Insurance Institute of Nepal
इन्स्योरेन्स इन्स्टिच्युट अफ नेपाल

Volume 2, November 2025 ISSN: 3059-9296 (Print)

Journal of Insurance Studies in South Asia (JISSA)

Editorial Board

Patron

Mr.Susil Dev Subedi
Executive Director
Nepal Insurance Authority

Dr. Laxmi Kanta Paudel
Chief Executive Officer
Insurance Institute of Nepal

Mr. Poshak Raj Paudel
Chief Executive Officer
Citizen Life Insurance Company Limited

Mr. Damodar Bhandari
ACEO
Nepal Reinsurance Company Limited

Editorial Message

It is with great pleasure that we present the Second Edition of the Journal of Insurance Studies in South Asia (JISSA). Building on the encouraging response to our inaugural publication, this edition reaffirms our commitment to advancing insurance knowledge, research, and professional discourse across Nepal and the wider South Asian region.

The Journal continues to serve as a credible platform for scholarly inquiry, practical insights, and thought leadership in insurance and reinsurance. Through this edition, we aim to further strengthen academic rigor, encourage evidence-based policymaking, and address evolving industry challenges driven by economic change, technological innovation, regulatory reforms, and emerging risks.

This edition features a diverse range of research articles and professional perspectives that reflect current developments and future directions in the insurance sector. By bridging theory and practice, the Journal seeks to contribute meaningfully to professional excellence and sustainable growth within the industry.

We extend our sincere appreciation to the authors, reviewers, editorial team, and institutional supporters whose continued dedication has made this edition possible. Their contributions enhance the quality, relevance, and impact of the Journal and enrich the collective understanding of insurance in the region.

As JISSA progresses, we remain focused on publishing timely, high-quality research that responds to sectoral needs and global trends. By engaging distinguished scholars and industry experts, we aspire to position the Journal as a trusted reference for academics, practitioners, regulators, and policymakers supporting informed decision making and a resilient insurance ecosystem in South Asia.

Dr. Laxmi Kanta Paudel
Editor-in-Chief

Table of Contents

Inclusive Insurance Policy for Uninsured People: A Systematic Review

Author: Bharat Ram Dhungana, PhD
Email Address: dhunganabharat.pu@gmail.com
DOI: https://doi.org/10.3126/jissa.v2i1.92244

Abstract

Inclusive insurance has become a priority agenda in developing countries like Nepal. This study investigates the inclusive insurance policy for uninsured people using a systematic literature review. The research is based on a review of systematically selected empirical research papers. The Google Scholar search engine was applied using the keywords "social insurance" and "inclusive insurance". All papers that were published from January 2017 to September 2025 have been checked for the study and 21 research papers were selected for this study using the PRISMA framework. The study finds social insurance, microinsurance, public private partnership, solidarity and insurtech model of insurance are effective platforms to expand insurance services to the uninsured people. Adoption of technology-based method, insurance services can be widely expanded and delivered responsive, efficient and inclusive services to the under-served area and people. Inclusive insurance policy is essential to promote collaborative governance with public sectors, market-based instruments, and social institutions to develop a protection framework. Government may promote inclusive insurance environment, enhance capability of insurance institutions and expand the access of insurance services to the uninsured people.

Keywords: Financial inclusion, inclusive insurance policy, social insurance, uninsured people.

1. Introduction

Today, financial inclusion has become a priority agenda around the world. Despite the significant progress in financial inclusion, there is big disparity between developed and developing nations. Millions of people are still uninsured against various risks such as disaster, illness, and livelihood shocks due to poor inclusive insurance policy. Insurance companies play a crucial role in expanding inclusive finance. Inclusive insurance policy includes micro-insurance programmes, social insurance and community-based health insurance schemes designed for the vulnerable people (Zheng & Su, 2022). The low-income households, marginalized population, rural people, and informal sector workers are facing high economic risks due to poor purchasing power of insurance policies. As a result, governments have been progressively involved in administering inclusive insurance programmes in many developing countries around the world.

Insurance policy acts as an instrument of social, business, commercial, economic, and public policy. Insurance systems of developed nations tend to assist for the fulfillment of socio-economic principles. Social instrument element provides a significant supplementary tool for resolving insurance policy and coverage issues (Stempel, 2009). The role of insurance policy is substantial to contribute economic growth in terms of promoting financial stability, empowering trade and commerce, activating savings, tolerating risks, inspiring loss mitigation, and nurturing for efficient provision of capital (Lester, 2014). Increasing financial integration and building inclusive insurance environment are connected with insurance literacy, responsiveness of potential users and their perception regarding insurance benefits (Aheeyar et al., 2019).

Households in developing nations are subjected to extreme risks, with significant values on their welfare. Human life comprises risks, both professional-related and catastrophic, that can harm health, life, and work of people. The insurance products are designed to safeguard the insured from risks, support promises and prevent from significant consequences (Kiwanuka & Sibindi, 2025). Insurance services are essential instruments for managing risks arising from various sources, reducing poverty and adapting to climate issues. Developing countries often face a problem of low insurance penetration due to poor insurance literacy, unaffordable insurance policy, financial constraints of the people, and limited capacity of insurer (Linnerooth et al., 2009; Lou et al., 2024).

Universal health insurance characterizes one the most notable advances for rural-urban integration. Health insurance coverage ensures the fundamental rights related to access of affordable health services to people. It provides constant funding for health insurance security that eliminates the underfunding faced by healthcare providers. Social justice is influenced by one's normative principles in the role of social-economic institutions. Institutional arrangement decides social, political and economic interactions by means of formal rules such as policies and informal limitations such as traditions (Gong, 2022). An effective health policy is required to improve people's healthy life expectancy and well-being (Dhungana et al., 2024). A well-established health insurance structure plays a significant role in standing equality, security of rights and opportunities, and social justice (Golestani et al., 2025).

Smallholder farmers often face challenges of climate hazards and protection of farmers' welfare has become a global concern. Agricultural insurance has appeared as a safety net to empower farmers and enhance productivity. Since poor insurance literacy among the farmers in low-and middle-income countries, agricultural insurance is essential to promote farmers and their livelihood. The role of insurance providers is crucial to enhance insurance awareness through literacy campaigns, marketing movements and training program especially for marginalized farmers. Access to affordable insurance services, awareness and

trust improve the participation of farmers in agriculture insurance programmes. Government provides subsidies to the farmers in both high and low-income countries through affordable insurance agricultural insurance programmes that facilitate to empower small and marginalized farmers (Nshakira-Rukundo et al., 2021).

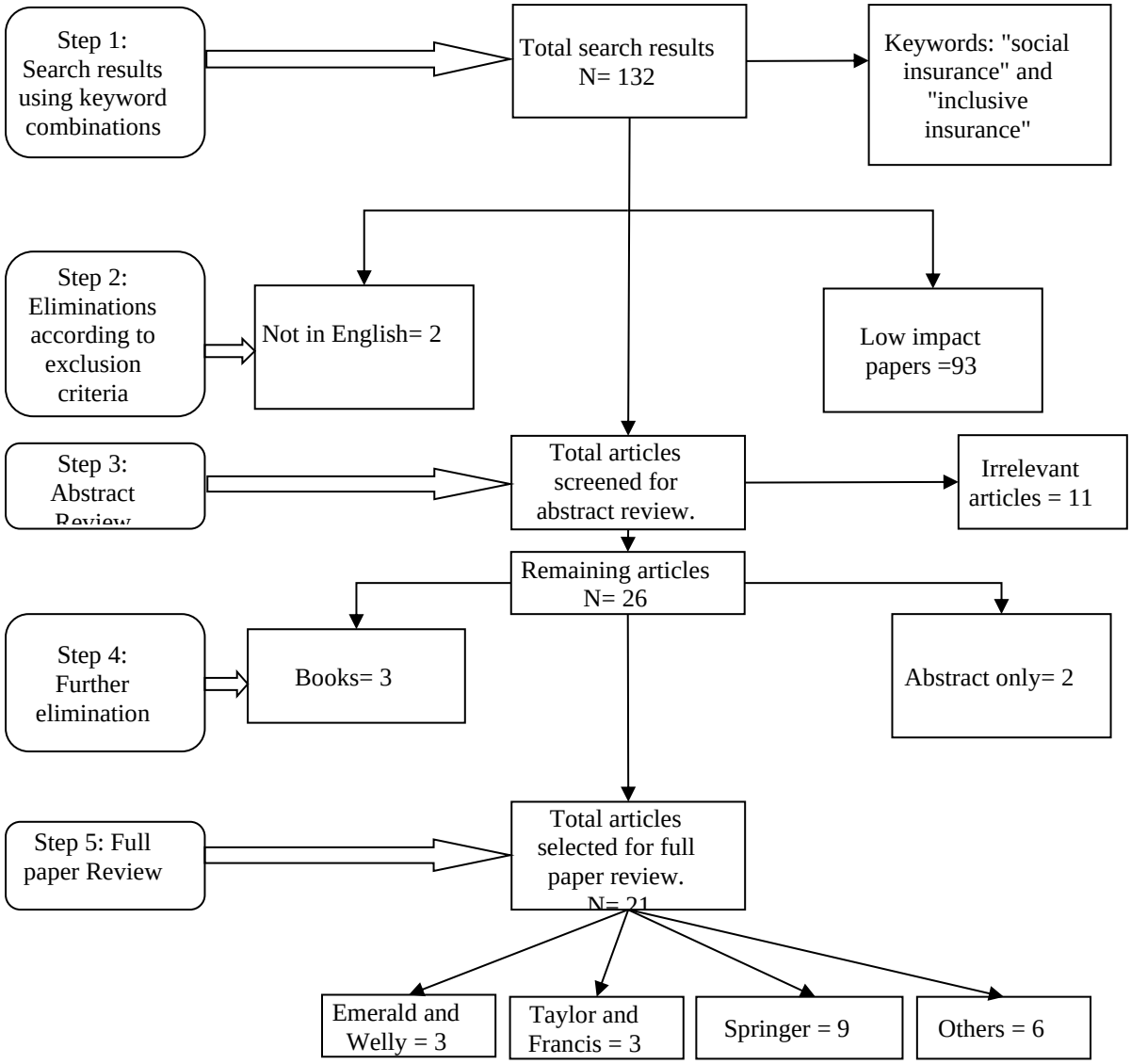
The primary objective of this study is to investigate the inclusive insurance policy for uninsured people. This paper examines the global practices on inclusive insurance models, major determinants of insurance inclusion, and role of government on expanding insurance inclusion among uninsured people. The finding of this study shows inclusive insurance models, key determinants, policy gaps, and innovations in expanding inclusive insurance to the uninsured people. This research is expected to contribute valuable insights to the government, policymakers, and insurer for promoting inclusive insurance programmes in developing nations.

2. Materials and methods

This study aims to assess the inclusive insurance policy for uninsured people. The research is based on a review of empirical studies, reports, and policy documents. The Google Scholar search engine has been used to find research publications on inclusive insurance policy for uninsured people. The search keywords are "social insurance" and "inclusive insurance" under the domain of the Google Scholar Open Database. All papers that were published from January 2017 to September 2025 have been checked for the study. 132 documents were discovered during the initial inquiry. We removed 93 low-impact articles (beyond Scopus and Web of Sciences) and 2 not in English. Out of 37 documents for abstract review, we further removed 11 irrelevant articles, 3 books, and 2 abstracts only. Finally, 21 research papers were selected for this study using a systematic literature review. The inclusion and exclusion criteria for this research are mentioned in Figure 1.

Figure 1

Inclusion and exclusion criteria for this study



3. Results

Global Practices on Inclusive Insurance Models

Based on the systematic review of literature related to the global practices on inclusive insurance models, the following are the key inclusive insurance models:

a. Microinsurance Model

Microinsurance is one of the widely used inclusive insurance models for marginalized people. These products are designed to address risk coverage to uninsured people such as low-income households, rural people, and informal sector workers. Microinsurance products are often related to health, life, property, crops and livestock. It is usually delivered through microfinance institutions (MFIs) and cooperatives with an objective of financial protection

to the uninsured population who are unable to afford conventional insurance products (Bernards, 2018). Microinsurance is a community-grounded method of social protection especially designed for informal workers and low-income households. The growth of digital knowhow and the expansion of market scenarios are key drivers progressing community-based microinsurance platforms concerning a for-profit, digital, and policy-oriented inclusive insurance programme (Perticone & Graz, 2024).

MFIs play a critical role in expanding access to insurance to uninsured people in the form of 'microinsurance'. However, the increase of microinsurance was not adequate with the development of microfinance over the past two decades in India. The key reasons behind the slow growth of microinsurance are: Low insurance literacy and demands in the target population, operational problems, low professional skills, lack of trust, and high cost of insurance through MFIs (Singh, 2023). The "contributive & collaborative" (C&C) model of microinsurance provides a demand-driven and customer-centric option to empower individuals and communities (Dror & Eling, 2025).

b. Social Insurance Model

Social insurance model is a popular program with a view of financial protection arising from unavoidable situations. Social insurance helps to collect contributions from different units and pool risks among social members. Health and pension insurance are the key pillars of the social protection system. Health Insurance is a social security initiative run by the government to support its people to achieve high-quality healthcare while bearing as little financial burden as possible. Social health insurance delivers high-quality medical care without having additional financial burdens. It empowers people to contribute to a health fund that ensures access to specific healthcare services frequently regulated by the government (Gong & Chen, 2023). China has the greatest social insurance system in terms of population in the world. It consists of five components: Basic medical insurance, basic pension insurance, unemployment insurance, work injury insurance, and maternity insurance (Fang & Xu, 2023).

Supplementary private health insurance (SPHI) acts as a critical complement to the social health insurance system. Health insurance is a financial sharing method for medical expenses, shows a critical role in alleviating illness-related poverty and confirming timely access to healthcare for low-income people. Social insurance schemes encourage efficient and equitable healthcare for all individuals. SPHI decreases the possibility of poverty vulnerability for people registered in social health insurance. SPHI is an efficient tool especially in low- and middle-income countries for vulnerable people to decrease medical impoverishment. Governments have directed on executing public health insurance programs in low- and middle-income countries. Emerging nations including China and India are promoting social insurance model to extend inclusive insurance programme. Limited

reimbursement ratios and boundaries have guided health insurance to be less efficient in resolving the economic risks of illness. Increasing SPHI infrastructure helps to expand insurance coverage and improve targeted poverty alleviation (Ma et al., 2025).

c. Solidarity Insurance Model

Solidarity is a source of inspiration for the forming of welfare states as a "moral infrastructure". Social and private insurance agreements protect people against the hazards of illness, accidents, and unemployment. Solidarity model of insurance encourages the notion of solidarity to the excluded people whose individual or social practices challenge the dominant moral order changes. The best way to protect the marginalized people from solidarity is to ensure that the supporting needs of people are connected outside of free market service provision. This model is guided by the principle of mutual risk sharing approach with social justice, equity and collective responsibility (Prainsack & Van Hoyweghen, 2020). Informal risk-sharing networks are substantially dominant in low-income economies and community-based systems in Ghana and South Africa collect funds to cover the unexpected risks (Flores-Contró et al., 2025).

The contribution of individuals is pooled with a view to creating common funds that provide benefits to the members of solidarity groups as per the risk level and their requirement. This model is based on social principles and moral values that rich or healthier people subsidize to poor or sick people to ensure universal financial protection from the unexpected risk or health hazards. This model is practiced in Western Europe to maintain welfare state, and it is a structured and established system of hazard and income solidarity (Prainsack & Van Hoyweghen, 2020). It has been built on from certain groups such as solidarity among workers, solidarity between employers and workers, and solidarity between substantial social groups. A regular contribution is made by such a group as per their paying ability (income level), people are eligible to benefits or assistance to safeguard them against the hazards of illness, unemployment, old age, and other risks.

d. Insurance Technology (InsurTech) Model

InsurTech bring together insurance and technology. It is a comprehensive use of artificial intelligence, big data, blockchain, and other advanced tools to increase the value of insurance entities. Insurtech is a technology-based innovation in financial products for expanding insurance services. With the digitalization of insurance, insurance technologies operate on distinct principles to those applied in Fintech, in particular concerning the pooling of risk conceived for increasing markets for the poor. It helps to expand the global access and power of insurance as an association of easy domination initiating new windows for market development. Insurtech platforms are modern inclusive insurance tools designed to expand

the insurance services to uninsured and low-income population around the world (Perticone & Graz, 2024).

The rapid growth of digital economy and constant improvement of technology, InsurTech has become poplar model. Widespread application of InsurTech has greatly changed the operations of the insurance sector in China. Conventional insurers are vulnerable to failures due to great insurance fraud. Moreover, it relies on manual operations of its transaction including underwriting, claims handling, and investigation. This model concentrates on expanding diverse customer-reaching paths and advanced products for fragmented marketing. Online insurers use internet and mobile based applications for product development, underwriting, claims and customer service, sales and sales promotion to offer continuous customer experience. InsurTech has a significant effect on the insurance business by adjusting risk management, increasing inclusive insurance products, and advancing customer experience (Fang & Xu, 2023).

e. Public Private Partnership (PPP) Insurance Model

PPP insurance model integrates financial and technical ability of insurers with the support of government to expand the insurance coverage to rural and marginalized people. The role of government is to subsidize premiums, increase insurance literacy, regulate insurance products and services, develop insurance infrastructure for technology-based insurance businesses, and promote outreach using national campaigns. This model is effective when it is supported by national financial inclusion strategies, developed digital infrastructure, and policy coherence between inclusive insurance frameworks and social protection to the vulnerable people. However, this model must balance with the public subsidies and long-term sustainability of the insurance industry to retain the service quality. Pradhan Mantri Fasal Bima Yojana (PMFBY) of India is one of the popular PPP models that has increased insurance access to the vulnerable people through blended funding and pooled risk management policy.

PPP can decrease vulnerability to poverty in a cost-effective manner. It helps to enhance productivity and access to resources through advancement of inclusive insurance mechanism. This model can increase access of insurance services, particularly low-income individuals to move out of poverty due to risks. Insurance is protective and productive device in preventing poverty (Flores-Contró et al., 2025). Inclusive commercial health insurance programme in China is promising due to the collaborative governance between the local governments and insurance companies. Collaboration is performing as an innovative explanation to deal with the risks. Government involvement is designed as a collaborative governance with a view to achieving financial protection, innovation, and economic goals. However, the application of this innovative governance mechanism may create prospective

risks arising from alignment of interests, challenging creditworthiness and sustainability, distortion of market rivalry, and regulatory management (Yan & Faure, 2025).

4. Determinants of Insurance Inclusion

The study made by Nshakira-Rukundo et al. (2021) found stable and efficient insurance market can be developed through the following factors: Product design and quality, household earnings and investments, education level, and insurance literacy, behavioural and cultural barriers, and the role of governments in providing an enabling, stable and efficient market. Government may provide subsidies for affordable insurance practices in low-income countries. The crucial role of government is to support in advancing policies, regulating the markets and designing a supporting environment for insurance providers. For this, mandatory insurance schemes and cost-effective strategy is required to expand insurance services to the low-income households.

Insurance penetration levels (life and non-life) determine a measure of the insurance development in the country (Avom et al., 2025). Based on the PESTEL structure, health insurance policy is influenced by a complex environment including economic, political, social, legal, technological, and environmental factors (Amuzadeh-Araei et al., 2025). The microinsurance market may not succeed if there is poor demand from targeted customers, affordability issue, and information asymmetry (Yan & Faure, 2021). Inclusive insurance substantially reduces the income gap between rural and urban areas. The key mechanism of inclusive insurance is to smooth out income variations and foster investment in financial assets, human capital, and physical assets (Ma & Yang, 2025).

The key barriers to insurance penetration occur due to limitations on insurance illiteracy and product affordability. However, it is affected by low-income, limited financial literacy and experience of the people, and low product accessibility. The unique way to address the issues related to enhancing insurance inclusion is the supply and distribution of products through mobile-based business models, mostly for the targeted and vulnerable people (Flores-Contró et al., 2025). The market-driven microinsurance programme and Insurtech platform firms are key factors to spread unserved and low-income households as an inclusive insurance policy (Perticone & Graz, 2024).

