IOSR Journal of Business and Management (IOSR-JBM)
e-ISSN:2278-487X, p-ISSN: 2319-7668. Volume 28, Issue 2. Ser. 2 (February. 2026), PP 41-46
www.iosrjournals.org

Impact Of Digital Transformation In The Insurance Industry On Economic Growth And Insurer Development

Mrs. K. Pandieswari, Dr. U. Arumugam
Research Scholar, Department Of Corporate Secretaryship, Alagappa University, Karaikudi
Assistant Professor, Department Of Corporate Secretaryship, Alagappa University, Karaikudi.

Abstract
The insurers develop risk management and savings plans that create significant economic impacts. Nevertheless, the digital economy has led to the emergence of modern technological processes that have brought significant implications to the activities of insurers and the possibility of reaching their clients via the digital platform. The study examines the impact of digital transformation on insurance firms and, at the same time, its influence on the growth of the national economy. The kind of research methodology that was used in this research was quantitative. The researchers have prepared a standard questionnaire, and it was distributed to 99 respondents by the convenience sampling method. The researchers collected quantitative data by using the sources of secondary data, that is, journals, government websites, and reports. The researcher used SPSS software to conduct statistical analysis to reveal the descriptive statistics and chi-square results. The results of the analysis indicate that technological progress provides insurers with high rates of acquiring knowledge about digital insurance products and other services connected with them. The findings of the research reveal that digital transformation in the insurance sector has provided benefits to all stakeholders since it has enhanced accessibility and operational efficiency, and developed customer-friendly systems to enable the national economic development.
Keywords: *Digital Transformation, Insurance Industry, Economic Growth, Technology Upswing, Insurer Awareness.*

Date of Submission: 02-02-2026 Date of Acceptance: 12-02-2026

I. Introduction

The insurance sector is very crucial in economic development in that it is capable of collecting long-term savings, its capacity to manage risks, and playing a role in financial stability. This has been a significant transformation in the way life insurance firms operate and the manner in which they deliver their services to their clients today; this is due to the combination of regulatory changes and technological innovations. In the coming three to five years, the life insurance business in India will grow by 14-15 percent per year, since people are more and more interested in financial protection and products that would not only involve investment but would also carry some insurance. The Indian insurance companies are resorting to digital tools like the Internet of Things (IoT) to help them with improved risk assessment, interaction with clients, and efficiency of the services. The 110 Insurtech start-ups that were launched in India indicate that the insurance sector is currently embracing the use of digital technologies to create new insurance products. This growth is supported by three elements of the demographic component since they comprise the increasing middle-class households, a large number of youths who are at the age of insurance eligibility, and people are more aware of the importance of insurance in their financial planning and retirement preparation. The insurance industry is also a major tool that guides the accumulated capital to make investments that can contribute to economic growth. Insurance is a kind of protection mechanism against financial losses for trade and commerce activities, and for long-term economic stability. This necessitates the emergence of a technologically advanced insurance industry in emerging economies such as India to have sustainable economic development.

II. Scope Of The Study

This paper discusses the question of whether the digital transformation can be blamed as a way of driving economic growth. It analyses the impact of technological development and digital performance on the flexibility of insurers in disbursing premiums and overall involvement, taking into consideration a handful of Indian based insurance companies. Moreover, the Indian insurance industry is being advanced and invested in.

III. Statement Of The Problem

The development of the insurance industry is directly correlated with economic growth through the promotion of financial security, investment stability, and risk management. In recent years, digital transformation has led to the introduction of mobile apps and online platforms used by insurers to purchase policies, pay premiums, and gain access to services quickly and conveniently.

Even with the quick development, nonetheless, inconsistency still exists within the country in terms of the degree of awareness and the use of digital insurance services. Most insurers lack knowledge of the availability as well as the benefits of digital platforms. Consequently, the technological advancements in the modern insurance environment are not well exploited by insurers. This ignorance has provided a gap between the technological development and the corresponding impact on the involvement of the insurers and, accordingly, economic development. Thus, one should find out how digital transformation is connected to the awareness rates that the insurers possess concerning the new technology and how positive the effects of the technological progress on the evolution of the insurance sector and the economy's betterment are. This study will, however, address this gap by examining the effects of the digital revolution on the insurers in the insurance sector.

