a more comprehensive understanding of fraud risk management in the life insurance industry.

The benefits of this research are both theoretical and practical. Theoretically, this study is expected to enrich the literature on insurance risk management and fraud by including the digital dimension as a key factor. The findings of this study can also serve as a basis for future research that wants to examine similar topics with more specific approaches or different methods. Practically, the results of this research are expected to be a reference for life insurance companies in designing and strengthening fraud risk control systems that are adaptive to technological developments.

The implications of this study are not only limited to life insurance companies, but are also relevant to regulators and other stakeholders. For regulators, the results of this research can be considered in the formulation of policies and regulations that support the strengthening of governance and consumer protection in the insurance sector. Meanwhile, for industry players and risk management practitioners, this research can be a strategic guide in anticipating and mitigating fraud risks more systematically. Thus, this research is expected to contribute to the creation of a healthier, more transparent, and sustainable life insurance industry in the digital era.

METHOD

Types and Approaches to Research

This research used a qualitative approach with a descriptive-exploratory type of research. The qualitative approach was chosen because this study aims to understand in depth the phenomenon of fraud in life insurance in the digital era, including the challenges faced and risk control strategies implemented by companies. Qualitative research allows researchers to comprehensively explore the meanings, perceptions, and experiences of research subjects, which cannot be measured through numerical data alone.

A descriptive approach is used to describe the actual state of fraud risk management in life insurance, while an exploratory approach is used to identify new patterns, risk control practices, and challenges arising from digital transformation. Thus, this study does not aim to test hypotheses, but rather to build a deeper conceptual understanding of the phenomenon being studied.

Research Design

The research design used is a qualitative case study. The case study was chosen because this study focuses on a specific context, namely fraud risk management practices in life insurance companies that have adopted digital systems in their operations. Through the design of the case study, researchers can analyze the phenomenon of fraud in depth and contextually, taking into account internal and external factors that affect the emergence of fraud risks.

This design allows researchers to examine the relationship between digitalization, internal control systems, and risk management strategies holistically. In addition, case studies provide flexibility in the use of various data sources, thus increasing the richness and depth of research findings.

Location and Research Subject

The location of the research is determined purposively, namely in life insurance companies that have implemented digital systems in the marketing process, policy

administration, and claims management. The selection of this location is based on the consideration that digital-based life insurance companies have a more complex level of exposure to fraud risk compared to companies that are still using conventional systems.

The research subjects include parties that are directly related to fraud risk management, including risk managers, internal control staff, internal auditors, and management parties involved in strategic decision-making. The selection of subjects was carried out by purposive sampling, with the criteria of having sufficient experience and understanding related to risk management and handling of life insurance fraud cases in the digital era.

Research Instruments

In this qualitative research, the researcher plays the role of the main instrument that is directly involved in the process of data collection and analysis. To support the consistency and depth of the data, the researcher used supporting instruments in the form of semi-structured interview guidelines and observation sheets.

The interview guidelines are structured flexibly with open-ended questions that cover key topics such as common forms of fraud, factors that cause fraud, risk control challenges in the digital age, and strategies implemented to mitigate these risks. This instrument allows researchers to tailor questions according to the context and responses of the research subjects, so that the data obtained is richer and more in-depth.

Data Collection Techniques

The data collection techniques in this study were carried out through in-depth interviews, observations, and documentation studies.

In-depth interviews were conducted in person or online with the research subjects to obtain comprehensive information about the experience, views, and practices of fraud risk management applied. Interviews are semi-structured so that researchers can explore important issues that arise during the research process.

Observations are carried out to directly or indirectly observe work processes, internal control flows, and the use of digital systems related to fraud prevention and detection. This observation aims to strengthen the data from the interview results and provide a real picture of the implementation of risk management in the field.

In addition, the documentation study was carried out by examining the company's internal documents, such as risk management policies, internal control procedures, audit reports, and claims handling guidelines. These documents are used as a source of supporting data to validate the findings from interviews and observations.

By using a combination of these data collection techniques, this research is expected to be able to produce valid, in-depth, and comprehensive data on fraud risk management in life insurance in the digital era.

Data Analysis Techniques

Data analysis uses the interactive model Miles, Huberman, and Saldaña (2014) which consists of four components, namely data collection, data reduction by summarizing and categorizing data based on main themes such as forms of digital fraud, factors that cause fraud, and risk mitigation strategies, presentation of data in the form of descriptive narratives and tables, and drawing conclusions that are carried out continuously and verified with other data until they reach saturation.