5. Role of Government on Expanding Insurance Inclusion

Redesigning policies for expanding insurance inclusion is essential with the active involvement of government level organizations, international organizations, and the private sector for efficiently activating institutional capacities. Economic resources can be achieved for inclusive insurance policy by managing targeted subsidies, lowering insurance rates for vulnerable people, and enabling third-party contributions (Amuzadeh-Araei et al., 2025).

Government intervention for microinsurance policy is effective if the condition is: smartly and stable intended subsidies or innovative market practices; easy to understand insurance policies; properly trained or licensed product distributors; and renewed group policies. The purpose of government intervention for social protection is lowering vulnerability and poverty, income redistribution, and empowering the poor (Yan & Faure, 2021).

Government support is crucial for household removal from poverty and capital injection to ensure that they will not return to poverty with some level of confidence due to financial losses and risks. Though total subsidies paid by the government have a small burden within the cost of social protection, it helps to reduce the poverty line of vulnerable people due caused by risk trap. The capital injection on trapping is very low as compared to that of uninsured households. These considerations improve the reduction in the cost of social protection for the vulnerable people particularly in developing nations (Flores-Contró et al., 2025). The extension of social protection was believed to be a requirement for implementing the structural improvements of the South Korean economy (Cho & Choi, 2017). Since insurance remains voluntary, government institutions may drive markets not only through infrastructure and meso-level provisions such as reinsurance, but also by setting up supporting guiding principles and regulatory organizations that build confidence (Nshakira-Rukundo et al., 2021).

6. Strategy for Promoting Inclusive Insurance Policy

The growth of insurance (life and non-life) enhances the well-being of the people. Culture has been linked as a channel through which insurance can have a larger effect on the well-being of people in sub-Saharan Africa. Inclusive insurance policies should be directed towards well-being of uninsured people through encouraging investment in the insurance sector (Avom et al., 2025). Microinsurance model of inclusive insurance can be extended by improving demand from targeted clients, enhancing affordability, reducing information problems and decreasing administrative costs (Yan & Faure, 2021). Insurance renewal decisions are affected by peers in the same network. The peer effect is convincing among households of the identical risk type showing that the diverse peer effect acts for adverse selection (Du et al., 2023).

The insurance policies are inclusive insurance instruments explicitly planned to protect from financial risks to the most vulnerable. Inclusive insurance concerns to the establishment of insurance facilities to low-income people with inadequate or no access to majority insurance services. It aims to connect the protection inequality that happens between uninsured and insured losses related to life, health, and property by financing protection to the poor (Flores-Contró et al., 2025). Insurance principles are with the social protection system for the working people to defend from falling into poverty. The provision of mandatory social

insurance strengthens the social protection against poverty. It may occur due to decline in income level due to a job loss, illness, maternity, old age, injury, and death of the breadwinner. Thus, insurance programmes including a pension insurance package, which ensures life-long retirement payments and a health insurance scheme, which supports to expand the quality of medical care through inclusive insurance policy (Tsvetkova et al., 2022).

The government and social insurance institutions are responsible for long-term care costs through the long-term care insurance system, empowering family members to decrease the direct financial spending caused by caregiving concerns. In the non-existence of caregiving coverage, low-income houses often struggle to pay for high caregiving expenditure. Poor family unit with constrained resources lack financial barriers to manage with unexpected health distresses. Social insurance mechanism buffers income shocks, enhances income stability, and thereby declines income inequality. Thus, expanding social insurance approaches is an effective strategy for promoting inclusive insurance that may help to decrease economic variations caused by health shocks or other hazards through risk-sharing mechanisms (Li et al., 2025). Inclusive insurance policy helps to promote collaborative governance with public sectors, market-based instruments, and social institutions to develop a protection framework (Zhang et al., 2025).

7. Discussion

Financial inclusion acts as a foundation for equitable and viable economic advancement. Government insurance schemes and micro-insurance services enhances insurance penetration to the disadvantaged and economically weaker segments by expanding insurance coverage (Jain & Singh, 2024). The role of government is crucial to develop financial infrastructure and policy, strengthening regulatory agency, and inclusive growth environment to foster financial inclusion (Dhungana & Kumar, 2015). Inclusive insurance plays a crucial role by protecting people against the risk of losses and promoting social and economic activity. Insurance literacy has a positive nexus with insurance inclusion indicates that insurance literacy positively impacts insurance inclusion (Kiwanuka & Sibindi, 2025).

Social health insurance is an efficient approach for fair access to health care services. Due to low penetration of social health insurance in Nepal, it may be an effective tool for enhancing the health approach in developing countries (Dhungana, 2022). Social insurance is essential tool to fulfill social justice and to fight against poverty in developing countries. Social security programmes are necessary to expand to the disadvantaged people by extending its coverage, allocating budgetary provision and promoting inclusivity (Nhede & Marumahoko, 2023). Health insurance as a social protection system seeks to assist for quality health care services without financial burden in developing countries like Nepal (Dhungana et al., 2021).

Financial constraints are one of the greatest obstacles to acquiring high-quality health care. A national level health insurance programme increased public financing for health care and the structure of community-based health care model in rural areas significantly promote universal health care (Dhungana, 2023).

Insurance innovations support to expand insurance services and it is considered as an integral part inclusive insurance policy. Progress in the digitalization has increased innovative digital technologies around the world to promote financial and insurance products. China and India, prove the fast development of innovative digital tools in the insurance sector (Didenko & Sidelnyk, 2021). The expansion of digital tools and the growth of market scenarios are the key drivers to promote insurance programmes. Insurtech model is useful strategy to enlarge insurance up to uninsured and low-income people around the world (Perticone & Graz, 2024). It is better to adopt a customized and context-specific policy while expanding inclusive insurance policy to fulfill universal health coverage and sustainable development goals (Joarder et al., 2019).

8. Conclusion and Suggestions

Insurance inclusion has become a priority agenda among the policymakers, development groups and academicians. Inclusive insurance initiatives promote insurance inclusion with an aim of ensuring access to and use of inclusive insurance, mainly to the uninsured people. Inclusive insurance systems increase the social protection and reduce the probability of risk trapping for the most vulnerable people in developing countries like Nepal. Insurance policy is designed as a cost-effective social protection approach that helps in reducing poverty due to unexpected risks and losses. The study finds social insurance, microinsurance, public private partnership, solidarity and insurtech model of insurance are effective platforms for expanding insurance services to the uninsured people. Insurance system is necessary to design with adequate consideration of local circumstances, cost reduction of insurance services and sustainable operation of insurance to foster inclusive insurance mechanism in the nation. Adoption of technology-based method, insurance services can be widely expanded and delivered responsive, efficient and inclusive services to the under-served area and people. Insurtech platforms are innovative inclusive insurance tools for expanding uninsured and low-income people. Inclusive insurance policy is essential to promote collaborative governance with public sectors, market-based instruments, and social institutions to develop a protection framework. Government may promote inclusive insurance environment, enhance capability of insurance institutions and expand the access of insurance services to the uninsured people.

References

Aheeyar, M., de Silva, S., Senaratna-Sellamuttu, S., & Arulingam, I. (2019). Unpacking barriers to socially inclusive weather index insurance: towards a framework for inclusion. *Water*, *11*(11), 2235. https://doi.org/10.3390/w11112235

Amuzadeh-Araei, S., Takian, A., & Jabbari, A. (2025). Universal public health insurance for Afghan refugees in Iran: a contextual analysis. *Globalization and Health*, *21*(1), 46. https://doi.org/10.1186/s12992-025-01143-2

Avom, D., Meytang, C., Tsassa Mbouayila, F. M., & Ongo Nkoa, B. E. (2025). Increasing people's subjective well-being in sub-Saharan Africa: does the developed insurance sector matter? D. Avom et al. *The Geneva Papers on Risk and Insurance-Issues and Practice*, 1-45. https://doi.org/10.1057/s41288-025-00366-z

Bernards, N. (2018). The truncated commercialization of microinsurance and the limits of neoliberalism. *Development and Change*, *49*(6), 1447-1470. https://doi.org/10.1111/dech.12454

Cho, S., & Choi, Y. (2017). Convergent or divergent? The hidden dynamics of institutional changes in the labor markets and social welfare systems in South Korea and Japan. *Politics & Policy*, *45*(4), 594-625. https://doi.org/10.1111/polp.12208

Dhungana, B. R. (2023). Government health expenditure and policy for public health outcomes: A systematic literature review. *MedS Alliance Journal of Medicine and Medical Sciences*, *3*(6), 84-91. https://doi.org/10.3126/mjmms.v3i6.66615

Dhungana, B. R. (2022). The status of social health insurance in Nepal. *MedS Alliance Journal of Medicine and Medical Sciences*, *2*(4), 92-96. https://doi.org/10.3126/mjmms.v2i4.53719

Dhungana, B. R., & Kumar, P. (2015). The status of financial inclusion in Nepal. *Pacific Business Review International*, *7*(8).

Dhungana, B. R., Singh, J. K., & Dhungana, S. (2024). Life expectancy and health care spending in South Asia: An econometric analysis. *Plos one*, *19*(12), e0310153. https://doi.org/10.1371/journal.pone.0310153

Dhungana, B. R., Giri, S. S., Kushwaha, S. P., Khanal, D. K., & Yadav, B. K. (2021). Awareness and perception regarding health insurance among community people in a municipality: A cross sectional study. *MedS Alliance Journal of Medicine and Medical Sciences*, *1*(1), 76-82. https://doi.org/10.3126/mjmms.v1i1.42952

Didenko, I., & Sidelnyk, N. (2021). Insurance innovations as a part of the financial inclusion. *Business Ethics and Leadership, 5*(1), 127-135. http://doi.org/10.21272/bel.5(1).127-135.2021

Dror, D. M., & Eling, M. (2025). Microinsurance: Promoting resilience and welfare in the informal sector. In Handbook of Insurance: Volume II (pp. 555-578). Cham: Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-69674-9_20

Du, X., Zheng, W., & Yao, Y. (2023). The peer effect in adverse selection: Evidence from the micro health insurance market in Pakistan. *Journal of Risk and Insurance, 90*(4), 1063-1100. https://doi.org/10.1111/jori.12447

An Analysis of Underwriting Performance of Nepalese Non-Life Insurers

Author: Dibash Timalsina
HOD-Underwriting, Himalayan Everest Insurance Company Limited
Email: dibeshtimalsina@gmail.com
DOI: https://doi.org/10.3126/jissa.v2i1.92245

Abstract

The study depicts the performance of non-life insurers in terms of their net premium income with reinsurance commission received and the expense made through the net claims, agency & reinsurance commission paid and management expenses. By netting the income versus expenses aroused of core business function, underwriting profit or loss are derived which formed the basis of this study. The underwriting profit is still in the P/L accounts of insurer but with much diminishing pattern. If other variables are kept constant the higher expenses ratio having 6.3% CAGR will surpass the lower income ratio having 4.15% CAGR in coming 11.3 years. Methodology of ANOVA is used in this study to find out the relation between the underwriting profit and net premium income by using simple linear regression. Findings directs that the underwriting profit will be converted into near future if the rate of risk premium does not rise or the net claims are not reduced by this industry.

Keywords: Performance, net premium income, underwriting, non-life insurers, net claims.

1. Introduction

The insurance being an inevitable part of our risk transfer strategy, has gone too much advanced and technical in terms of risk analysis and risk financing. It consists of good anticipation of risk and pricing strategy. Pace of analysis had come to far from hit & trial method to the artificial intelligence technology. It can be said that the human intervention is needed only while training the software in Machine Learning process. Albeit the various approaches are introduced by the experts, the analysis and pricing of the risks in Nepalese market is still on the cradle of its own kind. Risk analysis and pricing in Nepalese insurance market has still as a backlogging than those of concurrent foreign market. It is assumed that the top-level management of non-life insurance companies are experts in risk anticipation and pricing. The insurance regulatory has made almost every business portfolio under a tariff regime. The company has choice of doing or not doing the tariff driven non-life businesses. On the flip side, File and Use system has created the policy wordings, ratings & modality into pre-approval from regulatory limiting the competitive edge. The competitive advantage between insurers is now limited to the procedural services to insured and claimants. Another competitive advantage could be limited to the return on the investment mix made by

insured's finance team. Rest policy coverage, policy pricing, claims modality are somehow same in this sector. Under the controlled environment of pricing and choice of risks are fixed, the underwriting profit/loss of each company operating in the same market, should follow the same pattern of rise/fall of each business segment. This article aims to find the underwriting profit/loss by non-life insurers under the tariff-controlled environment.

It is to study the impact of almost every business portfolio tariff. Since 1990s the tariff is being loaded and the last one named "minimum rating guidelines for non-tariff business" has come to force from 2079-80 onwards except Medical & Public Liability Products. So, the data is taken from 2079-80 quarterly basis. Altogether 12 quarters are reviewed for the study of this article.

For the purpose of this study, we have taken the aggregated income/loss calculation. The income side of the insurer consists of various topics such as Net Premium Income, Reinsurance Commission, Investment Income, Other realized income, Opening balance of unexpired risk reserve & outstanding claims. Whereas the expense side of the insurer consists of various topics such as Net Claim Paid, Agency & Reinsurance Commission paid, service tax, other direct expenses, management expenses, Closing balance of unexpired risk reserve & outstanding claims. This article focuses on the significant contributor of income as net premium income, reinsurance commission and on the expense side as net claims paid, reinsurance and agency commission paid and management expenses.

Underwriting Profit/Loss = Net Premium Income + Reinsurance commission received – Net Claim Paid – Agency/Reinsurance commission paid – Management expenses

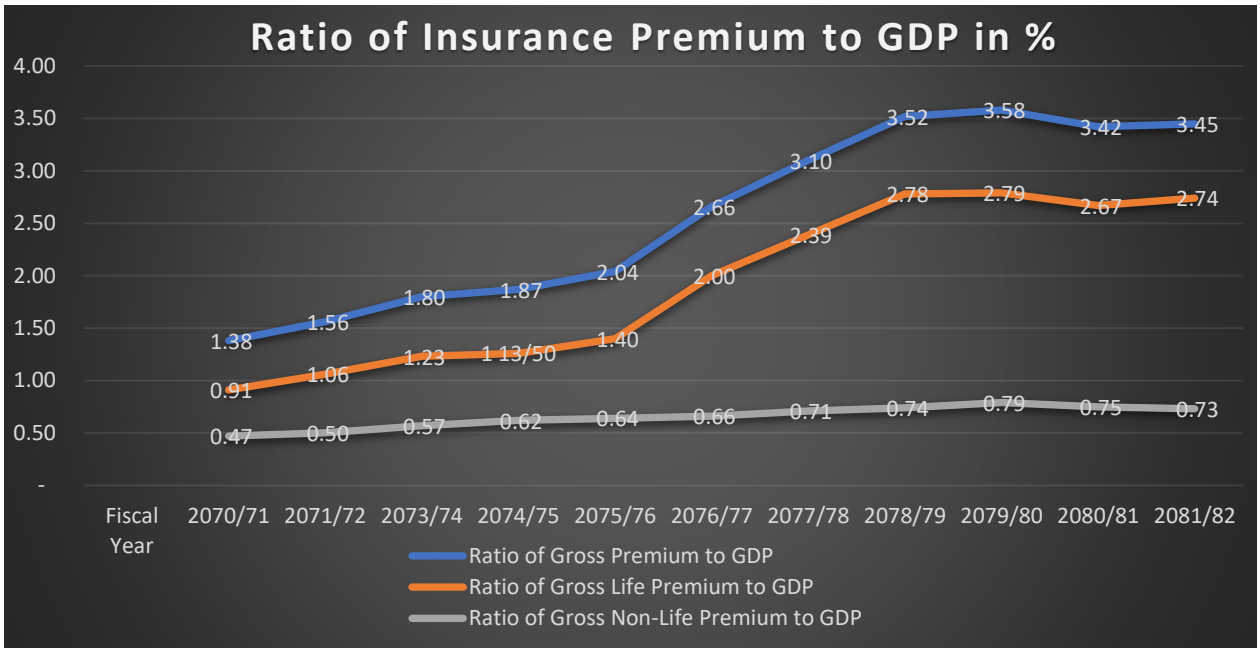
Milestones and Governmental Uplift

After being the WTO member in 2004, a new avenue in Nepal has risen in competitive trade and so did in insurance sector. The mandatory transit insurance in foreign trade has given insurance company a new level. Beside this, government of Nepal had started a new regulation for the mandatory third-party insurance to every road use vehicle while renewing vehicle registration book. With increasing disablement and death to those Nepali who went for foreign employment, has introduced another threat to the livelihood of those dependents and also a serious concern of workplace safety. Again, mandatory foreign employment insurance policy is introduced in conjunction of work permit documentation. These reforms made by government enhanced gross premium income of some portfolio of insurers. The performance shift by these changes is visible and shown in comparison with the GDP as Chart 1 below.

Apart from regular insurance ecosystem, government has introduced a separate health insurance scheme under health bill passed in 2019 AD, which mainly functions as pooling mechanism of risk and backed by government fund for adverse scenario. Provident fund

institutions like Social Security Fund, Citizen Investment Trust, Employe Provident Fund also provides their respective coverage on the health and accidental products at their own capacity. Deposit & Credit Guarantee Fund has separate arrangement of coverage of funds at financial institutions and a credit guarantee against non-collateral loans as well.

Chart 1



Source: NIA Annual Report 2080/81

By the establishment of autonomous insurance regulatory in 1992 AD as a result of free economic reform by the then government, many industrialists have taken license for the insurance companies. Before 1990s one government owned, two branches of Indian insurance company and few joint stocks company were in operation. The number raised to 20 non-life insurers with 2 reinsurers. Later the merger/acquisition took place and non-life insurer got reduced to 14. The government has given extra 4 licenses to the non-life micro insurers to capture the untapped area where the traditional non-life insurer had not reached thereto. After the various insurance literacy program and the initiatives taken by the government in collaboration with the insurers and stakeholder good uplift on insurance product is seen these current years. Records from the insurance regulatory shows the penetration level reached 50% of the population. There is a good increment in the number of policies and premium as penetration level raised.

Parameters of analysis

The risk assumed by the insurers are not to be accumulated in the insurers' liability section, they are spread to the reinsurers domestically and/or cross border. After the hedging of the risk by insurers to the reinsurers, the remaining premium are retained by the insurers as

termed as Net Retention Premium. While ceding such reinsurance premium, reinsurance commission are provided by the reinsurers to the insurers. Reinsurance commission could be fixed, provisional or sliding scale accounted for loss ratio. After the payment released to the claimant for the losses, insurers allocate the proportion of the shared loss to their reinsurance partners. Some of the losses or part of the losses are paid to claimant by insurer itself. Such retained losses are treated as Net Claims paid. While receiving the reinsurance business inward by non-life insurer, some of the premiums are rebated to the reinsured in the form of reinsurance commission paid, such amount is charged as reinsurance commission. Business allocation charges incurred by the agents are indicated as agency commission, which are also charged to the profit/loss account. The overall management expenses including staff renumerations, office expenses, operating costs are also allocated. These income resources and the expenses are net-off for the final computation to arrive at underwriting profit/loss. There are other sources of income and expenses, which are not considered for this particular study.