IV. Objectives Of The Study

1. To examine the role of the insurance industry in promoting economic growth.
2. To analyze recent investments and developments in the Indian insurance sector.
3. To assess the impact of digital transformation on insurers' awareness and usage of digital insurance services.
4. To study the relationship between technological advancements and insurer participation in online insurance platforms**.**

V. Review Of Literature

Insurance has been a significant engine of economic Growth in terms of risk management, financial intermediation, and capital formation. Outreville (2015) concludes that an increase in insurance development provides economic stability as it provides an opportunity to make a profitable investment and is applicable in the mobilization of long-term savings. Further, a healthy insurance environment will enhance trade and entrepreneurship, which will lead to sustainable economic growth not only in the developed but also in the emerging economies, Sawadogo et al. (2018) observed.

There is empirical evidence that the correlation between insurance penetration and economic performance is positive. In the Eurozone countries, Dash et al. (2018) reported a strong causal relationship between the insurance sector development and economic growth. Buric et al. (2017) also supported these arguments by demonstrating that life insurance industry development in the developing countries is strongly related to GDP development and income. In addition, life and non-life insurance add to the rise of national incomes in developing nations (Olayungbo, 2015; Pant and Bahadur, 2017).

The rapid application of digital technologies has affected the way of how insurance companies are run. There is increased accessibility of digital products and services, mobile apps, and automation technologies to customers. Han et al. (2020) assert that digitalization can simplify the process of the transaction, improve the quality of the service, and help customize insurance services to be customized. It is also claimed that digitalization has enhanced the performance of the insurance, purchasing policy, and processing claims (Kumar and Gupta, 2021).

Insurtech developments have been useful in driving the digitization of the insurance segment. According to Sharma and Verma (2021), blockchain, artificial intelligence, and advanced analytics are new technology-based companies that examine the risk and combat fraud. The technological advances enhance transparency and create confidence between the consumers and the insurers.

The consequences of digitalization on consumer knowledge and engagement have become the subject of numerous studies. The study by Ports and Prasad (2020) confirms the fact that the role of digital marketing platforms in enhancing awareness and confidence in insurance products is enormous. Comparably, Mehta (2022) proved that the advantageous presence of the insurance service provided through mobile devices contributes to improving the intention of accessing insurance services, especially in younger generations of customers.

In India, regulatory reform has led to improvements in the digitalisation of the Indian insurance sector. Singh and Kaur (2021) point to how the IRDAI has implemented a system for handling online complaints as well as allowing customers to purchase policies online. Also, e-payments have increased premium collections, resulting in more efficient operations.

Advances in digital technology have not yet resulted in the widespread adoption of digital insurance, as evidenced by Patel (2021) and Nair (2022) identifying low levels of digital literacy and low awareness levels in rural and semi-urban regions as major barriers. These studies highlight the importance of creating digital educational programs and infrastructure to support inclusiveness.

In a comprehensive analysis performed by Cosma and Rimo (2024), it is evident that traditional insurers continue to modernise their underwriting, claims, and distribution functions through the use of digital solutions. These advances create a higher level of interaction with customers, as well as helping improve operational efficiency. In order to describe how important technology is for extending the reach and inclusion in the marketplace of their services, Elomari (2024) gave examples of how fintech strategies are impacting digital transformation within the Gulf insurance markets.

Overall, the existing body of literature points to the transformational nature of digital technologies and creates a solid positive correlation between the insurance industry development and economic growth. Nonetheless, the empirical research on the Indian context, specifically about the impact of digital transformation on the awareness and involvement of the insurers, remains lacking. This study aims to bridge this gap by exploring the impact of the digital revolution on the development of insurers and economic growth.

VI. Research Methodology

Data Collection

This research study will utilize a structured questionnaire administered to a set of insurance employees and a series of interviews to gather data from individuals working in insurance companies. Primary and secondary data collection efforts will be made and will consist of data related to technology, which will be collected from the technology department of the insurer, as well as through the use of reputable journals, textbooks, newspapers, etc.

Sampling Technique

This study aimed to identify respondents from insurance companies, including managers and staff. The number of potential respondents is 99, where the targeted sample will contain a team of professionals who are of differing groups of experts, such as business, technology, Development of Technology, and Finance, the company CEO, and the company's promoters. The sampling method used in this research study will be convenience sampling.

Questionnaire Development

The questionnaires were used to collect the following information: demographic profile, digital awareness, and usage of online platforms about the company. Respondent demographic data. Employees of insurance companies' source of employment (from which insurance company).

Tools Analysis

A descriptive analysis was performed on these variables to provide detailed information on each of them. Various data points for these variables were collected using the Statistical Package for Social Sciences (SPSS).