Data Credibility Testing Procedure

To ensure the validity of the data, this study applied five credibility testing techniques from Lincoln & Guba, (1985). Extended observations were carried out with repeated visits to the research site to build trust and understand the context in depth. Increased diligence is done by carefully re-examining data and digging for information continuously. Triangulation of sources and methods is applied by comparing information from various informants as well as between interview, observation, and documentation methods. Member checks are carried out by resubmitting the interview results to the informant to ensure the suitability of the researcher's interpretation. Negative case analysis is carried out by searching for and analyzing data that does not fit into a general pattern to test the resilience of conclusions.

In addition to credibility, this study also meets the criteria for transferability through the preparation of a detailed and in-depth description of the research context. The dependability criteria are met through a dependency audit by systematically documenting the entire research process as an audit trail (*audit trail*). The confirmability criteria are met by ensuring that the findings come from field data through critical reflection (*reflexivity*) as well as triangulation and member checks that have been carried out. With the application of all data validity testing procedures, this research is expected to produce credible and scientifically accountable findings.

RESULTS AND DISCUSSION

General Description of Respondents

This study involved purposively selected respondents, consisting of management and licensed employees of life insurance companies that have adopted digital systems in their operations. The total number of respondents involved was 22 people, which were divided into two main groups, namely management and licensed employees.

The management group consists of 7 respondents, including risk managers, claims managers, internal auditors, and leaders of information technology units. Meanwhile, the group of licensed employees consisted of 15 respondents, which included certified insurance agents, claims administration staff, and underwriting staff. All respondents have at least three years of work experience and are directly involved in operational processes and risk control.

Table 1. Characteristics of Research Respondents

Respondent Categories	Quantity	Range of Work Experience
Management	7	5–15 years
Licensed Employees	15	3–10 years
Total	22	

Source: Primary data processed, 2025

This description shows that respondents have sufficient competence and experience to provide relevant information related to life insurance fraud risk management in the digital era.

Key Findings from the Interview with Management

The results of in-depth interviews with the management show that digitalization is a double-edged sword in managing fraud risk. On the one hand, technology speeds up the claims

process and improves operational efficiency, but on the other hand, it opens up new loopholes for more sophisticated fraud practices.

The majority of management informants said that the most frequent forms of fraud are manipulation of claim data, digital identity forgery, and collusion between agents and external parties. In addition, the use of digital documents without layered verification is considered to increase the potential for system abuse.

Management also revealed that the main challenges in controlling fraud risk include limited human resources who understand digital technology, lack of analytics-based detection systems, and weak internal reporting culture. Some informants emphasized that there is still internal resistance to changes in the stricter control system because it is considered to slow down business processes.

However, management has begun to implement various control strategies, such as increasing risk-based internal audits, separating work functions, and strengthening digital compliance policies. This strategy is considered to be able to reduce the risk of fraud, although it is not fully optimal.

Findings from the Licensed Employee Questionnaire

In addition to interviews, the study also used an open questionnaire to licensed employees to explore their perceptions of fraud risks and existing control systems. The results of the questionnaire show that most employees are aware of an increase in the risk of fraud along with the digitization of insurance services.

Table 2. Employee Perceptions of Digital Fraud Risks

Statement	Percentage of Respondents Agree
The risk of fraud increases due to digitalization	80%
Control system still needs to be strengthened	73%
Digital fraud training is still limited	67%
Technology helps detect fraud	60%

Source: Research questionnaire results, 2025

The data shows that while employees recognize the benefits of technology, they also consider that risk control is not yet fully in line with digital developments. Licensed employees also revealed that training related to digital fraud is still general and has not touched the technical aspects in depth.

Observation Results

The results of observations made by the researcher on the work process and internal control system show that there is a significant discontinuity between written policies and practices in the field. Although the company has well-documented risk management policies and internal control procedures in place, its implementation at the operational level still faces various obstacles. In some digital claim processes, data verification still relies heavily on the honesty of the agent and the completeness of the documents uploaded by the customer, without being supported by an automatic verification system that is able to detect irregularities or indications of forgery. This creates a significant risk gap, as risk control relies heavily on subjective factors and individual integrity, rather than on objective and measurable system mechanisms. This is exacerbated by the persistent practice of manual verification at certain

stages that not only slows down the process, but also increases vulnerability to data manipulation and human error.