Underwriting Practices

Underwriting is the decision on the risk to be written in accounting books. Those risks which are being transferred from the client to the company's account, the company will measure the risk exposure and price the risk on the basis of their financial capacity. Moreover, risks are transferred to the reinsurers, but still the significant number of risks are to be retained by every insurer. Underwriting risk may arise from the inadequate pricing or inaccurate risk assessment. The insurance policy is contingent and the future liability is the main concern, so every insurer has to thoroughly analyze their future liability and cost of acquiring business as on date. Additionally, the non-life insurance policies are short term in nature and generally do not exceed 12 months. Underwriting strategy of each company has to ensure that the underwriting risks has to be well managed despite of their diverse nature as per geography, intensity, recurring ability. Every company has its unique feature of underwriting practices. It differs in its risk appetite, risk modeling, financial capacity, short term and long-term strategy, skills of underwriting staffs, etc. Historical data provide the nature of frequency and severeness of the risk enabling underwriters to make decisions. As per the Nepalese market, the policy wording and risk rating both are tariff driven, there is very little scope of the customization. Almost all portfolios are somehow tariff guided. Innovations on the new product are some areas where insurers can bring competitiveness. If new products have overlapping features with those tariff driven products, then the insurance regulatory usually does not allow such duplicated policy to float in the market. In this situation the competitiveness solely depends upon the service rendered to the insured and claimants. Underwriting income now dependent on the top line, who can procure maximum number of efficient sales staffs. Underwriting income also depends upon on the maximized negotiation done in the part of reinsurers and reinsurers brokers' commission payout. On the flip side,

the underwriting expenses depends on net claims liability to pay out and the cost of business acquisition. The business acquisition expenses usually incurred the expenses namely agency plus reinsurance commission payout, sales staff renumeration, and overhead costs.

2. Review of Literature

Many research articles have been published in the determinant of profitability in banking sectors, but very few research articles are found in the Nepalese insurance sector. Specially research is more focused in finding profitability of Nepalese insurance companies in terms of ROA & ROE and the correlation between liquidity, tangible assets, premium growth, firm size and operating ages (Shah, et.al, 2021). Similarly, determinant of profitability of insurance companies has been identified by authors as Expense Ratio, Financial Leverage, Claim Ratio, Firm size and operating ages. (Sejuwal & Koirala 2023) Separately, profitability of insurance companies has been researched on the determinants are explored as Liquidity, Leverage, Firm Size and Operating ages by author Sharma (2024). Ghimire (2014) has studied the impact of income structure to profitability on Nepalese life insurance companies. Contents in terms of underwriting profitability and its relation with underwriting income of Nepalese insurance market is not found in Internet of Things (IoT). But the similar type of research is found in India, Pakistan and other countries. In India, data from 2001 to 2024 is used to find the performance done by non-life insurers in last 24 years based on regression analysis and CAGR method by Dutta (2024). Based on Data Envelop Analysis method, by taking input variables as Operating Expenses and Commission to the output variables as Net Premium and Investment Income of Insurance Sector, performance was analyzed by Sinha and Bandopadhyay (2016). Similar type of DEA analysis was done by Ertagrul et al. (2016) for finding out the performance of insurance sector. There have been numerous studies on various aspects of non-life insurers in terms of performance, but there is less research work on underwriting performance in terms of underwriting proft/loss. By finding the gap in the similar type of performance analysis from ANOVA and CAGR method, this research paper tries to fulfill the gap.

3. Objectives and Methodology

Objectives

The objective of this paper is to confirm whether the trend of underwriting profit is directly proportional to the business underwritten and analyzing the underwriting performance of non-life insurance sector of Nepal. The paper has examined the trends and pattern of underwriting profitability despite of same underwriting ratings and business arena. Based on the net value of underwriting premiums and net claim losses, this paper examined the retention portion of insurers in correspondence with the market trends.

Data Source

The study is based on the secondary data. The data has been obtained from quarterly reports of respective 12 non-life insurers from 2079-80 to 2081-82 (12 Quarters). Data of those unmerged insurers before merger has been compiled with their respective merged entity. References and cross validation have been done from data obtained via annual reports of NIA, quarterly reports published under the statistics section of Nepal Insurance Authority website.

Out of 14 non-life insurers, only 12 companies are taken for study (See Table 1). The Oriental Insurance Company and National Insurance Company, has been excluded due to unavailability & insufficient data in their respective websites under study period. These companies were established in Nepal as the foreign branch of Indian insurers and has less accessibility to public disclosure of their financials. The data used in this study has been derived entire from the secondary data and in the lack of primary data, further screening is not possible. The effort has been made in the cross verification of such data with the NIA published data in their websites. Some of the quarterly reports were downloaded from Nepal Stock Exchange website.

Table 1: Non-Life Insurance Companies under study

S.No	Nepse Code	Name of Company	Type
1	NICL	Nepal Insurance Company Limited	Unmerged
2	SICL	Shikhar Insurance Company Limited	Unmerged
3	NECO	Neco Insurance Company Limited	Unmerged
4	RBCL	Rastriya Beema Company Limited	Unmerged
5	PRIN	Prabhu Insurance Limited	Unmerged
6	NLGI	NLG Insurance Company Limited	Unmerged
7	HEI	Himalayan Everest Insurance Limited	Merged
8	SALICO	Sagarmatha Lumbini Insurance Company Limited	Merged
9	SPIL	Siddhartha Premier Insurance Company Limited	Merged
10	SGIC	Sanima GIC Insurance Company Limited	Merged
11	IGI	IGI Prudential Insurance Company Limited	Merged
12	UAIL	United Ajod Insurance Company Limited	Merged

Research Methodology

This research paper used MS-Excel for graphical presentation and regression model running for the data analysis. The linear regression is done in the standard form as prescribed below.

$$Y = mX + C$$

Where, X = Independent Variable (Non-life insurance premium earned)
Y = Unknown Dependent Variable (Underwriting Profit/Loss)
m = Slope
C = Intercept

For analysis of last 12 quarters in terms of compounded annual growth rate (CAGR), the following formula is used.

$$CAGR = (FV/PV)^{\wedge(1/years)} - 1$$

Where, CAGR = Compounded Annual Growth Rate
FV = Final Value
PV = Beginning Value

The problem statements

The primary objective of establishing an insurance company is to function its core business and earn the profit out of its core business. The core business functions of any insurance company include underwriting, claims & reinsurance. The marketing and sales perform the front end of insurance company. Other auxiliary function consists of Accounts, Finance, Agency, Risk Management, Logistics, Legal, IT etc. Income generation consists of underwriting net premium, investment income, other income, commissions and release of earlier provisioning. Expenses consists of Net claim, reinsurance and agency commission paid, service charges, management expenses, allocation of current year provisioning. So, the profit allottable to underwriting is given by formula as below:

Underwriting Profit = (Net Premium Income + RI Commission Income) – (Net Claims paid + RI & Agency Commission Paid + Management Expenses)

It is considered that as the income in the form of premium increases, the underwriting profit also increases; provided that the other conditions remain constant. As per the Nepalese market, the tariff driven business in terms of coverage and ratings makes an equal footing between insurance company. Higher premium income ought to yield the higher profit with same profitability percentage. As the anticipated claims are statistically predicted as indicated by law of large number philosophy and reserving as prescribed by actuaries. Now, the yard stick of determining profitability percentage would only differ if insurer does the business with higher negotiation in commissions and optimized management expenses.

So, the analysis spiral down to the method of simple linear regression analysis. Regression analysis is conducted between the earned premium and the underwriting loss/profit made by non-life insurance sector.

Hypothesis

The following hypothesis has been formulated and tested.

H_o: $\beta = 0$ (Non-Life Insurance net earned premium does not explain the phenomenon of underwriting profit or loss)

H_1: $\beta \neq 0$ (Non-Life Insurance net earned premium explains the phenomenon of underwriting profit or loss)

Data Analysis

Hypothesis has been tested using independent t test and Analysis of Variance (ANOVA). CAGR, Descriptive Analysis, Inferential Statistics has been used via MS-Excel to analyze data and finding the conclusion.

Explanation of Variables

Full name of Variables, abbreviation of variables, measurement unit, descriptions of variables used in analysis are shown in Table 2.

Table 2: Abbreviation and Description of Income and Expenses related variables

Abbreviation	Variable	Description	Measurement Unit
NPREM	Net Premium	Net premium shown in P/L account (Serial No. 1.1)	Rs. in '000
RECOMI	Reinsurance Commission Income	Reinsurance Commission Income shown in P/L account (Serial No. 1.2)	Rs. in '000
NCLM	Net Claim	Net Claim shown in P/L account (Serial No. 2.1)	Rs. in '000
ACOME	Agency Commission Expenses	Agency Commission Expenses shown in P/L account (Serial No. 2.2)	Rs. in '000
RCOME	Reinsurance Commission Expenses	Reinsurance Commission Expenses shown in P/L account (Serial No. 2.3)	Rs. in '000
MGMTE	Management Expenses	Management Expenses shown in P/L account (Serial No. 2.6)	Rs. in '000
UWPL	Underwriting Profit/Loss	Underwriting Profit/Loss = NPREM+RECOMI-NCLM-ARCOME-MGMTE	Rs. in '000

While extracting variables from the quarterly report, the agency commission expenses and reinsurance expenses are in separate serials in P/L account in 2.2 and 2.3, which are added while taking the data for ease of calculation. After the introduction of NFRS 17 with effective from 1st quarter of 2080-81 by insurance regulatory, data are extracted from condensed

consolidated statement of profit and loss. Headings are same except for the bifurcations on Management Expenses into Other Operating Expenses and Employee Benefit Expenses. These two headings of Other Operating Expenses and Employee Benefit Expenses were added in the name of management expenses for ease of calculation.

4. Descriptive Analysis

Compounded Annual Growth Rate Pattern

Table 3: Non-Life Insurance Premium, Claims Paid, Commissions Paid & Operating Expenses

					Rs. In '000
Year	**Qtr**	**NPREM**	**NCLM**	**Commission Paid**	**Operating Expenses**
79-80	1	4,330,878	1,399,864	132,096	1,032,219
79-80	2	3,868,184	1,405,387	133,683	1,037,160
79-80	3	4,307,409	1,968,914	172,765	1,138,760
79-80	4	4,312,186	2,373,451	114,216	1,551,696
80-81	1	3,491,476	1,757,070	119,074	1,876,144
80-81	2	3,959,753	1,359,062	135,904	1,494,966
80-81	3	4,853,827	1,659,676	155,424	1,815,100
80-81	4	6,519,786	2,719,438	160,199	2,879,637
81-82	1	4,023,248	2,557,336	98,912	2,656,248
81-82	2	4,108,623	1,898,540	129,826	2,028,366
81-82	3	5,436,650	2,233,995	132,849	2,366,844
81-82	4	6,774,392	2,566,147	237,481	2,803,628
Source: Quarterly Report of insurers					

The table 3 shows the data of 12 non-life insurers' performance data from 2079-80 to 2081-82 total 12 quarters. It shows the net premium, claims, commissions paid and expenses. This table shows the premium and expenses are neck to neck but somehow some underwriting margins are seen. If we calculate the CAGR of the net premium income pattern, then it is found 4.15%, whereas in the net claims and commission & management expenses, it is found to be 6.30%. It revealed that the compounded annual growth rate of management &

commission expenses is more than net premium. The investment income has not been considered while calculating the underwriting loss. The net claims, commissions paid and management expenses has been increased in a higher rate than those of premium income rate. It requires the better management of claims and efficient management expenses, so the underwriting profit will be safeguarded in time.

Based on 4th quarter data, expenses to premium income ratio comes to 79.38% If this pattern continues, keeping other variables constant, then underwriting loss will start to occur. The below stated formula (Sam, 2025) is used to predict the time for the underwriting loss, keeping all other variables constant.

$$t = \ln\left(\frac{Po}{Eo}\right) / \ln\left(\frac{1+re}{1+rp}\right)$$

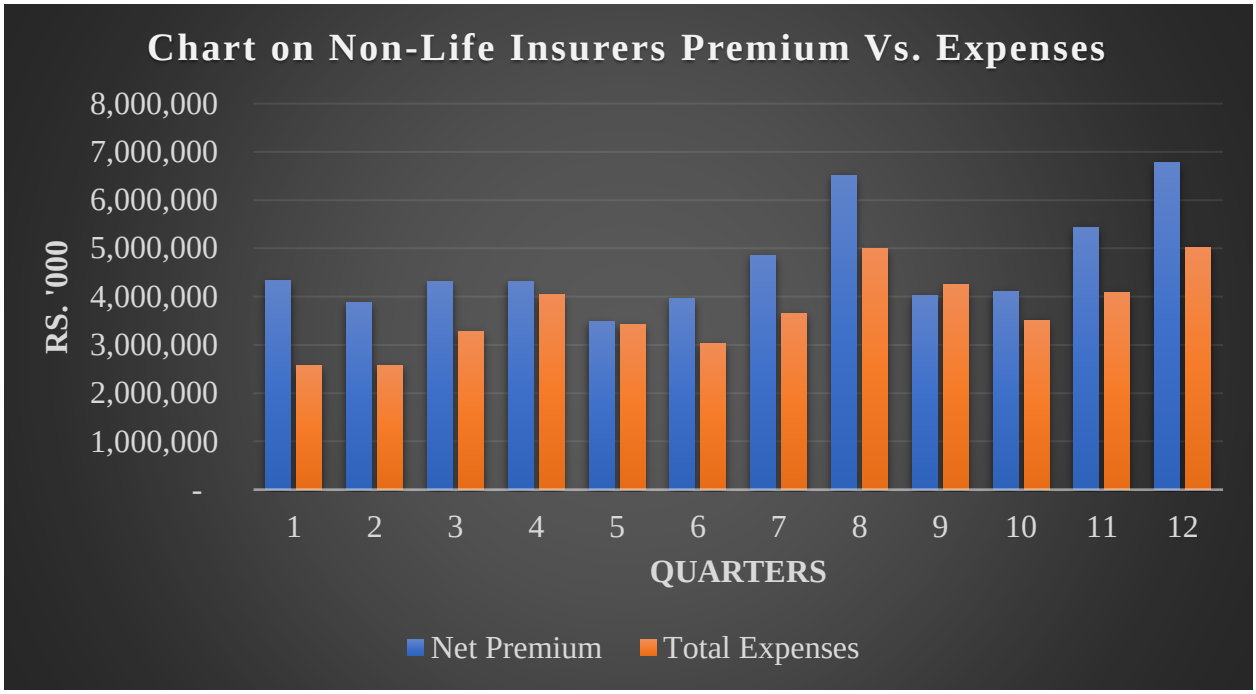
Where:

P_o is the initial premium income (NPREM+RECOMI)
E_o is the initial expenses (NCLM+ACOME+RCOME+MGMTE)
r_p is the premium CAGR (4.15%)
r_e is the expenses CAGR (6.30%)

By using the above formula, the underwriting loss will occur as per the time estimation comes to nearly 11.3 years.

Income and Expenses Trend

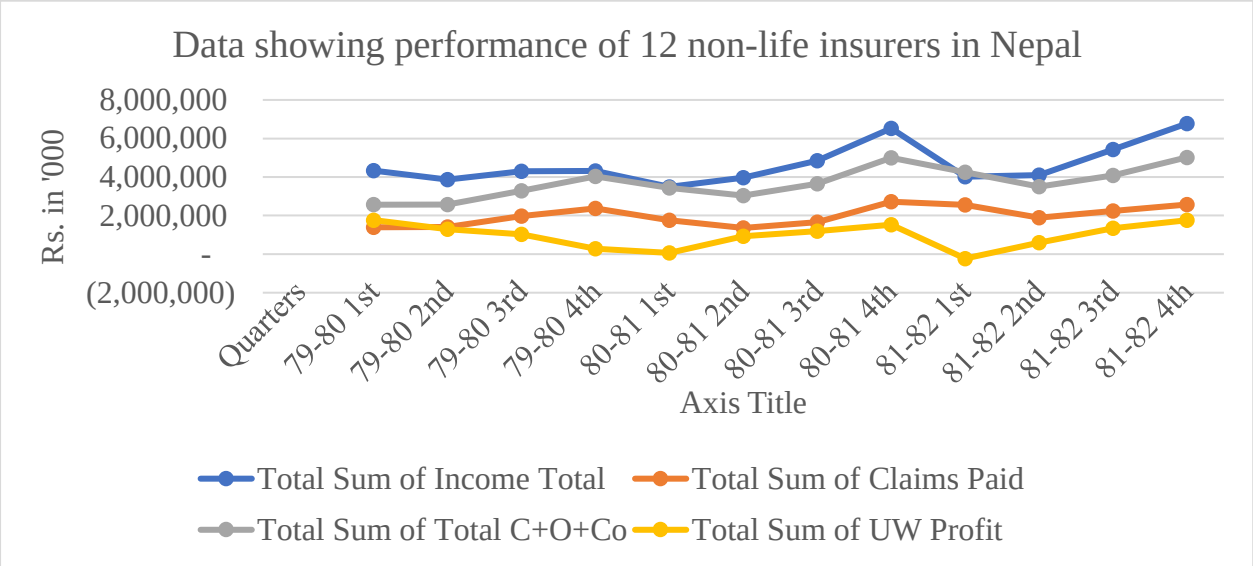
Chart 2



Source: Quarterly reports

From the chart 2, it revealed that the underwriting profit are seen in first three quarters of 79-80 and then its neck to neck till fourth quarter of 80-81. Then an underwriting loss is found in the first quarter of 81-82 and again it is found good underwriting profit.

Chart 3: Chart showing performance of non-life insurers



As on increase in the net premium income with higher slope, there is less rise in the underwriting profit.

Correlation between Income and Profitability

Model of Regression: Y = mX + C

Regression Fit:

Table 4: Coefficient of Regression

	β	*Standard Error*
C (Constant)	-884250	731,522.15
Premium Income	0.3957	0.153

a. Dependable Variable: Underwriting Profit/Loss

Predictors are to be based on the known independent variable X (Non-Life Net Premium Income Earned), Y is the unknown dependent variable which is to be predicted (Underwriting Profit/Loss) and m & C are slopes and constant/intercept whose value are to be determined.

Y = 0.3957X – 884250

Model Predictive Ability

Table 5: Summary of the model

Regression Statistics	
Multiple R	0.6324
R Square	0.39993
Adjusted R Square	0.33992
Standard Error	533525
Observations	12

a. Predictors: Non-Life Insurance Premium Income Earned

R square shows how well the data fit in the regression model (goodness of fit). The R square value comes to be 0.399 ≈ 0.40. It means the 40% of the relationship between non-life insurance income earned and the underwriting profit/loss can be explained. Remaining 60% are due to unexplained factors or the left-out variables such as investment income, other income, opening reserve balance.

Testing of Hypothesis

Coefficient of Regression:

Table 6: ANOVA Table

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	1.89708E+12	1.89708E+12	6.664642745	0.027341299
Residual	10	2.84649E+12	2.84649E+11		
Total	11	4.74357E+12			

a. Dependent Variable: Underwriting Profit/Loss

b. Predictors: Non-Life Premium Income Earned

Alternative Hypothesis

$H_1: \beta \neq 0$ (Non-Life Insurance net earned premium explains the phenomenon of underwriting profit or loss)

Null Hypothesis

$H_0: \beta = 0$ (Non-Life Insurance net earned premium does not explain the phenomenon of underwriting profit or loss)

At 95% confidence level (CL) the p-value computed is 0.027 which is less than 0.05. Thus, the null hypothesis is accepted and the alternative hypothesis is rejected. So, it proves that the non-Life net premium income earned and underwriting profit/loss has significant relationship.

5. Results & Conclusion

The major findings of this research paper are as follows:

a. The CAGR of the Net Premium Income Earned is 4.15%.
b. The CAGR of the Expenses incurred is 6.30%
c. The estimated time for superseding the expense to the income ratio is estimated for 11.3 years, if the same pattern is continued as per tariff regime. Then after overall industry will suffer underwriting loss.
d. The insurance regulatory (Nepal Insurance Authority) has to take corrective measures in the pricing and coverage terms of insurance policy as per the changing scenario of higher loss ratio. Higher loss ratio might have occurred from the climate change, pandemics, perennial natural disasters.
e. The insurer's management have to revisit their existing recruitment pattern to make the workforce more efficient and economic.
f. Operating expenses are increased in recent years. These are yet to be control efficiently.
g. The insurers have to explore alternative insurance market in order to take benefit of economies of scale.