VII. Results And Analysis

Hypothesis

Ho: There is no significant relationship between the technology upswing and insurer awareness
H1: There is a significant relationship between the technology upswing and insurer awareness

Insurance Companies And Types Of Insurance

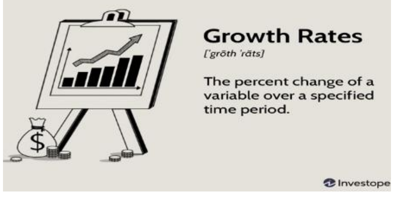
Financial intermediaries, known as insurance companies, provide insurance and reinsurance services that help protect against unanticipated future events. The seven categories of insurance are life, property, marine, fire, liability, and guarantee. There are also different forms of insurance depending on the level of risk and hazards involved**.**

Growth Rate And Its Importance

Growth rates are relevant to evaluating the worth of an investment, as they provide evidence of the changes an investment will go through over a given period. In the case of an asset or investment, in particular, it can be useful to estimate its potential future profit by considering such data.

Growth rate can be calculated with the following formula: Growth rate = (Current value / Previous value) x 1/N - 1.

Figure – 1
Growth Rates



Source: Secondary Data

Economic And Gdp Growth Rate Of Non–Life Insurance And Life Insurance Companies In Different Countries:

Life insurance growth rate. Traditional or whole life insurance premiums climbed 27% in the fourth quarter, the highest quarterly growth in 30 years, and 20% in 2021 over 2020. The non–life insurance sector has also experienced significant growth.

Particulars	USA	UK	CHINA	MALAYSIA	INDIA	PAKISTAN
Country status based on world bank per capita	Developed	Developed	Upper- and Middle-Income countries	Upper- and Middle-Income countries	Lower- and middle-income countries	Lower- and middle-income countries
GDP Growth rate (%)	2.6	2.2	6.9	5.0	7.9	4.7
World's GDP share	22.37	3.78	13.30	0.42	2.65	0.33
Trade as % of GDP	28	58	40	136	47	28
Population Growth Rate	0.9	0.9	0.7	1.1	1.3	2.5
Insurance Penetration (%)	7.29	11.9	3.9	5.1	2.5	1.7
World's Insurance market share (%)	29.8	7.9	9.42	1.3	1.58	0.05
Insurance Ranking	1st	4th	3rd	34th	12th	58th
Major Insurance Domain	Non–life Insurance	Life Insurance	Life Insurance	Life Insurance	Life Insurance	Life Insurance

Source: Sigma Swiss-Re (2021) and World Bank

Recent Investments And Developments In The Insurance Sector

Following is a list of some of the major investments and developments in the Indian insurance market.

- A collaboration between Airtel Payments Bank and ICICI Lombard allowed customers to obtain cyber insurance as of February 2022.
- As part of its commitment to promoting road safety awareness among customers, Vega partnered with ICICI Lombard to provide personal accident insurance coverage for every online purchase of a Vega helmet.
- In November 2021, ICICI Prudential Life Insurance Company teamed up with NPCI Bharat BillPay to provide Click Pay services to customers.
- Acko, an online insurance company, received $255 million in funding in Nov 2021, making it a $1.1 billion business.
- Zest Money raised $50 million in Sept 2021 to enter the insurance business.
- In August 2021, PhonePe announced that the IRDAI had given the company provisional permission to operate as a life insurance broker, meaning that they could now advise insurance products to their 300+ million users.
- In August 2021, ICICI Prudential Life Insurance and NPCI partnered to create a unified payment interface that allows consumers to set up recurring payments.
- Med Pay, a B2B technology startup located in Bangalore, operates an API-based infrastructure that connects healthcare providers, pharmacies, laboratories, and insurance companies in its MedPay Connected Care Network (CCN).

The Government's Initiatives In The Insurance Sector

There have been several initiatives taken by the Indian government to support the insurance industry.

- The government of India plans to sell a 7% stake in LIC, which will be the largest IPO in India, for 50,000 crore rupees (6.62 billion US dollars).
- In November 2021, the Indian government and the World Bank finalised the deal to enhance the state's health services and the health insurance program in Meghalaya.
- The Union Cabinet has sanctioned an investment of 6,000 crore rupees (804.71 million US dollars), which will generate an additional 5.6 lakh crore rupees (75.11 billion US dollars) in exports over the next five years.
- In August 2021, the General Insurance Business (Nationalisation) Amendment Bill, which permits the privatisation of state-owned general insurance companies, was passed in Parliament.