The observation also revealed that the use of digital systems in life insurance operations has not been fully integrated with data-based risk analysis systems. The process of examining claims and identifying indications of fraud is still carried out manually at certain stages, especially in the process of verifying documents, validating customer data, and checking claim history. This reliance on manual processes opens up the opportunity for human errors, such as data input errors, negligence in document examination, or inconsistencies in the implementation of procedures. More than that, the manual process also creates space for data manipulation by internal parties who have access to the system, either through document loss, data alteration, or collusion with external parties. In addition, the observation noted that the digital system used is more oriented towards accelerating administration than on risk detection. The absence of an integrated early warning system causes any new fraud indication to be detected after a long manual check, resulting in slow and less effective response to risk.

In addition, the observation found that the internal reporting system for fraud indications has not been optimally utilized due to concerns about administrative consequences among employees. The reporting mechanisms available tend to be formal and bureaucratic, with no adequate whistleblower protection. As a result, employees who find indications of fraud are more likely to choose not to report or resolve issues informally without going through official channels. This condition not only weakens the early detection system, but also creates a culture of silence that is harmful to the integrity of the organization. These findings are in line with the results of interviews which revealed that there is still internal resistance to changes in the stricter control system because it is considered to slow down business processes and increase administrative burdens.

Overall, the results of the observations confirm that the effectiveness of fraud risk control in life insurance companies has not been optimal due to the gap between formal policies and practical implementation, the lack of integration of analytics technology in operational systems, and the weak internal reporting culture. These three weaknesses are interrelated and create conditions that are vulnerable to fraudulent practices, both by external and internal parties of the company. Therefore, strengthening internal control systems in the digital age requires an approach that focuses not only on technological aspects, but also on developing an organizational culture that supports transparency, accountability, and courage to report indications of fraud.

Visualization of Research Findings

To clarify the results of the study, the following is presented a conceptual and descriptive visualization related to fraud patterns and risk control.

Claims Fraud Operational Process

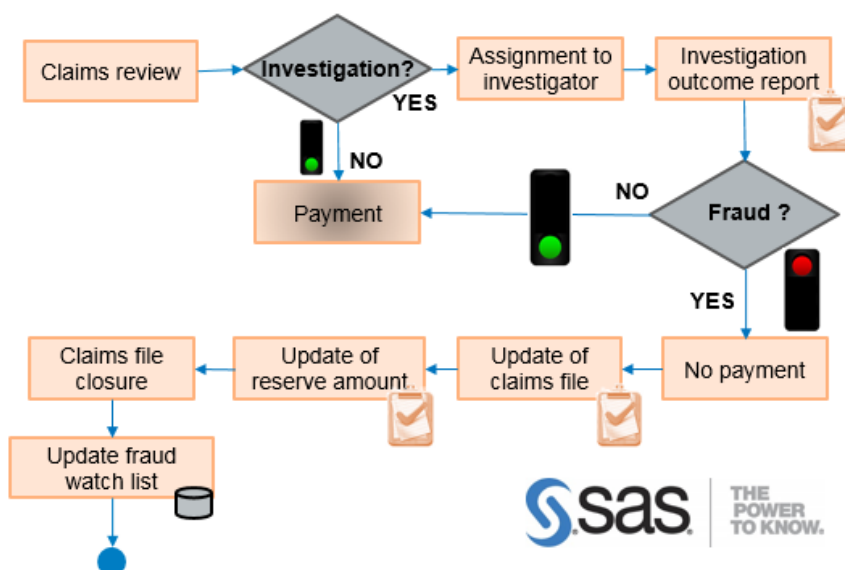


Figure 1. Common Flow of Digital Life Insurance Fraud Risk
Source: Results of observations and research interviews, 2025

The image illustrates how digitalization accelerates service flows, but also expands the points prone to fraud, especially at the claims and data verification stages.