References

Annual Report, 2079/80 - 2080/81. Nepal Insurance Authority

Dutta, M. M. (2024). An analysis of underwriting performance of non-life insurance sector in India. *Journal of Insurance Studies in South Asia*, *1*. Retrieved from https://www.iin.org.np/

Ghimire, R. (2014). Impact of income structure to profitability: Empirical evidence from life insurance industry in Nepal. *Journal of Economics and Management*, *2*(1). Retrieved from https://ssrn.com/abstract=2441064

Quaterly Report, 2079/80 - 2081/82. Himalayan Everest Insurance Limited

Quaterly Report, 2079/80 - 2081/82. IGI Prudential Insurance Limited

Quaterly Report, 2079/80 - 2081/82. Neco Insurance Limited

Quaterly Report, 2079/80 - 2081/82. Nepal Insurance Company Limited

Quaterly Report, 2079/80 - 2081/82. NLG Insurance Company Limited

Quaterly Report, 2079/80 - 2081/82. Prabhu Insurance Limited

Quaterly Report, 2079/80 - 2081/82. Rastriya Beema Company Limited

Quaterly Report, 2079/80 - 2081/82. Sagarmatha Lumbini Insurance Company Limited

Quaterly Report, 2079/80 - 2081/82. Sanima GIC Insurance Limited

Quaterly Report, 2079/80 - 2081/82. Shikhar Insurance Company Limited

Quaterly Report, 2079/80 - 2081/82. Siddhartha Premier Insurance Limited

Quaterly Report, 2079/80 - 2081/82. United Ajod Insurance Limited

Sah, L. K., & Magar, M. R. (2021). Factors affecting the profitability of Nepalese insurance companies. *Nepalese Journal of Insurance and Social Security*, *4*(1), 87–99. Retrieved from https://nepjol.info/index.php/njiss/article/view/42363

Sam, Rainsy, How to Adjust the P/E Ratio for Earnings Growth in Equity Valuation: PEG or PPP? (May 05, 2025). Available at SSRN: https://ssrn.com/abstract=5241650 or http://dx.doi.org/10.2139/ssrn.5241650

Sejuwal, N., & Koirala, K. B. (2023). Determinants of profitability of insurance companies in Nepal. *Patan Prospective Journal*, *3*(2), 88–95. https://doi.org/10.3126/ppj.v3i2.66163

Sharma, G. (2024). Factors affecting the financial performance of Nepalese Life Insurance Companies. *Journal of Insurance Studies in South Asia*, *1*, 7–17. Retrieved from https://www.iin.org.np/

Sinha, A., & Bandopadhyay, K. (2016). An Analysis of Efficiency of General Insurance Industry in India. *Malaysian Management Journal (MMJ)*, *19*, 51-64

Learning Experiences of Adults About Non-Life Insurance

Author: Riju Dhakal Poudyal
MPhil, Development Studies, Kathmandu University School of Education, Nepal
Email: riju_mpds2023@kusoed.edu.np
DOI: https://doi.org/10.3126/jissa.v2i1.92246

Abstract

This research investigates how adults in Nepal gain practical knowledge and financial awareness by directly engaging with non-life insurance products. It shifts focus from a purely theoretical interpretation of insurance literacy to viewing it as a learning process for adults influenced by their real-life experiences. Utilizing a qualitative narrative inquiry method, the study looks into how insured individuals develop their understanding through activities such as purchasing policies, paying premiums, filing claims, and interacting with insurance providers. Grounded in Adult Learning Theory, specifically Knowles' andragogical model and Kolb's experiential learning cycle, the research underscores the impact of readiness to learn, problem-based scenarios, and self-directed involvement on insurance literacy.

Research findings indicate that adults often have a poor grasp of policy coverage, terminology, and claims processes, frequently swayed by inaccuracies, complicated policy language, and insufficient communication from institutions. Nevertheless, active participation over time increases awareness of risks, fosters financial responsibility, and enhances decision-making skills. The research highlights significant obstacles to the adoption of non-life insurance in Nepal, such as a lack of transparency, inadequate education at the community level, and restricted access to digital resources. It underscores the importance of insurance professionals serving as educators and trusted allies rather than just policy salespeople. By improving insurance literacy through clearer communication, early educational programs, ethical practices, and joint outreach efforts, we can enhance financial resilience, informed risk management, and long-term economic stability among adults.

Keywords: Non-life insurance, policy, insurance literacy, risk management, premiums, claims.

1. Introduction

The article discusses how adults develop practical knowledge, awareness, and financial acumen through their involvement with non-life insurance products in their daily lives. Instead of gaining insights solely through formal education, adults learn through experience by purchasing policies, submitting claims, evaluating risks, making premium payments, and navigating the uncertainties related to properties, vehicles, businesses, and liabilities. In Nepal, where factors such as market constraints, regulatory hurdles, and low-income levels

influence insurance behaviour, this learning process becomes highly contextual and transformative. By directly engaging with non-life insurance, adults progressively enhance their risk awareness, financial discipline, and strategic thinking regarding asset protection and wealth preservation. Insurance thus evolves from being viewed merely as a contractual product into a practical educational tool that enhances financial literacy, encourages proactive risk management, and strengthens long-term financial resilience.

I have attempted to emphasize how adults develop significant knowledge regarding risk and security through their experiences with insurance education and practices. However, my job is to educate people about the benefits of insurance and the importance of having a policy in place. Primarily, I educate adults on risk management, which provides protection to individuals, businesses, and society from unforeseen risks (Rejda & McNamara, 2020). I am experiencing my role as an educator to reflect and practice adequate social safety which was somehow challenging, but in the context of net structures are not available, insurance assumes a more paramount function of contributing to economic resilience and poverty eradication (World Bank [WB], 2020).

Through the establishment of the Insurance Act of 1992 and the Insurance Board in Kathmandu, Nepal's insurance industry has experienced significant growth in the past few years, marked by an increase in the number of insurance companies and policyholders (Insurance Board Nepal, 2023). This evolution, in essence, signals the evolution of the financial sector in the country (Nepal Rastra Bank [NRB], 2023). However, just because insurance policies are accessible and can be purchased, it does not ensure that adults utilize and understand the coverage they have obtained. In this context, I am helping adults understand policy terminology and its coverage. Therefore, I recognize the importance of adult learning in the insurance industry. Studies show that low levels of insurance literacy worldwide can lead to people being underinsured, choosing the wrong products to meet their needs, and experiencing difficulties with settling claims, as well as increasing distrust in the insurance industry (Gutter & Copur, 2011).

Furthermore, while describing non-life insurance, both individuals and companies need top be instructed clearly on insurance policies that protected and managed liabilities arising from risks such as natural disasters, in a conversational yet formal manner. I understand that making and increasing clients without enough information might not be fair. Hence, it is necessary to help adult clients understand the claims process and recognize the importance of protecting their financial and physical assets against unavoidable threats, such as theft, accidents, and natural disasters (Majka, 2024). Insurance education emphasizes the benefits of having coverage, including financial security and regulatory compliance, as well as the associated legal requirements (Atkinson & Messy, 2013). Thus, the goal of non-life

insurance education is to increase understanding of risk management and promote the selection of appropriate policy coverage.

As risks and uncertainties abound in the world during this era of globalization and modernization, where insurance can serve as a crucial safeguard for the protection of individuals' and organizations' health and wealth (Khanal, 2020). Such insurance helps establish a policy agreement, represented by an individual or organization, in which the insured receives financial protection from the insurer in the event of a loss. Insurance services can be defined as a product that consists of an insurance document, a written legal contract, plus several types of additional services (Chowdhury et al., 2007).

Hence, the study highlights that adults do not merely learn about non-life insurance through theoretical explanations but rather through active involvement with policies, risks, and actual circumstances. Insurance education equips policyholders to understand coverage terms, evaluate potential risks, and make choices that align with their personal and business requirements. As they pay premiums, assess claims procedures, and experience the financial impact of unexpected events, their knowledge deepens through real-life experiences. This hands-on learning enhances their ability to protect their assets, recover from losses, and engage in proactive risk management. Consequently, insurance education lowers barriers posed by limited financial literacy and transforms non-life insurance from a complicated contractual product into a practical resource for informed decision-making and long-term financial stability.

2. Literature Review

This study explores how adults develop meaningful understanding of non-life insurance products in Nepal through direct engagement and experiential learning. Rather than viewing insurance education solely as formal instruction, it emphasizes learning by insuring process through which insured individuals build knowledge through purchasing policies, paying premiums, filing claims, and interacting with insurers. Furthermore, the chapter examines how limited understanding of policy coverage, claims procedures, and premium calculations can lead to financial vulnerability and dissatisfaction. It also highlighted how real-life insurance experiences often expose knowledge gaps, which in turn become powerful learning opportunities for adults. Within the context of Nepal's evolving regulatory framework and insurance industry development, the study underscores the importance of informed decision-making and practical risk management for strengthening financial security.

Additionally, the study highlighted that the understanding of insurance terms is significantly influenced by the level of education of policyholders. Many policyholders relied on agents and failed to read the policy's terminology, resulting in inadequate information about their

insurance policy. Hence, improving awareness and engagement with insurance products requires improved communication and teaching practices (Ghimire & Ghimire, 2024). Furthermore, the effectiveness of insurance programs depends on adults' awareness and education about insurance, focusing on the benefits of insurance and the community's role in promoting understanding and involvement in insurance (Preker & Dror, 2008). Additionally, to develop the understanding of policyholders who can successfully utilize insurance mechanisms to minimize risks, it is essential to emphasize the importance of educating college students about insurance, thereby increasing their understanding and ability to manage unavoidable risks.

I have focused on the studies regarding insurance which have been carried out in different countries, focusing on insurance literacy, consumer awareness, risk perception and purchasing behavior. These studies highlight how education, regulatory frameworks, and socio-economic factors influence individuals' understanding and effective utilization of insurance products. The study in Malaysia highlighted the significance of incorporating financial literacy and insurance awareness into the curriculum, which helped improve financial well-being and identified particular financial issues across various socioeconomic groups, ultimately increasing insurance acceptance (Lee & Kuang, 2025). Similarly, one of the biggest issues in India is the lack of awareness about insurance and environmental issues. Due to limited awareness and pricing issues, insurance does not adequately cover the nation's overall losses from natural disasters. To raise awareness of insurance and the environment in India, the government and insurance providers must cooperate (Kumar et al., 2023). Similarly, Australia and New Zealand focus on consumer education through online resources, which improves knowledge of insurance and financial products, thereby raising insurance literacy among adults (Zhou et al., 2013). Likewise, the study also highlighted the importance of adult learning, group discussions, and mass media in South Africa's micro insurance education methods (Chummun, 2016). Similarly, in order to improve knowledge of insurance products, European nations place a high priority on financial education using digital technologies like websites and mobile applications, and by enhancing consumer awareness and trust in insurance services, this strategy can contribute to Ukraine's National Strategy of Financial Literacy (Prykaziuk & Motashko, 2023). Hence, we can learn that awareness campaigns for adults, community and school initiatives, and training are required for insurance workers in many countries to incorporate insurance education. These emphasized the value of continuing education, regulatory assistance, and practical methods for developing insurance literacy and trust.

The aim of this research was to explore the education process surrounding non-life insurance products as seen through the lens of insured individuals. The primary purpose of insurance is to manage risk and provide financial security for the protection of individuals' properties. As many insured people lacked a clear understanding of non-life insurance policies, this

resulted in a lack of understanding of proper policy coverage and poor claims management. This study examines existing research to identify the key elements crucial for insurance education, assesses the effectiveness of various teaching methods, and evaluates how enhanced insurance knowledge influences the experiences of insured individuals. Therefore, marketing information systems, as outlined by Talvinen (1994), keep management informed about market conditions. An insurance company has developed an effective long-term marketing strategy that is essential and advantageous for any organization aiming to attract the necessary customers (Panda, 2019).

Present Scenario of the Nepali Insurance Market

Insurance companies in Nepal are required to address the needs of a general populace that lacks sufficient education and financial means to obtain insurance coverage. This situation is a result of inadequate educational opportunities and a high level of poverty (Nepal, 2012). The insurance sector in Nepal has been significantly impacted by the COVID-19 pandemic, the Ukraine-Russia conflict, and the global economic downturn. At the end of fiscal year 2021/22, the total gross premium collected by the Nepalese Insurance Company increased by 16.48 percent, amounting to Rs 177.81 billion, which accounted for 3.67 percent of the country's GDP. This indicates a gradual improvement in the insurance sector's indicators (NIA, 2023). The new Insurance Act of 2022 has granted the Nepal Insurance Authority greater autonomy, authority, and power, which is initiating mergers and acquisitions among insurance companies to enhance risk-bearing capacity, solvency, and foster healthy competition among insurers (NIA, 2023). Additionally, the insurance sector in Nepal has been expanding in recent years, driven by increasing consumer awareness of insurance products, economic growth, and regulatory measures.

Policy Review

Insurance is a contractual arrangement in which an individual or organization obtains financial protection from an insurer in the event of a loss. The term' policy' refers to a set of guidelines that an individual, organization, or government follows to direct decisions and actions toward achieving goals, objectives, and results. In today's era of globalization and modernization, it is evident that risks and uncertainties are pervasive, making insurance a crucial element for safeguarding the health and financial stability of both individuals and organizations (Khanal, 2020). On the other hand, we can view insurance as a means of managing risk. By obtaining insurance, we protect ourselves from unexpected and unacceptable financial setbacks, which the insurance company compensates us for. Insurance services can be described as a product that includes an insurance policy, which is a formal written agreement, along with various additional services (Chowdhury et al., 2007).

Insurance policies serve as more than just contracts, they are designed to fulfill essential tasks related to risk management, deterrence, and compensation, which are vital for the operation of the economy and society. Recognizing these realities significantly influences how insurance policies are interpreted in coverage-related disputes. Within the insurance domain, a policy serves as a formal document that binds the insurer (the insurance company) and the insured (the individual holding the policy) under it. The policy further describes in detail all the policies, rules, coverage, and limitations agreed upon in the insurance contract. In the modern and globalized 21st century, the world is filled with risks and uncertainties, where insurance serves as a crucial means of safeguarding individuals' and organizations' health and wealth (Khanal, 2020). Therefore, it can be stated that insurance constitutes a contract embodied in a policy, through which a person or organization obtains financial coverage from an insurer in case of a loss. Additionally, insurance services can be characterized as a product that consists of a legal written contract (the insurance document) along with a collection of related services (Chowdhury et al., 2007).

To enhance the insurance system and industry in Nepal, the Nepal Insurance Authority was established as a regulatory body responsible for managing the insurance sector. The primary objectives of the Insurance Act 1992 were to establish the Nepal Insurance Authority, which would facilitate, supervise, promote, and regulate insurance activities in Nepal. It oversees insurance providers to ensure they deliver a structured, regulated, competitive, and trustworthy insurance landscape. The authority plays a crucial role in regulating and overseeing the insurance sector to protect the rights and interests of policyholders. The Insurance Act, 1968, was repealed and replaced by the Insurance Act, 1992, which was further amended by the Insurance Act, 2022. The Insurance Act, 2022, comprises 20 chapters and includes section 172. Presently, under the Nepal Insurance Authority, there are 14 life insurance companies, 14 non-life insurance companies, 7 micro-insurance and 2 reinsurance firms in operation.

Hence, to develop the insurance system and make insurance companies regular, competitive, and trustworthy, and to offer quality insurance services to the public through healthy competition, the Insurance Act 2022 has been established. In addition to efficiently regulating the insurance industry and safeguarding the rights and interests of policyholders by updating and consolidating the existing insurance laws, the Federal Parliament has enacted this Act (NIA, 2023). Additionally, multiple theoretical perspectives can be employed to examine the issues related to insurance policies. Some of these theories comprise Adult Learning Theory, Organization Theory, and Ethics Theory. I intend to discuss the evaluation of insurance policies utilizing these theories. And I have focused on the adult learning theory for my study.

Theoretical Framework: Adult Learning Theory

I aimed to explore how individuals acquire knowledge about non-life insurance products, utilizing adult learning theory to gain insight into the approach. For nearly a hundred years, the systematic examination of adult learning has aided adult educators, corporate trainers, and providers of continuing professional education in comprehending the reasons why adults engage in learning, the types of learning opportunities available, and the most effective ways for adults to learn (Baroway, 2007). Typically, researchers have concentrated on societal transformations, as well as the expectations of both educators and students, along with the experiences of learners. Some of these societal transformations have involved shifts in the workplace and professional environments, as well as changes in the global economy (Baroway, 2007). A few examples of these societal shifts include adjustments made to the professional and job environments, as well as shifts in the global economy (Baroway, 2007).

I applied adult learning theories to explain the teaching of insurance on non-life products because they allow adults time to practice, emphasize making their own decisions, and provide a range of other elements that foster an environment supportive of adult learning (Brown, 2018). Thus, the study of insurance education on non-life products is based on the perspective of insured people; the adult learning theory is more suitable for this research because all insured people are from the adult group. From an Adult learning theory perspective, the process of insurance education on non-life products can be viewed as a means to fulfill learning requirements within society, and in this context, people who are insured are essential to the stability and education of the insurance system.

Experiential learning cycles, as outlined by Kolb (1984), help explain the informal learning approaches used by adults in the insurance industry. Adults begin by drawing on concrete experiences from interactions with peers and friends, reflecting on these situations to weigh the benefits and drawbacks of various insurance options. Through this reflection, they form abstract concepts that guide their understanding before applying these insights in real decisions. In addition, adults often engage in self-directed learning to determine suitable insurance plans that offer a sense of security. Similarly, andragogy, as proposed by Knowles (1984), emphasizes the unique ways adults learn. It highlights the importance of the learning process and promotes problem-based, collaborative approaches that foster greater equality between trainer and learner. This framework supports adults in actively shaping their own learning experiences within professional contexts.

3. Research Methodology

For this study I have applied qualitative research with interpretive paradigm. As an interpretive researcher, I hold the view that various realities that are formed through conversations with individuals. "The critical examination of the grounds for fundamental

beliefs and an analysis of the basic concepts employed in the expression of such beliefs" is the definition of philosophy (Dobson, 2002). As the researcher, I strive to comprehend a phenomenon from the perspective of individuals who experience it. Also, participant observation and interviewing are frequently prioritized in constructivist qualitative research investigations. According to the constructivist paradigm, individuals construct their own knowledge and understanding of the world through experiences and reflection on those experiences. Constructivists believe that learning happens only when a student gains knowledge via doing and experimenting (Bada & Olusegun, 2015). Philosophical assumptions guide researchers in making decisions regarding ontological, epistemological, and axiological worldviews (Peel, 2020). In the constructivist paradigm, my research was founded on the idea of multiple realities, as I believed that individuals perceive reality through their knowledge, beliefs, and experiences. I conducted interviews with my participants using broad, open-ended questions that allowed them to create their own meaning from their experiences.

Research Design

I have used narrative inquiry to present the participant's experience as a research design for the study. As narrative research design in education involves planning and conducting a study that focuses on collecting and analyzing stories to gain insights into educational phenomena. In relational inquiry, narrative inquiry involves the researcher accompanying the participant, telling, reliving, and retelling stories. Research designs are types of inquiry that provide specific direction for research procedures (Creswell & Creswell, 2017). The goal of this research is to gain a comprehensive understanding of the insured parties' perspective during the non-life product insurance education process. To identify potential areas for improvement, the study aims to investigate the experiences, views, and needs of insured individuals regarding insurance education.

Study Area

The study area of my research focused on adults who are keen on purchasing insurance policies. I had chosen the participants purposefully and collected the data through the open-ended questions about their understanding, knowledge, and experience with non-life insurance policies. As the qualitative researcher, I have tried to focus on the people and their experiences, behaviors, and opinions, and tried to understand the details.