- The Union Budget 2021 was the first to allow insurance companies to provide digital insurance policies via Digi Locker, and the IRDAI has stated that the insurance companies now have the ability to provide digital insurance policies via Digi Locker. FDI restrictions in insurance have been lifted from 49% to 74% for new entrants.

VIII. Data Analysis And Interpretation

To examine the relationship between technological advancements and insurer awareness regarding digital insurance applications, a chi-square test was applied. The hypotheses formulated for the study are as follows:

Null Hypothesis (H_0): There is no significant relationship between technological upswing and insurer awareness of digital insurance applications.

Alternative Hypothesis (H_1): There is a significant relationship between technological upswing and insurer awareness of digital insurance applications.

Table –2
Chi – Square Test

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	8.387[a]	1	.004		
Continuity Correction	6.462	1	.011		
Likelihood Ratio	7.016	1	.008		
Fisher's Exact Test				.009	.009
Linear-by-Linear Association	8.302	1	.004		
N of Valid Cases	99				
Source: Primary Data					

Interpretation

The Chi-square 8.387 value ($p <.0004$) is statistically significant as the value does not exceed the.05 value, which is the null hypothesis that can be rejected. This finding is an indication of a high correlation and statistically significant association between technological upswing and insurer Awareness($p<0.05$), progress, and insurer awareness of digital applications in insurance. The figures indicate that the changes brought by technology in the insurance sector are accompanied by positive correlations with the knowledge and application of different online insurance purchasing techniques by insurance companies.

Ethical Considerations:

Ethical standards of research were used in the study. All the respondents signed informed consent before data collection, and participation was voluntary. The data that was given by the participants remained confidential and was only used in an academic manner. Since this research was a general survey in terms of a questionnaire without any sensitive personal information or intervention, formal approval by the ethical committee was not necessary.

IX. Findings

Based on the analysis of primary and secondary data, the following key findings were derived from the study:

1. The insurance market tends to rise in all the sampled countries. This could indicate the increasing significance of insurance in the global economy.
2. Countries with higher rates of insurance coverage are likely to show stronger performance in their total economies and greater market share than those with lower penetration levels.
3. The chi-square test results concluded that there is a significant relationship between the level of technology and insurers' awareness of the way(s) in which digital insurance applications are accessed. Thus, digital transformation has positively contributed to the growth of insurers adopting online insurance services.
4. The convenience, accessibility, and efficiency of conducting business on digital platforms, along with technology-based innovation, have significantly increased insurers' participation in conducting business.

X. Suggestions

Based on the findings of the study, the following suggestions are offered to enhance digital adoption and sector growth:

1. Insurance companies should enhance awareness programs promoting digital platforms of their digital presence as a way to create awareness of how to leverage the digital platforms and mobile applications of insurers.
2. Government and regulatory bodies should provide support by sponsoring Digital Literacy programs in rural and semi-urban regions to facilitate the execution of digital insurance and adoption.

3. Insurance Companies should continue to invest in cutting-edge technologies (for example, Artificial Intelligence, Data Analytics, and Mobile Solutions) that enhance service delivery and improve customer experience.
4. Policymakers should support the development of infrastructure and facilitate digital innovations to strengthen the contribution of the insurance industry to Economic Growth.

XI. Discussion:

The results show that digital transformation can play a significant part in enhancing the level of knowledge of insurers regarding the digital insurance services and their participation in them. This fact coincides with the earlier research that suggested the favourable contribution of digital platforms to the accessibility of customers and service quality. Advancements in technology, like automated systems and mobile applications has simplified purchasing terms, payment of premiums, and claims. The developments have brought in more engagement and confidence in online insurance services. Moreover, the rapid expansion of Insurtech organizations has increased the pace of innovation and enhanced risk management strategies, artificial intelligence, and sophisticated analytics. These innovations turn the insurance industry more productive and increase the contribution it makes to economic growth. The findings further underscore the need to persist with technological education and digital infrastructure to ensure a greater reaping of the digital change.

XII. Conclusion

The insurance sector offers investment and financial security and, hence, is a critical element of economic growth. The digital world has made the process of insurance automated, mobile, and online, which has redefined how insurance is performed.

In the given research, one can observe that the positive correlation between the awareness of the insurers regarding the digital insurance services and the technological advancement is positive and high. The efficiency, accessibility, and interaction with the customer are positive aspects of digital transformation, which resulted in the creation of insurers and a great economic contribution. The insurance industry can also play its role in contributing to sustainable economic growth through the continued innovation of technology, supported by regulating bodies, and digital literacy.