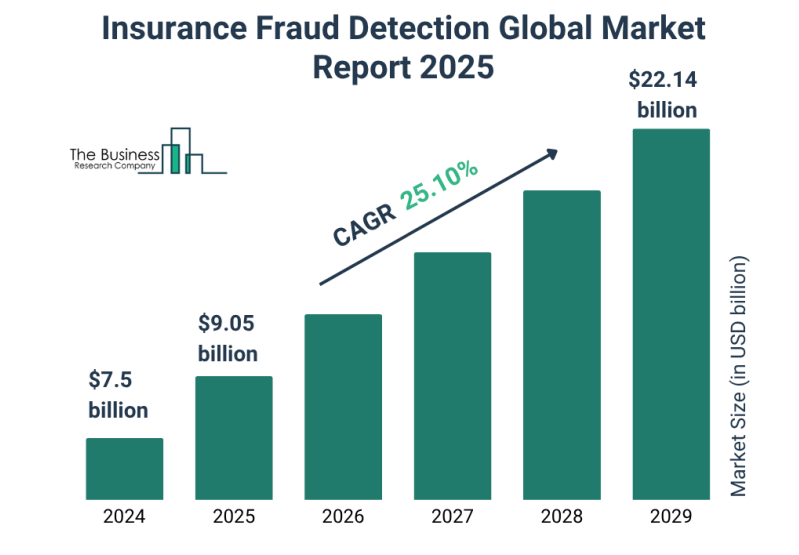




Figure 2. Comparison of Fraud Risk Perceptions
Source: Results of research questionnaires and interviews, 2025

This visualization shows that the perception of fraud risk is higher in the operational employee group than in management, which indicates a perception gap in the organization.

Summary of Findings

Overall, the results show that life insurance fraud in the digital age is a complex and multidimensional phenomenon, which cannot be understood from just one specific point of view. Digitalization has proven to provide significant efficiency benefits for companies,

especially in accelerating claims processes, policy administration, and digital platform-based marketing. However, on the other hand, digitalization also increases the risk of fraud proportionately if it is not balanced with an adaptive, integrated, and supported control system that is supported by overall organizational readiness. The findings from in-depth interviews with management, questionnaires open to licensed employees, and direct observation of operational processes and internal control systems corroborate each other that the main challenges in managing the risk of life insurance fraud in the digital era lie in three main pillars, namely human resource readiness, technology-based detection systems, and internal control culture.

First, from the aspect of human resources, the research reveals that the limitation of digital competence among employees and management is a serious obstacle in detecting and responding to technology-based fraud modes. The training available is still general and has not touched on the technical aspects in depth, so employees do not have adequate skills to identify indications of digital fraud. This is exacerbated by the ongoing internal resistance to changes in the stricter control system because it is considered to slow down business processes. *Second*, from the technological aspect, research shows that the digital systems used have not been fully integrated with data analytics-based risk detection mechanisms. The reliance on manual processes at certain stages causes risk control to be reactive, not preventive, so that companies are always in a position to respond to fraud cases after they have occurred rather than prevent them in the first place. *Third*, from the aspect of internal control culture, the study revealed that there is a significant perception gap between management and operational employees regarding the level of fraud risk, which indicates weak communication and coordination between organizational levels. The internal reporting system for fraud indications has also not been optimally utilized due to concerns about administrative consequences, so that many potential frauds are not detected early.

In addition to these three main challenges, the research also found that companies still face various structural and cultural obstacles in implementing comprehensive fraud risk control strategies. Structural constraints include limited budgets for investment in fraud detection technology, lack of experts in the field of cybersecurity and data analytics, and the absence of operational standards for integrated procedures between departments. Meanwhile, cultural constraints are reflected in the weak risk culture at the operational level, where employees tend to prioritize client completion speed over awareness of potential fraud. This combination of structural and cultural constraints creates conditions that are vulnerable to fraudulent practices, both by external and internal parties of the company.

The results of this study are an important basis for further discussion on effective and sustainable fraud risk management strategies in the life insurance industry in the digital era. The findings outlined show that fraud risk management cannot be done partially or reactively, but rather requires an integrated and sustainable approach that includes strengthening the competence of human resources through ongoing technical training, the use of analytics technology for early detection, and the development of a strong and transparent internal control culture. Without improvements to these three pillars, digitalization, which should be an opportunity to improve efficiency, will instead become a new source of vulnerability that threatens the sustainability of the company and the stability of the life insurance industry as a whole. Therefore, this study confirms that the success of fraud risk management in the digital

age relies heavily on top management's commitment, organizational readiness to change, and continuous investment in the development of technology capabilities and human resources.