Participant Selection

For the study the selection of the participant was guided by specific criteria designed to ensure that each participant could offer a unique and valuable perspective on the research problem. The criteria for selection are to bring first-hand experience. All participants must have had at least one direct experience with a non-life insurance product (e.g., vehicle,

property, health) or have been in a position where such insurance was relevant to their life or business.

Participants were selected to represent a spectrum of socio-economic, educational, and professional backgrounds. This heterogeneity is crucial in qualitative inquiry, as it enables the capture of multiple realities and enriches the understanding of the phenomenon from various viewpoints (Palinkas et al., 2015). Also, individuals were identified who were likely to be reflective and articulate about their experiences, as the power of narrative inquiry lies in the depth and detail of the stories shared (Connelly & Clandinin, 1990).

Based on these criteria, four participants were selected. Their distinct profiles were purposefully curated to build a multifaceted understanding of adult learning in non-life insurance. The unique characteristics and the specific value each participant bring to the study are detailed below:

- Sita Kumari Mainali represents the perspective of small-scale, female entrepreneurs in the informal economy, who often have limited formal education. Her narrative is invaluable because it illuminates the significant knowledge gap and the profound barriers to access faced by a vast segment of the population, a common challenge in developing economies where insurance penetration is low (World Bank [WB], 2020). Her initial lack of awareness, followed by her eager engagement upon learning, powerfully illustrates the latent demand and the critical need for community-driven, grassroots financial education (Atkinson & Messy, 2013). Her story gives voice to those often overlooked by conventional marketing and policy frameworks.

- Nitesh Karmacharya provides the viewpoint of a male urban entrepreneur with direct, yet mediated, experience with business insurance claims. His narrative is unique because it reveals a paradox: having benefited from an insurance pay-out, yet remaining disengaged and under-informed. His story adds immense value by highlighting issues of inherited financial management and the gap between experiencing a claim and developing genuine insurance literacy (Weedige et al., 2019). His focus on marketing and digital solutions offers a pragmatic perspective on how to bridge this gap, aligning with Zhou et al. (2013) assertion that social commerce, driven by social media and digital technologies, enhances firms' competitive advantage by improving communication and consumer engagement.

- Asmita Mishra presents a counterintuitive narrative of a highly educated, professionally accomplished individual working in the international IT sector. Her experience is critically important because it challenges the assumption that formal education automatically translates to financial or insurance literacy (Tennyson, 2011). Her story underscores that the problem is not merely one of general education but of specific, accessible, and effectively communicated insurance education. Her narrative adds value by demonstrating that complexity and poor communication can create barriers even for the most "likely-to-

understand" consumers, emphasizing the systemic nature of the issue (Gutter & Copur, 2011).

- Aakash Kumar Singh contributes the perspective of a well-educated business owner with significant capital investment who actively distrusts the insurance system. His narrative is vital because it delves into the consequences of misinformation and a breach of trust. His experience is defined by active scepticism born from observing negative claim experiences, a significant barrier to insurance uptake noted in the literature (Biener & Eling, 2012). His story adds profound value by focusing on the themes of transparency, ethical agent behaviour, and the restoration of trust as prerequisites for insurance uptake, even when the objective need for coverage is recognized.

Together, these four participants form a robust narrative ecosystem. Their collective stories do not merely present four separate cases; they interact to provide a holistic, nuanced, and deeply human understanding of how adults in Nepal navigate, learn about, and make meaning of non-life insurance amidst various personal, structural, and communicative barriers. This purposeful selection ensures that the research findings are grounded in a rich tapestry of lived experiences directly relevant to the core questions of this narrative inquiry, thereby fulfilling the methodological requirement for information-rich cases (Patton, 2015).

Methods and Tools for Collecting Data

I tried to learn about the non-life insurance education process from the perspective of the individual in order to collect data for this study. I conducted in-depth, semi-structured interviews to gather participants' individual experiences, interpretations, and understandings of non-life insurance education in following the principles of narrative inquiry. While I introduced myself to the participant and gave my intentions to talked with them, at first they felt excited and eager to share their experiences. Later on, while going to the subject matter they felt quite frustrated as they didn’t know about the simple concept of insurance which they felt very necessary for their daily life.

For this study, I conducted face-to-face interviews with participants, obtaining their informed consent prior to each session and audio-recording their narrative accounts. Guided by a semi-structured interview protocol, I encouraged participants to share their experiences related to the past, present, and anticipated future, allowing their stories to unfold naturally while maintaining a coherent structure. This approach enabled me to collect rich, detailed narratives that could later be organized chronologically, providing a comprehensive understanding of how their experiences have developed over time and how these temporal dimensions shaped their perspectives on non-life insurance education. Using the interview guidelines, I engaged with participants to gather their experiences regarding the past, present, and future, which were organized in chronological order (Creswell, 2017).

4. Data Analysis and Meaning Making

This study examines how adults enhance their financial literacy and practical knowledge through real-world experiences with non-life insurance products. Non-life insurance including health, property, motor vehicles, marine, aviation, engineering, and various other risks provides not just financial security but also serves as a platform for experiential learning. Adults typically start with minimal understanding, which is often influenced by misconceptions and uncertainty regarding policy coverage, benefits, and the claims process. By purchasing policies, navigating complex terminology, filing claims and interacting with insurers, they gradually build a clearer picture of how insurance operates. Nevertheless, this educational journey is often hindered by complicated policy wording, limited access to services, underuse of digital resources, and financial constraints. These obstacles can impede understanding and diminish trust in the industry. Thus, adult's understanding of non-life insurance emerges not solely from formal education, but from lived experiences that shape their awareness, confidence and decision-making in managing risk.

Furthermore, the chapter explored the social and cultural factors that contributed to the restricted demand for non-life insurance products. To overcome these obstacles, the chapter suggested improving insurance literacy through focused community efforts, simplifying policy language, increasing digital accessibility, and developing inclusive solutions that cater to local populations. Ultimately, the chapter emphasized the significance of improving understanding and access to non-life insurance to foster financial resilience and ensure the safeguarding of adult's assets.

Ways of Learning

The adults demonstrated different ways of learning while having insurance in their lives, among them key ways of learning related to their stories, including readiness to learn, experience-based learning, problem-centered orientation, and learning. While reflecting on the stories of all four participants, I understand that they learn new knowledge when it is connected to their immediate life transitions, such as Aakash getting married, having two children, and starting a business. This is a major trigger to have non-life insurance without any agent's suggestions. He would like to save on his insurance.

Non-Life Insurance for Safety

The experiences of Sita Kumari Mainali, Nitesh Karmacharya, Asmita Mishra, and Aakash Kumar Singh illustrate how adults gradually develop an understanding of non-life insurance through personal exposure rather than formal education. Sita, a small tailoring business owner in Kathmandu, initially had minimal awareness of ensuring her equipment or business, but through discussion, she realized the importance of protecting her livelihood against theft

and unforeseen risks. Similarly, Nitesh's early encounter with insurance during his export business when compensation was received during the India Nepal border blockade did not translate into deep understanding because he was not directly involved in policy management. Although he later insured vehicles and properties, he relied on others for information and had not insured his current business. Asmita, despite her strong academic and professional background, demonstrated confusion about policy coverage, particularly regarding vehicle and health insurance, highlighting that education alone does not ensure insurance literacy. Aakash, an entrepreneur, possessed basic knowledge of third-party insurance but hesitated to insure his business due to mistrust and unclear communication from agents.

Collectively, their stories reveal common barriers to non-life insurance adoption in Nepal, including complex policy language, limited outreach, lack of transparency, and insufficient community-based education. All participants emphasized the need for clearer communication, simplified policy documents, and targeted awareness programs through schools, communities, and digital platforms. Their experiences reinforce the idea that insurance literacy develops through engagement, dialogue, and real-life encounters, and they underscore the responsibility of insurance professionals to build trust through honesty, transparency, and grassroots education initiatives.

Experienced-Based Learning from Information and Misinformation

Experience-based learning in insurance aligns with Kolb's concept of reflective observation, where adults construct understanding through exposure, discussion, and lived experience. However, the quality of that learning is heavily influenced by the accuracy of information they receive. As noted by Feinman (2024), insurance misinformation is unethical and must be prevented and penalized, as it distorts consumer decision-making and weakens trust in the industry. Sita Kumari Mainali's limited understanding of non-life insurance stemmed from informal social conversations and a lack of professional guidance. Although she owned insurable assets, she was unaware of their protection value until engaged in dialogue. Similarly, Nitesh Karmacharya's knowledge was shaped by indirect involvement in his family business and casual interactions rather than formal education or clear communication with insurers, leading to inconsistent understanding and hesitation to insure his enterprises.

Asmita Mishra and Aakash Kumar Singh further demonstrate that higher education and business experience do not automatically translate into insurance literacy. Asmita relied primarily on employer-provided information and misunderstood key policy elements, while Aakash's perceptions were influenced by peer discussions and unclear explanations from agents, resulting in mistrust and reluctance to insure his business. Across all cases, misinformation, complex policy language, weak outreach, and inadequate ethical communication emerged as major barriers. These experiences underscore the urgent need for

transparent practices, simplified policy wording, community-based education, and early financial literacy initiatives to counter misinformation and strengthen informed participation in Nepal's insurance sector (Feinman, 2024).

Self-Directed Learning and Early Exposure

Education, literacy, and early exposure play a crucial role in shaping adults' understanding of insurance and their ability to make informed decisions. Sita Kumari Mainali's case shows that even with basic formal education, limited exposure to insurance concepts can leave individuals unaware of essential risk management tools. Once introduced to motor, health, and property insurance, she quickly recognized their importance and expressed interest in promoting community-level awareness. Her experience highlights that timely, practical, and community-oriented education can empower small entrepreneurs to protect their assets confidently. It also demonstrates that learning does not occur only through formal schooling but through social interaction, discussion, and relatable guidance that connects insurance concepts to real-life needs.

Similarly, Nitesh Karmacharya, Asmita Mishra, and Aakash Kumar illustrate that higher education and business experience alone do not guarantee insurance literacy. Nitesh's understanding remained limited due to a lack of systematic education and practical engagement, while Asmita's professional background did not prevent confusion about policy details. Aakash's uncertainty stemmed from unclear communication and insufficient early education about insurance principles. Together, their experiences emphasize the need for structured insurance education from a young age, combined with interactive, community-based learning and clear communication strategies. Strengthening insurance literacy through accessible platforms and practical engagement can build trust, enhance decision-making, and improve financial security among entrepreneurs and working professionals.

Internal Motivation and Mutual Aid

All participants demonstrated internal motivation to avoid risk and recognized the mutual benefits of insurance, particularly Aakash, who valued financial protection despite his uncertainties. Their experiences reveal that the role of an insurance professional goes beyond merely selling policies; it includes prioritizing after-sales service, maintaining strong and honest communication, and providing continuous education to build lasting trust. Clear explanations of both benefits and limitations help clients make informed decisions and strengthen their financial security. Furthermore, the call for simpler policy language and regular awareness initiatives highlights the urgent need for transparent, accessible, and practical insurance education. Ongoing engagement and community-based efforts are essential to reduce misunderstandings, close the trust gap, and increase insurance adoption among individuals like Sita, Nitesh, Asmita, and Aakash.

Trust and Institutional Responsibility

The experiences of Sita Kumari Mainali and Nitesh Karmacharya highlight the central role of trust and institutional responsibility in strengthening insurance literacy among small entrepreneurs in Nepal. Sita's limited exposure to insurance and her reliance on informal advice revealed a significant gap between insurance professionals and community members. Despite her eagerness to learn, she lacked access to basic knowledge, underscoring the need for community-based awareness programs and collaborative efforts between insurance companies and the government. Similarly, Nitesh's partial understanding of policy details and reliance on intermediaries demonstrated how complex procedures and unclear communication weaken personal trust. His experience reinforced the idea that insurance companies must go beyond selling policies by providing transparent information, continuous education, and authentic relationship-building to foster long-term confidence and economic stability.

Asmita Mishra and Aakash further emphasized that even educated professionals and entrepreneurs may feel disconnected from their insurance coverage due to unclear communication and lack of transparency. Asmita's dependence on her company's administrative department and Aakash's hesitation stemming from distrust and negative claim experiences both illustrate how poor communication reduces confidence in insurance institutions. Their reflections stress that insurance providers must act as educators and trusted partners by simplifying policy language, clearly explaining exclusions and limitations, and conducting regular awareness campaigns, including through social media and government collaboration. Ultimately, strengthening trust, maintaining transparency, and adopting a customer-centered approach are essential to empower individuals to make informed decisions and enhance the effectiveness of the insurance sector.

This study extends the existing knowledge on insurance literacy by moving beyond a purely financial or conceptual understanding and reframing it as a process of *adult learning*. Much of the prior literature on insurance literacy, such as that by Tennyson (2011) and Gutter and Copur (2011), focuses on quantifying literacy levels or identifying product-related barriers. This research, however, delves into the '*how* 'and '*why*' behind these literacy gaps by applying the principles of adult learning theory, particularly the andragogical model pioneered by Knowles (1980).

Hence, the study promoted insurance literacy based on adult learning theories, which emphasized the practical importance, problem-solving capacity, self-directed learning, and application of existing experiences. The stories shared by participants clarified how adult learners benefit from utilizing resources such as community workshops, digital content, and collaborative programs. Moreover, the chapter emphasized the need for systemic reforms

and early education on insurance, as well as ethical communication from agents, and clear, accessible policy choices.

5. Conclusion

This research reinterprets non-life insurance literacy as a lifelong learning journey influenced by practical experiences rather than just formal education. It illustrates that adults progressively enhance their financial knowledge through the purchase of policies, interactions with insurance providers, and the claims process, even though they often begin with misunderstandings, complex jargon, and limited access to straightforward information. The experiences shared by participants like Sita, Nitesh, Asmita, and Aakash demonstrate that insurance literacy is fostered through a willingness to learn, engagement with problem-solving situations, self-guided learning, and reflection on personal experiences. Nonetheless, challenges such as misinformation, poor communication, a lack of transparency, and inadequate outreach persist, undermining trust and hindering the adoption of non-life insurance in Nepal. These challenges emphasize the necessity for clearer policy language, ethical sales practices, increased digital access, and community-oriented awareness programs to enhance financial resilience.

Using adult learning theory with andragogical framework, this research builds on current literature regarding insurance literacy by investigating the reasons and mechanisms behind the persistence of knowledge gaps. It highlights that adults tend to learn more effectively when education is relevant, based on real experiences, and closely tied to their current life requirements. To improve insurance literacy, it is essential to provide early exposure, organized educational initiatives, engaging community workshops, and partnerships between insurance providers and governmental agencies. In the end, promoting transparency, fostering trust, and providing ongoing education can enable individuals to make well-informed decisions regarding risk management, thereby improving both personal safety and economic stability.

References

Atkinson, A., & Messy, F. A. (2013). *Promoting financial inclusion through financial education: OECD/INFE evidence, policies and practice publishing*. https://doi.org/10.1787/5k3xz6m88smp-en

Bada, S. O., & Olusegun, S. (2015). Constructivism learning theory: A paradigm for teaching and learning. *Journal of Research & Method in Education*, *5*(6), 66-70.

Baroway, C. A. (2007). ePublications at Regis University. *Adult Learning* https://regis.lunaimaging.com/luna/servlet/allCollections?homepageView=2

Biener, C., & Eling, M. (2012). Insurability in micro insurance markets: An analysis of problems and potential solutions. *The Geneva Papers on Risk and Insurance-Issues and Practice, 37, 77-107.* . https://doi.org/10.1057/gpp.2011.29

Brown, V. (2018). Infusing adult education principles into a health insurance literacy program. *Health Promotion Practice*, *19*(2), 240-245. https://doi.org/10.1177/1524839917700369

Chowdhury, T. A., Rahman, M. I., & Afza, S. R. (2007). Perceptions of the customers towards insurance companies in Bangladesh-*A study based on the survqual model.* http://hdl.handle.net/10361/397

Chummun, B. Z. (2016). Emerging practices of consumer financial education (CFE) in the micro insurance industry: a case of South Africa. *International Journal of Education Economics and Development, 7*, 1–13. https://doi.org/10.1504/IJEED.2016.079236

Connelly, F. M., & Clandinin, D. J. (1990). Stories of experience and narrative Inquiry. *Educational Researcher, 19*(5), 2–14. https://doi.org/10.3102/0013189X019005002

Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches.* Sage publications.

Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). SAGE Publications. https://www.scirp.org/reference/referencespapers?referenceid=2155979

Dobson, P. J. (2002). Critical realism and information systems research: Why bother with philosophy. *Information Research*, *7*(2), 7-2. https://informationr.net/ir/7-2/paper124.html

Feinman, J. M. (2024). *Misinformation about insurance fraud contents* (III). Rutgers University. https://doi.org/10.7282/00000460

Ghimire, R., & Ghimire, S. (2024). Awareness of policyholders towards the terms and conditions of life insurance policy. *Journal of Interdisciplinary Studies*, 13(1), 75–95. https://doi.org/10.3126/jis.v13i1.73340

Gutter, M. S., & Copur, Z. (2011). Financial behaviors and financial well-being of college students: Evidence from a national survey. *Journal of Family and Economic Issues*, 32(4), 699–714. https://doi.org/10.1007/s10834-011-9255-2

Insurance Board Nepal (IBN). (2023). *Annual Report 2021/22.* https://ib.org.np/uploads/files/Annual_Report_2078_79_English_1678859929.pdf

Insurance Act (2079) *Insurance act* Government of Nepal. https://nia.gov.np/law/insurance-act

Khanal, N. (2020). Review on insurance and their present status in Nepalese economy. *Management Dynamics*, *23*(1), 239-252. doi:https://doi.org/10.3126/md.v23i1.35583

Knowles, M. S. (1980). *The modern practice of adult education: From pedagogy to andragogy* (Rev. ed.). Association Press. https://www.umsl.edu/~henschkej/articles/a_The_%20Modern_Practice_of_Adult_Education.pdf

Kumar, N. (2024). Comprehensive risk management in personal finance. *Social Science Research Network.* https://doi.org/10.2139/ssrn.4844836.