References:

[1]. Buric, M. N., Smolovic, J. C., Bozovic, M. L., & Filipovic, A. L. (2017). Impact Of Economic Factors On Life Insurance Development In Western Balkan Countries. Zbornik Radova Ekonomskog Fakulteta U Rijeci, 35(2), 331–347. Https://Doi.Org/10.18045/Zbefri.2017.2.331

[2]. Dash, S., Pradhan, R. P., Maradana, R. P., Gaurav, K., Zaki, D. B., & Jayakumar, M. (2018). Insurance Market Penetration And Economic Growth In Eurozone Countries: Time Series Evidence On Causality. Future Business Journal, 4(1), 50–67. Https://Doi.Org/10.1016/J.Fbj.2017.11.001

[3]. Han, Y., Zhang, L., & Wang, Q. (2020). Digital Transformation In Insurance Services: Efficiency And Customer Engagement. Journal Of Financial Innovation, 6(2), 45–60. Https://Doi.Org/10.1186/S40854-020-00185-1

[4]. Kumar, R., & Gupta, S. (2021). Impact Of Digitalization On Insurance Sector Performance. International Journal Of Finance Studies, 9(3), 45. Https://Doi.Org/10.3390/Ijfs9030045

[5]. Pham, Q. T., Nguyen, H. N. D., Misra, S., & Misra, A. (2022). Investigating Factors For Using Insurance Apps By Customers: A Study Of A Developing Country. Journal Of Banking And Financial Technology, 6, 149–157. Https://Doi.Org/10.1007/S42786-022-00046-9

[6]. Nair, R. (2022). Digital Inclusion Challenges In Indian Insurance Markets. Asian Journal Of Business Research, 12(2), 78–95.

[7]. Olayungbo, D. O. (2015). Effects Of Life And Non-Life Insurance On Economic Growth In Nigeria: An ARDL Approach. Global Journal Of Management And Business Research, 15(11), 33–40.

[8]. Outreville, J. F. (2015). The Relationship Between Insurance And Economic Development: 85 Empirical Papers For A Review Of The Literature. Risk Management And Insurance Review, 16(1), 71–122. Https://Doi.Org/10.1111/Rmir.12015

[9]. Pant, S., & Bahadur, F. (2017). Contribution Of Insurance In Economic Growth Of Nepal. Journal Of Advanced Academic Research, 4(1), 99–110.

[10]. Patel, K. (2021). Digital Literacy And Insurance Adoption In Rural India. Indian Journal Of Economics And Business, 20(3), 45–60.

[11]. Ports, R., & Prasad, S. (2020). Digital Marketing Strategies For Insurance Awareness. Journal Of Marketing Trends, 5(2), 30–44.

[12]. Sawadogo, R., Guerineau, S., & Ouedraogo, I. (2018). Life Insurance Development And Economic Growth: Evidence From Developing Countries. Economic Modelling, 75, 264–278. Https://Doi.Org/10.1016/J.Econmod.2018.06.015

[13]. Sharma, P., & Verma, R. (2021). Insurtech Innovations And Digital Transformation In India. Asian Economic Review, 63(1), 78–95. Https://Doi.Org/10.1177/09765239211012045

[14]. Singh, K., & Kaur, P. (2021). Digital Reforms In India’s Insurance Sector: A Regulatory Perspective. Indian Journal Of Finance, 15(4), 25–38.

[15]. Cosma, S., & Rimo, G. (2024). Redefining Insurance Through Technology: Achievements And Perspectives In Insurtech. Research In International Business And Finance, 70, 102301. Https://Doi.Org/10.1016/J.Ribaf.2024.102301

[16]. Elomari, R. (2024). Fintech’s Impact On The Digital Transformation Of The Qatar Insurance Sector: Opportunities And Challenges. American Journal Of Financial Technology And Innovation, 2(1), 44–56. Https://Doi.Org/10.54536/Ajfti.V2i1.2387

[17]. Eti, S., Dinçer, H., Meral, H., & Yüksel, S. (2024). Insurtech In Europe: Identifying The Top Investment Priorities For Driving Innovation. Financial Innovation, 10, 38. Https://Doi.Org/10.1186/S40854-023-00541-Y

[18]. Wang, W. (2023). Research On Digital Transformation In The Insurance Industry. Advances In Economics, Management And Political Sciences, 19, 100–106. Https://Doi.Org/10.54254/2754-1169/19/20230124