Interview Data and Interpretation of Interview Results

The results of in-depth interviews with management show that fraud in life insurance in the digital era is seen as a strategic risk that continues to grow and requires special attention from all levels of the organization. Management recognizes that digitalization brings significant efficiencies, especially in claims processes and policy administration that have become faster and more integrated. However, on the other hand, digitalization also increases the complexity of fraud risk because the perpetrators' modus operandi is increasingly sophisticated and takes advantage of gaps in technological systems that have not been fully tested. Informants from management said that the most common forms of fraud are the manipulation of claim data, digital identity forgery, and collusion between agents and external parties that take advantage of weaknesses in the verification system. The use of digital documents without layered verification is considered to increase the potential for abuse of the system, especially in the claims process which should be a critical point of risk control.

The interpretation of the interview results shows that most management is still in the stage of adapting to digital fraud risks, especially in understanding technology-based fraud patterns that continue to evolve. Management admits that their understanding of digital fraud modes is still limited and has not fully matched the speed of technological development used by fraudsters. This condition causes the control strategies implemented to tend to be reactive and have not proactively anticipated potential risks. In addition, management also revealed that the main challenges in controlling fraud risk include limited human resources who understand digital technology, lack of an integrated analytics-based detection system, and weak internal reporting culture due to concerns about administrative consequences. Some informants emphasized that there is still internal resistance to changes in a stricter control system because it is considered to slow down business processes, resulting in a tug-of-war between the demands of operational efficiency and the need for comprehensive risk control.

Management assesses that fraud is no longer individual and sporadic, but rather increasingly organized and involves networks that systematically exploit digital system loopholes. These findings indicate that fraud risk has undergone a fundamental shift in character, from what was previously considered a conventional operational risk to a strategic risk that requires a strong technology-based control and governance approach. This shift requires companies to not only rely on traditional internal controls, but also develop data-driven early detection capabilities, strengthen cybersecurity, and build rapid and coordinated response mechanisms. Management recognizes that failure to manage fraud risk not only impacts financial losses, but can also damage the company's reputation and lower customer trust, which in turn threatens the long-term sustainability of the business.

In addition, the results of the interviews also show that there is management awareness of the importance of integrating risk management functions, information technology, and internal audits to create a more effective and coordinated control system. Management understands that fraud risk control cannot be carried out partially, but rather requires cross-functional collaboration involving all elements of the organization. However, the implementation of the integration still faces various obstacles, such as limited budgets for technology investments, lack of experts in the field of cybersecurity, and the lack of integrated

operational standards for procedures between departments. Management also acknowledged that although control strategies such as increased risk-based internal audits, separation of work functions, and strengthening digital compliance policies have begun to be implemented, these strategies are not considered to be fully optimal and still require continuous refinement. This shows that companies are still in the process of learning and adjusting in the face of the complexity of fraud risk in the digital era, so long-term commitment and continuous investment are needed to build a resilient and adaptive risk management system.

Discussion of Questionnaire Results

The results of the questionnaire filled out by licensed employees provided a complementary and enriching perspective to the management interview findings, while also revealing the dynamics of different risk perceptions among the two respondent groups. Operational employees tend to have a higher perception of fraud risk than management, with 80% of respondents stating that fraud risk increases due to digitalization. This can be interpreted as a result of the direct involvement of employees in the claims process and daily interactions with customers, so that they are more often in contact with potential fraud in the field. In contrast, management that is more involved in strategic planning and decision-making tends to have a more optimistic view of the effectiveness of the control systems that have been implemented. This perception gap indicates a difference in experience and perspective in dealing with fraud risk, which if not managed properly can hinder communication and coordination between levels of the organization in efforts to mitigate risk.

Furthermore, the discussion of the questionnaire results shows that the majority of employees (73%) consider that the existing control system is not fully able to anticipate the risk of digital fraud. Employees consider that internal control procedures are still conventional and have not adapted quickly to the development of technology-based fraud modes. In addition, as many as 67% of respondents stated that training related to digital fraud is still general and does not provide in-depth technical understanding, such as how to identify indications of digital identity forgery or manipulation of claim data. This limited training has an impact on the low readiness of employees to detect and respond to potential fraud in the digital age, which ultimately increases the vulnerability of companies to fraud risks.