Kumar, S., Raheja, K., & Dhiraj, A. (2023). Environment education and insurance awareness. *A Boon to Indian Insurance Sector*. 317–332. https://doi.org/10.1002/9781394167944.ch20

Lee, H. S., & Kuang, K. S. (2025). From anxiety to action: understanding financial worries and strategies to boost insurance take-up. *International Journal of Management, Finance and Accounting, 6(*2), 341–374. https://doi.org/10.33093/ijomfa.2025.6.2.12

Majka, M. (2024). *The crucial role of insurance in risk mitigation strategies*. https://www.researchgate.net/profile/Marcin-Majka-2/publication/383846608_The_Crucial_Role_of_Insurance_in_Risk_Mitigation_Strategies/links/66dc5f69f84dd1716cd4b626/The-Crucial-Role-of-Insurance-in-Risk-Mitigation-Strategies.pdf

Nepal Insurance Authority (2024): *Insurer information.* https://nia.gov.np/

Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and Policy in Mental Health and Mental Health Services Research, 42*(5), 533–544. https://doi.org/10.1007/s10488-013-0528-y

Patton, M. Q. (2015). *Qualitative research & evaluation methods* (4th ed.). SAGE Publications. https://uk.sagepub.com/en-gb/eur/qualitative-research-evaluation-methods/book232962

Peel, K. L. (2020). A beginner's guide to applied educational research using thematic analysis. *Practical Assessment, Research, and Evaluation*, *25*(1), 2. https://doi.org/10.7275/ryr5-k983

Preker, A. S., & Dror, D. M. (2008). *Insurance awareness and education* https://doi.org/10.1142/9789811208539_0008

Prykaziuk, N., & Motashko, T. (2023). Consumer protection in insurance sector in Europe. *Naukovij Vìsnik Užgorods'kogo Nacìonal'nogo Unìversitetu, 46.* https://doi.org/10.32782/2413-9971/2023-46-11

Rejda, G. E., & Mc Namara, M. J. (2020). *Principles of risk management and insurance* (14th ed.). Pearson. https://api.pageplace.de/preview/DT0400.9781292349763_A42098445/preview-9781292349763_A42098445.pdf

Talvinen, J. M. (1994). Information system in marketing: Identifying opportunity for new application. *European Journal of Marketing*, 29(1), 8-26. https://doi.org/10.1108/03090569510075307

Tennyson, S. (2011). Consumers' insurance literacy: Evidence from survey data. *Financial Services Review*, *20*(3), 165. https://www.researchgate.net/publication/267094407_Consumers'_Insurance_Literacy_Evidence_from_Survey_Data

Weedige, S. S., Ouyang, H., Gao, Y., & Liu, Y. (2019). Decision making in personal insurance: Impact of insurance literacy. *Sustainability*, *11*(23), 6795. https://doi.org/10.3390/su11236795

World Bank (WB). (2020). *Nepal: priorities for poverty reduction and inclusive growth*. World Bank Group. https://documents.worldbank.org/en/publication/documents-reports/documentdetail/587871589103597792/nepal-priorities-for-poverty-reduction-and-inclusive-growth (Context on development & risk)

Zhou, L., Long, M., Junjie, W., & Han, W. (2013). *The enlightenment of and reference from successful experiences of Australia and new zeal and for protecting financial and insurance consumers.* https://doi.org/10.13497/j.cnki.is.2014.12.013

Zhou, L., Zhang, P., & Zimmermann, H. D. (2013). Social commerce research: An integrated view. *Electronic Commerce Research and Applications*, *12*(2), 61–68. https://doi.org/10.1016/j.elerap.2013.02.003

Where Numbers Fall Short: Realities of Medical and Critical Illness Claims in Nepal's Insurance Sector

Kamal Pandey
Medical Claim, IGI Prudential Insurance Limited
Email: kamal.pandey@igiprudential.com
DOI: https://doi.org/10.3126/jissa.v2i1.92247

Abstract

Nepal's insurance sector is undergoing rapid transformation, particularly in health and critical illness coverage. However, a growing gap exists between product design and real-world claim adjudication. This article examines the inconsistencies between actuarial assumptions, medical realities, and policy interpretations within Nepal's insurance landscape. Drawing from five years of practitioner-based experience in both life and general insurance claims, the study utilizes qualitative case analysis to highlight systemic weaknesses in claim settlement, including diagnostic ambiguities, definitional rigidity, and documentation discrepancies. Six anonymized case studies illustrate recurring issues such as denial due to technical policy wording, absence of standardized medical documentation, and lack of coordination between claims, underwriting, and actuarial teams. The findings emphasize the need for localized policy definitions, standardized documentation, feedback integration, and regulatory oversight. The paper concludes that bridging actuarial precision with operational sensitivity is vital for strengthening customer trust and establishing an equitable, context-sensitive insurance ecosystem in Nepal.

Keywords: Insurance claims, critical illness insurance, medical indemnity, actuarial models, claim adjudication, health economics, policy design.

1. Introduction

Over the past decade, Nepal's insurance industry has experienced rapid diversification—both in product development and consumer awareness. Among the most notable areas of growth is the rising popularity of health and critical illness insurance, driven by increasing medical costs, a growing middle class, and expanding regulatory support (Kumara & Samaratunge, 2020). Life insurers now offer critical illness (CI) riders that promise lump-sum payouts upon diagnosis of serious diseases, while general insurers provide medical indemnity products that cover hospitalization expenses. Despite this progress, one critical component of insurance operations has not kept pace with product innovation: claims adjudication.

While actuarial science drives product pricing and benefit structure, claim departments must interpret real-life medical cases against rigid policy wordings - a task far more complex than anticipated during product design. In practice, the gap between what is covered and how

claims are assessed often results in confusion, delays, and customer dissatisfaction. This is especially evident in critical illness claims, where diagnosis, staging, and clinical documentation rarely align neatly with the policy's definition of illness.

As a professional who has worked in both life and general insurance claims departments, I have witnessed firsthand the operational and interpretational mismatches that arise in handling complex medical claims. This paper explores these mismatches by analyzing real-world scenarios in Nepal's insurance market. It aims to identify where actuarial models, medical interpretations, and policy definitions fall out of sync and what can be done to bridge that gap.

By blending academic insights with frontline claim experience, this article offers a practical framework for improving claim handling in Nepal's emerging insurance ecosystem. It contributes to ongoing conversations about customer trust, technical alignment, and insurance professionalism in South Asia.

2. Industry Context: Critical Illness and Medical Claims in Nepal

The insurance landscape in Nepal has experienced significant transformation over the last two decades. Spurred by economic growth, regulatory reforms, and rising health awareness, both life and non-life insurance companies have expanded their offerings to include health-related benefits. Among these, critical illness (CI) products in life insurance and medical (health) indemnity policies in general insurance have seen notable growth. These developments mirror trends across South Asia, where rising healthcare costs and increased disease prevalence have pressured insurers to innovate beyond traditional life cover or hospitalization reimbursement (World Bank, 2021).

(Nepal Insurance Authority, 2025) has actively encouraged diversification in insurance offerings. In its recent circulars, it has emphasized improving health insurance penetration and product standardization. As a result, critical illness riders—especially those covering cancer, cardiovascular diseases, and organ failure have become common in life policies (World Health Organization, 2023). Simultaneously, general insurance providers have launched variations of fixed benefit, top-up, and cashless medical policies. Yet, with this evolution comes a new set of challenges: notably, a mismatch between product design and the operational realities of claims processing.

Theoretical Models vs. Practical Claims Handling

Existing literature on insurance product design in developing markets often emphasizes the importance of actuarial soundness, sustainability, and pricing models. These models typically rely on clean datasets, risk stratification, and medical definitions rooted in global

clinical norms (e.g., ICD-10 or WHO staging). However, very little literature from Nepal or South Asia addresses how these models hold up when confronted with local claim realities.

Studies from India and Sri Lanka (e.g., Shah et al., 2020; Fernando, 2019) point to a growing disconnect between underwriting assumptions and claim settlement decisions in health-related insurance products. These findings are echoed in anecdotal observations from Nepal, where claim rejection rates in critical illness insurance especially in cancer and heart-related claims are higher than expected. This discrepancy is often rooted in the complexity of interpreting medical evidence, staging, and terminology vis-à-vis rigid policy definitions.

Additionally, there is a scarcity of peer-reviewed research focusing on claims management practices in Nepal. Most available documentation comes in the form of regulatory reports, operational manuals, or product brochures. Academic discourse tends to emphasize insurance penetration and premium trends, with less attention given to claims adjudication, claims-related disputes, or policyholder experience post-claim -the very factors that determine customer trust and retention (Swiss Re., 2023).

Operational Fragmentation and Policy Ambiguity

A review of product literature from major insurers in Nepal reveals significant variation in CI definitions, claim requirements, and documentation standards. For instance, while one insurer may require a detailed histopathology report for a cancer claim, another may accept a consultant oncologist's summary. Similarly, "stroke" or "heart attack" definitions vary in terms of necessary diagnostic evidence (e.g., CT scan vs. neurological observation), creating confusion for claimants and inconsistency among adjudicators.

The absence of a centralized clinical guideline or industry-wide medical interpretation framework further exacerbates this gap. This is compounded by the fact that many critical illness definitions are adopted directly from reinsurance templates, often developed in Western markets, with limited contextual adaptation to local disease presentation, diagnostic infrastructure, or medical reporting standards in Nepal.

Experience from the Field: A Missing Voice

Despite the importance of claims to the insurer-customer relationship, there is a marked lack of published work that draws on the experience of claims officers and medical assessors those who work at the frontline of policy interpretation. These professionals routinely face dilemmas that are not anticipated in underwriting manuals or product prospectuses. This article seeks to fill that gap by offering a field-based perspective that combines technical knowledge with practical realities, highlighting the limitations of current models and suggesting locally informed improvements.

3. Methodology and Perspective

This article employs a practitioner-based case reflection methodology, grounded in real-world experience handling critical illness and medical claims in both life and general insurance sectors in Nepal. The insights presented are not drawn from a formal quantitative dataset but are instead qualitative observations based on Five years of working within claim departments in life (Himalayan Life Insurance Limited) and General (IGI Prudential Insurance Limited) : direct involvement in evaluating, approving, and rejecting claims related to cancer, cardiac events, neurological disorders, and complex medical conditions.

The dual-sector exposure-first in life insurance and now in general insurance provides a unique lens to compare the fixed-benefit model typical of critical illness policies with the reimbursement-based structure of medical insurance. While critical illness claims depend heavily on matching diagnosis to strict definitions outlined in the policy, medical claims are more dynamic, involving diverse treatment types, billing structures, and hospitalization processes (Munich Reinsurance Company, 2022). This contrast informs the comparative framework used in this paper.

To illustrate the systemic disconnects between actuarial design and claim reality, this article reflects on six anonymized cases encountered during regular operations. These cases were selected based on their:

- Diagnostic ambiguity (e.g., early-stage cancers, stroke without radiological evidence)
- Policy interpretation complexity (e.g., cardiac claims not fulfilling all CI conditions)
- Conflict between medical reality and product wording
- Overlap between life and general insurance policies

These examples are used not as isolated anomalies but as representative patterns of issues that emerge across multiple insurers and policy types in Nepal.

Additionally, references are made to product documents, claim guidelines, and underwriting manuals used by leading insurers in Nepal to highlight where ambiguities arise. Although these materials are not quoted verbatim due to confidentiality, their essence is retained to demonstrate the typical structures used in local policy design and their influence on claims decisions.

The interpretative framework used in this analysis is drawn from the intersection of:

- Actuarial science principles (particularly assumptions embedded in product pricing and risk stratification)
- Health economics (specifically moral hazard, adverse selection, and information asymmetry)

- Operational claims management (focusing on real-time decision-making and medical documentation interpretation)

By situating the analysis within this blended framework, the article seeks to bridge the academic understanding of insurance product performance with the on-ground realities of claims adjudication. It aims to highlight that even technically sound insurance products can underperform in customer satisfaction and fairness if practical challenges in claims are not factored into their design.

4. Real-World Challenges in Claim Adjudication in Nepal

Claims adjudication is the moment where the insurer's promise is tested. In Nepal, this process is frequently challenged not only by limited documentation or infrastructure but by inconsistencies between policy wording, underwriting expectations, and medical realities. Based on firsthand experience across life and general insurance claims, several recurring patterns emerge that expose systemic weaknesses in how critical illness (CI) and medical insurance claims are handled. These issues are not isolated to specific insurers but appear across the industry suggesting a structural need for reform.

Critical Illness Claims in Life Insurance: Definitional Rigidity vs. Clinical Complexity

Critical illness policies in Nepal typically follow templates provided by global reinsurers, defining claim eligibility in strict, binary terms. However, medical conditions rarely present themselves in such clear-cut stages.

Cancer claims are frequently disputed due to classification issues- especially when diagnosed as carcinoma in situ, low-grade tumors, or borderline malignancies (Shah, et al., 2013). While policy definitions clearly exclude non-invasive cancers, confusion arises when diagnostic language in pathology reports does not neatly state “invasive” or when treatment (e.g., mastectomy and chemotherapy) suggests severity that policy wording doesn't technically acknowledge.

Cardiovascular claims such as myocardial infarction or coronary artery disease face problems when the required evidence (e.g., elevated cardiac enzymes, ECG changes, or angiographic proof) is only partially present. In some cases, CABG surgery is performed based on clinical judgment, yet claims are denied because certain diagnostic thresholds are unmet.

Neurological claims involving stroke or coma also demonstrate the issue. Policies often demand radiological evidence of permanent brain damage or specific durations of unconsciousness. Yet, in practice, patients may show severe functional impairment without fully satisfying these narrow definitions.

Another issue is the binary nature of CI benefits either full payment is made or none at all. This lack of proportionality leads to frustration among policyholders and limits the insurer's ability to act fairly in ambiguous cases.

Medical Claims in General Insurance: Documentation, Definitions, and Discretion

Medical insurance in Nepal generally follows a reimbursement model, which introduces its own set of challenges:

Pre-existing condition disputes are among the most common. In many cases, diagnoses made during hospitalization are retrospectively interpreted as pre-existing based solely on assumptions or indirect references in old prescriptions. Without standardized underwriting and claim-linked medical coding, such decisions can appear arbitrary.

Diagnostic ambiguity is also a problem. For example, a case diagnosed as "viral fever with suspected encephalitis" may lead to a denial if encephalitis is not confirmed- even though treatment aligns with the suspected condition. This reveals a gap between clinical judgment and claims criteria.

Cashless claims often face issues when hospitals provide incomplete documentation or omit key tests. In such cases, the insurer bears the cost of assumption or delays, creating tension between the customer, the provider, and the insurer.

In pediatric claims, insurers often struggle with rare diagnoses or undefined disease presentations, leading to conservative interpretations and increased rejection rates despite the presence of severe symptoms.

Shared Challenges Across Both Sectors

Several systemic issues affect both CI and medical insurance:

- Ambiguous documentation from hospitals or treating physicians makes it difficult to match real cases to policy definitions. Discharge summaries often use vague terms like "lesion," "provisional diagnosis," or "rule out," which lack the specificity needed for clean claim approvals.
- Lack of standard medical coding (e.g., ICD-10) across insurers prevents consistency. One claims team might accept a CT report as proof of stroke, while another may demand neurological certification.
- Misalignment between underwriting and claims: Many policies are sold based on optimistic interpretations of coverage. When customers discover exclusions or requirements at the time of claim, it results in dissatisfaction and reputational risk.

Resource gaps in claims teams: Many adjudicators lack a clinical background and rely solely on documentation rather than clinical reasoning. This can lead to overly rigid or overly lenient decisions -both of which can harm the insurer.

Operational Pressures and Moral Hazard

In some cases, moral hazard and fraud also complicate claim adjudication:

Fabricated medical bills or inflated treatment costs, particularly in general insurance, place claims teams in an adversarial position with customers and hospitals.

Multiple policy stacking (e.g., critical illness cover with overlapping benefits) creates difficulty in assigning liability and interpreting the scope of payout.

Agent-driven expectations lead to misrepresentation at the point of sale, where policyholders are led to believe that any "serious disease" will result in an automatic payout contradicting the legal definition embedded in the policy.

5. Bridging the Gap: Actuarial Assumptions vs. Practical Realities in Claim Handling

Actuarial science forms the foundation of modern insurance design. Actuaries define benefit structures, set premiums, and determine risk exposure based on mathematical models and historical data. In Nepal, where health and critical illness insurance are still maturing, actuarial models often rely on reinsurance templates, global disease prevalence, and assumed patterns of illness progression. While this provides a technical backbone for product development, the experience in claims departments reveals a significant gap between model assumptions and real-world complexity.

Theoretical Risk Stratification vs. Clinical Ambiguity

Actuarial pricing assumes a rational categorization of diseases: cancer is either invasive or not; a heart attack either occurred or didn't; a stroke is confirmed or excluded. In reality, medical conditions often lie in gray zones. For instance:

A biopsy may suggest "atypical ductal hyperplasia" rather than clear carcinoma.

A patient may undergo angioplasty for unstable angina with elevated markers, yet lack the full ECG pattern of an infarction.

Neurological deficits may persist without confirmatory imaging due to delays or limitations in rural diagnostic centers.

Such ambiguity is not factored into actuarial pricing, which assumes policyholders will either cleanly meet or miss the defined criteria. This oversimplification causes friction in claims,

especially when customers argue that the intent of the policy has been fulfilled, even if technical definitions are not met.

Claim Frequency and Severity: A Misaligned Expectation

CI products are priced assuming a low frequency, high severity model. In practice, claim departments are now witnessing:

- Increasing frequency of early-stage diagnoses, especially in cancers (due to better awareness and screening)
- More borderline cardiac procedures (angioplasty without full MI)
- Complex multi-morbidity claims, where one illness triggers investigation of another

These cases may not result in payout but require full claims investigation, thereby increasing operational cost, turnaround time, and customer dissatisfaction. Yet, actuarial loadings for administrative strain are often not sufficient, especially in low-premium CI riders.

Static Product Design in a Dynamic Medical Landscape

The definitions embedded in most CI policies in Nepal are often imported from international reinsurer guidelines with minimal localization. They reflect medical knowledge from a point in time, while medical science evolves rapidly. Examples:

Cancer classifications have expanded, with terms like “borderline malignancy” and “pre-invasive carcinoma” becoming more clinically relevant—but not yet reflected in policy wordings.

Neurological and cardiac conditions are increasingly diagnosed using biomarkers and advanced imaging, which may not be required or accessible in Nepal’s public hospitals.

Treatments like targeted therapy, hybrid cardiovascular surgeries, or daycare chemotherapy challenge the traditional assumption that hospitalization or full surgical intervention is a claim trigger.

Actuarial models, unless frequently updated, fail to capture these nuances placing pressure on claim adjudicators to interpret outdated definitions against modern clinical realities.

The Feedback Gap: Lack of Experience-Driven Product Evolution

In an ideal system, claims data and real-world experiences should loop back into actuarial pricing and underwriting design. However, in Nepal’s insurance industry, this feedback mechanism is weak or nonexistent. Some reasons include:

- Siloed operations: Claims, underwriting, and actuarial teams rarely collaborate post-product launch.

- Lack of standardized claims reporting across the industry, making it difficult to aggregate meaningful trends.
- Agent-driven distribution focuses more on sales volume than claim quality, reducing focus on feedback integration.

The result is a system where products continue to be priced and sold with assumptions that are divorced from how claims actually unfold- increasing friction, rejections, and reputational damage.

Claim Outcomes as a Risk Management Tool

Ironically, claim adjudication often becomes the de facto risk control mechanism, instead of better underwriting or pricing. Rather than refining products to reflect what is medically and operationally feasible, insurers depend on technical rejections or ambiguous interpretation to protect margins. This approach may provide short-term cost containment, but undermines long-term trust, market development, and regulatory goodwill.

6. Case-Based Illustrations from Nepal's Claims Landscape

The following anonymized case studies, drawn from real claim files handled across both life and general insurance companies in Nepal, illustrate the operational, medical, and interpretational complexities discussed earlier. These cases are not outliers- they represent common, recurring dilemmas that highlight the gap between insurance product assumptions and medical reality.

Case 1: Cancer Diagnosis and the "In Situ" Confusion

A 45-year-old female policyholder underwent a mastectomy after being diagnosed with ductal carcinoma in situ (DCIS) of the right breast. She submitted a claim under her critical illness rider for "Cancer of Specified Severity." Despite the severity of her treatment—surgery, radiation, and extended recovery-the claim was rejected on the grounds that DCIS is excluded under most CI definitions, as it is technically non-invasive.

✓ Key Issue:

Policy definition required histological confirmation of invasion beyond the basement membrane. The treating oncologist's report described the lesion as "DCIS, high grade," but without explicit mention of invasion, making it inadmissible - even though the clinical impact and cost of treatment were substantial.

✓ Insight:

This case demonstrates how strict adherence to pathology wording can override clinical severity, frustrating policyholders and damaging insurer credibility.

Case 2: Stroke Without a Scan

A 58-year-old man suffered a sudden loss of motor function and was diagnosed by the attending neurologist with a right hemispheric ischemic stroke. CT scan facilities were unavailable at the time, and he was referred to a government hospital days later, where imaging failed to capture definitive infarction due to delay.

The claim was filed under CI for stroke. Despite physician certification and obvious clinical symptoms, the claim was rejected because the policy required radiological evidence of brain tissue damage and neurological deficit lasting at least 96 hours.

✓ Key Issue:
In rural or resource-limited settings, radiological confirmation is not always feasible in time. Policy definitions assume access to modern diagnostics, which is not the reality for many in Nepal.

✓ Insight:
Standard definitions built for advanced clinical environments need local adaptation, or at least discretionary clauses for medically justified exceptions.

Case 3: heart disease – Treated but Not Covered

A 49-year-old male was diagnosed with double vessel coronary artery disease and underwent coronary artery bypass grafting (CABG). The claim under his CI policy was rejected due to lack of angiographic documentation and failure to meet the specified >70% stenosis threshold per the policy wording.

Ironically, the surgery itself should have signaled severity - but because the pre-op angiogram report was not attached (the hospital only provided a surgical note), the insurer could not validate whether the surgery met the technical trigger criteria.

✓ Key Issue:
Claims teams rely heavily on pre-specified test results, even when treatment decisions (and clinical severity) are clear.

✓ Insight:
Over-reliance on documentation - particularly when medical action already proves severity-results in technically defensible but ethically questionable rejections.

Case 4: Medical vs. CI Policy Overlap - Who Pays?

A 55-year-old policyholder had both a medical insurance plan and a CI rider. He was hospitalized with hypertensive heart disease and underwent a combination of diagnostic and stabilization procedures but no surgery. His medical insurer covered part of the cost. He then claimed the CI benefit, arguing the illness was severe enough.

The CI claim was denied, as the condition did not meet the strict definitions of "Heart Attack" or "Heart Failure" under the policy. The customer felt betrayed, believing that two separate covers should ensure broader protection.

✓ Key Issue:
Customer expectations often conflate medical and CI benefits, especially when agents oversell without clarifying distinctions.

✓ Insight:
There is a pressing need for better sales training, policyholder education, and policyholder-friendly CI definitions to reduce this confusion.

Case 5: Pediatric Neuroblastoma – Covered but Unclear

A 7-year-old boy was diagnosed with neuroblastoma and treated with chemotherapy and supportive care. His parents filed a CI claim. The policy included pediatric cancer but used adult-oriented definitions (requiring "histologically confirmed malignancy with evidence of metastasis or severe bone marrow suppression").

The histopathology report confirmed neuroblastoma, but did not specify metastasis. The claim was initially put on hold due to ambiguous staging. It was only after direct clarification from the oncologist that the claim was approved.

✓ Key Issue:
Pediatric conditions are often underrepresented or poorly defined in policy wordings, leading to delays or denials.

✓ Insight:
CI policies must explicitly define pediatric conditions, use clear staging standards, and recognize real-world treatment protocols.

Case 6: Reimbursement Denied Due to Documentation Errors

A woman was admitted to a private hospital for severe abdominal pain, later diagnosed as ovarian torsion, and underwent laparoscopic surgery. She filed a medical claim under her general insurance policy.

The hospital failed to submit the intra-operative findings and complete histopathology on time. The insurer rejected the claim for "insufficient documentation," despite multiple attempts by the claimant to supplement missing papers.

✓ Key Issue:
Hospital documentation practices vary widely and directly affect claim outcomes.

✓ Insight:

Standardized documentation templates, hospital tie-ups, and insurer training can reduce these unnecessary rejections.

7. Recommendations for the Nepalese Market

The recurring disconnects between policy design, actuarial assumptions, and real-world medical claims in Nepal signal an urgent need for systemic improvements. Based on professional experience, observed case patterns, and comparative regional practices, the following recommendations aim to improve fairness, clarity, and operational efficiency in Nepal's critical illness and health insurance claims ecosystem.

A. Local Adaptation of Policy Definitions

Many of Nepal's critical illness (CI) and medical insurance products are based on global reinsurer templates, which may not reflect local healthcare realities. These definitions often assume:

- Universal access to advanced diagnostic tools (e.g., MRI, histopathology)
- Standardized medical documentation
- Clinically uniform disease progression

Recommendation:

Insurers, guided by the Insurance Board and relevant medical associations, should develop localized CI definitions that consider:

- Common diagnostic practices in Nepal
- Resource variability between urban and rural hospitals
- Region-specific disease presentations (e.g., tuberculosis-related complications, late-stage diagnoses)

This will reduce unnecessary rejections and better align policies with the healthcare environment policyholders actually face.

B. Integrated Feedback Loop Between Claims, Underwriting, and Product Design

Currently, claim decisions in most companies are not systematically fed back into underwriting or actuarial teams, leading to repetitive product blind spots.

Recommendation:

- Establish a formal feedback mechanism where rejected, disputed, or complex claims are reviewed quarterly.
- Use anonymized case studies to update underwriting manuals, pricing models, and sales training materials.

- Consider forming a multi-disciplinary task force involving claims officers, underwriters, actuaries, and medical advisors to review emerging medical claim trends and their implications on policy design.

C. Standardized Medical Interpretation Guidelines

One of the key bottlenecks in claim adjudication is the inconsistent interpretation of medical documents, especially when terminology varies by doctor, hospital, or diagnostic lab.

Recommendation:

- Develop an industry-wide medical interpretation guideline- an internal document aligned with ICD-10/11 codes, WHO standards, and adapted for Nepal.
- Train claim adjudicators and panel doctors in standard diagnostic triggers and how they relate to policy wording (e.g., what counts as “invasive cancer” vs. “in situ”).

This would also support newer claims staff and reduce internal decision variance.

D. Clarity and Simplicity in Product Wording

Claim disputes often arise not from medical disagreements, but from ambiguity or complexity in policy wording.

Recommendation:

- Simplify CI definitions using layperson-friendly explanations in policy brochures.
- Include example scenarios in policy documents (e.g., “This policy does not cover Stage 0 breast cancer, but does cover Stage 1 and above”).
- Provide pre-claim checklists for common illnesses (cancer, heart disease, stroke) to help policyholders prepare documentation accurately.

E. Strengthen Agent and Intermediary Education

A significant proportion of claim dissatisfaction originates at the point of sale, where agents may oversell or misrepresent coverage.

Recommendation:

- Introduce a mandatory CI and medical product training module for agents and brokers.
- Include real claim scenarios in sales training to highlight limitations and responsibilities.
- Encourage agents to deliver "benefit vs. limitation summaries" at the time of sale.

This improves policyholder understanding and reduces future disputes.

F. Digital Integration for Claims and Medical Records

In many rejected claims, missing or incomplete documentation is a technical, not medical, issue.

Recommendation:

- Promote partnerships between insurers and major hospitals for direct medical data sharing (e.g., e-reports, diagnostic access).
- Pilot digital claim portals with document validation features and auto-flagging of missing sections.

This will reduce paperwork, speed up turnaround time, and improve claim quality.

G. Role of the Insurance Board and Industry Bodies

Finally, regulatory support is critical to drive consistency across the industry.

Recommendation:

- The Insurance Board of Nepal (Nepal Insurance Authority) could initiate a central guideline for CI definitions, documentation standards, and adjudication timelines.
- Promote annual cross-company claims benchmarking reports to monitor claim ratios, rejection trends, and customer satisfaction.

Such transparency would improve public trust and industry performance alike.

8. Conclusion

The promise of insurance lies not just in the design of products, but in their performance when it matters most- at the time of a claim. In Nepal's fast-evolving insurance landscape, the rise of critical illness and health insurance products represents a positive shift toward greater risk protection. Yet, this progress is hindered by a persistent and often overlooked gap: the disconnect between actuarial and underwriting assumptions versus the practical realities of claims adjudication.

As shown through both analytical observations and real case experiences, this disconnects manifests in multiple ways: overly rigid claim definitions, medical documentation mismatches, diagnostic ambiguities, and unmet customer expectations. These issues are not simply operational inefficiencies they are points of tension that can undermine trust, satisfaction, and market credibility. When a cancer patient undergoes life-altering treatment yet fails to qualify for a payout due to narrow wording, or when a heart disease claim is denied for lacking a specific enzyme report, the industry loses more than just money it risks losing the public's confidence.

For insurers in Nepal, the path forward requires a fundamental shift in how product design, underwriting, claims, and customer communication are integrated. Relying solely on imported policy templates and rigid benefit structures is no longer sufficient. As claims become more medically complex and policyholders more informed, the insurance sector must evolve into a more adaptive, data-informed, and empathetic system.

This article has argued that claims handling must be repositioned not as a back-office task but as a strategic feedback loop into the very structure of insurance products. With thoughtful regulatory support, localized policy frameworks, and a commitment to fairness, Nepal's insurance industry has the opportunity to lead a regional example in aligning numbers with needs- and turning policy promises into practical protection.

References

Kumara, A. S., & Samaratunge, R. (2020, January 08). Health insurance ownership and its impact on healthcare utilization: Evidence from an emerging market economy with a free healthcare policy. *International Journal of Social Economics, 47*(2), 244-267. doi:https://doi.org/10.1108/IJSE-05-2019-0333

Munich Reinsurance Company. (2022). *Critical illness insurance underwriting manual*. Retrieved from Munich Reinsurance Company.

Nepal Insurance Authority. (2025). *Guidelines on health and critical illness products.* Retrieved from Nepal Insurance Authority.

Shah, B., Victor, J., Chiu, M., Tu, J., Anand, S., Austin, P., . . . Hux, J. (2013). Cardiovascular complications and mortality after diabetes diagnosis for South Asian and Chinese patients: A population-based cohort study. *Diabetes Care, 36*(9), pp. 2670-2676. doi:https://doi.org/10.2337/dc12-2105

Swiss Re. (2023). *Claims management handbook.*

World Bank. (2021). *Health financing in Nepal.*

World Health Organization. (2023). *International classification of diseases* (11 ed.).

Enterprise Risk Management (ERM) Maturity Model and Challenges for Insurance Companies in the Nepalese Context

Ashish Shrestha,
Head – Risk Management Department, SuryaJyoti Life Insurance Company Limited
Email Address: dhunganabharat.pu@gmail.com
DOI: https://doi.org/10.3126/jissa.v2i1.92248

Abstract

Enterprise Risk Management (ERM) has advanced considerably since the early 2000s, evolving from a governance-driven, compliance-oriented framework into a strategic, integrated approach informed by COSO and ISO standards. For insurance companies in Nepal, the increasing complexity of the risk environment driven by regulatory reforms, digital transformation, and emerging threats such as cyber, ESG, and operational risks has made structured ERM implementation essential. This paper outlines the core prerequisites for establishing an effective ERM system, including a clear governance structure, systematic risk assessment and quantification, informed risk-based decision-making, and robust monitoring and reporting mechanisms. It further presents the ERM Maturity Model, which encompasses five stages ranging from foundational setup to full integration of ERM into strategic planning and business optimization. Although this model provides a practical roadmap, Nepalese insurers encounter notable challenges, particularly limited modeling expertise, difficulties in validating advanced risk models, and insufficient reliable data for quantifying operational and reputational risks. These constraints underscore the need for capacity enhancement, improved data infrastructure, and strengthened risk culture to support the continued evolution of ERM within the sector.

Keywords: Enterprise Risk Management (ERM), risk assessment, economic capital, risk transfer, maturity model, risk tolerance, risk culture.

1. Introduction

The formal development of the ERM framework began in the early 2000s, shaped largely by the COSO and ISO standards, with an initial focus on governance, organizational culture, and accountability. As the risk landscape evolved, the framework expanded to include strategic risk alignment, stress testing, and increased board-level oversight. Today, ERM continues to evolve, placing greater emphasis on resilience, crisis preparedness, ESG factors, digital risk management, and the integration of AI and real-time analytics.

Traditionally, organizations managed risks in isolation, with each department handling its own exposures separately and minimal coordination or communication across the company. It was reactive in nature, tactical rather than strategic, and had a limited scope. Unlike ERM offers an integrated approach that is dynamic, flexible, and highly interdependent, enabling organizations to manage a broad portfolio of risks more effectively and align risk management with overall strategy (Lam, 2014).

Before heading toward the ERM Module, the organizations should understand the requirements for implementing the ERM. They are:

- ✓ **Governance structure and policies:** Who is responsible to provide risk oversight and make critical risk management decisions? Boards play a key role in overseeing risk and form a dedicated risk committee. Involving members with risk expertise can strengthen oversight. Board members should be actively engaged in setting risk tolerance, challenging management decisions, and ensuring accountability (Sheedy & Canestrari-Soh, 2023). An ERM policy should support this oversight by clearly outlining governance roles, risk principles, reporting requirements, and defined risk tolerance levels, and promote a strong risk culture.

- ✓ **Risk Assessment and Quantification:** How will they make these risk management decisions in terms of analytical input? Risk assessment and quantification tools for ERM include:
    - Risk assessments help identify and evaluate key risks facing the organization, including estimates of their likelihood, potential impact, and how effectively they are controlled.
    - A loss event database records actual losses and risk incidents, helping management learn from past events and identify emerging risks and trends.
    - Key Risk Indicators (KRIs) track risk exposure over time and should ideally be measured against risk tolerance levels and aligned with related Key Performance Indicators (KPIs).
    - Risk analysis models assess specific or organization-wide risks using tools like value-at-risk (VaR), stress testing, and scenario analysis to estimate potential losses based on the organization's risk profile.
    - Economic capital models allocate capital to specific risks based on a set solvency standard (IAA, 2010). They are often used to assess risk-adjusted profitability and support shareholder value analysis.

To avoid a siloed approach, companies should integrate their risk assessment and analysis processes and focus on the relationships between critical risks.

- ✓ **Risk Management:** *What* specific decisions will they make to optimize the risk/return profile of the company? Key decision points include:

- **Risk acceptance or avoidance:** An organization can choose to increase or reduce specific risks through its core operations or financial activities.
- **Risk mitigation:** This involves implementing controls and strategies to manage a specific risk within the organization's defined risk tolerance.
- **Risk-based pricing:** Every business takes on risks, but the only way to be compensated for them is through the pricing of products or services. Prices should reflect the full cost of the risks involved.
- **Risk transfer:** If a risk is too high or transferring it is cheaper than keeping it, an organization can shift the risk through insurance or capital markets.
- **Resource allocation**: An organization can assign people and funds to activities that offer the highest risk-adjusted returns to maximize its value.

✓ **Reporting and Monitoring:** *How* will the company monitor the performance of risk management decisions (i.e., a feedback loop)? As the saying goes, "what gets measured gets managed." Lam (2014) found that to improve monitoring and reporting, companies should develop forward-looking, role-based dashboards tailored to the needs of the board, executives, or operational teams and these dashboards should combine both qualitative and quantitative data, connect internal risks with external factors, and include key performance and risk indicators. Like other departments, such as sales tracking revenue, customer service measuring satisfaction, or HR monitoring turnover, risk management also needs clear performance metrics and feedback loops to measure success and drive improvement.

2. ERM Maturity Model

As mentioned above, ERM implementation is built on four key building blocks. Companies can view ERM implementation as a step-by-step journey, with each stage creating a stronger foundation. While it typically unfolds over several years, this gradual process allows for thoughtful integration and long-term success. It is helpful for each company to create an ERM roadmap that outlines where they are now, where they want to go, and how they plan

to get there (Zhao, Hwang, & Low, 2013). This roadmap should be tailored to the company's current situation, future goals, business needs, regulatory requirements, and available resources. When developing the roadmap, using an ERM Maturity Model can help assess progress and set key benchmarks. However, an organization may have specific ERM practices from a more advanced stage before completing all of the practices in prior stages (Beasley, Branson, & Pagach, 2015). The 5 stages of ERM maturity Model are:

Stage 1: Laying the Foundation for ERM

In Stage 1, the organization focuses on organizing resources and defining the scope and goals of its ERM program. Key objectives include identifying ERM needs, gaining support from the board and executives, and developing a high-level framework and action plan. Many organizations form a cross-functional task force to help achieve these goals. This stage typically includes the following activities:

- Reviewing regulatory requirements and industry standards
- Providing risk briefings to board members and executives
- Forming or assigning an ERM functional team.
- Establishing a committee in line with NIA's standards.
- Benchmarking against other companies
- Assessing current risk management practices
- Defining the ERM vision, scope, and plan
- Developing an ERM framework, including a risk taxonomy

Stage 2: Preliminary Development

In Stage 2, the ERM program is just getting started. The primary objectives are to formalize roles and responsibilities within an ERM policy, identify key risks through risk assessments, and provide risk education to enhance awareness. This stage includes activities such as:

- Creating an ERM policy that defines roles and responsibilities
- Conducting annual risk assessments across business units
- Coordinating risk identification and controls among risk, audit, and compliance teams
- Offering risk education for the board and training for employees
- Setting up risk functions within business units

Developing the ERM policy is a critical step, as it lays the foundation for advancing through the ERM maturity model. A standard ERM policy typically includes:

- **Executive Summary** – Outlines the purpose, scope, and goals of ERM
- **Risk Philosophy** – Describes the company's approach and guiding principles
- **Governance Structure** – Defines roles, responsibilities, and board/management committees

- **Risk Tolerance** – States the organization's risk appetite and limits for key exposures
- **ERM Framework** – Summarizes the overall risk management process and requirements
- **Risk Categories** – Provides a standard list of risk types and definitions

Setting risk tolerance levels can be challenging. Organizations may use judgment, financial ratios (like a percentage of quarterly earnings or capital), or **advanced models** such as VaR or economic capital. Regardless of the method, tolerances must meet regulatory standards. Benchmarking against peers can also offer helpful insights.

Stage 3: Standard Practice

In Stage 3, the organization focuses on performing more frequent and detailed risk analyses. The main goals are to conduct risk assessments more often and to develop ways to quantify risk. This stage involves:

- Updating risk assessments quarterly or monthly
- Creating risk databases, including information on past losses
- Developing Key Risk Indicators (KRIs) and reporting on company-wide risks monthly
- Combining material risk models and building operational risk models
- Developing risk-adjusted performance measurement methodologies

Stage 4: Business Integration

In Stage 4, the primary goal is to embed Enterprise Risk Management (ERM) directly into the company's daily operations and management processes. This means ERM tools and practices become more widely used across the organization. At this point, the trade-offs between risk and potential returns are more clearly considered in business decisions.

Key objectives for this stage include:

- Quantifying the cost of risk to support pricing and risk transfer decisions
- Assessing business risks up front as part of business and product development
- Developing automated risk reporting and escalation technologies
- Linking risk and compensation

Implementing Stage 4 usually takes two to four years. The actual time can vary based on an organization's existing **risk culture**, how clearly its **objectives** are defined, and other relevant factors. During this stage, organizations will focus on:

- Expanding the scope of ERM to include business risk
- Allocating economic capital to underlying market, credit, operational, and business risks
- Incorporating the cost of risk into product and relationship pricing, as well as portfolio management and risk transfer strategies

- Integrating risk reviews into new business and product approval processes
- Automating ERM reporting through the use of electronic dashboards, including customized queries and real-time escalations
- Establishing trigger points to make timely business decisions, including risk mitigation and exit strategies
- Developing feedback loops on risk management performance

Stage 5: Business Optimization

At this highest maturity stage, ERM is leveraged to optimize business performance and strengthen relationships with key stakeholders. Key objectives in Stage 5 include:

- Integrating ERM into strategy development and execution
- Maximizing organization value by optimizing risk-adjusted profitability
- Providing risk transparency to key stakeholders
- Helping customers manage their risks

This advanced stage focuses on ongoing efforts, including:

- Expanding the scope of ERM to include strategic risk
- Integrating ERM into strategic planning processes
- Maximizing business value by strategically allocating resources
- Providing risk transparency to key stakeholders with respect to current risk exposures and future risk drivers

Depending on the organization's structure and risk culture, the ERM maturity model can be adapted to combine Stages 3 and 4 into a consolidated 4-stage framework. During implementation, organizations may encounter several key challenges:

1. Limited modeling skills and resources require specialized expertise, but most organizations have insufficient in-house capability to effectively use or implement these tools.
2. Validation of such risk modeling will be challenging, as it requires robust governance, regular testing, and expert oversight to ensure accuracy, reliability, and alignment with evolving business risks.
3. Identifying reliable sources to quantify operational and reputational risks in support of sound decision-making.

References

Beasley, M., Branson, B., & Pagach, D. (2015, May-June). An analysis of the maturity and strategic impact of investments in ERM. Journal of Accounting and Public Policy, 34(3), 219-243. doi:https://doi.org/10.1016/j.jaccpubpol.2015.01.001

IAA, S. S. (2010). Note on the use of internal models for risk and capital management purposes by insurers. International Actuarial Association. Retrieved from https://actuaries.org/app/uploads/2025/04/Internal_Models_EN.pdf

Lam, J. (2014). Enterprise risk management: From incentives to controls. (2nd, Ed.) John Wiley & Sons.