These findings indicate a significant gap between risk management policies designed at the strategic level and their understanding and implementation at the operational level. Policies that have been developed by management are often not followed by adequate socialization, clear technical guidance, or effective feedback mechanisms from employees in the field. These gaps have the potential to weaken the effectiveness of fraud risk control as a whole, as employees at the forefront of the verification and claims handling process do not have sufficient understanding and skills to identify and respond appropriately to fraud indications. This condition is exacerbated by the ongoing internal resistance to changes in the stricter control system because it is considered to slow down business processes, as revealed in interviews with management.

Thus, the discussion of the questionnaire results confirms that fraud risk management in the digital age cannot rely on policies and technology alone, but requires a more holistic approach that includes strengthening the capacity of human resources through continuous technical training, improving communication between organizational levels to align risk perceptions, and developing feedback mechanisms that allow operational employees to convey

input and findings in the field constructively. Only with such an integrated approach can life insurers build stronger resilience to fraud risks in the digital age

Analysis of Observation Results

The results of the observations made by the researchers reinforce the findings from interviews and questionnaires, as well as reveal the gap between formal policies and implementation in the field. Observations show that although companies have well-documented risk control policies and procedures, their implementation at the operational level still faces significant obstacles. In some cases, the digital claims verification process still relies on manual checks and trust in agents or customers, which opens up opportunities for data manipulation. This condition indicates that the internal control system has not fully utilized the potential of digital technology to create an automatic and accurate verification mechanism.

Furthermore, the analysis of the observation results shows that the digital system used in life insurance operations has not been fully integrated with the risk detection mechanism based on *data analytics*. The process of examining claims and identifying indications of fraud is still carried out manually at certain stages, especially in the process of document verification and customer data validation. This reliance on manual processes not only slows down workflows, but also increases vulnerability to *human error* and potential data manipulation by internal and external parties. In addition, the observations revealed that the internal reporting system for fraud indications has not been optimally utilized due to concerns among employees about administrative consequences, which in turn weakens the reporting and early detection culture of potential fraud.

The observational findings also show that the use of analytics technology for fraud detection is still very limited. Companies tend to use digital technology only to speed up the administrative process, without being accompanied by the development of data analysis capacity that is able to systematically identify fraud patterns. As a result, the risk control applied is reactive, namely responding to fraud cases after they occur, rather than preventive measures that are able to detect and prevent fraud before harming the company. This shows that the digital transformation in life insurance has not been fully accompanied by a commensurate transformation of the risk control system, creating a gap between the speed of technological innovation and the readiness of the internal control system. Thus, the results of the observations confirm that the effectiveness of fraud risk management is not only determined by the availability of policies and procedures, but also by the consistency of implementation, technology integration, and the readiness of the organization's culture to support risk control. Without strengthening these three aspects, digitalization has the potential to widen the gap in fraud risk that is increasingly difficult to detect and control

Comparison with Previous Research

The findings of this study reinforce and expand on the results of previous research that stated that digitalization improves operational efficiency but also opens new loopholes for fraud risk in the financial services industry (Eling & Lehmann, 2018), (Akomea-Frimpong et al., 2016). In line with the findings of (Aslam et al., 2022) and (Paula et al., 2021) who highlight the importance of using technology in fraud detection, this study found that life insurance companies in Indonesia are still not optimal in adopting data analytics-based detection systems, which causes risk control to be reactive rather than preventive. These findings also confirm the results of (Idrus, 2023) research in Indonesia which shows that weak internal supervision

systems are the main factor in the increase in fraud cases, but this study goes further by revealing that the perception gap between management and operational employees also weakens the effectiveness of fraud risk control in the digital era.

The main difference between this study and previous research lies in several fundamental aspects. *First*, in contrast to (Eling & Lehmann, 2018) who focused on insurance value chains in the European market with a quantitative approach, this study specifically examines the dynamics of life insurance fraud in the context of digital transformation in developing countries such as Indonesia. *Second*, unlike (Aslam et al., 2022) and (Subudhi & Panigrahi, 2022) who emphasized more on the technical aspects of algorithms and *machine learning* in fraud detection, this study pays attention to organizational readiness and human resources as a key factor in the successful implementation of risk control technology. *Third*, in contrast to the study of (Akomea-Frimpong et al., 2016) which used a quantitative survey in Ghana, this study uses a qualitative approach with a case study design involving two different groups of respondents, so as to be able to uncover the perceived gap between management and operational employees that was not detected in the previous study. *Fourth*, this study complements (Puspasari's, 2015) study on fraud theory by providing a new contextual perspective on how digitalization affects fraud patterns and the effectiveness of risk control at the operational level, which is still rarely discussed in the insurance risk management literature in Indonesia.