Sheedy, E., & Canestrari-Soh, D. (2023, March 30). Does executive accountability enhance risk management and risk culture? Accounting & Finance, 63(4), 4093-4124. Wiley Online Library. doi:https://doi.org/10.1111/acfi.13087

Zhao, X., Hwang, B.-G., & Low, S. (2013, March 1). Developing a Fuzzy Enterprise Risk Management Maturity Model for Construction Firm. Journal of Construction Engineering and Management, 139(9), 1179-1189. doi:https://doi.org/10.1061/(ASCE)CO.1943-7862.0000712

Digitalization and Its Transformative Impact on the Insurance Sector: Opportunities, Challenges, and Future Prospects

Author: Niroj Parajuli
Phone: 01-4233743, Mob No.9851155418
Email: nirojlonely21@gmail.com
DOI: https://doi.org/10.3126/jissa.v2i1.92249

Abstract

Digitalization has emerged as a powerful force reshaping the global insurance landscape by transforming operational structures, customer engagement systems, and regulatory frameworks. The increasing integration of digital technologies such as artificial intelligence, machine learning, blockchain, cloud computing, mobile applications, telematics, and data analytics, has shifted insurance from a traditionally paperwork-driven industry to a technology-enabled service sector. This study provides an extensive examination of "Digitalization" in the insurance sector at global, regional, and national levels, with a particular focus on South Asia and Nepal. Using qualitative analysis and secondary data sources, the paper explores major areas of digital adoption, including underwriting, distribution, claims management, customer service, fraud detection, and risk modelling.

The findings highlight that Digitalization significantly improves efficiency, accuracy, and transparency while reducing operational costs and strengthening customer trust. However, adoption challenges persist, particularly in developing countries, due to limited infrastructure, digital literacy gaps, cybersecurity threats, regulatory constraints, and financial limitations. In Nepal, Digitalization has begun accelerating with mobile insurance, digital payment integration, automated policy issuance, and emerging InsurTech partnerships, yet substantial potential remains untapped.

The paper concludes that Digitalization is not merely a technological upgrade but a strategic necessity for building a resilient, customer-centric, and inclusive insurance ecosystem. The study recommends regulatory innovation, investment in technological infrastructure, capacity-building programs, and stronger public-private partnerships to enhance digital transformation. These steps will enable insurers to meet evolving customer expectations, strengthen market competitiveness, and support national financial inclusion goals.

Keywords: Digitalization, InsurTech, inclusive insurance, claims, underwriting.

1. Introduction

Digitalization has transformed almost every industry worldwide, and the insurance sector is no exception. Historically seen as a conservative and paperwork-intensive industry, insurance is undergoing a major shift driven by advancements in digital technologies, rising customer expectations, competitive pressures, and evolving regulatory standards (Deloitte, 2019). Today, Digitalization is reshaping how insurance companies design products, assess risks, deliver services, process claims, and interact with customers (Albrecher, Bommier, & Filipović, 2020).

PricewaterhouseCoopers (PwC), (2017) highlighted that globally insurers are embracing digital tools such as automation, artificial intelligence (AI), machine learning (ML), blockchain, telematics, cloud computing, and big data analytics. These innovations help improve underwriting accuracy, enhance fraud detection, streamline claims processes, and offer more personalised products. At the same time, digitalization is empowering customers through user-friendly mobile apps, customer portals, digital payment options, and self-service facilities.

The shift toward digital technologies accelerated during the COVID-19 pandemic, which forced organizations to adopt digital channels to ensure business continuity (Accenture, 2020). Insurers that previously relied on face-to-face interactions and manual paper-based processes rapidly transitioned toward remote operations, digital documentation, and online service delivery. Consequently, digitalization has become a necessity rather than a choice.

In developing regions, including South Asia and Nepal, Digitalization is emerging as a critical tool to expand insurance penetration, increase operational efficiency, and promote financial inclusion. However, the pace of adoption varies, depending on technological infrastructure, regulatory support, and organizational readiness.

This paper provides an extensive analysis of digitalization in the insurance sector. It explores the historical evolution, scope, benefits, challenges, and future prospects of Digitalization, with a detailed assessment of Nepal's insurance industry. The paper aims to contribute to the academic and practical understanding of how Digitalization can strengthen insurance services in the modern era.

2. Literature Review

The literature on digitalization in insurance highlights several key themes: technological adoption, process transformation, customer experience improvement, and regulatory alignment.

Evolution of Digitalization in Insurance

Early insurance operations relied heavily on manual documentation and human judgment. Over time, the introduction of computers enabled basic data storage and policy management systems. Later, the rise of the internet and mobile technologies transformed sales and distribution. According to McKinsey and Company, (2021), slowly insurance industry has been adopting advanced technologies such as AI, automation, predictive analytics, blockchain, and IoT-enabled devices.

Scholars note that Digitalization is driven by three major forces:

1. **Consumer Demand:** Modern customers prefer self-service, quick responses, and digital communication channels.
2. **Technological Advancements:** With increasing availability of affordable digital tools, insurers can automate processes and improve data accuracy (ReportersNepal, 2025)
3. **Market Competition:** InsurTech startups and tech companies challenge traditional insurers, pushing them toward digital transformation.

Role of InsurTech

InsurTech, insurance technology startups have become a catalyst for digital innovation. These companies offer specialised solutions in areas such as automated underwriting, digital claims processing, telematics, fraud detection, and customer analytics (Bailey & Ngwenya, 2021).

Digital Tools Discussed in Literature

- **Artificial Intelligence & Machine Learning:** Enhance fraud detection, risk modelling, and customer insights.
- **Blockchain:** Enhances transparency, reduces claim fraud, and secures transactions.
- **Cloud Computing:** Improves operational flexibility and reduces IT costs.
- **IoT and Telematics:** Enable usage-based insurance (UBI) and real-time risk assessment.
- **Mobile Applications:** Offer convenient access to insurance services.
- **Data Analytics:** Support evidence-based decision-making and personalised pricing.

3. Methodology

This study uses a qualitative descriptive research design. The data is entirely based on secondary sources, including journal articles, industry reports, academic publications, regulatory documents, and official data from insurers. The analytical approach focuses on thematic interpretation of patterns, trends, and developments related to digitalization in the insurance sector.

The methodology includes:

i. Literature synthesis
ii. Comparative analysis
iii. Evaluation of practical applications
iv. Assessment of Nepal's digital insurance environment

These approaches enable a comprehensive understanding of digitalization within both global and Nepal-specific contexts.

4. Key Areas of Digitalization in Insurance

Digitalization impacts almost every functional area of insurance. The major transformation areas include:

Underwriting and Risk Assessment

Digital underwriting uses AI, ML, and big data to evaluate risks more accurately. Automated underwriting reduces human errors, improves consistency, and speeds up policy issuance (Stoeckli, Dremel, & Uebernickel, 2018). For example:

- Health insurers use wearable devices to assess lifestyle patterns.
- Auto insurers use telematics for usage-based pricing.
- Life insurers utilize predictive analytics for mortality risk.

Claims Management

Claims processing is one of the most complex aspects of insurance. Digital tools simplify this through:

i. Electronic claims submission
ii. Automating document verification
iii. AI-enabled fraud detection
iv. Digital investigation tools
v. Real-time claim status
vi. Faster and more transparent claims build customer trust.

Distribution Channels

Traditional agents and brokers are being supplemented by:

i. Online sales platforms
ii. Mobile applications
iii. Insurance aggregators
iv. Chatbots
v. Digital advisors

Digital distribution reduces cost and expands market reach, especially among younger customers.

Customer Service and Engagement

Digitalization enhances customer experience through:

i. Self-service portals
ii. 24/7 chatbots
iii. Automated reminders
iv. Digital premium payment
v. Online policy management
vi. Customer expectations for convenience are driving these innovations.

Fraud Detection

AI and analytics help identify patterns of fraudulent activities. Blockchain enhances transparency across the value chain, making fraud more difficult.

Product Innovation

Digitalization enables:

i. Usage-based insurance (UBI)
ii. On-demand microinsurance
iii. Parametric insurance (e.g., weather-based payouts)
iv. Peer-to-peer insurance models
v. These innovations align products with customer behaviour and market needs.

5. Benefits of Digitization in Insurance

Digitization offers a wide range of organizational and customer benefits:

- **Operational Efficiency**
  Automation reduces paperwork, speeds up processes, and lowers administrative costs. Insurers can handle large volumes with less human intervention.

- **Accuracy and Transparency**
  Digital tools reduce human errors and improve transparency, especially in underwriting and claims.

- **Enhanced Customer Satisfaction**
  Customers receive faster services, personalised products, real-time updates, and round-the-clock support.

- **Cost Savings**
  Digitalization reduces costs related to printing, documentation, branch operations, employee time, and manual errors.

- **Market Expansion**
  Digital platforms enable insurers to reach remote, rural, and underserved populations, supporting financial inclusion.

- **Data-Driven Decision Making**
  Analytics help insurers design better products, assess risks accurately, and forecast trends.

- **Strengthened Competitiveness**
  Digitalization helps insurers compete with global players and InsurTech startups.

6. Challenges in Digitalization

Despite its benefits, digital transformation faces several barriers:

- **Lack of Digital Infrastructure**
  Developing countries face limitations in internet connectivity, IT hardware availability, and digital payment systems.

- **Digital Literacy Gap**
  Customers and employees may struggle to adapt to digital platforms.

- **Cyber security Risks**
  The rise in digital systems also increases exposure to:
  1. Data breaches
  2. Ransomware
  3. Identity theft
  4. Financial fraud

- **Regulatory Limitations**
  Outdated regulations can slow digital innovation.

- **High Initial Investment**
  Digital transformation requires substantial investment in software, hardware, training, and security.

- **Resistance to Change**
  Employees and traditional agents may resist automation due to perceived job threats.

7. Digitization in Nepal's Insurance Sector

Nepal's insurance industry is in a transitional phase toward Digitalization. Key developments include:

- **Digital Policy Issuance and Renewal**
  Most insurers now offer online policy purchase, renewal, and premium payment through digital wallets, e-banking, and mobile banking.

- **Mobile Insurance (m-Insurance)**
  Mobile-based microinsurance is emerging, particularly beneficial for rural populations (Tech Aware Nepal, 2024).

- **Regulatory Support**
  The Insurance Board (Nepal Insurance Authority) is encouraging digital reporting, digital claim submissions, and standardized software use (Nepal Insurance Authority, 2024).

- **InsurTech Partnerships**
  Collaborations with payment platforms, health-tech companies, and digital service providers are increasing.

- **Challenges Specific to Nepal**
  i. Low awareness in rural populations
  ii. Limited access to smartphones
  iii. Weak digital compliance framework
  iv. Need for capacity building

Despite these challenges, Nepal has considerable potential for growing digitization to increase national insurance penetration.

- Growing digital infrastructure projects (such as the Digital Nepal Framework) seek to improve connectivity and digital readiness across industries.
- Rising mobile and internet usage trends indicate that demand for digital services is growing, especially in underdeveloped areas.
- Nepal Rastra Bank's regulatory innovation activities, such as sandboxes and AI guidelines, suggest a shift toward modern digital financial systems (The Kathmandu Post, 2025).

With strategic investments in awareness, access, regulatory strength, and capacity building, Nepal can accelerate digital insurance penetration, expanding financial inclusion across both urban and rural populations.

8. Future Prospects and Recommendations

- **Strengthening Digital Infrastructure**
  Investment in broadband, data centers, and cloud systems is essential for reliable digital insurance operations.
- **Updating Regulatory Frameworks**
  Regulations should support e-signatures, online KYC, automated underwriting, and digital claims systems.
- **Capacity Building**
  Training insurance employees, agents, and customers on digital tools will accelerate adoption.
- **Cyber security Enhancement**
  Insurers must adopt multi-layered security systems, encryption, and regular cybersecurity audits.
- **Promoting InsurTech Collaboration**
  Partnerships with technology companies will boost innovation and help insurers modernize rapidly.
- **Expanding Digital Microinsurance**
  Digitalization can make microinsurance affordable and accessible to low-income populations.
- **AI and Blockchain Integration**
  These technologies can significantly improve:
  1. Fraud detection
  2. Claims transparency
  3. Risk-based pricing
  4. Data security

9. Conclusion

Digitalization is redefining the insurance industry by improving efficiency, enhancing customer experience, enabling product innovation, and expanding market reach. While challenges remain—especially in developing countries—Digitalization offers immense opportunities for growth, competitiveness, and financial inclusion. For Nepal, embracing digital transformation is crucial to modernizing its insurance sector, increasing transparency, and meeting evolving customer expectations. With strategic investments, regulatory support, and collaboration between insurers and technology providers, Nepal can achieve a highly efficient, customer-centric, and inclusive insurance ecosystem.

Digitalization is not merely a trend; it is the foundation of the future insurance industry.

References

Accenture. (2020). Technology vision for insurance 2020: We, the post-digital people. From Accenture: https://www.accenture.com/us-en/insights/insurance/technology-vision-2020-insurance

Albrecher, H., Bommier, A., & Filipović, D. (2020). Insurance and financial mathematics: Recent developments. European Actuarial Journal, 10(2), 223-245. doi:https://doi.org/10.1007/s13385-020-00236-7

Bailey, D., & Ngwenya, S. (2021). Digital transformation in insurance: Drivers, challenges and opportunities. Journal of Financial Innovation, 7(1), 44-60.

Deloitte. (2019, December 19). 2019 Insurance Industry Outlook. From Deloitte

McKinsey & Company. (2021). The future of insurance: The digital imperative. From McKinsey & Company: Retrived from website

Nepal Insurance Authority. (2024). Digital Insurance Policy Guidelines. From Nepal Insurance Authority.

PricewaterhouseCoopers (PwC). (2017). Insurance 2025: Redefining the industry with digital innovation. From PricewaterhouseCoopers (PwC): Retrived from PwC website.

ReportersNepal. (2025, May 2). 'डिजिटल' नेपालको निर्माणको अभियानमा सूचना सञ्चार प्रविधिको उपयोग. From Reporters Nepal: https://www.reportersnepal.com/2025/05/1082147/

Stoeckli, E., Dremel, C., & Uebernickel, F. (2018). Exploring characteristics and transformational capabilities of InsurTech innovations. Electronic Markets, 28(3), 285-305. doi:https://doi.org/10.1007/s12525-017-0281-5

Tech Aware Nepal. (2024, May 8). Digital payment services expand in rural Nepal: Bridging the financial divide. From Tech Aware Nepal.

The Kathmandu Post. (2025, December 12). Nepal Rastra Bank drafts AI guideline for banks and digital payment firms. From The Kathmandu Post: https://kathmandupost.com/money/2025/12/12/nepal-rastra-bank-drafts-ai-guideline-for-banks-and-digital-payment-firms.

Information for the contributors

Introduction

The Insurance Institute of Nepal (IIN), a pioneering institution for insurance education and training within Nepal's insurance sector, hereby extends its profound gratitude to all contributors, stakeholders, and reviewers whose valuable efforts have culminated in the successful publication of Volume 1 of the Journal of Insurance Studies in South Asia (JISSA) in 2024.

The JISSA focused on current issues, innovations, developments, and solutions in the insurance sector. This journal will contribute to advancing insurance knowledge and practice in Nepal and the broader region from the Insurance Industry. It seeks to engage a meaningful insurance community among academics and practitioners within the insurance sector.
Topic of deliberation may include, but are not limited to:

- Innovations in insurance products and services
- Role of technology and digitalization in insurance
- Microinsurance and inclusive insurance practices
- Climate risk and insurance solutions for disaster resilience
- Reinsurance strategies and market development
- Regulatory reforms and compliance challenges
- Risk management frameworks and methodologies
- Emerging trends in life and non-life insurance
- Behavioral economics and consumer decision-making in insurance
- Cybersecurity risks and insurance coverage
- Data analytics and AI in underwriting and claims management
- Bancassurance and distribution channel strategies
- Insurance education, training, and human capital development
- Public-private partnerships in insurance
- Insurance penetration and awareness in rural and underserved areas

The reviewing processes

All submitted articles undergo initial editorial review to ensure relevance to insurance practice and industry standards. Articles meeting our publication criteria are then evaluated by two independent experts through a double-blind peer review process. Based on these professional assessments, the editorial board determines whether to accept the article, request revisions, or decline publication.

Copyright

Authors certify that their submissions are original work free from copyright infringement and agree to indemnify the publisher against any related claims. Upon publication, articles become the legal copyright of the publisher unless alternative arrangements are agreed upon in writing.

Manuscript requirements:

- Articles should be between 7000 to 7500 words in length.
- The title should be in an appropriate size.
- A brief autobiographical note should be supplied, including:
    - Full name
    - Institute Name
    - E-mail address
    - Contact information
    - Brief professional biography.
- Abstract: Authors must supply an abstract of around 200-300 words in total.
- Minimum four keywords that encapsulate the principal topics of the paper.
- Headings must be short, clear, and reflective.
- Notes or Endnotes should be used only if absolutely necessary and must be identified in the text by consecutive numbers, enclosed in brackets, and listed at the end of the article.
- All Figures (charts, diagrams, and line drawings) and Plates (photographic images) should be submitted in both electronic forms. They should be of clear quality, in black and white, and numbered consecutively with Arabic numerals.
- Tables should be typed and included as part of the manuscript. They should not be submitted as graphic elements. Supply succinct and clear captions for all tables, figures, and plates. Ensure that any superscripts or asterisks are shown next to the relevant items and have corresponding explanations displayed as footnotes to the table, figure, or plate.
- References to other publications must be in APA style and carefully checked for completeness, accuracy, and consistency.
- You should cite publications in the text: (Adams, 2006) using the first named author's name or (Adams & Brown, 2006) citing both names of two, or (Adams et al., 2006), when there are three or more authors. At the end of the paper, a reference in alphabetical order should be supplied:
    - For books: Surname, Initials (year), Title of Book, Edition, Publisher.
    - For book chapters: Surname, Initials (year), Chapter title. In Editor's Surname, Initials (Ed.), Title of Book (page number). Publisher.
    - For journal articles: Surname, Initials (year). Title of article. Journal Name, volume (issue), number, pages. doi .
    - For published conference proceedings: Surname, Initials (year of publication). Title of paper. In Surname, Initials (Ed.), Title of published proceeding (page number). Publisher.
    - For unpublished conference proceedings: Surname, Initials (year). Title of paper. Conference Name, Location.
    - For working papers: Surname, Initials (year). Title of article (working paper number if available). Institution or organization, Place of organization, date.
    - For encyclopedia entries (with no author or editor): Title of Encyclopedia (year) "Title of entry", volume, edition, Title of Encyclopedia, Publisher, Place of publication, pages.
    - For newspaper articles (authored): Surname, Initials (year, month, day). Article title. Newspaper Name.
    - For electronic sources: Include DOI when available, or URL with access date only if no DOI exists.

Final submission of the article

- Once accepted for publication, the editor may request the final version as an attached file to an email or to be supplied on a CD-ROM labelled with author name(s); title of article; journal title; file name. Authors should note that proofs are not supplied prior to publication. The author must ensure that it is complete, grammatically correct, and without spelling or typographical errors.

Submission Requirements

- Format: MS Word document
- Must include: Full manuscript, declaration of originality, contact information, and professional credentials.

Full paper should be emailed to publication@iin.org.np.

फोन नं. +९७७-०१-४५१९७२२,समा मार्ग. नारायणचौर. नक्साल. प्रिमियर भवन (पाचौ तल्ला)
Phone: +977-01-4519722, | Address: Sama Marga,Narayanchaur Naxal, Premier Bhawan (Fifth Floor)

Email: info@iin.org.np / URL: www.iin.org.np