Thus, this research makes an original contribution by highlighting the importance of human resource readiness, technology integration, and a culture of internal control as the main pillars of life insurance fraud risk management in the digital era. These findings not only complement previous research, but also open up a new research agenda that examines more deeply the relationship between organizational readiness and the effectiveness of digital fraud control in the context of developing countries.

Practical Implications

The practical implications of this research are particularly relevant for life insurance companies, particularly in designing fraud risk control strategies in the digital age. The results show that companies need to strengthen technology-based fraud detection systems, such as the use of data analytics and early warning systems. In addition, improving the competence of human resources through special training related to digital fraud is an urgent need.

For management, this study confirms the importance of building a strong risk culture and encouraging openness in reporting fraud indications. The integration between risk management, information technology, and internal audit functions also needs to be improved so that risk control does not run partially. From the perspective of regulators, the findings of this study can be the basis for encouraging the strengthening of regulation and supervision of the implementation of digital-based fraud risk management in the insurance industry.

Research Limitations

Although this research makes an important contribution, there are some limitations that need to be considered. First, this study uses a qualitative approach with a relatively limited number of respondents, so that the results of the study cannot be generalized widely to the entire life insurance industry. Second, the data obtained is highly dependent on the openness of respondents, so the potential for subjectivity bias cannot be completely avoided.

Another limitation is limited access to sensitive internal company data, especially related to actual fraud cases and financial losses caused. Therefore, further research is recommended

to combine qualitative and quantitative approaches, as well as involve more life insurance companies so that the results of the research are more comprehensive and representative.

CONCLUSION

This study concluded that fraud in life insurance in the digital era is a complex risk and continues to grow along with the increasing use of digital technology in company operations. Digitalization has been proven to provide significant benefits in improving service efficiency, especially in the claims process and policy administration. However, at the same time, digitalization also widens the fraud risk gap if it is not balanced with an adaptive and integrated risk management system. The results of the study show that the main challenge in managing the risk of life insurance fraud lies in the limited readiness of human resources, the weak use of data-based fraud detection technology, and the lack of optimal internal control culture. Findings from interviews, questionnaires, and observations indicate that there is a gap between risk management policies designed at the managerial level and their implementation at the operational level. Operational employees tend to have a higher perception of risk than management, reflecting differences in experience and viewpoints in dealing with fraud risks in the field. This study also concludes that the fraud risk control strategies implemented are still reactive and have not fully led to a preventive approach. Reliance on manual processes and trust-based verification is a factor that increases vulnerability to digital fraud. Therefore, strengthening the internal control system supported by analytics technology, risk-based audits, and cross-functional integration is an urgent need for life insurance companies. Thus, this study confirms that the success of fraud risk management in life insurance in the digital age is not only determined by technological sophistication, but also by the readiness of the organization as a whole. The development of human resource competencies, strengthening the risk culture, and management's commitment to implementing transparent and accountable governance are key factors in mitigating fraud risks in an ongoing manner. Thus, this research is expected to be the basis for the development of fraud risk management policies and practices that are more effective in supporting the sustainability of the life insurance industry in the digital era.

Based on the findings and conclusions of the research, several suggestions were proposed for stakeholders. For life insurance companies, it is recommended to develop fraud detection systems based on *data analytics* and artificial intelligence, improve human resource competencies through digital fraud technical training, build a safe reporting culture with *whistleblower protection*, and align risk perception between management and operational employees. For regulators, namely the Financial Services Authority and the Indonesian Life Insurance Association, it is recommended to develop regulations and minimum standards for digital-based fraud risk management, strengthen supervision of the implementation of internal control systems, and facilitate knowledge sharing forums between industry players. For future researchers, it is recommended to develop this study with a quantitative approach or mixed methods involving more insurance companies, examine the effectiveness of artificial intelligence technology in detecting fraud patterns, as well as conduct longitudinal studies to observe changes in fraud patterns and the effectiveness of control strategies over a period of time.

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